Florida’s Statewide Course Numbering System
Course & Cross Reference Guide
Course Descriptions
FLORIDA'S STATEWIDE COURSE NUMBERING SYSTEM

Courses in this catalog are identified by prefixes and numbers that were assigned by Florida's Statewide Course Numbering System. This numbering system is used by all public postsecondary institutions in Florida and 33 participating non-public institutions. The major purpose of this system is to facilitate the transfer of courses between participating institutions.

Each participating institution controls the title, credit, and content of its own courses and recommends the first digit of the course number to indicate the level at which students normally take the course. Course prefixes and the last three digits of the course numbers are assigned by members of faculty discipline committees appointed for that purpose by the Florida Department of Education in Tallahassee. Individuals nominated to serve on these committees are selected to maintain a representative balance as to type of institution and discipline field or specialization.

The course prefix and each digit in the course number have a meaning in the Statewide Course Numbering System (SCNS). The list of course prefixes and numbers, along with their generic titles, is referred to as the “SCNS taxonomy.” Descriptions of the content of courses are referred to as “course equivalency profiles.”

EXAMPLE OF COURSE IDENTIFIER

<table>
<thead>
<tr>
<th>PREFIX</th>
<th>LEVEL CODE (FIRST DIGIT)</th>
<th>CENTURY DIGIT (SECOND DIGIT)</th>
<th>DECADE DIGIT (THIRD DIGIT)</th>
<th>UNIT DIGIT (FOURTH DIGIT)</th>
<th>LAB CODE</th>
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<tbody>
<tr>
<td>SYG</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>No Laboratory component in this course</td>
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<tr>
<td>Sociology, General at this institution</td>
<td>Entry-level General Sociology</td>
<td>Survey Course</td>
<td>Social Problems</td>
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SYG 1 0 1 0
Sociology, Freshman Level Entry-level Survey Course Social Problems No Laboratory component in this course

GENERAL RULE FOR COURSE EQUIVALENCIES

Equivalent courses at different institutions are identified by the same prefixes and same last three digits of the course number and are guaranteed to be transferable between participating institutions that offer the course, with a few exceptions. (Exceptions are listed below.)

For example, a survey course in social problems is offered by 35 different postsecondary institutions. Each institution uses “SYG_010” to identify its social problems course. The level code is the first digit and represents the year in which students normally take the course at a specific institution. In the SCNS taxonomy, “SYG” means “Sociology, General,” the century digit “0” represents “Entry-level General Sociology,” the decade digit “1” represents “Survey Course,” and the unit digit “0” represents “Social Problems.”

In science and other areas, a “C” or “L” after the course number is known as a lab indicator. The “C” represents a combined lecture and laboratory course that meets in the same place at the same time. The “L” represents a laboratory course or the laboratory part of a course, having the same prefix and course number without a lab indicator, which meets at a different time or place.

Transfer of any successfully completed course from one institution to another is guaranteed in cases where the course to be transferred is equivalent to one offered by the receiving institution. Equivalencies are established by the same prefix and last three digits and comparable faculty credentials at both institutions. For example, SYG 1010 is offered at a community college. The same course is offered at a state university as SYG 2010. A student who has successfully completed SYG 1010 at the community college is guaranteed to receive transfer credit for SYG 2010 at the state university if the student transfers. The student cannot be required to take SYG 2010 again since SYG 1010 is equivalent to SYG 2010. Transfer credit must be awarded for successfully completed equivalent courses and used by the receiving institution to determine satisfaction of requirements by transfer students on the same basis as credit awarded to the native students. It is the prerogative of the receiving institution, however, to offer transfer credit for courses successfully completed that have not been designated as equivalent.

THE COURSE PREFIX

The course prefix is a three-letter designator for a major division of an academic discipline, subject matter area, or sub-category of knowledge. The prefix is not intended to identify the department in which a course is offered. Rather, the content of a course determines the assigned prefix to identify the course.
AUTHORITY FOR ACCEPTANCE OF EQUIVALENT COURSES

Section 1007.24(7), Florida Statutes, states:

Any student who transfers among postsecondary institutions that are fully accredited by a regional or national accrediting agency recognized by the United States Department of Education and that participate in the statewide course numbering system shall be awarded credit by the receiving institution for courses satisfactorily completed by the student at the previous institutions. Credit shall be awarded if the courses are judged by the appropriate statewide course numbering system faculty committees representing school districts, public postsecondary educational institutions, and participating nonpublic postsecondary educational institutions to be academically equivalent to courses offered at the receiving institution, including equivalency of faculty credentials, regardless of the public or nonpublic control of the previous institution. The Department of Education shall ensure that credits to be accepted by a receiving institution are generated in courses for which the faculty possess credentials that are comparable to those required by the accrediting association of the receiving institution. The award of credit may be limited to courses that are entered in the statewide course numbering system. Credits awarded pursuant to this subsection shall satisfy institutional requirements on the same basis as credits awarded to native students.

EXCEPTIONS TO THE GENERAL RULE FOR EQUIVALENCY

The following courses are exceptions to the general rule for course equivalencies and may not transfer. Transferability is at the discretion of the receiving institution.

A. Courses not offered by the receiving institution
B. Courses with the last three digits ranging from 900-999 (e.g., ART 2905)
C. College preparatory and vocational preparatory courses
D. Internships, practica, clinical experiences, and study abroad courses with numbers other than those ranging from 900-999
E. Applied performance or studio courses in Art, Dance, Interior Design, Music and Theatre
F. Skills courses in Criminal Justice
G. Graduate courses
H. For courses at non-regionally accredited institutions, courses offered prior to the established transfer date of the course

Questions about the Statewide Course Numbering System and appeals regarding course credit transfer decisions should be directed to (Angela S. Kennerly) in the (Office of Academic Affairs) or the Florida Department of Education, Office of Articulation, 1401 Turlington Building, Tallahassee, Florida 32399-0400. Special reports and technical information may be requested by calling the Statewide Course Numbering System office at (850) 245-0427, SunCom 205-0427 or via the internet at http://scns.fldoe.org.

Office of Articulation 06/06/07
Florida Department of Education
# How to Find a Course and Its Description

Daytona Beach Community College course offerings and descriptions are grouped alphabetically under the applicable discipline title, not under the department or division of the college through which they are offered.

Within the specific disciplines, courses are listed alphabetically by the course prefix and number. Not all courses are offered in all semesters, or at all campuses. For current offerings, check the schedule of classes published each semester or contact the registration offices at all DBCC campuses.

The course prefixes to discipline areas guide will help you locate your courses by prefix, course or discipline area.
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COURSE DESCRIPTIONS
A study of accounting concepts for service and merchandising businesses, matching concept, adjusting process, financial statements, accounting systems, internal controls, special journals, receivables, inventories, current liabilities, bonds payable and investment in stocks and bonds, international transactions, and corporate: organization, equity rights and earnings. (Prerequisite: Appropriate placement scores or successful completion of college prep courses.) Lab fee: $10. FA, SP, SU

A study of heat and heat flow. Calculate heat gain and loss, duct and register sizing for comfort in refrigeration and air conditioning. (Prerequisites: ACR 0001C/0001L and ACR 0002C/0002L. Corequisite: ACR0062L.) Lab fee: $10. SU

Physical principles of electricity and practices in air conditioning and refrigeration systems. Laws of energy, energy equivalents, electrical components and circuits. (Corequisite: ACR0100L.) Lab fee: $12.50. FA, SP

Continuation of the study of physical principles of electricity and practices in air conditioning and refrigeration systems. Laws of energy, energy equivalents, electrical components and circuits. (Corequisite: ACR0102L.) Lab fee: $12.50. FA, SP

Study of single phase motors and related components. Disassembly, assembly, application and testing with appropriate instrumentation. (Prerequisites: ACR 0100C/0100L and ACR 0102C/0102L. Corequisite: ACR0150L.) Lab fee: $10. FA, SP

A study of the internal chemistry and physics of a refrigeration system. Refrigerants, oil, contaminants, dehydration and burnouts in detail. (Prerequisites: ACR 0001C/0001L and ACR 0002C/0002L. Corequisite: ACR0205L.) Lab fee: $10. SU

Study and application of physical principles. Temperature, pressure, volume, enthalpy, state and condition. Pipe sizing and application for air conditioning and refrigeration. (Prerequisites: ACR 0001C/0001L and ACR 0002C/0002L. Corequisite: ACR0206L.) Lab fee: $10. SU

Oil and gas fired heating systems. Combustion, mechanical and electrical components. (Prerequisites: ACR 0850/0850L and ACR 0150/0150L. Corequisite: ACR0600L.) Lab fee: $10. FA, SP

An advanced study of the refrigerant cycle and the electrical circuitry necessary to provide year-round air conditioning. Includes electric furnaces. (Prerequisites: ACR 0850/0850L and ACR 0150/0150L. Corequisite: ACR0601L.) Lab fee: $15. FA, SP

Study of application, installation, and servicing of central residential equipment. Integrates electrical, psychrometric and mechanical operation. (Prerequisites: ACR 0001C/0001L, ACR 0002C/0002L, ACR 0100C/0100L and ACR 0102C/0102L. Corequisite: ACR0700L.) Lab fee: $10. FA, SP

Comprehensive study of standard and special mechanical components. Component characteristics, operation and application. Design, construction and analysis of commercial systems. (Prerequisites: ACR 0001C/0001L, ACR 0002C/0002L, ACR 0100C/0100L and ACR 0102C/0102L. Corequisite: ACR0741L.) Lab fee: $10. FA, SP
ACR 0742/0742L  Commercial Refrigeration II and Lab  3.0 voc. crs.
A study of larger, multiple temperature refrigeration systems, more complex electrical and mechanical components and three-phase electricity. Design, construct and troubleshoot advanced equipment. (Prerequisites: ACR 0741/0741L and ACR 0150/0150L. Corequisite: ACR0742L.) Lab fee: $15. FA, SP

ACR 0815/0815L Advanced Service Practices and Lab  3.0 voc. crs.
Conglomerate of previous courses, diagnostic procedures of job entry competencies in commercial refrigeration and central residential air conditioning. (Prerequisites: ACR 0850/0850L and ACR 0150/0150L. Corequisite: ACR 0815L.) Lab fee: $15. FA, SP

ACR 0850/0850L  Air Conditioning Wiring and Lab  3.0 voc. crs.
The student will study principles of controls and interaction of components associated with residential and light commercial air conditioning systems. The student will design, construct and troubleshoot electrical circuits as used in residential and commercial A/C systems. (Prerequisite: ACR 0100C/0100L and ACR 0102C/0102L. Corequisite: ACR0850L.) Lab fee: $10. FA, SP

AER 0905 Directed Study in Air Conditioning/Refrigeration 1-4 voc. crs.
FA, SP, SU

AER 0949 Cooperative Education Experience in Air Conditioning/Refrigeration 1-4 voc. crs.
FA, SP, SU

AER 1101/1101L Electricity/Electronics Fundamentals and Lab 4 sem. hrs.
Prepares the student to test, diagnose and repair automotive starting, charging, lighting and associated electrical systems. Electrical measurement and circuit tracing are stressed, along with an introduction to the operation of basic components associated with vehicle electrical and electronic systems. Components include lecture/discussion, written assignments and hands-on experience. (Corequisite: AER1101L.) Lab fee: $12. FA

AER 1112/1112L Engine Mechanical Service and Repairs and Lab 4 sem. hrs.
Prepares the student to diagnose and repair four, six and eight cylinder engines. Components include lecture/discussion, written assignments and hands-on experience. (Corequisite: AER1112L.) Lab fee: $13. FA

AER 1114/1114L Basic Concepts and Service Procedures and Lab 4 sem. hrs.
Introduces the student to automotive industry practices and procedures. The vehicle basic engine service and maintenance. The student will learn how to interpret service information, both electronic and paper-based. Components include lecture/discussion, written assignments and hands-on experience. (Corequisite: AER 1114L.) Lab fee: $15. FA

AER 1272/1272L Automotive Transaxles and Differentials and Lab 4 sem. hrs.
Prepares the student to diagnose and repair automobile manual transaxles, clutches, transmissions, differentials, driveline components, hydraulic systems and four-wheel drive transfer cases. Components include lecture/discussion, written assignments and hands-on experience. (Corequisite: AER 1272L.) Lab fee: $12.50. FA

AER 1413/1413L Automotive Brake Systems and Lab 4 sem. hrs.
Prepares the student to test, diagnose and repair late model automobile Disc and Drum braking systems and controls, including Anti-lock Braking Systems, TCS, and vehicle safety. Components include lecture/discussion, written assignments and hands-on experience. (Corequisite: AER 1413L.) Lab fee: $20. SP

AER 1451/1451L Automotive Steering, Suspension and Alignment and Lab 4 sem. hrs.
Prepares the student to diagnose and repair automobile steering and suspension systems, including electronic suspensions. The latest 4-wheel alignment techniques are taught. Components include lecture/discussion, written assignments and hands-on experience. (Corequisite: AER 1451L.) Lab fee: $15. FA

AER 1611/1611L Automotive Heating and Air Conditioning Systems and Lab 4 sem. hrs.
Prepares the student to test, diagnose and repair automobile heating and air conditioning systems. Automatic Temperature Control systems are introduced, and freon recovery procedures are taught. Components include lecture/discussion, written assignments and hands-on experience. (Corequisite: AER1611L.) Lab fee: $36. SP

AER 2251/2251L Automotive Automatic Transaxles and Drive Systems and Lab 4 sem. hrs.
Prepares the student to test, diagnose and repair automobile automatic transaxles and electronic transmissions. Theories of operation, testing and diagnosis are stressed. Components include lecture/discussion, written assignments and hands-on experience. (Corequisite: AER 2251L.) Lab fee: $20. SP

AER 2524/2524L Automotive Computer Systems and Supercharging and Lab 4 sem. hrs.
Familiarizes the student with the theory of operation of automotive computer systems. Prepares the student to perform lab scope analysis of electronic control unit circuitry. Familiarizes the student with the theory of supercharging, and the diagnosis of turbochargers. Components include lecture/discussion, written assignments and hands-on experience. (Corequisite: AER2524L.) Lab fee: $15. FA

AER 2526/2526L Automotive Ignition and Emissions Control and Lab 4 sem. hrs.
Prepares the student to test, diagnose and repair automobile electronic ignition and emissions control systems. Five-gas theory and labscope diagnosis are introduced. Components include lecture/discussion, written assignments and hands-on experience. (Corequisite: AER 2526L.) Lab fee: $15. SP

AER 2527/2527L Drivability and Dynamometer Analysis and Lab 4 sem. hrs.
Prepares the student to diagnose drivability problems with hand-held diagnostic scanning tools. Prepares the student to diagnose driveability problems using chassis dynamometer analysis. Prepares the student to perform five-gas emissions analysis. Components include lecture/discussion, written assignments, hands-on experience and selected student troubleshooting skills testing. (Corequisite: AER 2527L.) Lab fee: $15. SP

AER 2528/2528L Automotive Fuel Systems and Lab 4 sem. hrs.
Prepares the student to test, diagnose and repair electronic fuel injection systems, including Throttle Body and Multi-Point injection components associated with EFI and ECCS. Fuel injection theory is stressed, along with testing of individual components within subsystems. Components include lecture/discussion, written assignments and hands-on experience. (Corequisite: AER 2528L.) Lab fee: $15. SP

AER 2905 Directed Study in Automotive Technology 1-4 sem. hrs.
FA, SP, SU

AER 2949 Cooperative Education Experience in Automotive Technology 2 sem. hrs.
FA, SP, SU

AFR 1101 The Air Force Today I (General Military Course) 1 sem. hr.
A survey course that focuses on the organizational structure and missions of Air Force organizations, officership and professionalism, and includes an introduction to communicative skills. A weekly leadership laboratory is mandatory. (Prerequisite: Appropriate placement scores or successful completion of college prep courses. Corequisite: AFR 1101L.) FA

AFR 1111 The Air Force Today II (General Military Course) 1 sem. hr.
Continuation of AFR 1101. A weekly leadership laboratory is mandatory. (Prerequisite: Appropriate placement scores or successful completion of college prep courses. Corequisite: AFR 1101L.) SP
AFR 2130  The Development of Air Power I  
(General Military Course)  1 sem. hr.
Focuses on factors contributing to the development of air power from its earliest beginnings through two world wars, the evolution of air power concepts and doctrine and an assessment of communicative skills. A weekly leadership laboratory is mandatory. (Prerequisite: Appropriate placement scores or successful completion of college prep courses. Corequisite: AFR 1101L.) FA

AFR 2131  The Development of Air Power II  
(General Military Course)  1 sem. hr.
Continuation of AFR 2130. A weekly leadership laboratory is mandatory. (Prerequisite: Appropriate placement scores or successful completion of college prep courses. Corequisite: AFR 1101L.) SP

AMH 2010  United States History to 1877  3 sem. hrs.
The political, economic, social and intellectual development of the people of the United States, from European exploration and settlement through the Civil War and Reconstruction. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite or corequisite: ENC 1101.) FA, SP, SU

AMH 2020  United States History 1865 to Present  3 sem. hrs.
The political, economic, social and intellectual development of the people of the United States, from the Civil War to the present. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite or corequisite: ENC 1101.) FA, SP, SU

AMH 2042  American Social History 1860 to Present  3 sem. hrs.
An examination of the cultural experiences, institutions and customs of American life and their effects on our common heritage, from 1860 to present times. This course meets the 3,000 word Gordon Rule requirement. (Prerequisite or corequisite: ENC 1101.) FA, SP

AMH 2045  American Maritime History  3 sem. hrs.
An introductory course on American maritime history, tracing the impact of seafaring Americans and their related institutions and activities on American history from pre-colonial times to the present. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite or corequisite: ENC 1101.) FA, SP

AMH 2091  Survey of African American History  3 sem. hrs.
A historical survey of African American experiences beginning with an overview of ancient African peoples, with emphasis on the experiences of Africans and their descendants in America. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite or corequisite: ENC 1101.) FA, SP

AMH 2905  Directed Study in History  1-4 sem. hrs.
(Prerequisite: Appropriate placement scores or successful completion of college prep courses.) FA, SP, SU

AMH 2949  Cooperative Education Experience in History  1-4 sem. hrs.
FA, SP, SU

AML 2010  Early American Literature  3 sem. hrs.
Representative American writers of the Colonial, Federal, Romantic and Realistic periods. Emphasis is placed upon artistic excellence and literary history. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite: ENC 1101 or permission of chairperson.) FA

AML 2023  Contemporary American Literature  3 sem. hrs.
A survey of representative American writers since World War II. Emphasis on style, techniques and basic themes of each author. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite: ENC 1101 or permission of chairperson.) FA, SU

AML 2052  Modern American Literature  3 sem. hrs.
A survey of representative American writers of the Modern period. Emphasis is placed upon the maturation of American literature from the Civil War to World War I. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite: ENC 1101 or permission of chairperson.) SP

AML 2260  Southern Literature  3 sem. hrs.
A survey of representative Southern American writers incorporating selected readings from novelists, poets and playwrights. Emphasis on style, themes and regional uniqueness. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite: ENC 1101 or permission of chairperson.) SU

AML 2600  Introduction to African American Literature  3 sem. hrs.
A survey of the African American history tradition from the eighteenth century to the present as reflected in a variety of oral and written traditions: songs, speeches, poetry, short-fiction, novels, drama, autobiographies, journals and letters. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite or Corequisite: ENC 1101.) FA, SP, SU

ANT 2000  Introduction to Anthropology  3 sem. hrs.
A survey course including the subfields of linguistics, archaeology, cultural and physical anthropology. (Prerequisite or Corequisite: ENC 1101.) FA, SP, SU

ANT 2905  Directed Study in Anthropology  1-4 sem. hrs.
(Prerequisite or Co-requisite: ENC 1101.) FA, SP, SU

ANT 2949  Cooperative Education Experience in Anthropology  1-4 sem. hrs.
FA, SP, SU

APA 1111  Computerized Accounting/Bookkeeping I  4 sem. hrs.
The recording of business transactions; organization of ledgers, trial balances and worksheets; and adjusting and closing entries. Preparation of financial statements both manually and in the computer. Lab fee: $10. FA, SP, SU

APA 1121  Computerized Accounting/Bookkeeping II  4 sem. hrs.
Principles and procedures for establishing, maintaining and summarizing financial records. Payroll procedures and closing books, both manually and on the computer. (Prerequisite: APA 1111 or permission of chairperson.) Lab fee: $10. FA, SP

APA 1711  Computer Spreadsheet  3 sem. hrs.
Introduction in using computerized spreadsheets for beginning spreadsheet students. This course includes worksheet commands, functions, formulas and designing; printing; and filing worksheets. Additionally, simple macros, graphing and database functions are introduced. Lab fee: $10. FA, SP, SU

APA 2905  Directed Study in Accounting  1-4 sem. hrs.
Practical applications of the techniques and practices of the accountant at work. (Prerequisite: ACG 2071.) Lab fee: $10. FA, SP, SU

APA 2949  Cooperative Education Experience in Accounting/ Bookkeeping  1-4 sem. hrs.
FA, SP, SU

ARH 1000  Art Appreciation  3 sem. hrs.
A foundation for understanding the visual arts. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite: ENC 1101.) FA, SP, SU

ARH 2050  Introduction to the History and Criticism of Art I  3 sem. hrs.
Survey and criticism of ancient, medieval, Renaissance and contemporary art and architecture, relation of styles to cultural context. (Prerequisite: ENC 1101.) FA, SP

ARH 2051  Introduction to the History and Criticism of Art II  3 sem. hrs.
Relation of artistic styles to cultural context. Survey and criticism of Renaissance, Baroque and contemporary art and architecture. (Prerequisite: ENC 1101.) FA, SP
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
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<tbody>
<tr>
<td>ARR 0121C/0121L</td>
<td><strong>Introduction to Refinishing and Lab</strong></td>
<td>4.0 voc. crs.</td>
<td>Students will be introduced to the theory of operating today's high tech refinishing equipment. Students will learn the proper application of today's repair materials, while adhering to personal and refinishing safety techniques. (Corequisite: ARR0121L) Lab fee: $27. FA</td>
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<tr>
<td>ARR 0122C/0122L</td>
<td><strong>Auto Refinishing II and Lab</strong></td>
<td>4.0 voc.crs.</td>
<td>Students are introduced to finishing identification, masking, and surface preparation. Develop proper spray gun techniques and application of corrosion protective materials. (Prerequisite: ARR 0121C. Corequisite: ARR0122L.) Lab fee: $20. SP</td>
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<tr>
<td>ARR 0123C/0123L</td>
<td><strong>Auto Refinishing III and Lab</strong></td>
<td>4.0 voc.crs.</td>
<td>Students will be demonstrating advanced refinishing techniques, color theory and perform tinting and blending procedures. Students will also develop skills in repair and weld removal and final detailing techniques. (Prerequisites: ARR 0121C/0121L and ARR 0122C/0122L. Corequisite: ARR0123L.) Lab fee: $20. FA</td>
</tr>
<tr>
<td>ARR 0241C/0241L</td>
<td><strong>Introduction to Collision Repair and Lab</strong></td>
<td>4.0 voc.crs.</td>
<td>Students will learn vehicle construction, terminology and collision energy management of today's high tech vehicles. Students will develop understanding of repair vs. replacement techniques, and the basics of collision estimating. Students will also learn basic industry welding techniques. (Corequisite: ARR0241L.) Lab fee: $25. FA</td>
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<tr>
<td>ARR 0242C/0242L</td>
<td><strong>Collision Repair II and Lab</strong></td>
<td>4.0 voc.crs.</td>
<td>Covering frontal impact analysis, students learn vital repair / replacement decisions. Developing repair plans and proper removal / replacement procedures. This class also covers function and fit of exterior panels. (Prerequisite: ARR 0241C/0241L. Corequisite: ARR0242L.) Lab fee: $20. SP</td>
</tr>
<tr>
<td>ARR 0243C/0243L</td>
<td><strong>Collision Repair III and Lab</strong></td>
<td>4.0 voc.crs.</td>
<td>Students develop skills in vehicle mechanical system analysis, effects of side and rear impacts, restraint systems and cosmetic straightening of steel. (Prerequisites: ARR 0241C/0241L and ARR 0242C/0242L. Corequisite: ARR0243L.) Lab fee: $15. FA</td>
</tr>
<tr>
<td>ARR 0294C/0294L</td>
<td><strong>Electrical, Glass and Trim and Lab</strong></td>
<td>4.0 voc. crs.</td>
<td>Students will develop basic skills in electrical analysis, and proper glass adjustment and installation. Also, learn interior and exterior trim and molding removal and replacement techniques. (Corequisite: ARR0294L.) Lab fee: $15. FA</td>
</tr>
<tr>
<td>ARR 0381C/0381L</td>
<td><strong>Introduction to Unibody and Frame and Lab</strong></td>
<td>4.0 voc. crs.</td>
<td>Introductory instruction in the diagnosis and measurement of damaged unibody and frame-type vehicles. Training in frame straightening techniques and related tasks. (Corequisite: ARR0381L.) Lab fee: $10. FA</td>
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<tr>
<td>ARR 0382C/0382L</td>
<td><strong>Unibody and Frame II and Lab</strong></td>
<td>4.0 voc. crs.</td>
<td>Students will learn advanced skill development in replacement of structural components. This course takes students through the theory to hands-on unibody and frame set-up and pulls to return vehicle dimensions to manufacturer specifications. Instruction also includes structural welding techniques. (Prerequisite: ARR 0381C/0381L. Corequisite: ARR0382L.) Lab fee: $45. SP</td>
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<tr>
<td>ARR 0383C/0383L</td>
<td><strong>Unibody and Frame III and Lab</strong></td>
<td>4.0 voc. crs.</td>
<td>This course takes students into full frame sectioning and replacement through to structural aluminum design and repair. Highlights are actually setting up and measuring unibody and full frame vehicles, and developing advanced skills to be utilized in the industry. (Prerequisites: ARR 0381C/0381L and ARR 0382C/0382L. Corequisite: ARR0383L.) Lab fee: $41. SP</td>
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<tr>
<td>ARR 0949</td>
<td><strong>Cooperative Education Experience in Automotive Body Repair and Refinishing</strong></td>
<td>4.0 voc. crs.</td>
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ART 2702C/2702L Sculpture II and Lab 3 sem. hrs. Continuation and refinement of Sculpture I processes. May be repeated one time for credit. Four studio hours. (Prerequisite: ART 2701C/2701L or permission of chairperson. Corequisite: ART 2702L.) Lab fee required: $10. FA, SP

ART 2710/2710L Stone Carving and Lab 3 sem. hrs. This is an introductory course in subtractive sculpture which builds foundation skills in stone carving and other processes. NOTE: This course may be accepted for transfer credit at the discretion of the receiving institution. Four studio hours. (Corequisite: ART 2710L.) Lab fee: $10. FA, SP

ART 2752C/2752L Pottery Wheelthrowing I and Lab 3 sem. hrs. Introduction to wheel-throw pottery. Basic principles and development of skills on the potter’s wheel. Simple forming, glazing and firing techniques. Four studio hours. (Corequisite: ART 2752L.) Lab fee: $27. FA, SP

ART 2759C Ceramic Studio I 1 sem. hr. An advanced course in ceramics for art majors specializing in ceramics. (Prerequisite: ART 1754C/1754L, ART 2752C/2752L and permission of chairperson.) May be repeated one time for credit. Lab fee: $10. FA, SP

ART 2834 Museum and Gallery Practices 3 sem. hrs. This course covers basic museum principles and techniques and includes an overview of collections care and management, installation and design of exhibitions, exhibitions and publications research, education and interpretation, marketing, and conservation. Students undertake production role duties in a variety of museum operational areas. Formal instruction is supplemented by demonstration with hands-on learning and participation under the direction of placement supervisors. (Prerequisite: ARH 2050 or ARH 2051 or PHY 2000.) FA, SP

ART 2905 Directed Study in Art 1-4 sem. hrs. FA, SP, SU

ART 2949 Cooperative Education Experience in Art 1-4 sem. hrs. FA, SP, SU

AST 1002 Astronomy 3 sem. hrs. A survey of planetary, stellar and galactic astronomy; history of astronomy; and theories of the universe. Optional observing sessions may be held if the weather permits. (Prerequisites or corequisites: ENC 1101 and MAT 1033.) FA, SP, SU

AST 2905 Directed Study in Astronomy 1-4 sem. hrs. FA, SP, SU

BCN 1210 Materials and Processes 3 sem. hrs. Applications and characteristics, both physical and chemical, of materials commonly used in construction and mechanical processes by which materials may be shaped or formed. FA, SP

BCN 1251C/1251L Architectural Drawing I and Lab 3 sem. hrs. Fundamentals of construction drafting, including basic components of construction. Development of working drawings including plans, elevations and sections using wood and construction in accordance with building code requirements. (Corequisite: BCN 1251L.) FA, SP, SU

BCN 1253C/1253L Architectural Drawing II and Lab 3 sem. hrs. Intermediate principles of architectural drafting, space utilization, visual design and perspective. (Prerequisite: BCN 1251C/1251L. Corequisite: BCN 1253L.) SP, SU

BCN 1272 Blueprint Reading 3 sem. hrs. This class is a survey of the various types of drawings and other documents commonly used in the construction industry. It includes topics such as: terminology, abbreviations, symbols, notations, scales, dimensions, meanings of lines, drawing history, technical and orthographic projections, types of construction, and trade information. This class reinforces the skills of reading, writing and mathematics.

BCN 2257C/2257L Architectural Detailing and Lab 3 sem. hrs. Architectural detailing of steel, wood and concrete systems used in light construction. (Prerequisite: EGS 1110C/1110L or BCN 1251C/1251L or permission of assistant chair. Corequisite: BCN 2257L.) SP

BCN 2560 Mechanical and Electrical Equipment 3 sem. hrs. The study of heating, air conditioning, water supply, sanitation and electrical service and their installation. Design methods along with the operation of equipment and controls is also included. (Prerequisite: PSC 1121.) SP

BCN 2905 Directed Study in Construction 1-4 sem. hrs. FA, SP, SU

BCN 2949 Cooperative Education Experience in Construction 1-4 sem. hrs. FA, SP, SU

BCT 2990 Technical Training 23 sem. hrs. Students must have completed an appropriate apprenticeship or certificate program of 700 contact hours or equivalent with a GPA of 2.0 or better. Demonstrated work experience with supporting documentation equivalent to an apprenticeship or certificate may be acceptable. The certificate or apprenticeship program will be evaluated. If accepted, credit will be awarded.

BCV 0020C/0020L Tools, Safety and Pre-Construction Skills and Lab 3.0 voc. crs. Topics include the safe use of all hand and power tools, construction of saw horses, saw vises and tool box. The course also includes the uses of the framing square and a review of working drawings. (Corequisite: BCV 0020L.) Lab fee: $30. FA

BCV 0050C/0050L Trade Career Path Introduction and Lab 3.0 voc. crs. Course designed for students to apply knowledge of basic electricity, its uses and installation methods, first aid and safety, and DC theory. Students gain knowledge of fundamentals of basic safety of construction tools, basic introduction to the construction plumbing industry, math skills, blueprint reading, and basic principles skills as they relate to compression refrigeration. Tools and test equipment used to construct, charge, operate and trouble-shoot a refrigerating machine will also be covered. (Corequisite: BCV 0050L.) Lab fee: $30. FA

BCV 0103C/0103L Wood Products, Substitutes, Lumber and Building Materials and Lab 3.0 voc. crs. Learn about the basic science, handling, and code issues of topics including wood, wood substitutes, different kinds of construction lumber, its growth and how wood finally becomes lumber. This course also includes building adhesives, their types and their applications. (Corequisite: BCV 0103L.) Lab fee: $30. FA

BCV 0110C/0110L Leveling Instruments, Site Preparation and Layout and Lab 3.0 voc. crs. Topics include the importance of accurate work in laying out buildings with the use of different leveling instruments and the many aspects of site preparation and layout of buildings and houses. (Corequisite: BCV 0110L.) Lab fee: $30. SP

BCV 0134C/0134L Foundation Formwork, Wall and Floor Framing and Lab 3.0 voc. crs. Topics include procedures necessary to make buildings and houses strong. The course also includes framing and bracing of floors and walls. (Corequisite: BCV 0134L.) Lab fee: $30. FA

BCV 0140C/0140L Roof Framing I and Lab 3.0 voc. crs. Topics include basic styles of roofs and construction and framing of a gable, hip and combination roof. (Corequisite: BCV 0140L.) Lab fee: $30. SP

BCV 0141C/0141L Roof Framing II and Timber Construction and Lab 3.0 voc. crs. This course is a continuation of Roof Framing I. Topics include layout and construction of a combination roof. (Corequisite: BCV 0141L.) Lab fee: $30. FA
Course Descriptions

BCV 0171C/0171L Interior Trim and Lab 3.0 voc. crs.
Topics include the fundamentals of wall covering, door hanging, windows, stairs and cabinets. (Corequisite: BCV 0171L.) Lab fee: $30. SP

BCV 0173C/0173L Exterior Trim and Hardware Finishes and Lab 3.0 voc. crs.
Topics include the different types of exterior finishing material and their application. The course also includes the different finish and rough hardware methods of installation, intended uses and appearances. (Corequisite: BCV 0173L.) Lab fee: $30. SP

BCV 0921 Carpentry Co-op Work Experience I 4.0 voc. crs.
This is a third semester course for Co-op Work Experience. It introduces the on-the-job work experience and hands on training in basic carpentry skills. Students will work in the construction field to receive credit for this class. FA, SP

BCV 0922 Carpentry Co-op Work Experience II 4.0 voc. crs.
This is the fourth semester course for Carpentry Co-op Work Experience. It introduces the on-the-job work experience and hands on training in basic carpentry skills. This course will expand on the students job skills and work experience. FA, SP

BOT 1010C/1010L General Botany and Lab 4 sem. hrs.
General principles of the structural organization and function of plants emphasizing cellular structure and physiology, anatomy, genetics, growth and diversity of plants. (Prerequisite or corequisite: ENC 1101. Corequisite: BOT 1010L.) Lab fee: $20. FA, SP

BSC 0070 Basic Anatomy & Physiology 1.5 voc. crs.
Surveys the structure and function of the various systems of the human body as applied to certificate health programs. (May not be used toward degree requirements.) FA, SP, SU

BSC 1005 Survey of Biological Science (For Non-Science Majors) 3 sem. hrs.
A survey of topics in biology designed to meet the informational needs of the non-scientist. Coverage of topics in molecular, cellular, organismal and population biology is included. (Not intended for science, engineering or pre-professional health-related majors.) (Prerequisite or corequisite: ENC1101.) FA, SP, SU

BSC 1005L Survey of Biological Science Laboratory (For Non-Science Majors) 1 sem. hr.
The laboratory consists of observation, demonstration and experiments which correlate with the lecture. (Prerequisite or corequisite: ENC1101. Corequisite: BSC 1005L.) Lab fee: $15. FA, SP, SU

BSC 1010C/1010L General Biology I (For Science Majors) and Lab 4 sem. hrs.
Basic principles, which apply to the nature of plant and animal cells, including metabolism, reproduction, protein synthesis and genetics. (Prerequisites or corequisites: ENC1101 and MAT1033. Corequisite: BSC 1010L.) Lab fee: $35. FA, SP, SU

BSC 1011C/BSC1011L General Biology II (For Science Majors) and Lab 4 sem. hrs.
A survey of the evolution, morphology, physiology and ecology of the five kingdoms of living organisms. (Prerequisite: BSC 1010C/1010L. Corequisite: BSC 1011L.) Lab fee: $30. FA, SP, SU

BSC 1085C/1085L Human Anatomy & Physiology I and Lab 4 sem. hrs.
Structure and function of the integumentary, skeletal, muscular and nervous systems of the human body. Course also will cover basic cytology and histology. This course is designed for students in health professions. (Prerequisite or corequisite: ENC1101.) A background in biology and chemistry strongly recommended. (Corequisite: BSC 1085L.) Lab fee: $25. FA, SP, SU

BSC 1086C/1086L Human Anatomy & Physiology II and Lab 4 sem. hrs.
A continuation of BSC 1085C. This course covers the structure and function of the digestive, urinary, respiratory, endocrine, circulatory and reproductive systems. This course is designed for students in health professions. (Prerequisite: BSC 1085C/1085L. Corequisite: BSC 1086L.) Lab fee: $35. FA, SP, SU

BSC 2905 Directed Study in Biological Science 1-4 sem. hrs.
(Prerequisite: Appropriate placement scores or successful completion of college prep courses.) FA, SP, SU

BUL 2241 Business Law I 3 sem. hrs.
A survey of topics in biology designed to meet the informational needs of the non-scientist. Coverage of topics in molecular, cellular, organismal and population biology is included. (Not intended for science, engineering or pre-professional health-related majors.) (Prerequisite or corequisite: ENC1101. Corequisite: BSC 1010L.) FA, SP, SU

BUL 2242 Business Law II 3 sem. hrs.
Continuation of BUL 2241. The context of Business Law II reflects current thinking and recent changes in the law. Also examined are areas of the Uniform Commercial Code; creditor’s rights; and agency, employment, partnership, corporations, and special ventures. (Prerequisite: Appropriate placement scores or successful completion of college prep courses.) FA, SP, SU

CAP 1801 Simulation Fundamentals 3 sem. hrs.
This is an introductory course in simulation technology. Students will learn the basic concepts in safety and housekeeping, basic sim-related software and hardware, instrumentation, documentation, and publications as related to the simulation industry. Lab fee: $20. FA

CAP 2023 Introduction to Game Programming 3 sem. hrs.
During this course student will complete a ready-to-play, 3D animated game. This is a fast-paced, hands-on class to introduce the student to programming essentials, scripting, networking, GUI, textures, skins and 3D math. Students program clients and server modules; users interface, model and animate 3D characters, vehicles, terrains, and environments; program sound and music; and finally play test the finished game. Lab fee: $20. FA, SP, SU

CAP 2802/2802L Simulation System Testing and Lab 3 sem. hrs.
Introduction to testing procedures, equipment and documentation at system, sub-system, and component level, with close attention to customer specifications. (Corequisite: CAP 2802L.) Lab fee: $50. FA

CAP 2803/2803L Simulation System Trouble Shooting and Lab 3 sem. hrs.
Troubleshooting techniques and replacing of defective components including visuals, communications, navigation, motion controls, avionics, power, and safety sub-systems are covered. (Corequisite: CAP2803L) Lab fee: $50. SP

CCJ 1010 Introduction to Criminology 3 sem. hrs.
A survey of the social origins of criminal law, the administration of criminal justice, the causes of criminal behavior and the prevention and control of crime. (Prerequisite: Appropriate placement scores or successful completion of college prep courses.) Lab fee: $5. FA, SP, SU

CCJ 1020 Introduction to Criminal Justice 3 sem. hrs.
Exposure to the philosophical and historical background of criminal justice agencies and evaluation of their purpose, functions and contemporary problems. (Prerequisite: Appropriate placement scores or successful completion of college prep courses.) Lab fee: $5. FA, SP, SU
CCJ 2500  Juvenile Delinquency  3 sem. hrs.
Study of the juvenile justice system emphasizing definitions, causes, prevention, control of juvenile delinquency and rehabilitation of the delinquent youth. (Prerequisite: Appropriate placement scores or successful completion of college prep courses.) Lab fee: $5. FA, SP, SU

CCJ 2905  Directed Study in Criminal Justice  1-4 sem. hrs.
(Prerequisite: Appropriate placement scores or successful completion of college prep courses.) FA, SP, SU

CCJ 2949  Cooperative Education Experience in Criminal Justice  1-4 sem. hrs.
(Prerequisite: Appropriate placement scores or successful completion of college prep courses.) FA, SP, SU

CEN 2304  Microsoft Windows Professional  4 sem. hrs.
Installing, configuring and supporting Microsoft Windows Professional in a workgroup or domain to prepare for MCP Exam 70-270, a core requirement for MCSA and MCSE certifications. Lab fee: $50. FA, SP

CET 1114C/1114L  Digital Fundamentals and Lab  4 sem. hrs.
First course in digital theory covers number systems, including binary, octal, hexadecimal and decimal. Also includes logic gates, Boolean algebra, decoders, flip-flops, counters and programmable logic devices. (Corequisite: CET 1114L) Lab fee: $20. FA, SP

CET 1173C/1173L  A+: Computer Hardware and Lab  3 sem. hrs.
Designed to teach the fundamentals needed to perform board-level servicing of desktop computers systems. Also covers how the hardware used in the computer works and interacts with other hardware. Introduces how printers work and basic troubleshooting procedures used with printers. Also introduces to other computing devices such as Notebook Computers and PDAs. This course prepares students for the core A+ Exam. (Corequisite: CET 1173L) Lab fee: $20. FA, SP

CET 1600  Network Plus  4 sem. hrs.
Basic concepts of network communication using the OSI model. Media, access protocols, routing, reliability, network services. Concepts of routing on an internet work. Prepares students for Network Plus certification exam. Lab fee: $50. FA, SP

CET 2123C/2123L  Microcomputer and Basic Digital Communications and Lab  4 sem. hrs.
This course includes the architectural study of a microprocessor with its bus system and instruction set. An introduction to the principles of digital communications is also included in this course. (Prerequisites: CET 1114C/1114L and EET 1141C/1141L. Corequisite: CET 2123L) Lab fee: $20. FA, SP

CET 2154C  A+: Computer Operating Systems and Lab  4 sem. hrs.
This course is designed to present proper preventative and corrective maintenance procedures for computers for computer systems. Also covers the basic installation and function of Windows operating systems as well a brief introduction to the Linux operating system. The installation use of basic applications such as Spyware removers, Anti-Virus software, and software firewalls are also covered. This course prepares students for the A+ Software Exam. Lab fee: $20. FA, SP

CET 2615  Advanced Cisco Router Configuration  4 sem. hrs.
Advanced techniques in configuration of Cisco routers in Internet works, including utilization of configuration files downloaded from a TFTP server, employing advanced Cisco IOS EXEC commands. Lab fee: $50. FA, SP

CET 2620  Cisco Wide Area Network (WAN)  4 sem. hrs.
Routing WAN services and encapsulation, WAN design, PPP operation and authentication, ISDN capabilities and configuration, Frame Relay, subinterfaces and configuration. CCNA 640-607 certification exam. (Prerequisite or corequisite: CET 2615.) Lab fee: $50. FA, SP

CET 2625  Building Scalable Cisco Internetworks  4 sem. hrs.
The Building Scalable Cisco Internetworks (BSCI) course focuses on using Cisco routers connected in LANs and WANs typically found at medium to large network sites. Upon completion of this training course, students will be able to select and implement the appropriate Cisco IOS services required to build a scalable, routed network. BSCI is part of the recommended training path for those students seeking the Cisco Certified Network Professional (CCNP) and Cisco Certified Design Professional (CCDP). (Prerequisite: CET 2615.) Lab fee: $50. FA

CET 2626  Building Cisco Remote Access Networks  4 sem hrs.
In the Building Scalable Remote Access Networks (BSRAN) course, students learn how to build, configure and troubleshoot a remote access network to interconnect central sites to branch offices and home offices. Students also learn how to control access to the central site, as well as to maximize bandwidth utilization over the remote links. BSRAN is part of the recommended training path for those students seeking the Cisco Certified Network Professional (CCNP), Cisco Certified Design Professional (CCDP), and Cisco Certified Internetwork Expert (CCIE) certifications. (Prerequisite: CET 2615.) Lab fee: $50. SP

CET 2660  Fundamentals of Network Security  4 sem. hrs.
This course introduces the student to the concepts and methods of securing a computer network. The course includes general security concepts, legal aspects of computer crime, cyber-crime culture, viruses, types of attack, communications security, cryptography, access control, firewalls, intrusion detection and disaster preparedness. This course prepares the student for the CompTIA Security+ certification. Students must have a thorough knowledge of TCP/IP prior to enrolling. (Prerequisite: CET 1600 or CEN 2304) FA, SP

CET 2650  Computer Introduction  4 sem. hrs.
This is a short introductory course, which introduces students to word processing, spreadsheets, database and presentation software. Students will receive hands on experience with word processing, spreadsheet, presentation and other application programs. The course will be composed of classroom lectures together with hands-on computer exercises. (Corequisite: CGS 1060L) Lab fee: $20. FA, SP, SU

CET 2655  Internet Web Foundations  3 sem. hrs.
An introductory course designed to teach the basic hands-on skills and knowledge that today’s business and Internet professionals are expected to understand and use. The three major topics are: the Internet and its fundamental uses, webpage development and development using HTML, and various fundamental networking skills. Students will perform a variety of practical tasks and assignments. Lab fee: $20. FA, SP

CET 2660  Fundamentals of Network Security  4 sem. hrs.
This course introduces the student to the concepts and methods of securing a computer network. The course includes general security concepts, legal aspects of computer crime, cyber-crime culture, viruses, types of attack, communications security, cryptography, access control, firewalls, intrusion detection and disaster preparedness. This course prepares the student for the CompTIA Security+ certification. Students must have a thorough knowledge of TCP/IP prior to enrolling. (Prerequisite: CET 1600 or CEN 2304) FA, SP

CET 2850  Wireless Networking  4 sem. hrs.
Site survey, installation, configuration, and troubleshooting of Wireless Local Area Networks. Basic RF and antenna theory. (Prerequisite: CET 1600) Lab fee: $50. FA, SP

CET 2949  Cooperative Education Experience in Computer Engineering Technology  1-4 sem. hrs.
(Prerequisite: 12 semester hours of approved Computer Science courses and permission of Computer Science chairperson.) FA, SP, SU

CGS 1002  Introduction to Microcomputer Operations  1 sem. hr.
This is an introductory hands-on course that teaches the essentials of using the Windows Operating System. Emphasis on the use and management of the explorer, the taskbar, the desktop and menus, online help, disk tools and accessories. Lab fee: $10. SP

CGS 1060/1060L  Basic Computer Concepts and Lab  3 sem. hrs.
This course is intended for first time computer users and concentrates on basic computer literacy. Students completing this course will have a concrete understanding of how to use a personal computer, manage computer files, use the Windows operating system and its various tools, send and receive e-mail and utilize the Internet to access information. Furthermore, the student will receive hands on experience with word processing, spreadsheet, presentation and other application programs. The course will be composed of classroom lectures together with hands-on computer exercises. (Corequisite: CGS 1060L) Lab fee: $20. FA, SP, SU

CGS 1555  Internet Web Foundations  3 sem. hrs.
An introductory course designed to teach the basic hands-on skills and knowledge that today's business and Internet professionals are expected to understand and use. The three major topics are: the Internet and its fundamental uses, webpage development and development using HTML, and various fundamental networking skills. Students will perform a variety of practical tasks and assignments. Lab fee: $20. FA, SP

CGS 1570  Introduction to Computer Applications  1 sem. hr.
This is a short introductory course, which introduces students to word processing, spreadsheets, database and presentation software. Students participate in hands-on activities using these software applications. Lab fee: $10. FA, SP
Course Descriptions

**CGS 2100** Microcomputer Applications 3 sem. hrs.
An introduction to computer operations including Windows operating system, e-mail, internet, and the use of software packages, including word processing, spreadsheets, data base management and presentation software. Lab fee: $20. FA, SP, SU

**CGS 2512** Advanced Computer Spreadsheets and Graphics Presentations 3 sem. hrs.
This course examines advanced spreadsheet techniques such as @Function, formula development, what-if tables and database operations. Also covered is the planning and development of graphics presentations. (Prerequisite: CGS 2100 or demonstration of basic proficiency with computer spreadsheets.) Lab fee: $20. SP

**CGS 2820** Web Programming 3 sem. hrs.
This project-based course deals with a variety of web design tools used to access, design, and develop web sites. This course includes a review of Internet concepts and HTML coding. The students will also be trained in techniques for creation and implementation of well-designed Web sites using a design tool and a client side scripting language (Java Script). (Prerequisite: CGS 1555 or permission from the Computer Science chairperson.) Lab fee: $20. FA, SP

**CGS 2821** Advanced Web Programming 3 sem. hrs.
This course continues the participants' development of skills using advanced web design techniques. Students will gain hands-on experience in creating and applying XML documents to web pages; understand XML mechanics and applications; use XML to document format data for enabling and facilitating wide reuse of data. (Prerequisite: CGS 1555 or permission from the Computer Science chairperson.) Lab fee: $20. FA

**CGS 2905** Directed Study in Computer Software Applications 1-4 sem. hrs.
FA, SP, SU

**CHD 1104** Introduction to Early Childhood Education I 3 sem. hrs.
This course is designed to introduce the student to the field of Child Development and Education, with an emphasis on the historical, philosophical, psychological and sociological foundations of Early Childhood Education. (Corequisite: CHD 1104L.) FA

**CHD 1104L** Introduction to Early Childhood Education I Lab 1 sem. hr.
Designed to provide the student with a supervised observation experience in a child care setting. (Corequisite: CHD 1104.) Lab fee: $6. FA

**CHD 1220** Child Growth and Development 3 sem. hrs.
A study of the interplay of biological factors, human interaction, social structure and cultural forces involved in shaping the growing child. FA, SP, SU

**CHD 1430** Observation, Recording and Assessment 3 sem. hrs.
This course covers techniques for observing, recording and assessing the behavior of young children. FA

**CHD 1820** Introduction to Early Childhood Education II 3 sem. hrs.
An overview of facilities, equipment, program planning and family involvement, using educational objectives and lesson plans in the preschool. Includes field experiences. (Corequisite: CHD 1820L.) SP

**CHD 1820L** Introduction to Early Childhood Education II Lab 1 sem. hr.
Designed to provide the student with a supervised observation and participation experience in a child care setting. (Corequisite: CHD 1820.) Lab fee: $6. SP

**CHD 2110** Infant/Toddler Development 4 sem. hrs.
A study of the physical, social, emotional and mental development of infants and toddlers. FA

**CHD 2236** Introduction to School-Age Child Care 3 sem. hrs.
This course is designed to introduce the student to the field of school-age care. An emphasis is placed on the historical, sociological, philosophical and psychological foundations of school-age care. The student explores the role of health, safety, nutrition, and recreation in the school-age care program and the establishment of positive relationships with families. Issues relating to school-age children, such as characteristic health problems and positive self-management are examined. This course is intended to meet partial educational requirements for the Florida School-Age Certification Training Program. FA

**CHD 2320** Curriculum Planning for Early Childhood 3 sem. hrs.
A course designed to study and develop competencies in lesson planning, curriculum design, record keeping, diagnostic/evaluative procedures and teaching techniques using preschool settings. This course is intended to meet one of the educational requirements for the Advanced Level Child Care and Education Administrator Credential as defined by the state of Florida. (Prerequisite: Permission of chairperson.) SP

**CHD 2333/2333L** Creative Activities for the Young Child and Lab 3 sem. hrs.
Designed to develop competencies in planning and supervising creative activities and to provide students with skills acquisition necessary to develop and adapt learning materials for the young child. (Corequisite: CHD 2333L.) Lab fee: $23. FA

**CHD 2334** Language Arts for the Young Child 3 sem. hrs.
A course covering skills and concepts required by teachers of young children to plan developmentally appropriate activities in language development, reading readiness and storytelling. (Corequisite: CHD 2334L.) FA

**CHD 2334L** Language Arts Activities Lab 1 sem. hr.
Supervised laboratory experience with young children. Emphasis is placed on planning and implementing learning experiences in language arts and storytelling. Two hours laboratory. (Corequisite: CHD 2334.) Lab fee: $13. FA

**CHD 2335/2335L** Music and Motor Activities for the Young Child 3 sem. hrs.
Designed to teach the value of musical and physical activities in the child’s life and ways to incorporate musical and motor activities in creative learning experience in the preschool. (Corequisite: CHD 2335L.) SU

**CHD 2338** Math and Science for the Young Child 3 sem. hrs.
A course covering the skills and concepts required by teachers of young children to plan developmentally appropriate activities in math, safety, science and food experience. (Corequisite: CHD 2338L.) SP

**CHD 2338L** Math and Science Activities Lab 1 sem. hr.
Supervised laboratory experience with young children. Emphasis on planning and implementing learning experiences in math, science, social studies and art. Two hours laboratory. (Corequisite: CHD 2338.) Lab fee: $3. SP

**CHD 2382** Planning Curriculum for School-Age Care Programs 3 sem. hrs.
This course is designed to study and develop competencies in planning for child-centered school-age programs that foster critical thinking skills and reinforce and support math, science, social science, and language and literacy development, and the creative development of school-age children. Students learn to design activities that help children develop interpersonal skills and their own self-concept, promote multicultural understanding, and teach school-age children cooperative learning strategies. SP

**CHD 2440** Child Development Practicum 6 sem. hrs.
The course is designed to provide students with a supervised internship in a selected educational program for young children. (Prerequisite: Permission of chairperson.) Lab fee: $3. SU

**CHD 2801** Child Development Management 3 sem. hrs.
Child care management course covering director responsibilities in implementing and administering an early childhood program, staff selection and supervision and financially managing the program. This course is intended to meet the educational requirements for the foundational-level child care and Educational Administrator Credential as defined by the state of Florida, and can be used toward the advanced level of the credential. FA
CJD 0791 Correctional Probation Operations .53 voc. crs.
This course is an overview of the basic operating procedures of a penal
institution, for probation officers working inside a correctional facility. FA,
SP, SU

CJD 0792 Correctional Probation Interpersonal Skills 2.26 voc. crs.
This course concentrates on the development of good interpersonal com-
munication skills and their effectiveness in working with diverse groups of
people and intervening in crisis situations. FA, SP, SU

CJD 0793 Correctional Probation Communication Skills 2.34 voc. crs.
The entire report writing process is covered, from interviewing techniques,
statement and note taking, to the completion of the written report. Com-
puter information systems are also emphasized. FA, SP, SU

CJD 0794 Correctional Probation Supervision 1.8 voc. crs.
This course is an introduction to the basic responsibility of a probation of-
Ficer in the supervision of criminal offenders. Identification of problems an
offender may have are explored. FA, SP, SU

CJD 0795 Correctional Probation Firearms .55 voc. crs.
This course covers firearms safety procedures and the basic principles of
firing a handgun and shotgun. The use of chemical agents is also covered.
Lab fee: $35. FA, SP, SU

CKJ 0006 Law Enforcement - Introduction and Law 2.23 voc. crs.
This course provides the student with an overview of the Criminal Justice
System and the basic provisions of the U.S. Constitution. Ethics and Pro-
fessionalism are covered. Lab fee: $56. FA, SP, SU

CKJ 0010 Human Issues in Law Enforcement 1.66 voc. crs.
This course teaches students the appropriate procedures for dealing with
people who have special needs, such as, mentally ill, mentally retarded,
substance abusers and persons with physical disabilities. FA, SP, SU

CKJ 0015 Law Enforcement Communications 2.56 voc. crs.
The entire police report writing process is covered. Topics include interview-
ing and interrogation, IPR skills, radio and telephone procedures, as well as
practice exercises. Objectives are as specified by the CJSTC. FA, SP, SU

CKJ 0020C Law Enforcement Vehicle Operations 1.60 voc. crs.
Components of the police driving environment are explored and practical
exercises on the driving range are conducted. Vehicle pullovers and felony
traffic stops are included via lecture, demonstration and scenario. Lab fee:
$100. FA, SP, SU

CKJ 0031C Criminal Justice CPR and First Aid 1.33 voc. crs.
Based on DOT's first responder to medical emergencies. Included are major
types of communicable diseases among adults, signs and symptoms of
each and methods of transmission. Lab fee: $25. FA, SP, SU

CKJ 0040C Criminal Justice Weapons 2.67 voc. crs.
Handgun and shotgun use, safety procedures and ammunition use are
covered in lecture. Introduction includes weapons qualifications. Lab fee:
$157. FA, SP, SU

CKJ 0421 Dart Stun Gun Firing Course 0.2 voc crs.
This course familiarizes the student with the function and effects of a dart
firing stun gun. This course is required by the State of Florida. Lab fee
$17.50. FA, SP, SU

CKJ 0050C Criminal Justice Defensive Tactics 2.67 voc. crs.
Unarmed defense, restraining and apprehending techniques are taught.
Special emphasis on the “use of force” continuum. Restraining devices,
impact weapons, pressure points, chemical agents, and use of aerosol
subject resistance, and officer fitness are also covered. Lab fee: $55. FA,
SP, SU

CKJ 0060 Law Enforcement Patrol 1.90 voc. crs.
Addresses the daily skills and techniques needed by officers to perform
patrol tactics and respond to the various types of calls that face today's
patrol officer. FA, SP, SU

CKJ 0070 Law Enforcement Investigations 1.90 voc. crs.
Includes all basic aspects of crime scene investigation encountered by
today's patrol officer. Techniques are developed from the initial observation
methods through the preparation of the crime scene and preparation of the
case for court. FA, SP, SU

CKJ 0075 Law Enforcement Investigating Offenses 1.33 voc. crs.
This course is designed to introduce the students to the process of inves-
tigating specific offenses including, domestic violence, child abuse, elder
abuse and death investigations. FA, SP, SU

CKJ 0080 Law Enforcement Traffic Stops 2.06 voc. crs.
This course introduces the student to the basic rules for conducting safe,
effective traffic stops, handling unattended vehicles and determining the
impairment of a driver. FA, SP, SU

CKJ 0085 Law Enforcement Traffic Crash Investigations 1.07 voc. crs.
This course introduces the student to traffic crash investigations, law per-
taining to traffic crashes and procedures for responding to a traffic crash.
FA, SP, SU

CKJ 0090 Tactical Applications in Law Enforcement 1.80 voc. crs.
This course teaches students skills that will enable them to effectively re-
solve situations involving rescues, bombs, explosives and crowd control.
FA, SP, SU

CKJ 0095 Criminal Justice Special Topics .66 voc. crs.
This course is designed to prepare students for the State of Florida Law En-
forcement Officer Certification Examination. The major learning outcomes
for all of the courses in the Basic Law Enforcement Recruit Training program
will be reviewed. Test taking strategies will also be taught. FA, SP, SU

CLP 2001 Psychology of Adjustment 3 sem. hrs.
An exploration of the process of personal and social growth. Emphasis is
placed on increasing self-understanding and personal effectiveness. (Pre-
requisite or Corequisite: ENC 1101.) FA, SP, SU

CLP 2140 Abnormal Psychology 3 sem. hrs.
A study of terminology, diagnostic categories and treatment methods of
major types of psychological disturbances. (Prerequisite or Corequisite:
ENC 1101.) FA, SP, SU

COP 1000 Principles of Computer Programming 3 sem. hrs.
This course provides the beginning programmer with a guide to developing
structured program logic, and assumes no programming language experi-
ence. Programming concepts together with program definition, algorithms,
flow charts, debugging, documentation, pseudocode, and a high-level lan-
guage are introduced. Lab fee: $20. FA, SP

COP 1126/1126L COBOL Programming I and Lab 3 sem. hrs.
Design computer programs using algorithms and data structures common
to “commercial” applications, code computer programs in standard CO-
BOL language. (Prerequisite: COP 1000 or permission of Computer Science
chairperson. (Corequisite: MAC 1105 or permission of Computer Science
chairperson. Corequisite: COP 1126L) Lab fee: $20. FA, SP

A continuation of Computer Programming I using “C.” Object-oriented pro-
gramming concepts and fourth generation languages will be introduced
and applied. (Prerequisite: COP 1000 course or permission of Computer
Science chairperson. Corequisite: COP 2001L) Lab fee: $20. SP

COP 2010 Visual Basic Programming 3 sem. hrs.
A first course in object-oriented programming using Microsoft Visual BA-
SIC.NET for Windows. Topics covered will be the programming environment
and how to use it, use of programming values and variables, conditional
statement and loops, modules and parameter passing and use of color and
windows forms for communication with the user. An introduction to ASP.
NET and database access will be covered. (Prerequisite: COP 1000 or permi-
sion of Computer Science chairperson.) Lab fee: $20. FA, SP

A continuation of Computer Programming I using “C.” Object-oriented pro-
gramming concepts and fourth generation languages will be introduced
and applied. (Prerequisite: COP 1000 course or permission of Computer
Science chairperson. Corequisite: COP 2001L) Lab fee: $20. SP

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windows forms for communication with the user. An introduction to ASP.
NET and database access will be covered. (Prerequisite: COP 1000 or permi-
sion of Computer Science chairperson.) Lab fee: $20. FA, SP

A continuation of Computer Programming I using “C.” Object-oriented pro-
gramming concepts and fourth generation languages will be introduced
and applied. (Prerequisite: COP 1000 course or permission of Computer
Science chairperson. Corequisite: COP 2001L) Lab fee: $20. SP

COP 2010 Visual Basic Programming 3 sem. hrs.
COP 2011 Advanced Visual Basic Programming 3 sem. hrs.
The student applies the Visual Basic programming language to more advanced problems including accessing SQL Server databases, creating Web forms, and creating custom controls. The student designs, implements and documents computer programs using Microsoft's Visual Basic.NET development environment. This course covers competencies of the developing and implementing Windows-based Applications with Microsoft Visual Basic.NET and Visual Studio.NET exam (70-306) of the Microsoft Certified Application Developer (MCAD) certification. (Prerequisite: COP 2010 or permission of Computer Science chairperson.) Lab fee: $20. FA

COP 2128/2128L COBOL Programming II and Lab 3 sem. hrs.
Computer programming for file manipulation, interactive online processing, table processing and report preparation using sequential, relative and indexed files. (Prerequisite: COP 1126/1126L and COP 2220 or permission of Computer Science chairperson. Prerequisite or Corequisite: COP 1000. Corequisite: COP 2128L.) Lab fee: $20. SP

COP 2220 Computer Programming “C” 3 sem. hrs.
Hands-on, introductory study of C Programming language as applied to business applications. The course includes arrays, pointers, functions, I/O operations, data structures, and operating system interaction. Students write and compile their program in multiple platforms and compilers. Students also learn debugging techniques in existing malfunctioning programs and customize programs according to specifications. (Prerequisite: COP 1000 or MAC 1105.) Lab fee: $20. FA, SP

COP 2337 Advanced C++ and DirectX Programming 3 sem. hrs.
The student applies the C++ programming and the Microsoft Foundation classes to create applications that run under the Microsoft Windows operating system. Topics include creating Windows applications, Web services and server-side coding. The student designs, implements and documents programs using Microsoft’s Visual Studio development environment. (Prerequisite: COP 2001/2001L or permission of Computer Science chairperson.) Lab fee: $20. FA

COP 2510 Software Design and Development 3 sem. hrs.
This course deals with the techniques used in analysis, design, and development of computer system software through data flow analysis and system development life cycle including traditional (and object) analysis, requirements analysis, specification, systems design, implementation, and maintenance. (Prerequisite: COP 2001/2001L or COP 2010 or COP 2220 or COP 2800 or permission of Computer Science chairperson.) Lab fee: $20. FA

COP 2700 Introduction to Database Management 3 sem. hrs.
This class covers the concepts of relational databases and the industry standard SQL language. Students are taught the relational model to create and maintain database objects. Data analysis, logical and physical structure will be covered. Students will learn data definition language and data manipulation language syntax in SQL. CASE tools will be used to analyze data structure. Lab fee: $20. FA

COP 2800 Computer Programming “Java” 3 sem. hrs.
The high-level computer language “java” is used to solve business problems. Course includes basics, object-oriented programming, graphical user interfaces with event-driven programming and applets used in web pages. (Prerequisite: COP 1000 or permission of Computer Science chairperson.) Lab fee: $20. FA, SP

COP 2831 Web Scripting 3 sem. hrs.
This course prepares student to understand the syntax and semantics of scripting programming such as JavaScript, Perl and basic concepts of VB script. Students will learn to write scripting language code, integrate the scripts into Web pages and identify uses and applications of scripts in Web sites and/or other multimedia projects. (Prerequisite: CGS 2820.) Lab fee: $20. SP

COP 2881 Advanced Java Programming 3 sem. hrs.
This course expands on the Java programming basics to explore advanced Java topics such as inner classes, object serialization, and multithreading. Many of the objectives for Sun Java Certification are covered. (Prerequisite: COP 2800.) Lab fee: $20. SP

COP 2883 Web Application Development - Action Scripting 3 sem. hrs.
This course introduces the student to Macromedia Flash, with an emphasis on ActionScript. Students will learn about Object Composition, Inheritance, Interfaces and Components. They will learn to write object-oriented ActionScript code, integrate it into Web pages, and identify different uses and applications on the scripts in Web sites and/or other multimedia projects. (Prerequisite: COP 1000.) Lab fee: $20. SP

COP 2905 Directed Study in Computer Programming 1-4 sem. hrs.
Independent individual or team studies, projects and practica in computer programming—design, construction, documentation and implementation—under the direction of the Computer Science faculty. Specific content to be arranged. May be repeated with change of content. (Prerequisite: Permission of Computer Science chairperson.) FA, SP, SU

COP 2940 Computer Science Internship 2 sem. hrs.
Six hours per week of practical computer programming experience in a computer installation. FA, SP, SU

COP 2949 Cooperative Educational Experience in Computer Programming 1-4 sem. hrs.
(Prerequisite: 12 semester hours of approved Computer Science courses and permission of Computer Science chairperson.) FA, SP, SU

Cos 0080/0080L Cosmetology I and Lab 8.0 voc. crs.
Orientation to the field of cosmetology. The student will use classroom and laboratory facilities to develop basic skills and techniques. (Corequisite: COS 0080L.) Lab fee: $85.50. FA, SP, SU

Cos 0081/0081L Cosmetology II and Lab 8.0 voc. crs.
A continuation of basic skills and concept development. Introduction to principles and concepts of cosmetology. (Prerequisite: COS 0080/0080L. Corequisite: COS 0081L.) Lab fee: $85.50. FA, SP, SU

Cos 0082/0082L Cosmetology III and Lab 8.0 voc. crs.
The student will acquire knowledge of the principles and concepts of cosmetology. Intermediate skills will be perfected on clients in the school-operated salon. (Prerequisites: COS 0080/0080L and COS 0081/0081L. Corequisite: COS 0082L.) Lab fee: $85.50. FA, SP, SU

Cos 0083/0083L Cosmetology IV and Lab 8.0 voc. crs.
The student will acquire knowledge of the principles of nail care, skin care and hair coloring. Skills will be perfected in the school-operated salon. (Prerequisites: COS 0080/0080L, COS 0081/0081L and COS 0082/0082L. Corequisite: COS 0083L.) Lab fee: $85.50. FA, SP, SU

Cos 0084/0084L Cosmetology V and Lab 8.0 voc. crs.
State Board preparation is emphasized. Theoretical knowledge and skills will be perfected to employment competency level. (Prerequisites: COS 0080/0080L, COS 0081/0081L, COS 0082/0082L and COS 0083/0083L. Corequisite: COS 0084L.) Lab fee: $85.50. FA, SP, SU

Cos 0905 Directed Study in Cosmetology 1-4 voc. crs.
FA, SP, SU

CPD 2001 Comparative Government 3 sem. hrs.
An introduction to comparative political behavior, processes, institutions and public policy in selected industrial democracies, communist and former communist states and “third world” countries. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite or corequisite: ENC 1101.) FA, SP, SU

CRW 2100 Fiction Writing 3 sem. hrs.
An introduction to the techniques of writing fiction. (Prerequisite: ENC 1102 or permission of chairperson.) FA, SP
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Nature of Study</th>
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<tbody>
<tr>
<td>CTS 2810</td>
<td>Managing and Maintaining Systems</td>
<td>4</td>
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<td>CEN 2304</td>
<td>Installation, administration and troubleshooting Windows Active Directory</td>
<td>4</td>
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<tr>
<td>CTS 2180</td>
<td>Designing Windows Active Directory Services</td>
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<td>CTS 2181</td>
<td>Microsoft Windows Active Directory Services</td>
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<tr>
<td>CTS 2300</td>
<td>Designing Windows Networks</td>
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<tr>
<td>CTS 2310</td>
<td>Designing Windows Network Security</td>
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<td>CTS 2311</td>
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<td>CTS 2321</td>
<td>Linux System Administration</td>
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<tr>
<td>CTS 2810</td>
<td>Managing and Maintaining a Windows Network Environment</td>
<td>4</td>
<td>Semester Hours</td>
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</tbody>
</table>
DAN 2740  Stretch and Placement  3 sem. hrs.
This course will investigate dynamic alignment principles as they relate to flexibility and movement quality. Emphasis is placed on the anatomical and kinesiological factors involved in movement and range of movement exercises as they relate to any movement oriented skills. FA, SP

DAN 2906  Directed Study in Dance  1-4 sem. hrs.
FA, SP, SU

DAN 2949  Cooperative Education Experience in Dance  1-4 sem. hrs.
FA, SP, SU

DEA 0000  Introduction to Dental Assisting  1.0 voc. cr.
This course explores the major historical events in dentistry. Other areas of study include ethics and jurisprudence, OSHA regulations, the state dental practice act, certification procedures, expanded functions for dental auxiliaries and an overview of the dental specialties. (Corequisites: DEA 0020C/0020L) FA

DEA 0020C/0020L  Chairside Assisting I and Lab  3.5 voc. crs.
This course introduces students to the knowledge and skills that are required of a dental assistant in clinical practice. Emphasis is placed on the knowledge and practice of proper infection control methods, principles of four-handed dentistry and restorative procedures. (Corequisites: DEA 00130, DES 0000C and DEA 0020L) Lab fee: $40. FA

DEA 0130  Biomedical Science  2.0 voc. crs.
This course is an introduction to the fundamentals of anatomy and physiology of the human body. Other areas of study include histology, microbiology, pathology, oral pathology, pharmacology and medical/dental emergencies. (Corequisites: DEA 0020C/0020L and DES 0000C) FA

DEA 0801C/0801L  Chairside Assisting II and Lab  3.5 voc. crs.
This course is a continuation of DEA 0020C Chairside Assisting I. This course exposes the students to the knowledge and skills that are required for a dental assistant in the various dental specialties. Emphasis is placed on the sequence of steps, armamentariums, expanded functions and procedures performed in specialized areas of dentistry. (Prerequisites: DEA 0020C/0020L and DES 0000C. Corequisite: DEA 0801L.) Lab fee: $46. SP

DEA 0850L  Externship I  8.0 voc. crs.
Students are assigned to clinical facilities to develop competence in performing chairside assisting skills, expanded functions, minor laboratory and basic office procedures. Students must maintain current certification in cardiopulmonary resuscitation and the ability to rotate through clinical facilities. Seminars are conducted in order to correlate clinical experiences with instructional goals. (Prerequisites: DEA 0020C/0020L and DES 0000C. Corequisite: DEA 0801L.) Lab fee: $6. SP

DEA 0851L  Externship II  8.0 voc. crs.
This is a continuation of DEA 0850L Externship I. Students are assigned to clinical facilities to perfect competence in performing chairside assisting skills, expanded functions, minor laboratory and basic office procedures. Students must maintain current certification in cardiopulmonary resuscitation while rotating through clinical facilities. Seminars are conducted in order to correlate clinical experiences with instructional goals. (Prerequisites: DEA 0801C/0801L and DEA 0850L) Lab fee: $6. SU

DEH 1003C/1003L  Preclinical Dental Hygiene and Lab  4 sem. hrs.
This course is designed to acquaint students with the basic principles of dental hygiene practice. Lectures focus on diagnostic collection techniques, instrumentation and methods of infection control. (Prerequisites: BSC 1085C/1085L and BSC 1086C/1086L. Corequisite: DEH 1003L) Lab fee: $35. FA

DEH 1133  Orofacial Anatomy & Physiology  2 sem. hrs.
This course provides an in-depth study of the human dentition and supporting structures. Topics of study include anatomical landmarks of the oral cavity, tooth and root morphology, oral embryology, oral histology and nomenclature. (Prerequisites: BSC 1085C/1085L and BSC 1086C/1086L) FA

DEH 1133L  Orofacial Anatomy & Physiology Laboratory  1 sem. hr.
This course provides the student an opportunity to examine tooth and root morphology, occlusal relationships, stages of tooth development, histological tooth structures and the embryonic development of orofacial structures. The reproduction of the human dentition is emphasized. (Prerequisites: BSC 1085C/1085L and BSC 1086C/1086L.) FA

DEH 1800  Clinical Dental Hygiene I  2 sem. hrs.
This course is a continuation of DEH 1003C/1003L Preclinical Dental Hygiene and Lab. Emphasis is on treatment planning, nonsurgical periodontal therapy and dential hypersensitivity. (Prerequisites: DEH 1003C/1003L and DES 1841. Corequisite: DEH 1800L) SP

DEH 1800L  Dental Hygiene Clinic I  2 sem. hrs.
This course focuses on the utilization of periodontal debridement, coronal polishing, patient assessment and treatment planning during clinical sessions. (Prerequisites: DEH 1003C/1003L and DES 1200C/1200L. Corequisite: DEH 1800.) Lab fee: $70. SP

DEH 1802  Clinical Dental Hygiene II  2 sem. hrs.
This course is a continuation of the practical application of the competencies and skills acquired in DEH 1800 Clinical Dental Hygiene I. Topics include ultrasonic instrumentation, air polishing, plaque indices and scoring methods, cosmetic whitening, and intraoral photographic imaging. (Prerequisites: DEH 1800 and DEH 1800L. Corequisite: DEH 1802L.) SU

DEH 1802L  Dental Hygiene Clinic II  2 sem. hrs.
This course focuses on the refinement of basic skills pertaining to dental hygiene practice. (Prerequisites: DEH 1800 and DEH 1800L. Corequisite: DEH 1802.) Lab fee: $80. SU

DEH 2300  Pharmacology and Pain Control  2 sem. hrs.
This course is a comprehensive comprehensive study of drugs and anesthetics used in the treatment of dental diseases. Special emphasis is given to the principles and techniques of pain control as it relates to the field of dentistry. (Prerequisites: CHM 1025/1025L and BSC 1086C/1086L) FA

DEH 2400  General and Oral Pathology  2 sem. hrs.
This course is a comprehensive study of oral abnormalities and disease processes with a focus on clinical identification. The principles of general pathology in relationship to the diseases and the oral cavity are emphasized. (Prerequisites: BSC 1086C/1086L and DEH 2602.) FA

DEH 2602  Periodontology  3 sem. hrs.
This course is a study of the etiology, clinical manifestations, prognosis and treatment of periodontal disease. Periodontal examinations, treatment planning and the dental hygienist’s role in periodontal therapy are emphasized. (Prerequisites: DEH 1003C/1003L and DES 1841.) SP

DEH 2702/2702L  Community Dental Health and Lab  3 sem. hrs.
This course covers the philosophy as well as the practice of community and public health dentistry. The study of statistical analysis, research methodology, epidemiology of dental disease and the role of the dental hygienist in the community are emphasized. Students are required to design and implement an oral health education program for a community group. (Prerequisites: DEH 2804 and DEH 2602. Corequisite: DEH 2702L.) SP

DEH 2804  Clinical Dental Hygiene III  2 sem. hrs.
This course is a continuation of DEH 1802 Clinical Dental Hygiene II. Lectures focus on applied techniques for patients with special needs. (Prerequisites: DEH 1802 and DEH 1802L. Corequisite: DEH 2804L.) FA

DEH 2804L  Dental Hygiene Clinic III  4 sem. hrs.
This course emphasizes the utilization of advanced dental hygiene skills, expanded functions and periodontal therapy. (Prerequisites: DEH 1802 and DEH 1802L. Corequisite: DEH 2804.) Lab fee: $38. FA

DEH 2806  Clinical Dental Hygiene IV  2 sem. hrs.
This course is a continuation of DEH 2804 Clinical Dental Hygiene III. Lectures focus on ethics, jurisprudence, and legal concerns which are relevant to clinical practice. Emphasis is on review of case studies. (Prerequisites: DEH 2804 and DEH 2804L. Corequisite: DEH 2806L.) SP
DEH 2806L Dental Hygiene Clinic IV  4 sem. hrs.
This course provides further proficiency of clinical skills and refinement of assessment capabilities in preparation for licensure and clinical practice. (Prerequisites: DEH 2804 and DEH 2804L. Corequisite: DEH 2806.) Lab fee: $88.  SP

DEP 2004 Developmental Psychology  3 sem. hrs.
A study of the various aspects of normal human development, equally emphasizing tasks, changes and adjustments that occur in each stage of the life span. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite or Corequisite: ENC 1101.)  FA, SP, SU

DEP 2481 Death & Dying: Life & Living  3 sem. hrs.
An exploration of the meanings, human experiences and dilemmas associated with life and death in the twentieth century. Lecture/discussion method. (Prerequisite or Corequisite: ENC 1101.)  FA, SP, SU

DEP 2949 Cooperative Education Experience in Developmental Psychology  1-4 sem. hrs.  FA, SP, SU

DES 0000C Dental Anatomy & Physiology  1.0 voc. cr.
This course is an in-depth study of the human dentition and supporting structures. Other areas of study include dental terminology, occlusal relationships, oral history and embryology as well as head and neck anatomy. (Corequisites: DEA 0020C/0020L and DEA 0130.)  FA

DES 0100C/0100L Dental Materials and Laboratory Procedures  3.0 voc. crs.
This course is designed to acquaint the student with the physical and chemical properties of materials used in dental practice. Instruction and practice in the manipulation of materials and minor laboratory procedures is emphasized. (Corequisites: DEA 0020C/0020L, DES 0000C and DES 0100L.) Lab fee: $50.  FA

DES 0210C/0210L Dental Radiology and Lab  3.0 voc. crs.
This course is a study of the theories and principles of dental radiology. The following areas will be covered: history of X-ray development, radiation physics, radiographic anatomy, processing techniques, radiation hygiene and safety, X-ray equipment and radiographic techniques. Emphasis is placed on the interpretation, placement, exposing, processing and mounting of X-ray films during laboratory sessions. (Corequisites: DEA 0020C/0020L, DES 0000C and DES 0210L.) Lab fee: $50.  FA

DES 0502 Practice Management  1.0 voc. cr.
This course instructs the student in the methods of maintaining dental office records. Other areas of study include bookkeeping systems, dental insurance, telephone communication, patient management, recall systems, appointment control, written and oral communications, inventory systems and supply ordering. (Prerequisites: DEA 0020C/0020L and DEA 0000C.)  SP

DES 0840 Preventive Dentistry and Nutrition  1.0 voc. cr.
This course is a study of the mechanisms employed to avert or intercept dental disease and the conditions that tend to destroy oral structures. Students are also given the opportunity to study the utilization of food derivatives in the maintenance and repair of body and oral tissues. Emphasis is placed on dietary considerations for the dental patient. (Prerequisites: DEA 0020C/0020L and DEA 0000C.)  SP

DES 1120C/1120L Elements of Dental Materials and Lab  3 sem. hrs.
This course introduces the student to the physical and chemical properties of materials used in dental practice. Instruction and practice in the manipulation of materials and minor laboratory procedures are emphasized during laboratory sessions. (Prerequisites: CHM 1025/1025L and DES 2830L. Corequisite: DES 1120L.) Lab fee: $50.  SU

DES 1200C/1200L Dental Radiography and Lab  4 sem. hrs.
This course provides students with the fundamental background and theory for the safe and effective use of X-ray radiation. Laboratory sessions emphasize the placement, exposing, processing, mounting and interpretation of dental radiographs. (Prerequisites: CHM 1025/1025L and BSC 1086C/1086L. Corequisite: DES 1200L.) Lab fee: $50.  FA

DES 1841 Preventive Dentistry  2 sem. hrs.
This course is designed to introduce the student to the practice and philosophy of preventive dentistry. Methods of dental biofilm control, tooth deposits and stains, dental caries, fluorides, oral physiotherapy, interdental care and oral health care products are emphasized. (Prerequisites: BSC 1085C/1085L and BSC 1086C/1086L.)  FA

DES 2010 Head and Neck Anatomy  2 sem. hrs.
This course is an in-depth study of the anatomy of the head and neck region. The skeletal, muscular, nervous, lymphatic and circulatory systems are emphasized. (Prerequisites: DEH 1133 and DEH 1133L.)  SP

DES 2600 Medical and Dental Emergencies  1 sem. hr.
This course is designed to provide students with information on the signs, symptoms, treatment and equipment that is necessary to render care for common emergencies that can occur in the dental office. (Prerequisites: DEH 1802 and BSC 1086C/1086L.)  FA

DES 2830L Expanded Functions for the Dental Hygienist  2 sem. hr.
This course provides students with didactic information and the laboratory experience to perform expanded functions that are permitted by the Florida State Dental Practice Act. (Prerequisites: DEH 1003C/1003L and DEH 1133.) Lab fee: $36.  SP

DIG 1109 Digital Imaging Fundamentals  3 sem. hrs.
This course covers digital image manipulation, editing and file management techniques using industry software. Introduces students to personal computers, the Macintosh Operating System and peripheral devices as graphic production tools for design, photography and digital media. Class materials fee: $20.  FA, SP, SU

DIG 2100 Web Design I  3 sem. hrs.
An introduction to professional tools, techniques and methods used in web publishing. Current industry production software is used to create and edit electronic pages, layouts and websites. This course is repeatable one time for credit. (Prerequisite: DIG 1109.) Class materials fee: $20.  FA, SP

DIG 2101 Web Design II  3 sem. hrs.
This course explores the advanced study of specific conceptual, aesthetic, and production design issues for interactive websites. Current industry production software is used to develop electronic pages and paths that contain animation, sound and video. (Prerequisite: DIG 2100.) Class materials fee: $20.  SP

DIG 2115 Digital Imaging Fundamentals II  3 sem. hrs.
A continuation of DIG1109, this course combines digital technology processes with fundamental photography skills. Emphasis is on tools, techniques, and aesthetics in a range of visual communication applications. (Prerequisite: DIG 1109.) Class materials fee: $25.  SP, SU

DIG 2132 Digital Art & Design  3 sem. hrs.
This course provides a sound theoretical introduction to the concepts, principles and techniques of digital art and design. Explores the use of the computer workstation as an art production and drawing tool using drawing and painting software to create and generate visuals. (Prerequisite: GRA 1741 or ART 1201C.) Class materials fee: $25.  FA, SP

DIG 2280 Digital Video and Sound  3 sem. hrs.
This course introduces students to non-broadcast video production and concepts including camera operation, image control, aesthetics, and editing. Covers digital editing and digital audio post-production. (Prerequisite: GRA 1158.) Class materials fee: $20.  FA, SP

DIG 2284 Advanced Digital Video and Sound  3 sem. hrs.
This course in digital video production techniques covers advanced skills with production planning and execution, camera operation, editing and post-production effects. (Prerequisite: DIG 2280.) Class materials fee: $20.  FA, SP
DIG 2300  2D Animation  3 sem. hrs.  
An introduction to two-dimensional animation concepts and techniques using traditional methods and computer software applications. Stresses the basics of moving imagery and covers storytelling, scripting, backgrounds, surfaces, and lines of action. (Prerequisites: GRA 1158 and DIG 2100. Corequisite: DIG 2500.) Class materials fee: $20. FA

DIG 2302  Introduction to 3D Animation  3 sem. hrs.  
An introduction to using computer software applications for three-dimensional modeling, mapping and rendering. Covers techniques to create moving images and simulations. (Prerequisite: DIG 2300. Corequisites: DIG 2501 and DIG 2101.) Class materials fee: $20. SP

DIG 2500  Multimedia Authoring I  3 sem. hrs.  
An introduction to the design and construction of multimedia presentation materials for a range of electronic media. The student creates, arranges and manages audio, video, animation, graphics, typographic, and photographic sources to create effective informational, navigational, and interactive syntax. (Prerequisites: DIG 2100 and GRA 1158.) Class materials fee: $20. FA

DIG 2501  Multimedia Authoring II  3 sem. hrs.  
This course covers advanced concepts and techniques for multimedia authoring and production. Basic scripting concepts for animation elements and designing for interactivity are explored in a range of professional applications. (Prerequisite: DIG 2500.) Class materials fee: $20. SP

EAP 0300  Speech/Listening – Level III  4 college prep. hrs.  
A low-intermediate academic English language course designed to continue the development of the student’s speaking and listening skills necessary for participating in classroom discussions with an emphasis on clarification through re-wording and asking questions. (Prerequisite: Permission of chairperson.) FA, SP, SU

EAP 0320  Reading – Level III  4 college prep. hrs.  
A low-intermediate academic English language course designed to continue the development of the student’s ability to read text on familiar and basic academic topics with an emphasis on vocabulary expansion and application of critical reading skills. (Prerequisite: Permission of chairperson.) FA, SP, SU

EAP 0340  Writing – Level III  4 college prep. hrs.  
A low-intermediate academic English language course designed to continue the development of the student’s ability to write basic, structured academic paragraphs on familiar topics and execute other academic writing tasks. (Prerequisite: Permission of chairperson.) FA, SP, SU

EAP 0360  Grammar – Level III  4 college prep. hrs.  
A low-intermediate academic English language course designed to continue the development of the student’s ability to use intermediate-level grammatical structures appropriate to classroom discussion and the writing of academic paragraphs with an emphasis on increased accuracy. (Prerequisite: EAP 0360 or permission of chairperson.) FA, SP, SU

EAP 0400  Speech/Listening – Level IV  4 college prep. hrs.  
A high-intermediate academic English language course designed to continue the development of the student’s speaking and listening skills necessary for participation in classroom discussions. Introduction to oral presentation and critical listening skills is emphasized. (Prerequisite: EAP 0300 or permission of chairperson.) FA, SP, SU

EAP 0420  Reading – Level IV  4 college prep. hrs.  
A high-intermediate academic English language course designed to continue the development of the student’s academic and critical reading skills through the use of contemporary and literary reading texts. (Prerequisite: EAP 0320 or permission of chairperson.) FA, SP, SU

EAP 0440  Writing – Level IV  4 college prep. hrs.  
A high-intermediate academic English language course designed to continue the development of the student’s ability to write more sophisticated, structured academic paragraphs in various rhetorical modes and execute other academic writing tasks. (Prerequisite: EAP 0340 or permission of chairperson.) FA, SP, SU

EAP 0460  Grammar – Level IV  4 college prep. hrs.  
A high-intermediate academic English language course designed to continue the development of the student’s ability to apply intermediate level grammatical structures appropriate to classroom discussions, oral presentations, and writing of more sophisticated academic paragraphs with an emphasis on increased accuracy. (Prerequisite: EAP 0360 or permission of chairperson.) FA, SP, SU

EAP 1500  Speech/Listening – Level V  4 college prep. hrs.  
An advanced academic English language course designed to continue the development of the student’s communication, organization and pronunciation skills necessary for effective academic presentation and discussion. Instruction includes an introduction to lecture note-taking. (Prerequisite: EAP 0400 or permission of chairperson.) FA, SP, SU

EAP 1501  Accent Reduction  3 college prep. hrs.  
This course is designed to equip students with the necessary skills to approximate the spoken language of Standard American English. Topics will range from discrete, individual sounds of letters and words to the holistic concepts that encompass sentences and phrases. Additionally, direct instruction to counterbalance articulation differences indigenous to specific languages will be provided. (Prerequisite: Permission of chairperson.) FA, SP

EAP 1520  Reading – Level V  4 college prep. hrs.  
An advanced academic English language course designed to continue the development of the student’s ability to comprehend lengthier texts on diverse academic topics by applying appropriate reading strategies. (Prerequisite: EAP 0420 or permission of chairperson.) FA, SP, SU

EAP 1540  Writing – Level V  4 college prep. hrs.  
An advanced academic English language course designed to continue the development of the student’s ability to write basic, structured academic essays with an emphasis on accuracy, clarity and cohesiveness and execute other academic writing tasks. (Prerequisite: EAP 0440 or permission of chairperson.) FA, SP, SU

EAP 1560  Grammar – Level V  4 college prep. hrs.  
An advanced academic English language course designed to continue the development of the student’s ability to use complex grammatical structures appropriate for effective academic presentations, discussions and essays. (Prerequisite: EAP 0460 or permission of chairperson.) FA, SP, SU

EAP 1580  Combined Skills Class – Level V  4 college prep. hrs.  
This elective course is intended for advanced ESL students. It is designed to prepare students for the Test of English as a Foreign Language (TOEFL). Students will become familiarized with the format and style of the TOEFL. This comprehensive course focuses on the skills measured by the TOEFL including listening, speaking, structure, written expression, and reading comprehension. (Prerequisite: Permission of chairperson.) FA, SP, SU

EAP 1930  Essential Writing Skills for Effective Communication  3 college prep. hrs.  
This course introduces high-intermediate and advanced non-native English speakers to business practices, decorum and terminology used in United States businesses. (Prerequisite: Permission of chairperson.) FA, SP

ECO 2013  Principles of Macroeconomics  3 sem. hrs.  
An introduction to the fundamental principles and concepts of the U.S. national economy, including supply and demand analysis, national income accounting, economic growth, fiscal and monetary policy, business cycle theories and international trade. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite or Corequisite: ENC 1101.) FA, SP, SU
Course Descriptions

**ECO 2023 Principles of Micro Economics** 3 sem. hrs.
An introduction to the fundamental principles and concepts of individual, business and government, including supply and demand, taxation price supports, plus analysis of labor, income distribution, politics, health care, and anti-trust. This course meets the 3,000 word minimum Gordon Rule requirements. (Prerequisite or Corequisite: ENC 1101.)  FA, SP, SU

**ECO 2905 Directed Study in Economics** 1-4 sem. hrs.
(Prerequisite: Appropriate placement scores or successful completion of college prep courses.)  FA, SP, SU

**ECO 2949 Cooperative Education Experience in Economics** 1-4 sem. hrs.
(Prerequisite: Appropriate placement scores or successful completion of college prep courses.)  FA, SP, SU

**EDF 1005 Introduction to Education** 3 sem. hrs.
Social forces which give purpose and support to education at the national, state and local levels. Classroom observation in public schools required. (Prerequisite: Appropriate placement scores or successful completion of college prep courses.)  Lab fee: $10.  FA, SP, SU

**EDF 2060 History of Education in the USA** 3 sem. hrs.
The historical development of American education including contributions, conflicts and changes in educational thought. (Prerequisite: Appropriate placement scores or successful completion of college prep courses.)  FA, SP

**EDF 2949 Cooperative Education Experience in Education** 1-4 sem. hrs.
FA, SP, SU

**EDG 2701 Teaching Diverse Populations** 3 sem. hrs.
Orientation to the instructional needs if diverse classroom populations including cultural, racial, religious, ethnic, gender issues, learning styles, abilities and disabilities. Observation in diverse settings required. (Prerequisite: Appropriate placement scores or successful completion of college prep courses.)  FA, SP, SU

**EDG 2905 Directed Study in Education** 1-4 sem. hrs.
(Prerequisite: Appropriate placement scores or successful completion of college prep courses.)  FA, SP, SU

**EDG 2949 Cooperative Education Experience in Education** 1-4 sem. hrs.
FA, SP, SU

**EDP 2002 Educational Psychology** 3 sem. hrs.
Application of psychological principles to the educational process and the effect of intelligence factors, environment, emotions and motivation on learning. Lecture and discussion method. (Prerequisite: Appropriate placement scores or successful completion of college prep courses.)  FA, SP, SU

**EEC 2401 Home, School and Community** 2 sem. hrs.
Designed for students to become acquainted with the dynamics of the relationships of home, school and community in early childhood education.  SP

**EEC 2523 Leadership and Management of Child Care Programs** 3 sem. hrs.
This course is designed to study and develop competencies in the administrator's leadership role in the organizational structure of a child care center. This course is intended to meet one of the course requirements of the Advanced Level Child Care and Education Administrator Credential as defined by the state of Florida.  FA, SP

**EEC 2527 Child Care Center Financial and Legal Issues** 3 sem. hrs.
This course is designed to study and develop competencies in Financial and Legal Issues in child care programs. This course is intended to meet one of the course requirements of the Advanced Level Child Care and Education Administrator Credentials as defined by the state of Florida.  FA, SP

**EET 1011C/1011L Introduction to Electrical Circuits and Lab** 3 sem. hrs.
An introduction to the basic concepts of electricity and magnetism. Emphasis is placed on resistance, capacitance and inductance as basic circuit components. (Prerequisite: MAT 0024/0024L or equivalent. Corequisite: EET 1011L.)  Lab fee: $15.  FA, SP

**EET 1021C/1021L Advanced Electrical Circuits and Lab** 3 sem. hrs.
An introduction to the basic concepts of alternating voltage and current. Emphasis is placed on resistance, capacitance and inductance as basic AC circuit components. (Prerequisite: EET 1011C/1011L and Corequisite MAC1105. Corequisite: EER 1021L.)  Lab fee: $15.  FA, SP

**EET 1141C/1141L Analog Devices and Circuits and Lab** 4 sem. hrs.
Introduces the concepts of circuit simplification via idealizations, approximations and an overview of semiconductor devices and their electrical properties. Emphasis is placed on circuit analysis. (Prerequisite: EET 1011C/1011L and EET 1021C/1021L, or CET 1114C/1114L. Corequisite: EET 1141L.)  Lab fee: $20.  SP

**EET 1607C/1607L Electronics Assembly and Cabling and Lab** 3 sem. hrs.
This course involves lab environment training in communications cabling and electronics assembly techniques. Topics covered include computer network cable fabrication, installation, and management, safety, testing and troubleshooting, cabling industry standards, component recognition, soldering and desoldering methods, and reading and drawing of schematics. (Corequisite: EET 1607L.)  Lab fee: $20.  FA, SP

**EET 2142C/2142L Analog Circuits and Basic Analog Communications and Lab** 4 sem. hrs.
Circuits covered are more complex in applications. Includes FET circuits, amplitude/phase shift response of transistor circuits, integrated circuits and negative and positive feedback circuits. (Prerequisite: EET 1141C/1141L. Corequisite: EET 2142L.)  Labe Fee: $20.  FA

**EET 2326C/2326L Wireless Communications and Lab** 4 sem. hrs.
A comprehensive study of electronic communication systems, including topics in fiber optic, AM/FM radio, transmission lines, antennas, wave propagation, microwave techniques and other broadcast technologies. (Prerequisite: EET 2142C/2142L.)  Corequisite: EET 2326L.)  Lab fee: $20.  SP

**EET 2905 Directed Study in Electronics** 1-4 sem. hrs.
FA, SP, SU

**EET 2949 Cooperative Education Experience in Electronics** 1-4 sem. hrs.
FA, SP, SU

**EEV 0532C/0532L Computer Assembly and Set-Up and Lab** 4.0 voc. crs.
This course covers an introduction to computer hardware and software identification and configuration. Board-level PC assembly and the installation of operating systems and applications software is included. Prepares students for the Core A+ Exam. Lab fee: $20. (Corequisite: EEV 0532L.)  FA

**EEV 0539C Computer Repair Training and Lab** 5.0 voc. crs.
This internship course offers practical experience in customer service and computer repair in an industrial setting. This course is offered to students in the last semester of the Computer Support Specialist certificate program.  SP

**EEV 0552C/0552L Networking for Technicians and Lab** 4.0 voc. crs.
This course introduces the student to Internet research, basic Internet page construction and local area networks. It prepares the student to pass the Network Plus (+) certification exam. (Prerequisites: CGS 2100 and EEV 0532C/0532L. Corequisite: EEV 0552L.)  Lab fee: $20.  SP
EVE 0565C/0565L Hardware/Software Troubleshooting and Lab 4.0 voc. crs.
This course is designed to present the troubleshooting method and provide an opportunity to use this method in diagnosing and repairing computer system problems. Hands-on instruction is included in using diagnostic software and test equipment to solve hardware/software problems. Prepares students for the Windows operating systems A+ Exam. (Prerequisites: CGS 2100, EVE 0532C/0532L and EVE 0612C/0612L. Corequisite: EVE 0565L.) Lab fee: $20. SP

EVE 0612C/0612L Digital/Analog and Lab 4.0 voc. crs.
An introduction to analog and digital electronics for computer service technicians. Topics include basic digital logic, fundamentals of electronics, technical math, flow charts, microprocessors, active analog and digital communications. (Corequisite: EVE 0612L.) Lab fee: $20. FA

EEX 2010 Introduction to Exceptional Education 3 sem. hrs.
This course provides an introduction to exceptional education and includes basic information on etiology and characteristics as well as the programs and services provided to this population. (Prerequisite: EDF 1005 or permission of chairperson.) Lab fee: $10. FA, SP, SU

EEX 2080 Teaching the Exceptional Learner 3 sem. hrs.
This course provides students with strategies and methods to teach learners with special needs. SU

EGS 1000 Professional Performance for Technicians 3 sem. hrs.
Introduction to professional training activities related to organizations including interpersonal relationships, problem solving, goal settings, ethics, policies, and procedures, personal development and organizational structures and cultures. Lab fee: $10. FA, SP, SU

EGS 1110C/1110L Engineering Drawing and Lab 3 sem. hrs.
Drawing, lettering, dimensioning and geometric constructions; orthographic, isometric and oblique projections and drawings; sketching and working and assembly drawings. (Corequisite: EGS1110L.) Lab fee: $10. FA, SP, SU

EGS 2650 Technical Ethics 1 sem. hr.
This course is designed to make the student aware of the ethical responsibilities associated with extensive technical knowledge. Topics to be explored include electronic privacy intrusion, proprietary product knowledge and unclear or untried legislation regarding technical capabilities. FA, SP

EGS 2905 Directed Study in Engineering 1-4 sem. hrs.
FA, SP, SU

EHD 1400 Introduction to Interpreting 3 sem. hrs.
This course is 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. (Prerequisites: SPA 2613 and SPA 2613L.) Lab fee: $20. SP

EHD 1402 Educational Interpreting 3 sem. hrs.
Introduces the intermediate level interpreter training student to the sign systems and processes used in secondary and postsecondary educational settings. (Prerequisites: EHD 1400. Corequisite: EHD 1930.) SP

EHD 1404 Introduction to Transliterating 3 sem. hrs.
This course is designed to provide skill development for expressive and receptive transliterating of manually coded sign systems used primarily in educational settings. Students will practice from audio taped, video taped, and live material and will learn the techniques of self-assessment through video taping. (Prerequisites: SPA 2615, SPA 2615L and EHD 1400.) SP

EHD 1930 Ethics and Application of Interpreting 3 sem. hrs.
Special topics, including business practices, professional conduct and the role of the interpreter during employment are emphasized. (Prerequisites: SPA 2613 and SPA 2613L.) SP

EHD 1941 Externship Practicum I 3 sem. hrs.
This course provides the intermediate level interpreting student observes the interpreting process in various professional work situations. Students will schedule a series of individual and group observations and discuss their practicum experiences. (Corequisites: EHD 1402 and EHD 1930.) Lab fee: $12. FA, SP

EHD 2000 Orientation to Deafness 3 sem. hrs.
An introduction and orientation to the educational, communication, social, vocational, psychological and legal aspects of deafness; the impact of deafness on the individual and family, and social patterns of the deaf community. (Prerequisites: SPA 2613 and SPA 2613L.) SU

EHD 2401 Beginning Receptive Voicing 3 sem. hrs.
This course will introduce students to the process of Sign-to-Voice Interpreting. Students will practice from audio taped, video taped and live material and will learn the techniques of self-assessment through video taping. (Prerequisites: SPA 2613, SPA 2613L and EHD 1400.) Lab fee: $10. FA

EHD 2406 Receptive Voicing 3 sem. hrs.
This course studies and practices interpreting a signed message from American Sign Language to a hearing or hard of hearing person through voice, and the transliteration from a Signed English message to a hearing impaired person through voice. (Prerequisites: EHD 1400 and EHD 2401.) Lab fee: $10. SP

EHD 2407 Advanced Receptive Voicing 3 sem. hrs.
Designed to strengthen the skills of advanced level students in accurate interpreting from a signed message to a voiced English translation. (Prerequisite: EHD 2406.) Lab fee: $10. SU

EHD 2420 Receptive Signing 3 sem. hrs.
This course is the study and practice of the interpretation of a spoken message, from English to American Sign Language, for hearing, hard of hearing, and deaf individuals; and the study of transliteration, from a spoken message to Signed English, for hearing, hard of hearing, and deaf individuals. (Prerequisite: EHD 1400.) SU

EHD 2421 Advanced Receptive Signing 3 sem. hrs.
This course is designed to strengthen the skills of advanced level students in accurate interpreting from a voiced message to a Signed ASL or English translation in realistic interpreting situations. (Prerequisite: EHD 2420.) FA

EME 2040 Introduction to Educational Technology 3 sem. hrs.
A practical course in computer-assisted educational research, curriculum development, and instruction for the multimedia classroom. (Prerequisite: EDF 1005 or permission of chairperson.) Lab fee: $10. FA, SP, SU

EMS 0068C Dispatcher, Police, Fire and Ambulance 6.93 voc. crs.
This course prepares students for employment as a dispatcher in various public safety settings such as police fire and ambulance service. Students will learn standard telecommunication operating procedures and computer equipment operation. FA, SP, SU

EMS 0069 Emergency Medical Dispatcher .80 voc. crs.
This course provides the instruction and skills practice sufficient to achieve Emergency Medical Dispatcher certification eligibility. Medical terms, legal aspects and emergency medical procedures are emphasized. (Prerequisite: EMS 0068C.) FA, SP, SU

EMS 1119 Emergency Medical Technician I 7 sem. hrs.
Emphasizes basic life support skills necessary to work as an Emergency Medical Technician. Skills include assessment and pre-hospital care of the sick and injured. This course prepares the student for state licensure and the paramedic curriculum. (Corequisites: EMS 1401L and EMS 1431.) FA, SP, SU
EMS 1401L Emergency Medical Technician I Lab 2 sem. hrs. This course is designed to develop skills necessary for state licensing and employment as an Emergency Medical Technician. It emphasizes practical application of pre-hospital emergency care procedures in EMS 1119. (Corequisites: EMS 1119 and EMS 1431.) Lab fee: $125. FA, SP, SU

EMS 1431 Emergency Medical Technician Clinical/Field Experience 2 sem. hrs. This course is designed to fuse the theory learned in lecture and skills learned in lab while participating as part of the Emergency Medical Services (EMS) team in the pre-hospital and hospital settings. Students will participate in clinical rotations in an Emergency Department and on-board and Advanced Life Support (ALS) ambulance. (Corequisites: EMS 1119 and EMS 1401L.) FA, SP, SU

EMS 2603 Paramedic I 9 sem. hrs. The Paramedic is a certified allied health provider qualified in advanced life support. Skills and knowledge include recognition, assessment and management of the acutely ill or injured patient. This course serves as the building block to prepare the candidate with the necessary background information and basic cognitive knowledge to successfully complete the Paramedic program. Corequisites: EMS 2603L and EMS 2666.) FA, SP, SU

EMS 2603L Paramedic I Lab 4 sem. hrs. Practical application of the didactic and laboratory instruction received in EMS 2603 to include advanced patient assessment, airway management, clinical decisions, communications and documentation. Corequisites: EMS 2603 and EMS 2666.) Lab fee: $150. FA, SP, SU

EMS 2604 Paramedic II 9 sem. hrs. This course emphasizes the recognition and advanced pre-hospital care of the traumatically injured patient and the patient presenting with a medical emergencies related to respiratory, cardiovascular, neurological, endocrine, gastroenterologic, renal or urologic, toxic exposure, environmental, behavioral, gynecologic and obstetric pathologies. (Prerequisites: EMS 2603, EMS 2603L and EMS 2666. Corequisites: EMS 2604L and EMS 2667.) FA, SP, SU

EMS 2604L Paramedic II Lab 3 sem. hrs. Practical application of the didactic and laboratory instruction received in EMS 2604 to include advanced patient assessment, clinical decisions, communications, and documentation. (Prerequisites: EMS 2603, EMS 2603L and EMS 2666. Corequisites: EMS 2604 and EMS 2667.) Lab fee: $100. FA, SP, SU

EMS 2605 Paramedic III 8 sem. hrs. This course presents information on the pathophysiological principles and assessment findings of patients with special needs and integrates assessment-based management with clinical decision-making and transport considerations. It also develops an awareness of special considerations in the application and delivery of Emergency Medical Services and further defines the role of the Paramedic within the EMS system. (Prerequisites: EMS 2604, EMS 2604L and EMS 2667. Corequisites: EMS 2605L, EMS 2658 and EMS 2659.) FA, SP, SU

EMS 2605L Paramedic III Lab 3 sem. hrs. Practical application of the didactic and laboratory instruction received in EMS 2605 to include advanced patient assessment, airway management, clinical decision-making, communication skills and documentation. (Prerequisites: EMS 2604, EMS 2604L and EMS 2667. Corequisites: EMS 2605, EMS 2668 and EMS 2439.) Lab fee: $100. FA, SP, SU

EMS 2659 Paramedic Field Internship 3 sem. hrs. This is the capstone course of the Paramedic program. Interns will participate as lead crewmembers aboard a licensed Advanced Life Support transport ambulance during a 240-hour field internship with an assigned preceptor. (Prerequisites: EMS 2604, EMS 2604L and EMS 2667. Corequisites: EMS 2605, EMS 2605L) Lab fee: $100. FA, SP, SU

EMS 2666 Paramedic Clinical I 1 sem. hr. Rotation through various departments of local hospitals, health department and Advanced Life Support EMS providers performing invasive and noninvasive paramedic skills under the direct supervision of the clinical instructor and/or assigned preceptor. The EMS program clinical coordinator or designee will provide clinical schedules. Students are responsible for transportation to and from the clinical sites. (Corequisites: EMS 2603 and EMS 2603L.) FA, SP, SU

EMS 2667 Paramedic Clinical II 2 sem. hrs. Rotation through various departments of local hospitals, health department and Advanced Life Support EMS providers performing invasive and non-invasive paramedic skills under the direct supervision of the clinical instructor and/or assigned preceptor. The EMS program clinical coordinator or designee will provide clinical schedules. Students are responsible for transportation to and from the clinical sites. (Prerequisite: EMS 2603 and EMS 2603L. Corequisites: EMS 2604 and EMS 2604L.) FA, SP, SU

EMS 2605 Direct Study in Emergency Medical Services 1-4 sem. hrs. FA SP SU

EMS 2949 Cooperative Education Experience in Emergency Medical Services 1-4 sem. hrs. FA SP SU

ENC 0001/0001L Writing I and Lab 4 college prep. crs. Designed for students demonstrating a need for strengthening skills in sentence construction, grammar and usage. The course stresses improvement of these skills through drill and practice in writing. Required for students scoring below minimum score on placement test. (ENC 0001 cannot be used toward AA, AAS or AS degree requirements. Corequisite: ENC 0001L.) Lab fee: $5. FA, SP, SU

ENC 1101 College Composition 3 sem. hrs. Designed to develop skills in expressive, expository and persuasive writing, theme construction and style. This course meets the 6,000 word minimum Gordon Rule requirement. (Prerequisite: Appropriate placement scores or successful completion of college prep courses.) Lab fee: $5. FA, SP, SU

ENC 1102 Literature and Composition 3 sem. hrs. An introduction to the study of literature, together with the development of writing and research skills. This course meets the 6,000 word minimum Gordon Rule requirement. (Prerequisite: ENC 1101.) Lab fee: $5. FA, SP, SU

ENG 2210 Report Writing 3 sem. hrs. Principles and techniques for presenting technical and job related information, including primary research, graphically as well as in clear, concise written form. (Prerequisite: ENC 1101 or permission of chairperson.) FA, SP, SU

ENG 2341 Article Writing 3 sem. hrs. Designed for analysis and writing of expository, descriptive and narrative articles on subjects of contemporary interest. Emphasis is placed on individual creativity and research. (Prerequisite: ENC 1101 or permission of chairperson.) SP

ENG 2990 CLAST English Review 0 sem. hrs. A course designed for students who have failed the CLAST or need a review. Topics include reading comprehension skills, grammar skills, and essay writing. FA, SP, SU

ENG 2104 Latin American Literature in Film 3 sem. hrs. A study of selected readings and periods of Latin American literature as expressed through film. Genres of poetry, essays, novels and short stories will be studied through written work and film. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite: ENC 1101 or permission of chairperson.) SP

ENG 2905 Directed Study in English 1-4 sem. hrs. (Prerequisite: Appropriate placement scores or successful completion of college prep courses.) FA, SP, SU
ENL 2012  Early English Literature  3 sem. hrs.
Offered as part of the Cambridge University Summer Program in Cam-
bridge, England. A study of selected readings from Beowulf to the end of
the 18th century. This course meets the 3,000 word minimum Gordon Rule
requirement. (Prerequisite: ENC 1101 or permission of chairperson.) SU

ENL 2022  Nineteenth Century English Literature  3 sem. hrs.
A study of selected readings from the nineteenth century to the present.
Genres of poetry, plays, essays, novels and short stories will be studied.
This course meets the 3,000 word minimum Gordon Rule requirement. (Pre-
requisite: ENC 1101 or permission of chairperson.) FA, SP

ENL 2280  Contemporary English Literature  3 sem. hrs.
A survey of representative British and Irish writers of the 20th century. This
course meets the 3,000 word minimum Gordon Rule requirement. (Prer-
erequisite: ENC 1101 or permission of chairperson.) FA, SP

ENL 2931  Selected Topics in Shakespeare  3 sem. hrs.
Course focuses on Shakespeare's plays and poetry. Students read and view
plays, including the study of staging, plot, characterization and language
in Shakespearean works. This course meets the 3,000 word minimum Gor-
don Rule requirement. Course is also offered in SU as part of the Cam-
bridge University Summer Program in Cambridge, England. (Prerequisite:
ENG 1101 or permission of chairperson.) FA, SP

ETC 2207C/2207L  Construction Planning and Estimating
and Lab  3 sem. hrs.
Construction project organization and management, contracting and con-
struction. Estimating fundamentals; square-foot estimates; quantity take-
off, unit pricing; direct and indirect costs. Scheduling; network diagram
setting and critical path analysis; bar charts; resource analysis; project
control. Manual and computer approaches are used. Project: estimate and
schedule a small facility construction. (Prerequisite: BCN 1210 or permis-

ETC 2245  Construction Methods   3 sem. hrs.
Civil Engineering specialized methods including: site investigation; foun-
dation construction; piles and pile driving; drilling rock and earth; rock
blasting; conveyor belt systems; production of aggregates; compressed air;
and pumping operations. Cursory review of Construction Codes and Licens-
ing requirements. Small research project on special construction methods
or systems. Lab fee: $3. SP

ETD 0949  Cooperative Education Experience
in Architectural Drafting  1-4 sem. hrs.
FA, SP, SU

ETD 2218/2218L  Geometric Tolerancing and Lab  3 sem. hrs.
An introductory course in dimensioning and tolerancing using the Geo-
metric method nationally accepted as per ANSI Y14.5. (Prerequisite: EGS
1110C/1110L. Corequisite: ETD2218L.) SP

ETD 2320C/2320L  Computer Aided Drafting I (AutoCAD)
and Lab  3 sem. hrs.
A first course in computer aided drafting covering equipment, drawing
setup, creating geometry, use of text, dimensioning, plotting and file man-
gement. (Corequisite: ETD2320L.) Lab fee: $10. FA, SP, SU

ETD 2350/2350L  Computer Aided Design Applications (AutoCAD)
and Lab  3 sem. hrs.
Advanced applications course utilizing CAD software to produce finished
drawings. Topics include Windows operating system, text editors, software
variables, menu modification, macros, and programming. (Prerequisite:
ETD 2320C/2320L. Corequisite: ETD2350L.) Lab fee: $10. FA

ETD 2355C/2355CL  Computer Aided Drafting II (AutoCAD)
and Lab  3 sem. hrs.
An intermediate course in computer aided drafting covering hatching, ex-
ternal references, blocks, attributes and 3-D modeling. (Prerequisite: ETD
2320C/2320L or permission of assistant chair. Corequisite: ETD2355CL).
Lab fee: $10. FA, SP, SU

ETD 2355/2355L  Inventor Solid Modeling and Lab  3 sem. hrs.
Advanced course in drafting using Inventor software for 3D modeling and
surface generation. (Corequisite: ETD2355L.) Lab fee: $10. FA, SP

ETD 2359C/2359L  SolidWorks Solid Modeling and Lab  3 sem. hrs.
A course covering the creation of 3D solid models for manufacturing utiliz-
ing SolidWorks software. Topics include sketching, dimensioning, extrud-
ing, revolves, sweeps, booleans, shelling, assemblies, drawing creation,
design tables, exploded views and rendering. (Corequisite: ETD2359L.)
Lab fee: $10. SP

ETD 2395C/2395L  Architectural CAD (Architectural Desktop)
and Lab  3 sem. hrs.
Architectural design and drafting utilizing Architectural Desktop soft-
ware. Topics include floor plans, doors, windows, roofs, stairs, annota-
tions, elevations, sections and commercial structures. (Prerequisite: ETD
2350C/2350L or permission of assistant chair. Corequisite: ETD2395L.) Lab
fee: $10. SP

ETD 2377C/2377L  3D Computer Animation (3D Studio)
and Lab  3 sem. hrs.
An introductory course in 3D animation for technical graphics that includes
object creation, editing, lighting, materials, keyframing and rendering.
(Corequisite: ETD 2377L.) Lab fee: $10. SP

ETD 2465/2465L  Tool Design and Lab  3 sem. hrs.
An entry-level course covering theory, principles and techniques for the
modern design of tools, jigs, fixtures and related tooling. (Prerequisite:
ETD 2320C/2320L. Corequisite: ETD2465L.) SP

ETD 2547C/2547L  Civil Drafting and Surveying (CAD)
and Lab  3 sem. hrs.
Interpretation of USGS maps. Theory and application of field data in mea-
surements, land surveying and grading; surveying data acquisition. Lot,
building lines and grades layout. Drawing contour lines, street and highway
plans, profiles and cross-sections. Excavation quantities. Horizontal circu-
lar curves and vertical curves for road work. Drawings are prepared using
CAD computer software. (Prerequisites: ETD 2320C/2320L. Corequisite:
ETD 2547L.) Lab fee: $10. SP

ETD 2801C/2801L  Technical Illustration and Lab  3 sem. hrs.
Methods and techniques of pictorial drawing as related to mechanical and
industrial graphics using AutoCAD. (Prerequisite: ETD 2320C. Corequisite:
ETD2801L.) FA

ETD 2520  Statics and Strength of Materials  3 sem. hrs.
Fundamental principles of statics including forces, resultant, components,
reactions, analysis of trusses, strength of materials, stresses and strains,
tensile testing of steel and basic mechanical properties, section properties
for analysis and design, friction, shear and bending moment diagrams and
theory of bending. (Prerequisite: MTB 1348 or MAC 1105.) FA, SP

ETD 2906  Directed Study in Engineering  1-4 sem. hrs.
FA, SP, SU

ETD 2907  Directed Study in Engineering Technology
or Construction Technology  1-4 sem. hrs.
FA, SP, SU

ETD 2949  Cooperative Education Experience
in Engineering  1-4 sem. hrs.
FA, SP, SU

ETM 2315/2315L  Simulation Fluid Power Systems
and Lab  3 sem. hrs.
Electro-mechanical, Hydraulics and Pneumatics A practical approach to
technical problems involving hydraulics and pneumatics, fluid mechanics,
hydrostatic forces, and pipe and pump operation including the electrical
circuitry needed to operate and control mechanical and hydraulic/pneu-
matic systems. (Corequisite: ETM 2315L.) Lab fee: $50. FA
EUP 2000 History of Western Civilization to 1648 3 sem. hrs.
An analysis of the major changes in the societies of western man, from the Middle Eastern origins through the Protestant Reformation. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite or Corequisite: ENC 1101.) FA, SP

EUP 2001 History of Western Civilization 1648 to Present 3 sem. hrs.
A n examination of the historical evolution and diffusion of western institutions and ideas, including nationalism, the modern state, totalitarianism and democracy. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite or Corequisite: ENC 1101.) FA, SP

EXP 2420 Animal Behavior and Training 3 sem. hrs.
Introduction to the basic principles of classical and operant conditioning in animals and humans. Specific techniques for controlling behavior are presented. Includes lecture, outside lab and in-field experiences. (Prerequisite or Corequisite: ENC 1101.) FA, SP, SU

FFP 0010 Firefighter I 7.5 voc. crs.
This course of study is the first of two parts, which prepares the student with the fundamental knowledge and skills necessary to safely and dependably perform fire-rescue duties as a firefighter. Successful completers of this course are eligible to take a state administered examination for volunteer firefighters. This course is corequisite with FFP 0020 for those desiring to become state certified firefighters. Lab fee: $150. FA, SP

FFP 0020 Firefighter II 7.5 voc. crs.
This corequisite course with FFP 0010 is the second of the two-part series, which prepares the student participating in the state certification examinations administered by the Bureau of Fire Standards and Training for obtaining a state of Florida Firefighter Certificate of Compliance. Students must have successfully completed all aspects of FFP 0010 in order to participate in this course. Lab fee: $150. FA, SP

FFP 0360 Fire Apparatus Operations 1.34 voc. crs.
Course covers emergency driving laws, rules and techniques, as well as a review of hydraulics. There is a practical portion to this class which will entail various evolutions involving pre-connected lines, drafting, tandem and relay pumping. (Corequisite: FFP 0361. Prerequisite: Must have completed minimum of FFP 0010 and be a member of an organized fire department or permission of assistant chair.) Lab fee: $25. FA, SP

FFP 0361 Hydraulics and Water Distribution Systems 1.33 voc. crs.
Mechanics of the flow of fluids; design, testing, and use of nozzles and appliances; measurement of fluid flow and methods of determining quantities of water. (Corequisite: FFP 0360. Prerequisite: Must have completed a minimum of FFP 0010 and be a member of an organized fire department or permission of assistant chair.) FA, SP

FFP 1000 Introduction to Fire Protection Hazards 3 sem. hrs.
Historical development of fire service, safety and security; role of fire service, protection and safety personnel; identification of fire hazards and their causes; and application of fire protection principles. Lab fee: $5. FA

FFP 1510 Construction Codes and Material Rating 3 sem. hrs.
A study of building codes applicable to fire prevention; principles and practices used in various types of building construction; and fire resistance tests and ratings of building materials. Lab fee: $5. FA

FFP 1520 Fire Prevention Programs 3 sem. hrs.
Principles and applications of fire prevention for community and industrial plants including development and maintenance of fire prevention programs, educational programs and inspection programs, and specific applications to fire prevention problems. Lab fee: $5. FA, SP

FFP 1700 Management of Municipal Fire Protection 3 sem. hrs.
Fire department organization, personnel management and relationship with other city departments. Evaluation of fire protection needs, financial factors, etc., and other equipment necessary for modern fire protection. Lab fee: $5. SU

FFP 1799 Time Management for Fire Service 1 sem. hr.
A unique system that incorporates the ideas and concept of organization, priority setting, planning, decision making, study skills and communications needed for achievement of personal and scholastic goals. Lab fee: $3. SU

FFP 1810 Firefighting Strategy and Tactics I 3 sem. hrs.
Learn firefighting tactics and strategies in extinguishing fires. Tactical operations, commanding fire ground operations and contributing factors to fire ground failure will be emphasized. Lab fee: $5. SP

FFP 2120 Building Construction 3 sem. hrs.
Study of building designs and construction features providing indications of how fire will behave and spread in various types of structures. FA, SP

FFP 2401 Hazardous Materials I 3 sem. hrs.
A study of hazardous materials, with emphasis on unstable chemicals; explosive substances and their handling; exotic fuels (solid and liquid propellants); pesticides, corrosive, toxic and radioactive substances. SU

FFP 2402 Hazardous Materials II 3 sem. hrs.
A study of the methods used to transport hazardous materials; ways to control and lessen the effects of an accident. (Prerequisite: FFP 2401.) SU

FFP 2521 Blueprint Reading and Plans Evaluation 3 sem. hrs.
A review of actual building plans is designed to give the student an understanding of the basic principles involved in graphic communications and, in particular, blueprint and plan reading. FA

FFP 2540 Private Fire Protection Systems 3 sem. hrs.
A study of private fire detection systems to include fixed extinguishing systems and standard and/or special fire alarms. Includes a review of the design, installation, maintenance and testing of the systems. FA, SP

FFP 2604 Fire Detection and Investigation 3 sem. hrs.
Determine causes of fire, losses and records, origins, preservation of physical evidence, scientific aid to investigation and courtroom procedure in presenting evidence. SU

FFP 2720 Fire Department Leadership 3 sem. hrs.
Officers and potential officers within the fire service are provided the fundamentals of leadership - specifications of the fire officer's position are covered extensively. SU

FFP 2740 Fire Service Instructor 3 sem. hrs.
Methods and techniques of instruction including oral communication; preparing lesson plans; writing performance objectives; use of training aids; and the selection, evaluation and preparation of performance tests. SP

FFP 2741 Fire Service Course Design 3 sem. hrs.
Principles of effective curriculum design. Stresses the principles of adult learning and student-centered learning, designing units and courses that address learning, performance and behavioral objectives. (Prerequisite: FFP 2740.) SP

FFP 2811 Firefighting Strategy and Tactics II 3 sem. hrs.
Pre-fire plans, techniques of using available equipment and manpower and predicting fires by fuel analysis. Emphasis will be on developing thinking skills in relation to crises. (Prerequisite: FFP 1810.) SP

FFP 2905 Directed Study in Fire Science 1-4 sem. hrs.
FA, SP, SU

FFP 2949 Cooperative Education Experience in Fire Science 1-4 sem. hrs.
FA, SP, SU

FIN 1121 Personal Financial Planning 2 sem. hrs.
Study of the fundamental principles and practices used in the formation structure and monitoring of personal financial planning. Lab fee: $5. SP
FIN 2000  Principles of Finance  3 sem. hrs.
Investment characteristics of stocks and bonds, securities market, commercial banks and the Federal Reserve System, and inflation, deflation and money supply. FA, SP

FOS 1201  Sanitation and Safety  3 sem. hrs.
Students will study the causes and prevention of food spoilage and food borne illnesses. Study will focus on proper food handling, personal hygiene, and food service safety. FA, SP, SU

FRE 1120/1120L  French I and Lab  4 sem. hrs.
Fundamental grammar principles and basic speech patterns with intensive drills in listening and speaking followed by reading and writing of the language. Three-hour class instruction and two-hour language laboratory. (Prerequisite: FRE 1120/1120L. Corequisite: FRE 1121L.) Lab fee: $5. FA, SP, SU

FRE 1121/1121L  French II and Lab  4 sem. hrs.
Continuation of FRE 1120/1120L. Concentration on all tenses and grammar fundamentals. Three-hour class instruction and two-hour language laboratory. (Prerequisite: FRE 1120/1120L. Corequisite: FRE 1121L.) Lab fee: $5. FA, SP, SU

FRE 2220/2220L  French III and Lab  4 sem. hrs.
Continued practice of oral French together with simple readings in French literature. Includes grammar review, vocabulary building and composition. Three-hour class instruction and two-hour language laboratory. (Prerequisite: FRE 2220/2220L. Corequisite: FRE 2220L.) Lab fee: $5. SP

FRE 2221/2221L  French IV and Lab  4 sem. hrs.
Continuation of FRE 2220/2220L. Develop advanced skills in speaking, reading and writing modern French, based on selected readings from novels, magazines, etc. Three-hour class instruction and two-hour language laboratory. (Prerequisite: FRE 2220/2220L. Corequisite: FRE 2220L.) Lab fee: $5. SP

FRE 2905  Directed Study in French  1-4 sem. hrs.
(Prerequisite: Appropriate placement scores or successful completion of college prep courses.) FA, SP, SU

FRE 2949  Cooperative Education Experience in French  1-4 sem. hrs.
FA, SP, SU

FSS 1063C/1063L  Baking and Lab  3 sem. hrs.
Introduction to baking science and the composition and properties of baking ingredients. Students will produce a variety of baked goods, using proper tools and methods. Lab fee: $50. FA, SP, SU

FSS 1202C/1202L  Food Production I and Lab  3 sem. hrs.
Principles of food preparation, study will focus on basic principles and techniques of food production, use of recipes and use and care of equipment and tools. Corequisite: FOS 1201L. Lab fee: $50. FA, SP, SU

FSS 1222C/1222L  Food Production II and Lab  3 sem. hrs.
Study will focus on the preparation of meats, poultry, seafood and game. Students will use a variety of cooking and preparation methods. Lab fee: $50. FA, SP

FSS 1240C/1240L  Contemporary American Cuisine and Lab  3 sem. hrs.
Preparing modern American cuisine with emphasis on regional influences and contemporary presentation techniques. Lab fee: $50. FA, SP

FSS 1242C/1242L  International Cuisine and Lab  3 sem. hrs.
In this course students will study and practice classical/international menus of Europe and Asia. Special attention on flavor principles of various cuisines. Lab fee: $50. FA, SP

FSS 2292C*  Advanced Cuisine  3 sem. hrs.
Study to focus on the art of advanced food preparation. Students will acquire skills in producing a variety of food items including garde manger, charcuterie, entre and desserts. Students will execute planned meals using learned food preparation and presentation techniques. *Pending assigned course number.

FSS 2284/2284L  Catering and Buffet Management and Lab  3 sem. hrs.
This course will introduce the student to effective practices and principles of effective buffet and catering/event management. From pre-planning to service and staffing to breakdown and clean up. FA, SP

FSS 2905  Directed Study in Food Service  1-4 sem. hrs.
FA, SP, SU

FSS 2906  Directed Study in Culinary  1-4 sem. hrs.
FA, SP, SU

GEB 1011  Introduction to Business  3 sem. hrs.
Business in the modern political, social and economical environment. Forms of business enterprise, management problems, tools in decision making and business vocabulary. FA, SP, SU

GEB 2351  International Business Practice Firm  3 sem. hrs.
Using a simulated business firm in a state-of-the-art facility, students transact business with students in other simulated companies both in the U.S. and in other countries via the Internet. Repeatable for credit. (Prerequisite: Permission of assistant chair or department chairperson.) Lab fee: $25. SP

GEB 2430  Business Ethics  3 sem. hrs.
The purpose of this course is to direct the student toward a professional level of ethical awareness and decision-making in business. A review of the historical origins of ethics and value systems and their influence on various cultures is included. Different ethical values are compared and reviewed in relation to current ethics issues and cases. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite or corequisite: ENC 1101.) FA, SP

GEB 2430A  Business Ethics  3 sem. hrs.
The purpose of this course is to direct the student toward a professional level of ethical awareness and decision-making in business. A review of the historical origins of ethics and value systems and their influence on various cultures is included. Different ethical values are compared and reviewed in relation to current ethics issues and cases. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite or corequisite: ENC 1101.) FA, SP, SU

GEO 1120/1120L  German I and Lab  4 sem. hrs.
Continuation of FRE 1120/1120L. Concentration on all tenses and grammar fundamentals. Three-hour class instruction and two-hour language laboratory. (Prerequisite: FRE 1120/1120L. Corequisite: FRE 1121L.) Lab fee: $5. FA

GEO 2000  World Geography  3 sem. hrs.
A study of the Earth in spatial terms, place names of major countries and world regions, maps, globes and physical-human phenomena of environments and places. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite or Corequisite: ENC 1101.) FA, SP, SU

GEO 2420  Cultural Geography  3 sem. hrs.
A descriptive study of the location and distribution of people in the world and their cultural characteristics, including: language, religion, and how people use resources and earn their livings. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite or Corequisite: ENC 1101.) FA, SP, SU

GER 1120/1120L  German II and Lab  4 sem. hrs.
Fundamental grammar principles and basic speech patterns with intensive drills in listening, speaking, reading and writing the language. Three-hour class instruction and two-hour language laboratory. (Prerequisite: Appropriate placement scores or successful completion of college prep courses. Corequisite: GER 1120L.) Lab fee: $5. FA

GER 1121/1121L  German II and Lab  4 sem. hrs.
Continuation of GER 1120/1120L. Three-hour class instruction and two-hour language laboratory. (Prerequisite: GER 1120/1120L Corequisite: GER 1121L.) Lab fee: $5. SP
GER 2220/2220L German III and Lab 4 sem. hrs. Review of grammar and continued practice of oral German. Reading of intermediate level German literature. Special attention to vocabulary building and composition. Three-hour class instruction and two-hour language laboratory. (Prerequisite: GER 1121/1121L. Corequisite: GER 2220L.) Lab fee: $5. FA

GER 2221/2221L German IV and Lab 4 sem. hrs. Continuation of GER 2220/2220L. Reading of short novels, literature and magazines for the purpose of giving oral and written reports in German. Three-hour class instruction and two-hour language laboratory. (Prerequisite: GER 2220/2220L. Corequisite: GER 2221L.) Lab fee: $5. SP

GER 2905 Directed Study in German 1-4 sem. hrs. (Prerequisite: Appropriate placement scores or successful completion of college prep courses.) FA, SP, SU

GRA 1158 Digital Graphics Fundamentals 3 sem. hrs. This course covers vector illustration graphics software for graphic design and digital media applications. (Prerequisite: Permission of assistant chair. Corequisites: DIG 1109 and GRA 1741.) Class materials fee: $20. FA, SP

GRA 1171 Advertising Design 3 sem. hrs. A study of the principles & psychology of advertising design, campaigns & layout in areas of print, outdoor, point-of-purchase, direct response & television. Emphasis is on original concept. Effective techniques and presentation through text, typography, illustration and photography are investigated. (Prerequisite: GRA 1202. Corequisite: GRA 2545.) Class materials fee: $20. SP

GRA 1202 Typography 3 sem. hrs. This course covers typographic design, typographic illustration, type terminology, type specifying and digital typesetting. Emphasizes choice and use of appropriate type in a variety of design contexts. (Prerequisites: GRA 1741, GRA 1158 and GRA 1543. Corequisite: GRA 2114.) Class materials fee: $20. FA, SP

GRA 1204 Digital Publishing Fundamentals 3 sem. hrs. This course covers page layout and electronic publishing software for graphic design and digital media applications. (Prerequisite: DIG 1109. Corequisite: GRA 1202 and GRA 2114.) Class materials fee: $20. FA, SP

GRA 1543 Graphic Design Studio I 3 sem. hrs. An overview of the design industry and the methods of graphic design and visual communications. Covers the application of graphic design production tools and the design process with an emphasis on conceptualization and visualization. (Prerequisite: Permission of assistant chair. Corequisites: GRA 1741, GRA 1158 and DIG 1109.) Class materials fee: $20. FA, SP

GRA 1741 Principles of Design and Color 3 sem. hrs. An introduction to the principles, concepts and techniques of design, drawing, and color theory for visual problem solving. A foundation for further study of graphic design, photography, or digital media. Class materials fee: $20. FA, SP, SU

GRA 2109 History and Aesthetics of Design 3 sem. hrs. The course traces the development of graphic design and cites the major contributions to the development of contemporary graphic design practice and aesthetics. (Prerequisite: ENC 1100.) Class materials fee: $25. FA

GRA 2114 Graphic Design Studio II 3 sem. Hrs. An advanced study of specific conceptual, aesthetic, and production problems in graphic design. Application of design process to advanced layout problems. Management, project research and presentation issue are introduced. (Prerequisite: GRA 1543. Corequisite: GRA 1202.) Class materials fee: $20. FA, SP

GRA 2184 Portfolio Development 3 sem. hrs. A portfolio development class covering essential preparation for career entry into the graphic design, digital media and digital television industry. Areas covered include personal presentation skills, employment materials and creative work samples. This class should be completed in the student’s final semester of study. Class materials fee: $20. FA, SP


GRA 2511 Corporate Design 3 sem. hrs. A study of corporate image and identity design, development and implementation. Emphasizes choice and use of symbols, and appropriate application in stationery packages, corporate manuals, and collateral items. (Prerequisites: GRA 1204 and GRA 2114. Corequisite: GRA 2201.) Class materials fee: $20. FA

GRA 2545 Publication Design 3 sem. hrs. An advanced study of specific conceptual, aesthetic and production problems in graphic design for publication. (Prerequisites: GRA 1204 and GRA 2114. Corequisite: GRA 1171.) Class materials fee: $20. SP

GRA 2746 Illustration 3 sem. hrs. Course provides the student with training in the techniques of professional advertising and editorial illustration and covers a variety of traditional styles and mediums. (Prerequisites: DIG 1109, GRA 1543, GRA 1741 and GRA 1158.) Class materials fee: $20. FA

GRA 2905 Directed Study in Graphic Design 1-4 sem. hrs. Arranged with individual instructor to explore special areas of interest. FA, SP, SU

GRA 2949 Cooperative Education Experience in Graphic Design 1-4 sem. hrs. FA, SP, SU

HCP 0100/0100L Nurse Aide and Orderly Lab 5.5 voc. crs. Prepares individuals to perform selected tasks related to patient care in a long-term care facility or an adult living facility under the supervision of a licensed nurse. Students who successfully complete the program are eligible to take the Nurse Aide Competency Evaluation Program (NACEP) for certification as a Nursing Assistant in Florida (Florida Statute, 400.21). (Corequisite: HCP 0100L.) Lab fee: $22. FA, SP, SU

HCP 0600/0600L Patient Care Assistant and Lab 9.67 voc. crs. Prepares individuals to perform selected tasks related to patient care in a hospital, long-term care facility, or home health agency under the supervision of a licensed nurse. Students who successfully complete the program are eligible to take the Nurse Aide Competency Evaluation Program (NACEP) for certification as a Nursing Assistant in Florida (Florida Statute, Section 400.21). (Corequisite: HCP 0600L.) Lab fee: $22. FA, SP, SU

HCP 0720C Electrocardiograph Aide 2.5 voc. crs. This course is designed to prepare students to perform the duties necessary for employment as an electrocardiograph aide. Instruction will include theory, lab practice and clinical experience in a hospital, clinic or physician’s office. (Dual enrollment students only.) FA

HFT 1000 Introduction to Hospitality Industry 3 sem. hrs. An introduction to the hospitality industry. Current business trends, employment opportunities, management responsibilities and computer applications are stressed. FA, SP, SU

HFT 1261/1261L Hospitality Service and Lab 3 sem. hrs. This course teaches the principles of restaurant management both front and back of the house. Topics include guest service, organization and training as well as marketing and financial concerns. Students will practice service technique in College run restaurant, banquet and quick service operation. FA, SP
HFT 1410  Lodging Operations I  3 sem. hrs.
Introduction to the functions of the lodging front desk operations, reservations while stressing its mechanics and routines, with developmental training in interpersonal skills, communications and computer applications. SP

HFT 1820* Purchasing for Hospitality  3 sem. hrs.
This course is designed to prepare the student to plan, prepare, bid, order, receive, store, issue, inventory, and forecast the purchasing requirements of an organization in the Hospitality industry. The areas covered will include: equipment, food, beverages, furniture, fixtures, paper products, and POS and MIS systems. *Pending assigned course number.

HFT 1940/1940L* Hospitality Practicum I and Lab  3 sem. hrs.
Students will participate in work related experience in basic food service and table service in the College operated Hospitality facility. Students will rotate through work positions in the restaurant kitchen, dining room, lodging and quick service operation and banquet operation, applying basic skills learned in the classroom and lab to a work situation. *Pending assigned course number.

HFT 1941/1941L* Hospitality Practicum II and Lab  3 sem. hrs.
Students will participate in work related experience in intermediate food service and table service in the College operated Hospitality facility. Students will rotate through work positions and supervisory positions in the restaurant kitchen, dining room, quick service operation, lodging and banquet operation, applying intermediate skills learned in the classroom and lab to a work situation. *Pending assigned course number.

HFT 2282  Hospitality Supervision  3 sem. hrs.
This course covers the principles of supervision of employees in a hospitality management environment. Topics include recruitment, screening, hiring, training and evaluating personnel. FA, SP, SU

HFT 2313  Lodging Operations II  3 sem. hrs.
The broad scope of property management stresses training, record keeping and executive responsibilities, concerning the use of land, buildings, furnishing, equipment, materials, people and funds in achieving a desired goal. Housekeeping is covered from a dual focus of hands on functional duties paired with the supervisory and management of that department. FA

HFT 2454  Food and Beverage Cost Control  3 sem. hrs.
Covers food and beverage operation, purchasing, receiving, storage, preparation, and service. Emphasis is on controlling, analyzing costs, and using financial management techniques. FA

HFT 2462* Hospitality Managerial Finance  3 sem. hrs.
This course is designed to prepare students to read and understand financial documents produced in the hospitality industry. The fundamental concepts and analytical techniques that are essential to take control of a real-world asset management in a hospitality industry environment. Financial Statements, Asset Ratios, Cash Flow, Budgeting and Feasibility Studies are covered. The principles of finance, asset and money management are defined, explored and analyzed from the perspective of the professional hospitality manager, owner and decision maker. *Pending assigned course number.

HIM 0001  Introduction to Health Information Management for the Coder/Biller  1 voc. crs.
This 30 hour course introduces the student in the Coder/Biller program to the proper identification of patients or other clients, verification of addresses for communication and understanding the basic components of the patient medical record and the forms used in the proper maintenance of this record. (Corequisites: HIM 0040, HIM 0433, HIM 0471, HIM 0220C/0220L and HIM0011.)

HIM 0011  Ethical and Legal Issues for the Coder/Biller  1.5 voc. crs.
This course is designed to provide adequate resource in the study of medical law, ethics and bioethics for healthcare employees. A portion of the class is designated to understanding Health Insurance Portability and Accountability Act of 1996 (HIPAA) and how it relates to rules and regulations associated with privacy and security in healthcare settings. (Corequisites: HIM 0001, HIM 0433, HIM 0471, HIM 0220C/0220L and HIM0450.)

HIM 0220C/0220L  International Classifications of Disease for the Coder/Biller and Lab  5 voc. crs.
This course in an introduction to the mechanics of using the International Classification of Diseases - 9 – Clinical Modification (ICD-9-CM) and review of current and future ICD coding systems. (Corequisites: HIM 0001, HIM 0433, HIM 0471, HIM 0450 and HIM0011.) Lab fee: $15.

This course serves as an introduction to the implementation of Current Procedural Terminology (CPT/HCPCS) coding conventions, rules, methodology and sequencing, and data sets. Also included are documentation requirements, coding resources and a discussion of applicable ethics. (Prerequisites: HIM 0001, HIM 0433, HIM 0471, HIM 0220C/0220L, HIM 0450 and HIM0011. Corequisites: HIM 0272C/0272L.) Lab fee: $15.

This course is a continuation of the Introduction to CPT coding principles. It involves the more intricate and complex aspects of the utilization of CPT/HCPCS principles and practices currently used in the physician office setting. Case studies, class projects and simulations are included in this course. (Prerequisites: HIM 0001, HIM 0433, HIM 0471, HIM 0220C, HIM 0450 and HIM 0011. Corequisites: HIM 0272C/0272L.) Lab fee: $10.
### Course Descriptions

**HIM 0272/C/0272L  Billing and Reimbursement and Lab  2.33 voc. crs.**
Study of the principles and practices of insurance and reimbursement processing, to include the assignment and reporting of codes for diagnoses and procedures and services. Also covered are completion of UB-92 and CMS-1500 claims for inpatient, outpatient, emergency department, and physician office encounters. The review of case studies of outpatients is employed to identify possible issues of fraud and abuse. (Prerequisites: HIM 0001, HIM 0433, HIM 0471, HIM 0220C/0220L, HIM 0450 and HIM 0011. Corequisites: HIM 0253C/0253L.) Lab fee: $10.

**HIM 0433  Pathophysiology and Pharmacology for the Coder/Biller  1.5 voc. crs.**
This course covers the nature, cause and treatment of a large variety of human diseases affecting all of the body's systems including the diagnostic and therapeutic modalities used for each. Also included are the appropriate pharmacological interventions. (Corequisites: HIM 0001, HIM 0450, HIM 0471, HIM 0220C/0220L and HIM 0011.)

**HIM 0450  Anatomy and Physiology for the Coder/Biller  1.5 voc. crs.**
This course is designed to give the student in the Coder-Biller program an overview of the Anatomy and Physiology of the Human body and the application of this knowledge to duties and responsibilities as a Medical Coder biller in a physician office setting. (Corequisites: HIM 0001, HIM 0433, HIM 0471, HIM 0220C/0220L and HIM 0011.)

**HIM 0471  Medical Terminology for the Coder/Biller  1.5 voc. crs.**
This 45 contact hour course introduces the student to the basic root words, prefixes and suffixes used in the construction of medical vocabulary for all of the body's systems. A combination of lecture, discussion, worksheets and videos are employed to deliver this instruction. (Corequisites: HIM 0001, HIM 0433, HIM 0450, HIM 0220C/0220L and HIM 0011.)

**HIM 0817  Coder/Biller Externship  5 voc. crs.**
This course provides students with actual coding and/or billing experience in a health care setting. The student will participate in a broad range of duties, exposing the student to opportunities to apply knowledge of coding and billing procedures. (Prerequisites: HIM 0255C/0255L and HIM 0272C/0272L. Corequisites: HIM 0819.) Lab fee: $15.

**HIM 0819  Coder/Biller Seminar  2 voc. crs.**
This capstone course serves as a review of the program material, a discussion of the clinical experiences, updates in medical coding and billing and exposure and practice to credentialing examinations. (Prerequisites: HIM 0255C/0255L and HIM 0272C/0272L. Corequisites: HIM 0817.)

**HIM 1000  Health Information Management I  3 sem. hrs.**
Introduction to the science of health information management. The professional organization, chart content and development, admission and discharge procedures, numbering and filing systems will be emphasized. FA

**HIM 1031/1031L  Medical Record Transcription I and Lab  3 sem. hrs.**
Develop skills in the use of dictating/transcribing units and reference sources. Laboratory experience in transcribing medical record forms. (Prerequisites: HSC 1531 and OST 1100 or typing speed of 40 w.p.m. Corequisites: HIM 1031L) Lab fee: $20. FA, SP

**HIM 1032/1032L  Medical Record Transcription II and Lab  3 sem. hrs.**
Study of advanced medical record terminology and transcription of various medical records and reports. (Prerequisite: HIM 1031. Corequisite: HIM 1032L) Lab fee: $20. FA, SP

**HIM 1222/1222L  Basic Coding and Lab  4 sem. hrs.**
This course is designed to develop skills in the use of approved disease and operative classification systems, abstraction of patient data from the medical record and assignment of ICD-9-CM diagnostic and procedure codes. (Prerequisites: HSC 1531 and HIM 1000 or permission of chairperson. Corequisite: HIM 1222L) Lab fee: $5. SP

**HIM 2110/2110L  Health Information Management II and Lab  3 sem. hrs.**
Computers in health information, abstracting, indexing patient information and optical disk technology. Medicare and Medicaid and nomenclature will be stressed. (Prerequisite: HIM 1000. Corequisite: HIM 1222/1222L and HIM 2110L.) SP

**HIM 2234C/2234L  Advanced Coding and Lab  4 sem. hrs.**
This course is designed to enhance skills learned in HIM 1222. By recalling the basic coding rules and applying them with in-depth diagnosis and procedure analysis learned in this course, the student will become capable of accurate medical record coding and DRG assignment. (Prerequisite: HIM 1222/1222L. Corequisite: HIM 2234L) FA

**HIM 2253/C/2253L  CPT Coding  3 sem. hrs.**
This course is designed to develop skills in the use of the Physician's Current Procedure Coding Terminology (CPT) systems for hospital and physicians' offices. (Prerequisites: HSC 1531 and HIM 1222/1222L or permission of chairperson. Corequisite: HIM 2253L.) SP

**HIM 2430  Concepts of Disease  4 sem. hrs.**
Given a body of medical information, students will demonstrate their ability to interpret, understand, extract, analyze and synthesize information within the medical record. (Prerequisite: BSC 1085C or HSC 1531.) FA

**HIM 2440  Pharmacology and Laboratory Tests  1 sem. hr.**
This course will introduce the student to the most common drugs and laboratory tests utilized in medicine. (Corequisite: HIM 2430.) FA

**HIM 2510/2510L  Health Information Management III and Lab  2 sem. hrs.**
Quality assessment, utilization review, risk management, statistical procedures and employability skills. (Prerequisites: HIM 2110/2110L and HIM 2800. Corequisite: HIM 2510L.) SP

**HIM 2512  Health Information Systems Management  2 sem. hrs.**
This course will review the four basic management functions as they apply to a Health Information Systems (H.I.S.) department. (Prerequisites: HIM 2110 and HIM 2800.) SP

**HIM 2800  Professional Practice Experience I  2 sem. hrs.**
Supervised experience in a hospital healthcare facility HIS department. Emphasis on record assembly, analysis, routine correspondence procedures, preparing reports for microfilming and equipment use. (Prerequisite: HIM 2110.) Lab fee: $4. FA

**HIM 2810  Professional Practice Experience II  2 sem. hrs.**
Supervised experience in a non-hospital health care facility HIS department. Compiling health/data statistics, use of indexes and registers and computerization of HIS functions reports are emphasized. (Prerequisites: HIM 2110 and HIM 2800.) Lab fee: $4. SP

**HIM 2820  Professional Practice Experience III  3 sem. hrs.**
Supervised experience in a health care facility HIS department offering experience of a supervisory nature, utilization review, medical audit and overall chart flow. (Prerequisites: HIM 2510 and HIM 2810.) Lab fee: $4. SU

**HIM 2949  Cooperative Education Experience in Health Records  1-4 sem. hrs.**
FA, SP, SU

**HLP 1081  Fitness Assessment & Improvement  3 sem. hrs.**
This course evaluates the student's level of fitness, then develops a program of improvement through daily exercise and instruction in the areas of nutrition, stress management and basic training techniques. Lab fee: $25. FA, SP, SU
Course Descriptions

**HSC 0005** Healthcare Concepts for the Massage Therapist 3.0 voc. crs.
This course provides an overview of the current healthcare delivery system in the USA and current health occupations. Content includes, but is not limited to the use of interpersonal and communication skills with patients and other health professionals, written communication skills, knowledge of blood borne diseases and HIV/AIDS education, legal and ethical responsibilities, safety and security procedures and infection control, medical errors and eight hours. FA

**HSC 1000** Introduction to Health Care 3 sem. hrs.
Introduction to current practices and issues in health care. Content includes social and cultural responses to health problems of individuals and families; health care delivery in primary, secondary, and tertiary settings; critical thinking; health care professions; standards of practice; health care organizations; United States health policies; issues of finance, ethics, legal rights of patients and health care workers; infection control; universal precautions; and principles of effective communication and computer applications to health care. NOTE: This is a required course for students in selected health career programs. Lab fee: $5. FA, SP, SU

**HSC 1421** Health, Safety and Nutrition for the Young Child 3 sem. hrs.
Designed to provide the early childhood student with health, safety and nutrition principles for the young child; and experience and resources for teaching these principles in various curriculum areas. SP

**HSC 1531** Medical Terminology 4 sem. hrs.
This course prepares students for medically oriented careers. Lab fee: $5. FA, SP, SU

**HSC 2400** First Aid, Responding to Emergencies 3 sem. hrs.
Demonstrations, practical experiences, lectures and discussions on the principles and skills essential to the individual for the care of emergencies in the home and community. Certificates in CPR and Responding to Emergencies will be issued to those individuals successfully completing the course. Lab fee: $15. FA, SP, SU

**HSC 2905** Directed Study in Health and Fitness 1-4 sem. hrs.
FA, SP, SU

**HSC 2949** Cooperative Education Experience in Health and Fitness 1-4 sem. hrs.
FA, SP, SU

**HUM 2210** Humanities I 3 sem. hrs.
Literature, fine arts, music and philosophy of Western Europe from earliest times to the Renaissance, and their interrelation with the culture. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite: ENC 1101.) FA, SP, SU

**HUM 2230** Humanities II 3 sem. hrs.
A continuation of HUM 2210, beginning with the high Renaissance and concluding with the early 20th century. This course meets the 3,000 word minimum Gordon Rule requirement. NOTE: HUM 2210 is NOT a prerequisite for HUMANITIES 2230 (Prerequisite: ENC 1101.) FA, SP, SU

**HUM 2480** Multi-Cultural Humanities 3 sem. hrs.
A study of emerging Third World cultures and their relationship to the Western world by examining widely acclaimed literature, music and art of selected countries. FA, SP

**HUM 2740** Humanities Overseas Study Program 3 or 6 sem. hrs.
An opportunity to examine monuments of Western art in the classroom and in Europe. Specific attention given to interrelationships among the arts. (Prerequisites: Appropriate placement scores or successful completion of college prep courses, and one HUM course or permission of chairperson.) SU

**HUM 2905** Directed Study in Humanities 1-4 sem. hrs.
(Prerequisite: Appropriate placement scores or successful completion of college prep courses.) FA, SP, SU

**HUM 2949** Cooperative Education Experience in Humanities 1-4 sem. hrs.
FA, SP, SU

**HUN 1201** Human Nutrition 3 sem. hrs.
This course relates nutrition to the food service industry by way of menu planning, studying nutrition deficiencies, diseases, retention of nutrients and the basic principles for health conscious cooking. Lab fee: $5. FA, SP, SU

**HUN 1203** Hospitality Nutrition 3 sem. hrs.
This course relates nutrition to the food service industry by way of menu planning, studying nutritional deficiencies, diseases, retention of nutrients and the basic principles for health conscious cooking. FA, SP

**HUN 1270** Sports Nutrition 3 sem. hrs.
Introduces human nutrition and its relationships to athletic performance, fitness and health. Presents scientifically-based sports nutrition recommendations for the active person and the trained athlete. Lab fee: $5. FA, SP

**HUN 2905** Directed Study in Nutrition 1-4 sem. hrs.
FA, SP, SU

**HUN 2949** Cooperative Education Experience in Nutrition 1-4 sem. hrs.
FA, SP, SU

**HUS 1001** Introduction to Human Services 3 sem. hrs.
Introduces the history and an overview of human services including social work and mental health. Describes roles, responsibilities and goals of the human service worker and values, conflicts and dilemmas that affect the worker and the client relationship. Involvement in college, community, and social service work is emphasized. In addition, the critical involvement of students in professional responsibilities is introduced with involvement in student/faculty clubs and professional organizations. (Prerequisite: Appropriate placement scores or successful completion of college prep courses. Corequisite or prerequisite: PCO 2202.) FA

**HUS 1332** Advanced Counseling/Interview Skills 3 sem. hrs.
Advanced skills in assessment, recording, problem solving, developing treatment plans, case presentations, case management and crisis intervention are taught through academic and skill-based work. Practical experience and documentation required for internships and jobs in the field are emphasized. (Prerequisites: PCO 2202 and HUS 1001. Corequisites: PPE 2001 and HUS 1850.) SP

**HUS 1850/1850L** Human Services Internship I and Lab 4 sem. hrs.
Experiential learning in human service agencies through the practice of counseling skills and techniques. On and off-campus job training and clinical supervision are required. (Prerequisites: HUS 1001 and PCO 2202. Corequisites: HUS 1332, PPE 2001 and HUS 1850L.) Lab fee: $5. SP

**HUS 2200** Group Dynamics 3 sem. hrs.
Introduction to group dynamics; study of structure, organization and function of groups; and survey of different types of groups. (Prerequisites: PPE 2001, HUS 1332 and HUS 2801. Corequisite: HUS 2850.) FA

**HUS 2441** Addictions, Families, and Communities 3 sem. hrs.
Provides training in substance abuse in the context of family and community systems. This course introduces the basic concepts and issues related to substance abuse prevention and addiction processes. Orientation to evidence-based practice is reviewed and updated. It is part of the Transdisciplinary Foundations required by the certification boards. (Prerequisite: Appropriate placement scores or successful completion of college prep courses.) SP
HUS 2424  Addictions and Treatment  3 sem. hrs.
This course addresses the skills, concepts and issues of addictive processes, treatment, recovery and counseling with diverse populations. National and state practices are taught as part of the field’s development. It is part of the Transdisciplinary Foundations requirement of the certification boards. (Prerequisite: Appropriate placement scores or successful completion of college prep courses or permission of assistant chair or chairperson.) FA, SP

HUS 2801/2801L  Human Services Practicum and Lab  6 sem. hrs.
Practicum is designed to provide students with the opportunity to function in a chosen career in an internship/employee role for six or 12 weeks in a selected human service agency. Experiential learning in human service agencies through the practice of counseling and social service skills and techniques. On and off-campus job training and clinical supervision are required. (Prerequisites: PPE 2001, HUS 1332 and HUS 1850. Corequisite: HUS 2801L.) SU

HUS 2851/2851L  Human Services Internship II and Lab  4 sem. hrs.
Students select and interview at approved human service programs; activities will emphasize application of group dynamics and group skills. This course continues the practice skills from earlier externship and practicum experiences. On and off-campus job training and clinical supervision are required. (Prerequisite: HUS 2801/2801L. Corequisite: HUS 2200 and HUS 2851L.) FA

HUS 2852/2852L  Human Services Internship III and Lab  4 sem. hrs.
This experience gives the student opportunities to exercise more responsibility and leadership as a member of the Human Services team. This course continues the practice skills from earlier externship and practicum experiences. On and off-campus job training and clinical supervision are required. Leadership and mentoring roles are emphasized, with more sophisticated professional skills. (Prerequisite: HUS 2851/2851L. Corequisite: HUS 2500, CLP 2140 and HUS 2852L.) SP

HUS 2905  Directed Study in Human Services  1-4 sem. hrs.
(Prerequisite: Appropriate placement scores or successful completion of college prep courses.) FA, SP, SU

HUS 2933  Human Services Seminar  1 sem. hr.
A multi-topical approach to the study of a theme, problem or area of reference in Human Services. This course helps students with skills used throughout the program. Lab fee: $10. FA, SP, SU

IDS 1936  Honors Seminar  3 sem. hrs.
An interdisciplinary approach to the study of a topic or theme of contemporary relevance. (Prerequisite: Appropriate placement scores or successful completion of college prep courses.) Lab fee: $5. FA, SP, SU

IDS 2905  Directed Study in Interdisciplinary Studies  1-4 sem. hrs.
(Prerequisite: Appropriate placement scores or successful completion of college prep courses.) FA, SP, SU

IND 1001  History of Architecture & Interiors II  3 sem. hrs.
The study of furniture history and architectural styles for the 19th century through contemporary interior design; current and future trends; recognizing and using different architectural and furniture styles in the interiors. Lab fee: $15. SP

IND 1021  Interior Design Studio I  3 sem. hrs.
Planning floor plans in regard to function and aesthetics. Research and development of design solutions associated with color theory, furniture and room arrangement, lighting and electrical placement, application, floor plans, elevation development and graphic communication. (Prerequisite: HHD 1321. Prerequisite or Corequisite: BCN1251C/1251L or permission of chairperson.) Lab fee: $15. FA, SP

IND 1211  History of Architecture & Interiors I  3 sem. hrs.
Furniture history and the development of architectural styles from Antiquity to the end of the 18th century. Recognition and use of different period styles in the design of historical interiors. Lab fee: $15. FA

IND 1300  Graphics of Interior Design I  3 sem. hrs.
Basic presentation techniques with emphasis on materials and presentation boards. Oral and written communication and graphic presentation. Emphasis on marker and pencil rendering techniques. Lab fee: $15. FA, SU

IND 1429  Textiles for Commercial and Residential Interiors  3 sem. hrs.
The study of fibers used in interiors, fire and life safety codes involving their use, fabrication, application and evaluation of textiles and proper professional terminology. Lab fee: $15. SP

IND 1935  Building and Barrier Free Codes  3 sem. hrs.
This is a mandatory course required by the State Board of Education for all interior design students. It is designed to give the student an in-depth understanding of building codes and the American with Disabilities Guidelines (ADA). This course will teach students about space-planning and material specifications. Basic building construction and fire safety will be addressed. (Prerequisites: BCN 1251C/1251L and IND 2220.) Lab fee: $15. FA, SP

IND 2210  Interior Design Studio II  3 sem. hrs.
This course creates a design studio atmosphere with projects and deadlines required throughout the semester. Advanced application of the principles and elements of design into the conceptual design process. Creative problem solving, programming and special analysis. Graphic communication and presentation, placement and selection of furniture, materials, accessories, lighting and electrical schedules. (Prerequisite: IND 1021 or permission of chairperson.) Lab fee: $15. FA, SP, SU

IND 2220  Commercial Interior Design  3 sem. hrs.
Advanced application in creative problem solving and research of the design process for non-residential interiors. Space planning, programming, human factors, code requirements and specifications. Sample test project. (Prerequisite: IND 1021 or permission of chairperson.) Lab fee: $15. FA

IND 2501  Practices of Interior Design  4 sem. hrs.
Establishing and maintaining a successful interior design business. Resume writing, cover letters and portfolio development procedures. Specifications, financial operations, estimating, schedules and recordkeeping. (Prerequisites: IND 2210 and IND 2220 or permission of chairperson.) Lab fee: $15. SP

IND 2949  Cooperative Education Training Assignment in Interior Design  1-3 sem. hrs.
FA, SP, SU

INP 1390  Human Relations in the Workplace  3 sem. hrs.
Designed to enhance effectiveness in the workplace through an emphasis on awareness of self and others communication technique and interpersonal skills. Individualized Instruction. (Prerequisite or Corequisite: ENC 1101.) Lab fee: $25. FA, SP, SU

INR 2002  International Relations  3 sem. hrs.
Analysis of national power, foreign policy, settlement of disputes, the balance of power system, and international organization and disarmament in world affairs. This course meets the 3,000 word minimum Gordon Rule requirement. (Prerequisite or corequisite: ENC 1101.) FA, SP

ISS 1120  American Political and Economic Issues  3 sem. hrs.
A study of current political and economic issues in the United States, including international cases affecting American society. This course meets