Courses in this catalog are identified by prefixes and numbers that were assigned by Florida’s Statewide Course Numbering System (SCNS). This numbering system is used by all public postsecondary institutions in Florida and 28 participating non-public institutions. The major purpose of this system is to facilitate the transfer of courses between participating institutions. Students and administrators can use the online Statewide Course Numbering System to obtain course descriptions and specific information about course transfer between participating Florida institutions. This information is at the SCNS website at http://scns.fldoe.org.

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 "statewide course profiles."

**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 as listed below in Exception to the General Rule for Equivalencies.

For example, a freshman composition skills course is offered by 56 different postsecondary institutions. Each institution uses "ENC_101" to identify its freshman composition skills 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, "ENC" means "English Composition," the century digit "1" represents "Freshman Composition," the decade digit "0" represents "Freshman Composition Skills," and the unit digit "1" represents "Freshman Composition Skills I." In the sciences and certain 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 participating 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, ENC 1101 is offered at a community college. The same course is offered at a state university as ENC 2101. A student who has successfully completed ENC 1101 at the community college is guaranteed to receive transfer credit for ENC 2101 at the state university if the student transfers. The student cannot be required to take ENC 2101 again since ENC 1101 is equivalent to ENC 2101. 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. NOTE: Credit generated at institutions on the quarter-term system may not transfer the equivalent number of credits to institutions on semester-term systems. For example, 4.0 quarter hours often transfers as 2.67 semester hours.

**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 possesses 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.
Courses at Non-regionally Accredited Institutions

The Statewide Course Numbering System makes available on its home page (http://scns.fldoe.org) a report entitled "Courses at Nonregionally Accredited Institutions" that contains a comprehensive listing of all nonpublic institution courses in the SCNS inventory, as well as each course's transfer level and transfer effective date. This report is updated monthly.

Questions about the Statewide Course Numbering System and appeals regarding course credit transfer decisions should be directed to The District Director for Academic Affairs, at (954) 201-7519 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 or via the internet at http://scns.fldoe.org.
A C G 2 0 1 1   P R I N C I P L E S  O F  A C C O U N T I N G  I I  (3)
Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Oth Hrs = 0   Fees = 0.00

Prerequisite: MTB1103, suggested.
This course is designed to provide a systematic and in-depth study of the financial statements and underlying procedures for handling petty cash, bank deposits and withdrawals, payroll business tax, and financial reporting. Students achieving less than a grade of "C" in ACG2100 may experience academic difficulty in this course. Offered Term I, Central Campus.

A C G 2 0 0 1   P R I N C I P L E S  O F  A C C O U N T I N G  I  (3)
Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Oth Hrs = 0   Fees = 0.00

Prerequisite: ACG1003
This course is designed to introduce the student to the fundamentals of recording and summarizing the financial activities of proprietorships. Topics covered include plant assets, current liabilities, payroll, partnerships, and cash flow statements. Students achieving less than a grade of "C" in ACG2001 may experience academic difficulty in this course. A grade of less than "C" is not transferable to upper division.

A C G 2 0 7 1   M A N A G E R I A L  A C C O U N T I N G   (3)
Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Oth Hrs = 0   Fees = 0.00

Prerequisite: ACG2001
As the last course of the series, this course concludes the study of manufacturing accounting. Topics covered include inventory items, financial statement analysis, job order costing, and managerial accounting. Students achieving less than a grade of "C" may experience academic difficulty in this course. A grade of less than "C" is not transferable to upper division.

Lec Hrs = 12   Lab Hrs = 36   Clin Hrs = 0   Oth Hrs = 0   Fees = 24.00

Prerequisite: ACG2450C
This course provides in-service training for those working in accounting. Topics include accounting methods, job order costing, managerial and financial accounting. Students achieving less than a grade of "C" in ACG2949 may experience academic difficulty in this course. A grade of less than "C" is not transferable to upper division.

Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Oth Hrs = 0   Fees = 0.00

Prerequisite: ACG2100
This course is designed to teach the students how to accomplish common accounting functions with basic accounting software in order to set up, maintain, and establish defaults for chart of accounts, vendors, customers, inventory items, jobs, and employees.

A C G 2 4 6 9 C   A U T O M O T I V E  T E C H   (4)
Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Oth Hrs = 0   Fees = 29.83

Prerequisite: AER1081C
This course is designed to introduce the student to the automotive systems and instruction in minor service procedures. Students achieving less than a grade of "C" in ACG2469C may experience academic difficulty in this course. A grade of less than "C" is not transferable to upper division.

A C G 2 0 8 7 C   M A N A G E R I A L  A C C O U N T I N G  (3)
Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Oth Hrs = 0   Fees = 0.00

Prerequisite: ACG2071
As the last course of the series, this course concludes the study of manufacturing accounting. Topics covered include inventory items, financial statement analysis, job order costing, and managerial accounting. Students achieving less than a grade of "C" may experience academic difficulty in this course. A grade of less than "C" is not transferable to upper division.

A C G 2 1 1 0   I N T E R M E D I A T E  A C C O U N T I N G  I  (3)
Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Oth Hrs = 0   Fees = 0.00

Prerequisite: ACG2100
This course provides a systematic and in-depth study of the financial statements and underlying records. Special attention is given to the elements comprising working capital, investments, and plants assets. Students achieving less than a grade of "C" in ACG2110 may experience academic difficulty in this course. A grade of less than "C" is not transferable to upper division.

A C G 2 1 0 1   P R I N C I P L E S  O F  A C C O U N T I N G  I I  (3)
Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Oth Hrs = 0   Fees = 0.00

Prerequisite: ACG2110
This course covers the topics of accounting for proprietorships and partnerships. Special attention is given to the elements comprising working capital, investments, and plants assets. Students achieving less than a grade of "C" in ACG2101 may experience academic difficulty in this course. A grade of less than "C" is not transferable to upper division.

A C G 1 0 0 3   A C C O U N T I N G  S U R V E Y   (3)
Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Oth Hrs = 0   Fees = 0.00

Prerequisite: ACG2100
This course provides a systematic and in-depth study of the financial statements and underlying procedures for handling petty cash, bank deposits and withdrawals, payroll business tax, and financial reporting. Students achieving less than a grade of "C" in ACG2100 may experience academic difficulty in this course. Offered Term I, Central Campus.
AER197C  GM AUTOMOTIVE ENGINE REPAIR
This course is a study of the principles of operation and problem diagnosis of the internal combustion engine. Students will learn all aspects of the diagnosis, repair and operation of the various engines is presented. Students will be properly disassembled, parts identified, inspected, measured, and reassembled. Proper testing and break-in procedures along with approved diagnostic troubleshooting procedures will be emphasized. Prerequisite: AER1082C
Lec Hrs=48 Lab Hrs=48 Cln Hrs=0 Oth Hrs=0 Fees:45.83

AER198C  AUTOMOTIVE ENGINE REPAIR
A course designed to teach the principles and procedures necessary to completely rebuild an automotive engine and to provide the practical experience in the engine preparation, cleaning, disassembly, rebuilding, and dyno checking out. Topics include engine cleaning, engine removal; engine disassembly; engine rebuilding; piston, pin and rod service; engine assembly; engine installation; valve adjustment; tune ups; and road test procedures. Special emphasis will be given to safety procedures and the specific tools, fasteners, and equipment to be used. Prerequisite: AER1082C
Lec Hrs=48 Lab Hrs=48 Cln Hrs=0 Oth Hrs=0 Fees:45.83

AER199C  GM MANUAL DRIVE TRAIN AND AXLES
A course designed to teach the principles and operations of manual transmissions and transaxles, clutches, overdrive units, pressure plates, propeller shafts, differentials, final drive axles and to provide practical experience in diagnosing, removing, maintaining, and repairing transmission and drive systems. Topics include manual transmissions, overdrive systems, drive lines, differentials, and axles. Applications include front wheel drive, rear wheel drive, 4-wheel drive and all-wheel drive. Special emphasis will be given to safety procedures and the specific tools and instruments to be used. Prerequisite: AER1082C
Lec Hrs=48 Lab Hrs=48 Cln Hrs=0 Oth Hrs=0 Fees:68.83

AER200C  GM STEERING AND SUSPENSION SYSTEMS
The student will develop the knowledge and skills related to the diagnosis and repair of GM and steering systems alignment, testing, diagnosis and repair of modern GM vehicle systems will be emphasized. GM courses related to steering and suspension systems will be included in the curriculum. These are subject to change and may replace outdated and obsolete courses. Special emphasis will be given to safety procedures and the specific tools and instruments to be used. Prerequisite: AER1082C
Lec Hrs=48 Lab Hrs=48 Cln Hrs=0 Oth Hrs=0 Fees:62.83

AER201C  GM BRAKE SYSTEMS AND CHASSIS REPAIR
This course is a study of the theory and operation of GM brake systems. Students will learn all aspects of the diagnosis, repair and testing of GM brake systems including drum and disc brakes and power brake operation and repair. GM courses related to brake systems will be included in the curriculum. There are subject to change as new courses replace outdated and obsolete courses. Special emphasis will be given to safety procedures, and the specific tools and equipment to be used. Prerequisite: AER1082C
Lec Hrs=48 Lab Hrs=48 Cln Hrs=0 Oth Hrs=0 Fees:66.83

AER202C  AUTOMATIC TRANSMISSIONS AND TRANSAXLES
A course designed to teach the principles, operations, diagnosis and repairs of automatic transmissions and transaxles. Special emphasis will be given to safety procedures and the specific tools and instruments to be used. Prerequisite: AER1082C
Lec Hrs=48 Lab Hrs=48 Cln Hrs=0 Oth Hrs=0 Fees:136.83

AER203C  ADVANCED ENGINE PERFORMANCE
A course designed to teach the latest in computer engine controls, electronic fuel injection systems, emission controls and electronic instrumentation systems. This course includes theory of operation and construction, troubleshooting and testing. Prerequisite: AER1082C
Lec Hrs=48 Lab Hrs=48 Cln Hrs=0 Oth Hrs=0 Fees:83.83

AER204C  GM ENGINE PERFORMANCE
This course is designed to teach entry level skills in intake and exhaust systems, fuel systems, carburetors, and emission control systems. In addition, GM specific instruction based on GM-STG course number 16099.10 fuel injection diagnosis, and GM-STG course number 16030.02 on based diagnostics generation II will be covered. Prerequisite: AER1082C AER204C
Lec Hrs=48 Lab Hrs=48 Cln Hrs=0 Oth Hrs=0 Fees:82.83

AER205C  ENGINE PERFORMANCE
A course designed to teach the principles and operations of engine tune up and repair, and emission control systems. Prerequisite: AER1082C
Lec Hrs=48 Lab Hrs=48 Cln Hrs=0 Oth Hrs=0 Fees:83.83

AER206C  GM ADVANCED ENGINE PERFORMANCE
This course is designed to teach job entry skills in the diagnosis and repair of drivability problems. Topics covered include engine performance and electrical and computer systems diagnosis, and diagnostics is placed on manufacturer's diagnostic chart and diagnostic equipment. Use of scanners on both carbureted and fuel injected vehicles will be addressed. In addition, GM-AESP students will receive GM specific instruction based on GM-STG course number 16030.02 engine performance. Prerequisite: AER206C
Lec Hrs=48 Lab Hrs=48 Cln Hrs=0 Oth Hrs=0 Fees:83.83

AER209C  CO-OP WORK EXPERIENCE
On the job training at an automobile dealership. Each of the three credit hours of apprentice work experiences will cover one term and includes a work week from 32 to 40 hours in a supervised program at the dealership. Prerequisite: AER209C
Lec Hrs=48 Lab Hrs=48 Cln Hrs=0 Oth Hrs=14.84 Fees:83.83
AER1951 GM INTERNSHIP I
This course is a companion to electrical systems I, and air conditioning and heating. In order to meet the state of Florida, N.A.T.E.F. and GM ASE standards, interns must complete 100 hours on-the-job learning experience in electrical systems and 100 hours on-the-job learning experience in heating and air related repair. While working under the mentorship of an experienced technician, students must document the required hours and master the student performance standards.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec 16 Lab 16 Cln 0 Other 0 Fees 0.00

AER111 FIRST YEAR AIR FORCE ROTC II
AER111 is a continuation of the AFR101 survey course designed to introduce students to the U.S. Air Force Reserve Officer Training Corps. Featured topics include: Origins of the Air Force, The Air Force's mission and its operations and the nature of historical Air Force leaders.
Instruction is at the University of Miami campus.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
PH: 305-284-2870.

AER130 SECOND YEAR AIR FORCE ROTC (A)
This course examines general historical aspects of air and space power. The course covers the time period from the first balloons and dirigibles to the present age. Examples are provided to demonstrate the historical events leading to the modern day Air Force. An additional focus will be on Air Force operations and the nature of historical Air Force leaders and programs.
A leadership laboratory is included and provides cadets with leader/follower experiences.
Instruction is at the University of Miami campus.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AER131 SECOND YEAR AIR FORCE ROTC (B)
This course continues the historical review of air and space power provided in MS1202. The course covers events, number 14.47 of today. Historical examples are provided to demonstrate the development of Air Force capabilities and missions. This course provides the student with an understanding of the employment of air and space power. In addition, students will study the nature of historical Air Force leaders and programs. A leadership laboratory is included and provides cadets with leader/follower experiences.
Instruction is at the University of Miami campus.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AER291 HISTORY OF THE UNITED STATES TO 1877
This survey course of American history since 1877 provides students with an overview of the political, economic, cultural, social, military, and diplomatic development of American Society. Special emphasis is placed on U.S. expansion, progressivism, foreign relations, social movements, and political developments at the turn of the 20th century.
Students will also study the introductory concepts of history reading, writing, and methods. Students must earn a minimum grade of C to meet the requirements of the Gordon Rule. 
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AMH2010 HISTORY OF THE UNITED STATES SINCE 1945
This survey course of American history since 1945 provides students with an overview of the political, economic, cultural, social, military, and diplomatic development of American Society. Special emphasis is placed on U.S. expansion, progressivism, foreign relations, social movements, and political developments at the turn of the 20th century.
Students will also study the introductory concepts of history reading, writing, and methods. Students must earn a minimum grade of C to meet the requirements of the Gordon Rule.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AMR2610 AFRICAN AMERICAN LITERATURE: COLONIAL TO 1945
Students will be introduced to works which represent diverse scholarly traditions from Africa and the African Diaspora. The course provides historical context for the study of African American literature. Students will also study the introductory concepts of history reading, writing, and methods. Students must earn a minimum grade of C to meet the requirements of the Gordon Rule.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AMR2611 AFRICAN AMERICAN LITERATURE: POST 1945
Students will be introduced to works which represent diverse scholarly traditions from Africa and the African Diaspora. The course provides historical context for the study of African American literature. Students will also study the introductory concepts of history reading, writing, and methods. Students must earn a minimum grade of C to meet the requirements of the Gordon Rule.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AMT0010 BASIC ELECTRICITY
The study of the general theory of electricity and its application to aircraft systems, components, and circuits, to include practical knowledge of the different types of circuitry found in modern aircraft. Student fee charged.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AMT0100 AIRCRAFT DRAWINGS
This course covers aircraft drawings, care and use of blueprints, isometrics, orthographic and auxiliary projection lines and sections, dimensions, tolerances and allowances, geometric, construction, practical layout work and identification of standard parts and material, use of instruments, copying, and interpretation of free hand sketches of repairs and alterations, and use of various types of charts and graphs.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AMT0102 WEIGHT AND BALANCE
Students will be introduced to deciphering data regarding aircraft weight and balance control, the procedures for weighing an aircraft, the computations necessary to arrive at correct weight and balance data, weight and balance control, determination of weight and balancing forms and records. Students pass a practical test at the instructor's discretion. A certificate of training is received at the conclusion of this course. The fee is included.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AMT0105 AIRCRAFT SUSPENSION SYSTEMS
This course covers the theory of aircraft suspension systems, maintenance, testing of suspension systems, and the use of measuring instruments for the purposes of maintaining the systems in safe, proper operating condition. A certificate of training is received at the conclusion of this course. The fee is included.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AMT0200 PRINCIPLES OF AIRCRAFT STRUCTURE
This course covers the theory of aircraft structure, the use of reference data, the use of aerodynamic principles, and the calculation of stresses and the determination of the properties of materials used to design aircraft structures. A certificate of training is received at the conclusion of this course. The fee is included.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AMT0201 AERODYNAMICS
This course covers the theory of aerodynamics, the use of reference data, the use of aerodynamic principles, and the calculation of stresses and the determination of the properties of materials used to design aircraft structures. A certificate of training is received at the conclusion of this course. The fee is included.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AMT0202 TECHNICAL WRITING
This course provides practice in the development of clear writing skills for the various types of reports and correspondence which are used in the aircraft industry. A certificate of training is received at the conclusion of this course. The fee is included.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AMT0203 AVIONIC TECHNICIAN TRAINING
This course provides practice in the development of practical skills in airborne equipment and maintenance. A certificate of training is received at the conclusion of this course. The fee is included.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AMT0204 AIRCRAFT ELECTRICAL SYSTEMS
This course provides practice in the development of practical skills in electrical systems and components. A certificate of training is received at the conclusion of this course. The fee is included.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AMT0205 AIRCRAFT PROPULSION SYSTEMS
This course covers the theory of aircraft propulsion systems, maintenance, testing of propulsion systems, and the use of measuring instruments for the purposes of maintaining the systems in safe, proper operating condition. A certificate of training is received at the conclusion of this course. The fee is included.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AMT0206 AIRCRAFT AUTOMATION
This course covers the theory of aircraft automation, the use of reference data, the use of aerodynamic principles, and the calculation of stresses and the determination of the properties of materials used to design aircraft structures. A certificate of training is received at the conclusion of this course. The fee is included.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AMT0208 AIRCRAFT PROPULSION SYSTEMS
This course covers the theory of aircraft propulsion systems, maintenance, testing of propulsion systems, and the use of measuring instruments for the purposes of maintaining the systems in safe, proper operating condition. A certificate of training is received at the conclusion of this course. The fee is included.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

AMT0214 AIRCRAFT STRUCTURAL DESIGN
This course covers the theory of aircraft structural design, the use of reference data, the use of aerodynamic principles, and the calculation of stresses and the determination of the properties of materials used to design aircraft structures. A certificate of training is received at the conclusion of this course. The fee is included.
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees
Lec Hrs Lab Hrs Cln Hrs Other Hrs Fees

American literature in the 20th and 21st century.
AMT005C FLUID LINES AND FITTINGS
Prepares the student to fabricate and install rigid and flexible lines and fittings with regard to holes, tools, and instruments used in aircraft structures as well as methods of repair to fluid lines. Student fee charged. Lec Hrs=19 Lab Hrs=0 Clin Hrs=0 Other Hrs=0 Fees:62.83

AMT004C MATERIALS AND PROCESSES
Familiarizes student with the methods used to identify and select aircraft materials with emphasis on welding and the use of various equipment to weld. Student fee charged. Lec Hrs=19 Lab Hrs=0 Clin Hrs=0 Other Hrs=0 Fees:46.83

AMT006C GROUND OPERATIONS AND SERVICING
Familiarizes the student with the proper methods of starting ground operating, servicing and securing aircraft. Lec Hrs=10 Lab Hrs=21 Clin Hrs=0 Other Hrs=0 Fees:37.83

AMT008C CLEANING AND CORROSION CONTROL
Provides experience in cleaning and corrosion removal, and treatment of the various types of corrosion found on ferrous and non-ferrous metals. The course deals with the different methods of cleaning and aircraft components. Student fee charged. Lec Hrs=12 Lab Hrs=16 Clin Hrs=0 Other Hrs=0 Fees:23.83

AMT007C APPLIED MATHEMATICS
Reviews principles of mathematical functions and studies their application to aircraft and powerplant maintenance operations. Lec Hrs=14 Lab Hrs=7 Clin Hrs=0 Other Hrs=0 Fees:0.00

AMT001C FAR’s, FORMS & PRIVILEGES
Familiarizes the student with FAA regulations, advisory circulars, and other government and industry publications, and the proper form and procedures for the execution of log books and major repair and alteration forms, and privileges and limitations as they apply to the certificate mechanic. Student fee charged. Lec Hrs=22 Lab Hrs=0 Clin Hrs=0 Other Hrs=0 Fees:17.00

AMT009C BASIC PHYSICS
Provides an understanding of energy and matter and how their relationships apply to aircraft maintenance. Lec Hrs=17 Lab Hrs=0 Clin Hrs=0 Other Hrs=0 Fees:7.83

AMT009C BASIC ELECTRICITY
The study of laws and theory of electricity and its application to aircraft systems, components, and circuits, to include practical knowledge of the different types of complex circuits found in modern aircraft. Student fee charged. Lec Hrs=42 Lab Hrs=47 Clin Hrs=0 Other Hrs=0 Fees:49.00

AMT010C AIRCRAFT WOOD STRUCTURES
Aircraft wood structures are covered in this section and familiarizes the student with the different systems and aircraft structures as well as methods of repair to wood structures. Student fee charged. Lec Hrs=2 Lab Hrs=0 Clin Hrs=0 Other Hrs=0 Fees:17.83

AMT015C AIRCRAFT COVERINGS
Student will gain knowledge and skills to inspect, test, and repair fabric-covering materials. The student will also test and apply all types of fabric covering, including the synthetic types, and use of proper materials to finish the material. Student fee charged. Lec Hrs=6 Lab Hrs=4 Clin Hrs=0 Other Hrs=0 Fees:19.83

AMT012C AIRCRAFT FINISHES
Student will acquire the ability to properly use a paint spray gun to apply various types of finishes on a variety of surfaces. The student will be able to apply trim lines and aircraft identification number, touch up paint defects, and identify aircraft finish spray finishing materials. Student fee charged. Lec Hrs=10 Lab Hrs=20 Clin Hrs=0 Other Hrs=0 Fees:99.83

AMT015C SHEET METAL STRUCTURES
Student is provided with knowledge and skills needed to provide expertise, and repair sheet metal structures and components. The course provides the student an introduction to fiber glass and the use of non-metallic structural materials and methods of construction using these materials. Student fee charged. Lec Hrs=41 Lab Hrs=16 Clin Hrs=0 Other Hrs=0 Fees:23.83

AMT014C AIRCRAFT WELDING
A theory and practice of welding methods used in aircraft construction and repair is thoroughly covered with emphasis on gas welding and advanced work in heli arc welding. Lab fee is required. Lec Hrs=15 Lab Hrs=25 Clin Hrs=0 Other Hrs=0 Fees:70.83

AMT015C ASSEMBLY AND RIGGING
Student will explain and compare aircraft design features and knowledge of pneumatics as used in aircraft systems. The course covers fluid flow, identifies the various actuating units, type of seals, pumps, and differences between hydraulics and pneumatics. Student fee charged. Lec Hrs=35 Lab Hrs=30 Clin Hrs=0 Other Hrs=0 Fees:64.83

AMT022C CABIN ATMOSPHERE CONTROL SYSTEMS
This unit covers the various systems used to condition air and cabin pressurization as well as practical experience in inspecting, checking, troubleshooting, and servicing the oxygen system. Student fee charged. Lec Hrs=29 Lab Hrs=30 Clin Hrs=0 Other Hrs=0 Fees:0.00

AMT025C AIRCRAFT INSTRUMENTS SYSTEMS
A basic familiarization of aircraft instruments and their function to include installation, inspection, and the installed testing of such instruments. Student fee charged. Lec Hrs=15 Lab Hrs=19 Clin Hrs=0 Other Hrs=0 Fees:41.83

AMT024C COMMUNICATIONS AND NAVIGATION SYSTEMS
This course introduces the student with basic auto pilot operation and familiarizes him/her with the installation requirements and use of the various communication and navigation systems. Student fee charged. Lec Hrs=25 Lab Hrs=42 Clin Hrs=0 Other Hrs=0 Fees:29.83

AMT025C AIRCRAFT FUEL SYSTEMS
The student is provided with the knowledge and skills needed to maintain fuel systems and fuel system components. He/she will be able to inspect, check, maintain, and repair aircraft fuel system components, fuel dump systems, fuel management and transfer systems, and perform refueling operations. Student fee charged. Lec Hrs=17 Lab Hrs=23 Clin Hrs=0 Other Hrs=0 Fees:67.83

AMT026C AIRCRAFT ELECTRICAL SYSTEMS
The student will be introduced to the theory of operation of various aircraft electrical systems. The student will be able to troubleshoot and repair AC and DC electrical systems and equipment. Student fee charged. Lec Hrs=45 Lab Hrs=65 Clin Hrs=0 Other Hrs=0 Fees:112.83

AMT027D POSITION AND WARNING SYSTEMS
This course presents the student with the inspection, servicing and repair of position and warning systems. Included in this area are navigation lights, beacons, and lights indicating the position of various aircraft components. Student fee charged. Lec Hrs=18 Lab Hrs=20 Clin Hrs=0 Other Hrs=0 Fees:38.83

AMT028C ICE, RAIN, & FIRE PROTECTION
Introduces the student to the basic principles of ice and rain control as it relates to aircraft surfaces, propellers, windshields, and other components. Methods of ice prevention and ice elimination are taught, providing the student with the knowledge and skills needed in the operation, inspection, checking, troubleshooting, and repair of airframe and engine icing and extinguishing systems. Student fee charged. Lec Hrs=10 Lab Hrs=20 Clin Hrs=0 Other Hrs=0 Fees:46.83

AMT030C RECIPROCATING ENGINES
The course covers theory and fundamental requirements for aircraft engines, basic parts of internal combustion engines, 2 stroke and 4 stroke cycle, power measurements and calculations, conversion of heat energy into mechanical energy, horsepower, piston displacement, compression ratio, types of horsepower, crankcase assembly, compression, gasketing, crankshafts, and rod assemblies, cylinder and piston assemblies, and bearings used in reciprocating engines. Student fee charged. Lec Hrs=45 Lab Hrs=107 Clin Hrs=0 Other Hrs=0 Fees:221.83

AMT031C TURBINE ENGINES & TURBINE ENGINES TROUBLESHOOTING
A thorough study of the theory of operation of turboprop engines and the function of the related engine components such as compressors, fuel control, fuel pumps, governors and other engine systems. Course covers disassembly, inspection, minimal repairs reasonably test run, and final adjustment. Corequisites: AMT0200, AMT0400, AMT0420, AMT0210. Student fee charged. Lec Hrs=60 Lab Hrs=97 Clin Hrs=0 Other Hrs=0 Fees:133.83

AMT032C ENGINE INSPECTION
A course of study which details the correct methods of engine removal and installation, inspection and run up testing, including the final adjustments according to FAA regulations and manufacturer's recommendations. Student fee charged. Lec Hrs=10 Lab Hrs=22 Clin Hrs=0 Other Hrs=0 Fees:66.83

AMT040C ENGINE INSTRUMENT SYSTEMS
Students will have a knowledge of operation, installation, marking and interpretation of powerplant instruments powered by or actuated by non-electrical means. They will be able to install, adjust, and calibrate instruments in accordance with FAA and manufacturer's
recommendations. This course will provide experience in inspection, checking, servicing, troubleshooting, and repair of engine instrument systems that are electrical in nature. Student fee charged. Lec Hrs.12 Lab Hrs.19 Cln Hrs.0 Oth Hrs.0 Fees:35.85.

AMT040C ENGINE FIRE PROTECTION SYSTEMS
To provide the student with the knowledge and skills needed in the operation of inspection, checking, troubleshooting, and repair of engine fire detecting and extinguishing systems. Student fee charged. Lec Hrs.05 Lab Hrs.10 Cln Hrs.0 Oth Hrs.0 Fees:25.85.

AMT040C ENGINE ELECTRICAL SYSTEMS & AP/U'S
This course provides knowledge and skills necessary to perform electrical repairs, installations, adjustments, and service. The subject area includes alternators, generators, voltage regulation, and paralleling of generators. The student will be introduced to the operational principles of auxiliary power units. Student fee charged. Lec Hrs.31 Lab Hrs.31 Cln Hrs.0 Oth Hrs.0 Fees:63.83.

AMT045C LUBRICATION SYSTEMS
Provides a comprehensive knowledge of the purpose and function of lubricants and lubrication system for powerplants. Covers lubrication, identifying and selecting lubricants, as well as, inspecting, checking, servicing and troubleshooting repair of the system and components. Fee will be charged. Lec Hrs.16 Lab Hrs.25 Cln Hrs.0 Oth Hrs.0 Fees:41.85.

AMT046C IGNITION SYSTEMS
Students will have knowledge of the operation, repair, inspection, and service of reciprocating and jet power plant ignition systems. They will be able to overhaul and troubleshoot the various components of each system. Student fee charged. Lec Hrs.37 Lab Hrs.4 Cln Hrs.0 Oth Hrs.0 Fees:84.83.

AMT047C ENGINE FUEL SYSTEMS
Student is provided with knowledge and skills needed to maintain fuel system components. Student will be able to inspect, perform troubleshooting, and repair engine fuel system components. Student fee charged. Lec Hrs.08 Lab Hrs.12 Cln Hrs.0 Oth Hrs.0 Fees:32.83.

AMT048C FUEL METERING SYSTEMS
Provides the student with the relative information and practice necessary to inspect, check, service, troubleshoot, and repair reciprocating and turbine fuel metering systems. The theory and practical application of carburetion, fuel injection systems, and water systems are also taught. Fuel pumps, filters, and strainers are discussed and practical experience is gained in these areas. Student fee charged. Lec Hrs.26 Lab Hrs.36 Cln Hrs.0 Oth Hrs.0 Fees:101.83.

AMT100C INDUCTION SYSTEMS
Gives student the knowledge and experience needed to service and maintain induction systems, supercharger systems that are an auxiliary system. Material covered includes controls, indicators, theory of operation and inspection criteria. Student fee charged. Lec Hrs.11 Lab Hrs.14 Cln Hrs.0 Oth Hrs.0 Fees:30.85.

AMT104C ENGINE COOLING & EXHAUST SYSTEMS
This course provides the student with an understanding of the need for the various types of engine cooling systems. Gives the student the knowledge of in the inspection, checking, servicing, troubleshooting, and repairing exhaust systems. This course will also enable the student to comprehend the function of exhaust systems including turbo charging and thrust reversers. The student will gain experience in inspection, checking, troubleshooting, and repairing various types of exhaust systems. Student fee charged. Lec Hrs.11 Lab Hrs.15 Cln Hrs.0 Oth Hrs.0 Fees:43.85.

AMT105C PROPPELLERS AND UNDUCED FANS
This unit of instruction is designed to cover aircraft engine and turbo prop installations. Areas dealt with are: propeller fundamentals and terminology, synchronize and cold start systems, identification and selection of propeller manufacturer powerplant systems, propeller control systems, propeller governing systems, and installation, troubleshooting and removal of propellers. This course will be presented by a professional. Student fee charged. Lec Hrs.41 Lab Hrs.48 Cln Hrs.0 Oth Hrs.0 Fees:74.83.

AMT106C BASIC ELECTRICITY
Basic electricity. The study of laws and theory relating to the aircraft's center gravity envelope and related systems. Provides an understanding of energy and matter and their relationships as they apply to aircraft and flight characteristics. This course will also enable the student to comprehend the function of exhaust systems including turbo charging and thrust reversers. The student will gain experience in inspection, checking, troubleshooting, and repairing various types of exhaust systems. Student fee charged. Lec Hrs.12 Lab Hrs.26 Cln Hrs.0 Oth Hrs.0 Fees:31.85.

AMT107C APPLIED MATHEMATICS
Reviews principles of mathematical functions and studies their application to aircraft and powerplant maintenance operations. Lec Hrs.15 Lab Hrs.7 Cln Hrs.0 Oth Hrs.0 Fees:66.83.

AMT108C FAR'S, FORMS & PRIVILEGES
Familiarizes the student with FAA regulations, advisory circulars, and other government and industry publications, proper terminology and procedures for the execution of log books and major repair and alteration forms, and privileges and limitations. Student fee charged. Lec Hrs.19 Lab Hrs.16 Cln Hrs.0 Oth Hrs.0 Fees:66.83.

AMT109C BASIC PHYSICS
Provides an understanding of energy and matter and how these relationships apply to aircraft maintenance. Lec Hrs.15 Lab Hrs.7 Cln Hrs.0 Oth Hrs.0 Fees:0.00.

AMT110C AIRCRAFT WOOD STRUCTURES
Aircraft wood structures are covered in this section and familiarizes the student with the different types of wood used in aircraft structures as well as methods of repair to wood structures. Student fee charged. Lec Hrs.9 Lab Hrs.2 Cln Hrs.0 Oth Hrs.0 Fees:31.83.

AMT111C AIRCRAFT COVERINGS
The student will gain knowledge and skills to inspect, test, and repair fabric covering materials. The student will be able to select and apply all types of fabric covering, including the synthetics types, and use of proper materials to finish the material. Lec Hrs.8 Lab Hrs.4 Cln Hrs.0 Oth Hrs.0 Fees:66.83.

AMT112C AIRCRAFT FINISHES
Student will acquire the ability to properly use a paint spray gun to apply various types of finishes on a variety of parts and surfaces. The student will be able to apply trim lines and aircraft identification numbers, touch up paint defects, and identify and select aircraft finishing materials. Pre or Corequisite: AMT111L. Lec Hrs.19 Lab Hrs.29 Cln Hrs.0 Oth Hrs.0 Fees:64.83.

AMT113L SHEET METAL STRUCTURES
Students provided with knowledge and skills needed to inspect, maintain, and repair sheet metal structures and components. The course provides the student an introduction to fiberglass, composite and other non-metallic structural material and methods of construction using those materials. Student fee charged. Lec Hrs.41 Lab Hrs.116 Cln Hrs.0 Oth Hrs.0 Fees:81.85.

AMT114C AIRCRAFT WELDING
A theory and practice of welding methods used in aircraft construction and repair is thoroughly covered with simple deals with all types of metals and advanced work in high arc welding. Lab fee is required. Lec Hrs.15 Lab Hrs.25 Cln Hrs.0 Oth Hrs.0 Fees:66.83.

AMT115C ASSEMBLY AND RIGGING
Students will explain and compare aircraft design features in subsonic, transonic, and supersonic aircraft. They will be able to assemble and rig various aircraft control systems, analyzing and correcting faulty flight characteristics. Lec Hrs.20 Lab Hrs.65 Cln Hrs.0 Oth Hrs.0 Fees:0.00.

AMT1160 AIRFRAME INSPECTION
Students will acquire the knowledge and skills needed to perform airframe inspections. The student will demonstrate knowledge of FAR's by checking appropriate A.D.'s, classifying repairs, and pinpointing specific service problems. The student will complete the required maintenance forms, records, and inspection reports required by the Federal Air Regulations. Lec Hrs.3 Lab Hrs.15 Cln Hrs.0 Oth Hrs.0 Fees:31.83.

AMT120C LANDING GEAR SYSTEMS
Student will receive training in the proper methods of inspection, servicing and repairing of landing gear systems, shock struts, brakes, wheels, tires and steering systems. Rigging of various types of retractable landing gear systems will be covered in detail. Lec Hrs.35 Lab Hrs.60 Cln Hrs.0 Oth Hrs.0 Fees:66.83.
AMT120 HYDRAULIC AND PNEUMATICS SYSTEMS (2)
The student will study the operation, maintenance requirements, and adjustments of various hydraulic and pneumatic systems. The course will provide the student with the knowledge of pneumatics as used in aircraft operation. The course covers fluid hydraulics, identifies the various actuating units, types of seals, pumps, and differences between hydraulics and pneumatics. 
Lec Hrs=35 Lab Hrs=0 Cln Hrs=0 Oth Hrs=0 Fees=66.83
AMT1220 CABIN ATMOSPHERE CONTROL SYSTEMS (1)
This unit covers the various systems used to condition air and cabin pressurization as well as practical experience with the various components and installation requirements and use of the various control systems, propeller, windshield, and other components.
Lec Hrs=20 Lab Hrs=30 Cln Hrs=0 Oth Hrs=0 Fees=66.83
AMT1230 AIRCRAFT INSTRUMENTS SYSTEMS (1)
A familiarization of aircraft instruments and their function to include removal, installation, and the installed testing of such instruments.
Lec Hrs=15 Lab Hrs=10 Cln Hrs=0 Oth Hrs=0 Fees=66.83
AMT1240 COMMUNICATIONS AND NAVIGATION SYSTEMS (1)
This course introduces the student with basic auto pilot operation and familiarizes him/her with the installation requirements and use of the various communications and navigation systems.
Lec Hrs=25 Lab Hrs=5 Cln Hrs=0 Oth Hrs=0 Fees=66.83
AMT1250 AIRCRAFT FUEL SYSTEM (1)
The student is provided with the knowledge and skills needed to maintain fuel systems and fuel system components. He/she will be able to inspect, check, maintain, aircraft fuel system components, fuel dump systems, fuel management and transfer systems, and perform refueling operations.
Lec Hrs=17 Lab Hrs=15 Cln Hrs=0 Oth Hrs=0 Fees=66.83
AMT1260 AIRCRAFT ELECTRICAL SYSTEMS (1)
The types and characteristics of aircraft electrical circuits and components are compared and evaluated. Advanced electrical systems as used in corporate and airline aircraft are studied. The course covers troubleshooting and repairs of AC and DC electrical systems and equipment.
Lec Hrs=55 Lab Hrs=55 Cln Hrs=0 Oth Hrs=0 Fees=66.83
AMT1270 POSITION AND WARNING SYSTEMS (1)
This course presents the student with the inspection, servicing and maintaining of position and warning systems. Included in this area are navigation lights, beacons, and lights indicating the position of various aircraft components.
Lec Hrs=10 Lab Hrs=10 Cln Hrs=0 Oth Hrs=0 Fees=66.83
AMT1285 ICE, RAIN, & FIRE PROTECTION
Introduces the student to the basics of ice and rain control as it relates to aircraft surfaces, propellers, windshields, and other components.
AMT240 ENGINE ELECTRICAL SYSTEMS & APUS (2)
This course provides knowledge and skills necessary to perform electrical repairs, installations, adjustments, and service. The subject area includes alternators, generators, voltage regulation, and paralleling of generators. The student will be introduced to the operational principles of auxiliary power units. Student fee charged.
Lec Hrs=11 Lab Hrs=15 Cln Hrs=0 Oth Hrs=0 Fees=66.83
AMT245 LUBRICATION SYSTEMS (1)
Provides a comprehensive knowledge of the purpose and lubrication requirements for fuel systems, Oils and greases in identifying and selecting lubricants, as well as, inspecting, checking, servicing and troubleshooting repair of the fuel systems. The student will be able to overhaul and troubleshoot the various components of the fuel systems.
Lec Hrs=45 Lab Hrs=10 Cln Hrs=0 Oth Hrs=0 Fees=81.83
AMT2440 IGNITION SYSTEMS (1)
Students will have knowledge of the operation, repair, inspection, and service of reciprocating and jet power plant ignition systems. They will be able to overhaul and troubleshoot the various important of the ignition system.
Lec Hrs=45 Lab Hrs=10 Cln Hrs=0 Oth Hrs=0 Fees=81.83
AMT2450 ENGINE FUEL SYSTEMS (1)
Student is provided with knowledge and skills needed to maintain fuel system components. Students will be able to inspect, maintain check, and repair engine fuel system components.
Lec Hrs=45 Lab Hrs=12 Cln Hrs=0 Oth Hrs=0 Fees=81.83
AMT2453 FUEL METERING SYSTEMS (1)
Provides the student with the necessary information and practical experience necessary to perform inspection, check, service, troubleshoot, and repair reciprocating and turbine fuel metering systems. The student will be able to inspect, maintain and repair various components of fuel systems.
Lec Hrs=20 Lab Hrs=0 Cln Hrs=0 Oth Hrs=0 Fees=0.00
AMT2460 INDUCTION SYSTEMS (1)
Students will have knowledge and experience needed to service and maintain induction systems, superchargers, and exhaust systems. Material covered includes carburetors, induction, theory of operation and inspection criteria.
Lec Hrs=11 Lab Hrs=14 Cln Hrs=0 Oth Hrs=0 Fees=0.00
AMT2475 ENGINE COOLING & EXHAUST SYSTEMS (1)
This course provides the student with an understanding of the need for the various types of engine cooling systems. Gives experience in the inspection, checking, servicing, troubleshooting and repairing of engine cooling systems. This course will also enable the student to comprehend the function of exhaust systems including turbo charging and turbo charging. The student will gain experience in inspection, checking, troubleshooting, and repairing various types of exhaust systems.
Lec Hrs=11 Lab Hrs=15 Cln Hrs=0 Oth Hrs=0 Fees=66.83
AMT2490 PROPELLERS AND UNDUCED FANS (2)
This unit of instruction is designed to cover aircraft engine and turbo prop installations.
Lec Hrs=11 Lab Hrs=15 Cln Hrs=0 Oth Hrs=0 Fees=66.83
Areas dealt with are: propeller fundamentals and terminology, synchronizing and ice control systems, identification and selection of propeller lubricants, balancing of propellers, propeller control systems, propeller governing systems, and installation, troubleshooting and removal of propellers. Student fee charged.
Lec Hrs=45 Lab Hrs=48 Cln Hrs=0 Oth Hrs=0 Fees=81.83
ANT2000 INTRODUCTION TO ANTHROPOLOGY (3)
An introductory study of the biological evolution and cultural development of human customs, social organization, and institutions. The student is introduced to the major fields of study undertaken by anthropologists.
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Oth Hrs=0 Fees=0.00
ANT2140 INTO TO ARCHEOLOGY (3)
The study of past cultures and the ongoing record of human history. This course reviews the major techniques and theories used to interpret culture change through time. A student must earn a grade of C- or higher to meet the requirements of the Gordon Rule.
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Oth Hrs=0 Fees=0.00
ANT221 I NTRODUCTION TO WORLD ETHNOLOGY PEOPLES OF THE (3)
A survey of cultures on differing levels of development, focusing upon subsistence, social organization, religion, art, and culture change. A student must earn a grade of C- or higher to meet the requirements of the Gordon Rule.
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Oth Hrs=0 Fees=0.00
ANT2381 CULTURE AND SOCIETY OF SPAIN (3)
Spanish culture and society includes a study of Spanish life and character as it manifests itself in historical, regional personality, celebrations, music, legendary figures, art and architecture. Special emphasis will be given to the southern part of Spain, Andalucia, which conserves the diverse cultural heritage of Europe, Africa, and the Orient (Near East).
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Oth Hrs=0 Fees=0.00
ANT2825 ANTHROPOLOGY FIELD SCHOOL (3)
This lab course is designed to supplement various topics related to fieldwork in Anthropology as well as Archaeology. Study is limited to field projects.
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Oth Hrs=0 Fees=0.00
ANT2985 INDEPENDENT STUDY ANTHROPOLOGY (3)
A directed study course available to both majors and non-majors who wish to investigate a particular problem related to the field of anthropology. The student will apply for the course to the Head of the Behavioral Sciences Department via an Instructor with whom the student wants to work. Prerequisite: Instructor-approval.
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Oth Hrs=0 Fees=0.00

www.broward.edu      College Catalog   259258

258 College Catalog BrowardCollege 219 College Catalog
Course is designed to provide a survey of current techniques and applications of virtual building technology to learn to apply virtual building technology to architectural design floor plans, elevations and sections, single-view drawings including parallel axonometric drawings and perspective drawings including one- and two-point.

Pre or Corequisite: ARC1701
Lec Hrs=0 Lab Hrs=96 Cln Hrs=0 Oth Hrs=0 Fees=0.00

Lec Hrs=64 Lab Hrs=0 Cln Hrs=0 Oth Hrs=0 Fees=40.00

A R T 1 2 0 3 C  3 D  D E S I G N     ( 3 )

A three-dimensional study of form, principles of organization, and the elements of design fundamental for creative work in 3-D visual arts.

Prerequisite: ARC2303C
Lec Hrs=48 Lab Hrs=96 Cln Hrs=0 Oth Hrs=0 Fees=40.00

ART201C 2D DESIGN
Two-dimensional study of form, principles of organization, and the elements of design fundamental for creative work in 2-D visual arts.

Lec Hrs=96 Cln Hrs=0 Oth Hrs=0 Fees=0.00

ART2500C
Lec Hrs=Lab Hrs=96 Cln Hrs=0 Oth Hrs=0 Fees=0.00

ART2501C PAINTING I
A basic introduction to oil painting and acrylic media.

Lec Hrs=48 Lab Hrs=96 Cln Hrs=0 Oth Hrs=0 Fees=0.00

ART2502C 3D COMPUTER MODELING FOR ANIMATION (3)
A three-dimensional study of form and concept utilizing physical material to occupy real space either free-standing or placed in a setting. The principles of organization and the element of design fundamentals are carried over and expand from 2-D designs. Prerequisite: Instructor permission.

Lec Hrs=Lab Hrs=96 Cln Hrs=0 Oth Hrs=0 Fees=40.00

ART2700C SCULPTURE
A three-dimensional study of form and concept utilizing physical material to occupy real space either free-standing or placed in a setting. The principles of organization and the element of design fundamentals are carried over and expand from 2-D designs. Prerequisite: Instructor permission.

Lec Hrs=Lab Hrs=96 Cln Hrs=0 Oth Hrs=0 Fees=40.00

ART2705C CERAMICS I
Study of basic ceramic shaping techniques, slaking, decorating and firing.

Lec Hrs=Lab Hrs=96 Cln Hrs=0 Oth Hrs=0 Fees=55.00

ART2750C CERAMICS II
A study of advanced techniques in ceramics synthesizing basic skills with more advanced concepts and techniques of forming clay, surface decoration, glazing and firing.

Lec Hrs=Lab Hrs=96 Cln Hrs=0 Oth Hrs=0 Fees=55.00
A particular problem related to the painting

ART275C CERAMICS: THROWING ON THE POTTERS WHEEL
A fine arts study of advanced techniques in ceramics emphasizing control techniques of forming clay on the wheel, surface decoration, glazing and firing.
Prerequisite: ART275BC
Lec Hrs:32 Lab Hrs:48 Cls Hrs:0 Oth Hrs:0 Fees:0.00

ART275C CERAMICS HAND-BUILDING
Fine arts ceramics course to develop hand-building through various projects which emphasize technique, creativity and the personal expression. Includes advanced concepts and techniques of forming clay, surface decoration, glazing and firing.
Prerequisite: ART275BC
Lec Hrs:32 Lab Hrs:48 Cls Hrs:0 Oth Hrs:0 Fees:0.00

ART290 INDEPENDENT STUDY
A course designed to establish a framework for future self-learning. Students will shape the course to fit their needs by planning activities with a faculty advisor. Prerequisite may be the Art Department Head.
Prerequisite: ART210C ART213C ART215C
Lec Hrs:0 Lab Hrs:0 Cls Hrs:0 Oth Hrs:0 Fees:0.00

ART290 INDEPENDENT STUDY: CERAMICS A directed, independent study course available to both majors and non-majors who wish to investigate a particular problem related to the ceramics process.
Prerequisite: ART275C ART2751C
Lab Hrs:24 Cls Hrs:0 Oth Hrs:0 Fees:0.00

ART290 INDEPENDENT STUDY: DRAWING
A directed, independent study course available to both majors and non-majors who wish to investigate a particular problem related to the drawing process. Instructor’s approval required.
Prerequisite: ART150C ART253CC
Lab Hrs:24 Cls Hrs:0 Oth Hrs:0 Fees:0.00

ART290 INDEPENDENT STUDY: SCULPTURE
A directed, independent study course available to both majors and non-majors who wish to investigate a particular problem related to the sculpture process.
Prerequisite: ART125C ART2731C
Lab Hrs:24 Cls Hrs:0 Oth Hrs:0 Fees:0.00

ART290 INDEPENDENT STUDY: PAINTING
A directed, independent study course available to both majors and non-majors who wish to investigate a particular problem related to the painting process.
Prerequisite: ART250C ART2501C
Lab Hrs:24 Cls Hrs:0 Oth Hrs:0 Fees:0.00

ART293C ART SPECIAL TOPICS: SPECIFY MEDIUM
A studio course concentrating on a medium of art and topics of current interest. Media, topics or focus may vary from semester to semester. Special Topics credit hours are not transferable. Transfer credit is the prerogative of the receiving institution.
Instructor’s permission required.
Lec Hrs:0 Lab Hrs:0 Cls Hrs:0 Oth Hrs:0 Fees:0.00

ART293C SPECIAL TOPIC: CERAMICS A directed, independent study course available to both majors and non-majors who wish to investigate a particular problem related to the ceramics process. Instructor’s approval required.
Prerequisite: ART1203C ART2701C
Lec Hrs:0 Lab Hrs:0 Cls Hrs:0 Oth Hrs:0 Fees:0.00

ART2949 CO-OP WORK EXPERIENCE A course designed to provide training in a student’s field of study through work experience. Courses are graded on the basis of documentation of learning acquired as reported by student and employer.
Prerequisite: Instructor’s permission.
Lect Hrs:0 Lab Hrs:0 Cls Hrs:0 Oth Hrs:144 Fees:0.00

ART2950 SEMINAR IN ART A course directed, independent study course available to both majors and non-majors who wish to combine the study of Art with travel in a foreign country. Variable content depends on areas visited.
Prerequisite: ART2950C
Lab Hrs:48 Cls Hrs:0 Oth Hrs:0 Fees:0.00

ASC1100 HISTORY OF AVIATION A survey of aviation from its beginning with early myths, through gliders, balloons and powered flight to the present jet age. Includes effects of wars on the development of civil and military aircraft and discusses significant personnel flights and aircraft in tracing the advancement of general, commercial, and military aircraft. The major emphasis of the course will be directed towards the development of aviation in the United States.
Prerequisite: ART2950C
Lab Hrs:48 Cls Hrs:0 Oth Hrs:0 Fees:0.00

ASC1100 NAVIGATIONAL SCIENCE 1 This course is a prerequisite to ATT1100 and ATT1200. It provides the basic aeronautical knowledge for the professional pilot and aviation operations programs. The ten courses must be taken consecutively unless the student’s major is Airport Operations Management or Aviation Maintenance Management, in which case, the courses may be taken sequentially.
Prerequisite: ART2950C
Lab Hrs:48 Cls Hrs:0 Oth Hrs:0 Fees:0.00

ASC1100 NAVIGATIONAL SCIENCE 2
Prerequisite: ATT1100 ATT1200.
Lab Hrs:48 Cls Hrs:0 Oth Hrs:0 Fees:0.00

ASC2110 NAVIGATION SCIENCE II Methods and procedures for the solution of advanced aviation navigation problems. Includes the flight planning process and the prediction of aircraft position at any time. The course also covers navigational calculations, flight planning, cross-country navigation, and electronic navigation. Successful completion of ATT1100 and ASC1100 and/or equivalent is required. In addition, topics that are included in this course include: Federal Aviation Regulations (FARS) 77, 108, 121, 129, 135, 139, 159, 161, 165, 191, and NTSB R30. These topics will include navigational aids, airport instrumentation, and the applicable Advisory Circulars (AC) that explains them. In addition, student research projects should be approved by an instructor.
Prerequisite: ATT1100 ATT1200.
Lab Hrs:48 Cls Hrs:0 Oth Hrs:0 Fees:0.00

ASC2200 AVIATION LAW AND REGULATIONS An introduction and analysis of the regulations and laws governing aircraft and airline operations, incorporating aviation safety. Topics of discussion include the major regulations to include: Federal Aviation Regulations (FARS) 77, 108, 121, 129, 135, 139, 159, 161, 191, and NTSB R30. These topics will include navigational aids, airport instrumentation, and the applicable Advisory Circulars (AC) that explains them. In addition, topics that will be covered are regulations related to operators and operators certified under Part 121, 129, 135, 139, 159, 161, 191, and the workload of the U.S. Weather Bureau, maps, reports and forecasts. Prerequisite: private pilot’s license or instructor’s permission.
Prerequisite: ATT1100 ATT1200.
Lab Hrs:48 Cls Hrs:0 Oth Hrs:0 Fees:0.00

ASC2249 CO-OP WORK EXPERIENCE A course designed to provide training in a student’s field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by student and employer. Prerequisite: Co-Op Department approval. Students will be assigned specific course prefixes related to their academic major prior to registration. All students must contact the Co-operative Education Office to obtain registration approval.
Prerequisite: ATT1100 ATT1200.
Lab Hrs:48 Cls Hrs:0 Oth Hrs:144 Fees:0.00

ASL2140 AMERICAN SIGN LANGUAGE 1 A course designed to develop the fundamental linguistics principles of American Sign Language and vocabulary totaling approximately 1,000-1,200 signs, concepts, both expressively and receptively. Cultural literacy will be enhanced related to deafness and Deaf culture through reading, writing, and the social environment of the Deaf Community. A variety of classroom literacy activities and exercises are supplemented by laboratory and/or multi-media presentations, to be utilized to develop communicative competence and appreciation for cultural diversity. This course is designed for students who have never taken a course in American Sign Language. Prerequisite: College Placement Testing (CPT) scores must place student into college-level
ATT2120 INSTRUMENT FLIGHT THEORY (3)
Prepares student for FAA Instrument Rating (Airplane) Exam. Instrument flight rules, IFR Enroute and Low and High Altitude Charts. The course covers the fundamental rules and procedures required in the instrument flight rules to enter, remain in and leave the Center. This course will teach the student the fundamentals of operation of the air traffic control system; navigational aids and their use, communications, the airways system; VFR and IFR flight planning, enroute procedures as related to instrument flight. Prerequisite: private pilot license or instructor permission.

ATT2284C ATC ENROUTE OPERATIONS WITH LAB (4)
This course covers the J0710.65 Air Traffic Control Manual Sections 5, 6, 7, 8, 9, 10, 11, 12, and 15, (Airplane) Exam. Terminal Radar Approach Control (TRACON). The student will be required to demonstrate practical application of the rules and procedures in use at the Center. This course will teach the student the fundamentals of operation of the air traffic control system; navigational aids and their use, communications, the airways system; VFR and IFR flight planning, enroute procedures as related to instrument flight. Prerequisite: private pilot license or instructor permission.

AVS2941 AIRCRAFT OPERATIONS INTERNSHIP II (3)
Practical application of acquired knowledge and experience at a certificated airport. The student will be exposed to the finance, business, legal, and public relations aspects of Airport Operations. Intern will gain experience in the collection of rent and allocation formulas in airport operations, receive knowledge on grant money is applied for and received as well as the business aspect of leasing and the business opportunity for airport operators, including compliance with federal and state laws, liability claims and procedures. Exposure to Airport Planning, Airport Master Plan, construction and refurbishment of airport facilities, airport layout plan, and airport studies. Work with airport public relations and marketing personnel on communicating with media and marking the airport as a business enterprise toward potential airlines and tenants. Requires special application and criminal background check. Prerequisite: instructor permission.

Prerequisite: ASC2500 AVM1940 AVM2510
Lec Hrs=0 Lab Hrs=0 Clin Hrs=0 Oth Hrs=9 Fees:0.00

AVS294C AVIONICS INSTALLER (180 HRS) (6)
Courses related to the installation and maintenance of airborne radio communications, radio navigation and radar equipment systems in accordance with regulatory and industry standards. Skills preparation for passing licensing/certification tests required by industry former secondary education grandfathered curriculum. The course content also includes training in communication, leadership, human relations and employability skills; and safe, efficient work practices. Prerequisite: knowledge: airframe and/or powerplant training, electronics training, previous experience.

Prerequisite: ASC0100 ASC2500
Lec Hrs=90 Lab Hrs=90 Clin Hrs=0 Oth Hrs=0 Fees:62.00

AVS909C Aeronautics Fundamentals (6)
Content includes but is not limited to troubleshooting, repair and installation of airborne radio communications, radio navigation and radar equipment systems in accordance with regulatory and industry standards. Also included is instruction in basics of AM and FM electronics training, previous experience.

Prerequisite: ASC0100
Lec Hrs=90 Lab Hrs=90 Clin Hrs=0 Oth Hrs=0 Fees:93.00

AVS9150 AVIONICS INSTALLER (180 HRS)
Content includes but is not limited to troubleshooting, repair and installation of airborne radio communications, radio navigation and radar equipment systems in accordance with regulatory and industry standards. Also included is instruction in basics of AM and FM electronics training, previous experience.

Prerequisite: ASC0100
Lec Hrs=90 Lab Hrs=90 Clin Hrs=0 Oth Hrs=0 Fees:93.00

AVS2090C AVIONIC INSTALLER (180 HRS)
Content includes but is not limited to troubleshooting, repair and installation of airborne radio communications, radio navigation and radar equipment systems in accordance with regulatory and industry standards. Also included is instruction in basics of AM and FM electronics training, previous experience.

Prerequisite: ASC0100
Lec Hrs=90 Lab Hrs=90 Clin Hrs=0 Oth Hrs=0 Fees:93.00

AVM1940 AIRPORT OPERATIONS INTERNSHIP I (3)
Practical application of acquired knowledge at a certificated airport. Student exposed to airport related external facilities such as: airfield inspections; security inspections and enforcement; air traffic control system; navigational airdrome aids; aircraft noise and its impact on the surrounding community; environmental issues; environmental impacts; landuse issues; environmental impact studies; airport operations; management, planning, scheduling and operational issues.
The purpose of this program is to prepare students for employment as electrical technicians (85514608) and as avionic technicians (823.281-010). The course content includes, but is not limited to, troubleshooting, repair and installation of airborne radio communications, radio navigation, and radar equipment systems in accordance with regulatory and technical standards. Also included is instruction in basic communications and navigation. This course is designed to provide students with the knowledge and skills necessary to perform basic avionic repair, maintenance, and troubleshooting. Emphasis is on the installation and maintenance of various systems and equipment commonly used in high rise and heavy construction projects.

Pre-Requisite: BCT2710 INFRASTRUCTURE COORDINATION

This course provides the student with an overview of the various agencies related to the construction industry. Emphasis will be on the need for and the manner of coordinating with those agencies. Students will receive exposure to the various permits required to interface with the agencies in order to coordinate the permit process, and understand how this coordinates with the project.

Lec Hrs=32 Lab Hrs=32 Cln Hrs=0 Oth Hrs=0 Fees=0.00

BCT2760 BUILDING CODES AND REGULATIONS

This is a two-hour laboratory weekly which provides hands on activities that develop basic drafting skills while reinforcing basic concepts in drafting. This course is designed to give students an understanding of blueprint reading and the ability to interpret working drawings. Emphasis is on the fundamentals of mechanical, electrical, and plumbing. Students will be able to interpret working drawings.

Lec Hrs=48 Lab Hrs=48 Cln Hrs=0 Oth Hrs=0 Fees=0.00

BCT2791L BUILDING CONSTRUCTION FIELD EXPERIENCE

This course is designed to provide students with field experiences, including shadowing and job site visits which help the student understand the organizational structure of a variety of construction companies and how the companies function.

Lec Hrs=32 Lab Hrs=32 Cln Hrs=0 Oth Hrs=0 Fees=10.00

BCT2800 PLANTS AND PEOPLE

This course will emphasize the role of plants in the development of civilizations, and the influence of plants on world history, politics, economics and culture. Will survey important plants and plant products from different cultures around the world.

Lec Hrs=48 Lab Hrs=48 Cln Hrs=0 Oth Hrs=0 Fees=0.00
This course introduces the architecture, structure, functions, components, and models of the Internet and computer networking. It covers the OSI and TCP layer models to examine the nature and roles of protocol and services at the OSI and TCP layered models to examine the nature, structure, functions, components, and models of the Internet and computer networking.

Prerequisite: CET1114C

Lec Hrs=32 Lab Hrs=32 Cln Hrs=0 Oth Hrs=0 Fees=$0.00

CET1461C TECHNICAL COMPUTER APPLICATIONS I

This course introduces technical problems related to the use of the Windows operating system, computer applications such as word processing, spreadsheets, presentations graphics, an introduction to CAD (Computer-Aided Design) and electronic simulation software is presented with emphasis on the software typically used in the Engineering Technology fields. This course is geared towards the Engineering Technology student.

Prerequisite: CET1460C

Lec Hrs=32 Lab Hrs=32 Cln Hrs=0 Oth Hrs=0 Fees=$0.00

CET1620C CISCO NETWORKING IV

This course discusses the WAN technologies and network architecture and how these converged applications in Enterprise networks. The course uses the Cisco Network Architecture to introduce integrated network services and explains how to select the appropriate devices and technologies to meet network requirements. Students learn how to implement and configure simple access control, and addressing services. Finally, students learn how to detect, troubleshoot, and correct common enterprise network implementation issues.

Prerequisite: CET1610C

Lec Hrs=48 Lab Hrs=8 Cln Hrs=0 Oth Hrs=0 Fees=191.00

CET1840C NETWORK CABLEING TECHNOLOGIES

This course covers the principles of cable design and routing in the physical aspect of voice and data network cabling and installation. The course focuses on cabling issues related to topology and voice network connections and provides an understanding of the industry and best industry practices for installation and configuration of voice and data networks, including LANs and WANs. Students will develop skills in identifying different types of cabling and testing cabling and network connections. This course is geared towards the Engineering Technology student.

Prerequisite: CET1114C CET1117C

Lec Hrs=56 Lab Hrs=8 Cln Hrs=0 Oth Hrs=0 Fees=191.00

CET1845C CISCO CCNP I-II SWITCHING

This course introduces students with the knowledge and skills necessary to plan, configure and verify the implementation of complex enterprise switching solutions using Cisco’s Catalyst Enterprise Architecture. The skills developed by students completing this course will help prepare them for the Cisco Threshold Exam.

Prerequisite: CET2625C CET2626C

Lec Hrs=48 Lab Hrs=16 Cln Hrs=0 Oth Hrs=0 Fees=191.00

CET1846C CISCO CCNP I-II ROUTING

This course provides students with the knowledge and skills necessary to plan and perform regular maintenance on complex enterprise routed and switched networks and to use technology-based practices and a systematic ITIL-compliant approach to perform network troubleshooting. The skills developed by students completing this course will help prepare them for the Cisco Threshold Exam.

Prerequisite: CET2625C CET2626C

Lec Hrs=48 Lab Hrs=16 Cln Hrs=0 Oth Hrs=0 Fees=191.00

CET6060C CISCO CCNA SECURITY

This course equips students with the knowledge and skills needed to perform as a security specialist. It provides a hands-on introduction to network security.

Prerequisite: CET1620C

Lec Hrs=48 Lab Hrs=16 Cln Hrs=0 Oth Hrs=0 Fees=191.00

CET7474C ADVANCED NETWORKING

This course is for support professionals who are new to networking services and will be responsible for installing, configuring, managing, and supporting a network infrastructure that uses various networking services. It also provides students with the knowledge and skills required for implementing and administering directory services such as Microsoft Active Directory.

Prerequisite: CET2480C

Lec Hrs=32 Lab Hrs=32 Cln Hrs=0 Oth Hrs=0 Fees=7.00

CGS1060C COMPUTER AND INTERNET LITERACY

This is an introductory course in basic computer and internet use. It covers computer hardware and software fundamentals (including the use of Windows, key productivity applications (including word processing, spreadsheets, and presentation systems), and living in an online world (including network fundamentals, e-mails, and the effective use of the Internet as a communication tool and information resource). Students will develop basic computer skills to aid them with college and study and workplace productivity. Hands-on use of a personal computer is required.

Lec Hrs=32 Lab Hrs=16 Cln Hrs=0 Oth Hrs=48 Fees=47.00
CGS110C ELECTRONIC SPREADSHEET
This course provides hands-on applications with a spreadsheet software package. Through lecture and lab practices, students will develop skills that create, manipulate and utilize spreadsheets.
Lec Hrs=24 Lab Hrs=24 Clin Hrs=0 Oth Hrs=0 Fees:0.00

CGS140C DATABASE MANAGEMENT
This course is an introduction to database management. Using appropriate database software, students will learn to maintain and manipulate data in a business intelligent and secure manner. Emphasis is placed on the use of microcomputer database management software for common business applications.
Lec Hrs=48 Lab Hrs=2 Clin Hrs=0 Oth Hrs=0 Fees:0.00

CGS155C INTERNET SITE DESIGN
This course is intended to provide technical, programming and administrative background and experience for a career with the World-Wide Web. Students should have working familiarity with the Internet.
Lec Hrs=32 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees:16.00

CGS1100C COMPUTER APPLICATIONS
This is an intermediate-level course in computer applications software. Students will gain knowledge and experience in the use and capabilities of word-processing, spreadsheet, database, and presentation graphics applications. Through case studies, students will learn to develop comprehensive solutions to various types of problems. Integration between applications will be emphasized.
Prerequisite: CGS100C
Lec Hrs=32 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees:0.00

CGS254C WEB DEVELOPMENT 3
This course teaches development of E-Commerce web sites for back-end server applications. It stresses development of database information and manipulation for web delivery. Students should have completed knowledge of HTML and Database management, before taking this course. Students will conceptualize and develop E-Commerce web sites.
Lec Hrs=32 Lab Hrs=32 Clin Hrs=0 Oth Hrs=4 Fees:0.00

CGS874C MULTIMEDIA AUTHORING II
Continuation of multimedia CGS872C with emphasis on functions and variables and development of complex interactive titles for cross platform delivery. Custom variables will be created. In-depth projects will be developed using video, audio, text, and graphics while following the program direction, testing, and debugging. HyperText and development of on-line help modules and documentation will be included in the projects.
Prerequisite: CGS872C
Lec Hrs=32 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees:0.00

CHD1328 CURRICULUM PLANNING FOR EARLY CHILDHOOD
Content and methods of planning developmentally appropriate activities to enhance children's

Cognitive, social, emotional, physical and creative development. Lesson plan formats and daily scheduling will be covered.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees:0.00

CHD1531 CREATIVITY FOR YOUNG CHILDREN
This course offers an understanding of theory in children's art, music, and movement activities and their practical classroom application through project based activities.
Lec Hrs=48 Lab Hrs=2 Clin Hrs=0 Oth Hrs=0 Fees:0.00

CHD1534 CHILDREN'S LITERATURE & LANGUAGE ARTS
This course is designed to provide a study of a variety of children's literature and to help the student to utilize these books in the classroom setting. The role of the teacher in the child's acquisition of language skills will be investigated.
Lec Hrs=48 Lab Hrs=2 Clin Hrs=0 Oth Hrs=0 Fees:0.00

CHD1538 MATH & SCIENCE FOR THE YOUNG CHILD
Designed to foster understanding of the development of mathematical thinking and the mental ability of the preschool child. The science portion will enable the pupil to become familiar with the concept and techniques of counting and measurement.
Lec Hrs=48 Lab Hrs=2 Clin Hrs=0 Oth Hrs=0 Fees:0.00

CHD1940 PRACTICUM 1: OBSERVATION AND EYEWITNESS
Offers an opportunity to observe children in child care settings, gain understanding of their behavior and their environments.
Lec Hrs=48 Lab Hrs=2 Clin Hrs=0 Oth Hrs=24 Fees:9.50

CHD2441 PRACTICUM II
Facilitates practical experiences in techniques of early childhood education. It requires qualified supervision in a school or center for preschool education.
Lec Hrs=16 Lab Hrs=2 Clin Hrs=0 Oth Hrs=78 Fees:0.00

CHD2800 ADMIN AND MGMT IN E C EDUCATION
This course will emphasize the planning and operation of a childcare facility. Classroom exposure will emphasize and assess site selection, building design and structure, equipment selection, activity planning, scheduling, financing, budgeting, record-keeping, and marketing. Topics covered include: educational measurements, stoichiometry, atomic structure, periodic table, chemical bonding, ionic and covalent compounds, nomenclature, and formula writing.
Pre or Corequisite: MAT1025
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees:0.00

CHM1025 INTRODUCTION TO CHEMISTRY
Laboratory experiments to accompany CHM1025.
Pre or Corequisite: MAC1104C
Lec Hrs=0 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees:35.00

CHM1032 CHEMISTRY FOR HEALTH SCIENCES
Selected topics from general chemistry; organic chemistry and biochemistry. This course is designed specifically for Nursing and other Allied Health Technology students.
Lec Hrs=48 Lab Hrs=2 Clin Hrs=0 Oth Hrs=0 Fees:0.00

CHM1032L CHEMISTRY FOR HEALTH SCIENCES LAB
Laboratory exercises to accompany CHM1032.
Pre or Corequisite: CHM1032
Lec Hrs=0 Lab Hrs=32 Clin Hrs=0 Oth Hrs=18.00

CHM1040 GENERAL CHEMISTRY A (EXPANDED SEQUENCE)
This is the first course in a three semester sequence, CHM1040, CHM1041 and CHM1046. This sequence includes two laboratories: CHM1045L to be taken concurrently with CHM1041 and CHM1046L, to be taken with CHM1046. Topics covered include: measurements, stoichiometry, atomic structure, periodic table, chemical bonding, ionic and covalent compounds, nomenclature, and formula writing.
Pre or Corequisite: MAT1023
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees:0.00

CHM1040L GENERAL CHEMISTRY A (EXPANDED SEQUENCE) LAB
This is the first laboratory course in the two-semester general chemistry sequence: CHM1040 and CHM1041; and the final course of the three-semester general chemistry sequence: CHM1040, CHM1041, and CHM1046. These sequences include two laboratories: (1) CHM1046L, to be taken concurrently with CHM1041 or CHM1045L, and (2) CHM1046L, to be taken with CHM1046. Topics covered include thermodynamics, kinetics, equilibria, electrochemistry, coordination chemistry, descriptive chemistry of metals, nuclear chemistry and an introduction to organic chemistry.
Pre or Corequisite: CHM1045L
Lec Hrs=0 Lab Hrs=48 Clin Hrs=0 Oth Hrs=0 Fees:0.00

CHM1045L GENERAL CHEMISTRY B II LAB
Laboratory experiments to accompany CHM1046C or CHM1046L. Special fee charged. Upon successful completion of this course, the student should be able to perform laboratory experiments to safely perform laboratory experiments that relate to the topics covered in CHM1046C or CHM1046L, to collect data accurately and to use those data to calculate a reasonable answer or come to a logical conclusion.
Pre or Corequisite: CHM1045L
Lec Hrs=0 Lab Hrs=48 Clin Hrs=0 Oth Hrs=33.00

CHM1051 ORGANIC CHEMISTRY I
First part of a two-course sequence presenting the structure, preparation, reaction, and nomenclature of various classes of organic compounds and their derivatives. Reaction electronic mechanisms are interpreted and unified in the light of modern theory.
Pre or Corequisite: CHM1045L
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees:0.00

CHM1051L ORGANIC CHEMISTRY I LAB
First part of the design course sequence presenting the structure, preparation, reaction, and nomenclature of various classes of organic compounds and their derivatives. Reaction electronic mechanisms are interpreted and unified in the light of modern theory.
Pre or Corequisite: CHM1051
Lec Hrs=48 Lab Hrs=48 Clin Hrs=0 Oth Hrs=0 Fees:0.00

Special fee charged.
Pre or Corequisite: CHM1046L
Lec Hrs=0 Lab Hrs=48 Clin Hrs=0 Oth Hrs=100.00

CHM1064 ORGANIC CHEMISTRY I LABORATORY
Organic laboratory experiments and preparations to accompany CHM1051L or CHM1051. Special fee charged.
Pre or Corequisite: CHM1051
Lec Hrs=0 Lab Hrs=48 Clin Hrs=0 Oth Hrs=0 Fees:0.00

CHM1070 MICROBIOLOGY I
Prerequisite: CHM1040
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees:0.00

CHM2210 ORGANIC CHEMISTRY II
First part of a two course sequence presenting the structure, preparation, reaction, and nomenclature of various classes of organic compounds and their derivatives. Reaction electronic mechanisms are interpreted and unified in the light of modern theory.
Pre or Corequisite: CHM1046C
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=33.00

CHM2210L ORGANIC CHEMISTRY II LAB
Organic laboratory experiments and preparations to accompany CHM2210. Special fee charged.
Pre or Corequisite: CHM1046L
Lec Hrs=0 Lab Hrs=48 Clin Hrs=0 Oth Hrs=0 Fees:0.00

CHM2210L ORGANIC CHEMISTRY II LABORATORY
First part of the design course sequence presenting the structure, preparation, reaction, and nomenclature of various classes of organic compounds and their derivatives. Reaction electronic mechanisms are interpreted and unified in the light of modern theory.
CIS 1000 C INTRODUCTION TO COMPUTER SCIENCE (3)
A continuation of the study of the remaining classes of organic compounds including use of spectrophotometric methods and an introduction to bio-organic molecules.
Prerequisite: CHM2120 CHM2121L
Pre or Corequisite: CHM2211L
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 OtH Hrs=0 Fees=0.00

CIS 2131C ORGANIC CHEMISTRY II LABORATORY (1)
Appropriate experiments and preparation to complement CHM2120.
Special fee charged.
Prerequisite: CHM2120 CHM2121L
Pre or Corequisite: CHM2211
Lab Hrs=48 Cln Hrs=0 OtH Hrs=0 Fees=100.00

CIS 2303 ORGANIC & BIOCHEMISTRY (3)
This course introduces the preprofessional science educator to fundamental organic and biochemical concepts. This is a content course in the B.S. Degree in the BC Science Education Program. The course has been designed to enhance the understanding of organic and biochemical concepts essential for the K-12 classroom. This program has been designed to correlate chemistry concepts with the NSTA National Science Content Standards, the Florida Subject Matter Content Standards, and the Florida Sunshine State Standards.
Corequisite: CHM2303L
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 OtH Hrs=0 Fees=0.00

CHM 2303L ORGANIC & BIOCHEMISTRY LAB (1)
This course has a weekly 3-hour session with laboratory experiments to accompany the lectures in CHM2303 Survey of Organic Chemistry and Biochemistry. This is a student laboratory course in the B.S. Degree in the BC Science Education Program. The course has been designed to enhance the understanding of organic and biochemical concepts essential to the K-12 classroom. This program has been designed to correlate chemistry concepts with the NSTA National Science Content Standards, the Florida Subject Matter Content Standards, and the Florida Sunshine State Science Standards.
Corequisite: CHM2303
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 OtH Hrs=0 Fees=0.00

CIS 2310C INTRODUCTION TO COMPUTER SCIENCE (3)
This course is designed to provide students with a broad perspective covering the use of Science, from core issues and concepts inherent to the discipline of computing, to the various sub-disciplines of computer science. Topics include: Number Systems and Data Representation; Computer Components and Architecture including Gates and Circuits; Programming and Systems Development Methodologies; Low-Level and High-Level Programming Languages; Abstract Data Representations and Algorithms; Operating Systems, File Systems and Directories; Information Systems; Artificial Intelligence; Simulation, Graphics, and Other Applications; Networks and The World Wide Web.
Prerequisite: CHM2120 CHM2121L
Pre or Corequisite: CHM2211L
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 OtH Hrs=0 Fees=0.00

CIS 2352 SOCIAL AND PROFESSIONAL ISSUES IN IT (3)
In addition to technical skills, an IT professional must understand and conform to the ethical and professional codes of conduct. This course reviews the historical, social, professional, ethical and legal aspects of computing. It identifies how teamwork is integrated throughout IT and how IT supports an organization. It also stresses professional oral and written communication skills.
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 OtH Hrs=0 Fees=0.00

CIS 4261 INFORMATION ASSURANCE AND SECURITY (3)
The information technology (IT) professional must understand, apply, and manage information assurance and security (IAS) in computing, communications, and systems development. The information professional must be a professional rather than a liability. IAS includes operational issues, policies and procedures, attacks and defense mechanisms, risk analyses, recovery, and information security. It should also be noted that many of the essential educational activities in this knowledge area may be illegal if performed outside a controlled environment, or without proper authorization. It is the responsibility of each individual program to appropriately administer these activities.
Prerequisite: CIS3846
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 OtH Hrs=0 Fees=0.00

CIS 4596 IT CAPSTONE PROJECT (3)
This course will give the IT student the ability to utilize what he/she has learned from the IT Program and adapt it to a work environment. This will be accomplished by providing the student a senior project that includes first; project proposal, feasibility studies, identification of intellectual property, and a teamwork environment for project creation, and second; project support which includes: budgeting, scheduling, communications through reports and presentations project testing, implementation and final approval. Note: This course will be taken in the final semester. Permission from the Dean of Business, Technology & Management and Student Affairs or Pre or Corequisite: CDA4411 CEN4341 CEN4722 CIS3510 CIS2453 CIS4561 CNT3504 COP5703 COP5847 COP4858
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 OtH Hrs=0 Fees=0.00

CJE 2300 INTRODUCTION TO CRIMINAL JUSTICE ADMINISTRATION & MGMT (3)
Introduction to principles of administration and management concepts characteristic of criminal justice organizations.
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 OtH Hrs=0 Fees=0.00
CJE 2170 COMPARATIVE WORLD POLICE AGENCIES (3)
A survey of contemporary foreign law enforcement and criminal justice systems. Includes the operational and philosophical differences emerging from various cultural and legal systems. This course will be taken in case and group studies of selected countries.
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 OtH Hrs=0 Fees=0.00

CJE 2400 POLICE COMMUNITY RELATIONS (3)
A consideration of the significance of establishing good working relationships between the police and the public, including the complex factors that lead to successful police community relations.
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 OtH Hrs=0 Fees=0.00
CJE 2580 INTERVIEWS AND INTERROGATIONS (3)
This course is designed to cover the techniques, methods, principles and issues of interviews and interrogations for criminal justice officers and investigators. Course offered through Deception Control, Inc. Ft. Lauderdale.
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 OtH Hrs=0 Fees=0.00
CJE 2600 CRIMINAL INVESTIGATION (3)
The investigation activity of a police department is studied to evaluate its organization, function and relationship with other divisions and agencies. Emphasis is placed on the procedural aspects and methodology employed in the investigative process. The student will know the elements of preliminary and follow-up investigations, to include methods of crime scene search, collection and preservation of evidence, and chain of custody concepts.
Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 OtH Hrs=0 Fees=0.00
CJE 2640 INTRODUCTION TO CRIMINALISTICS (3)
An introduction to the scientific aspects of investigation known as criminalistics, with emphasis on crime scene techniques, the collection and preservation of evidence and the examination of evidence. Students will be familiarized with the capabilities and limitations of a police crime laboratory.
Special fee charged. 1 hr. Lect. 2 hrs. Lab.
Lec Hrs=48 Lab Hrs=48 Cln Hrs=0 OtH Hrs=0 Fees=20.00
CJE 2642 CRIMINALISTICS PRACTICUM (3)
The knowledge and skills developed in the preceding course are applied to practical exercises which will develop expertise in the complete processing of crime scenes. Special fee charged. 1 hr. Practicum.
Prerequisite: CJE3600 CJE2640 CJE2770
Lec Hrs=0 Lab Hrs=16 Cln Hrs=0 OtH Hrs=0 Fees=44.00
CJE2643 ADVANCED FORENSIC INVESTIGATION
This course explores the scientific and investigative methods used to solve serious crimes against persons. Topics include distinguishing between causes of death, such as accidental, suicide or homicide; the use of autopsies; child and elderly abuse investigation. (NOTE: this course utilizes graphic material that may make some students uncomfortable.) Instructor’s approval or Pre-requisite: CJE2600
Lec Hrs=48 Lab Hrs=6 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJE2722 POLYGRAPH THEORY AND OPERATIONS
Includes the history and development of the polygraph with further emphasis on mechanics of instrument operation, maintenance and calibration. Offered through Deception Control, Inc., Ft. Lauderdale.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJE2735 TEST QUIT CONSTR & SEMANTICS/PERSONNEL SCREENING
The construction of test questions appropriate to the personnel aspect of the polygraph is emphasized. Course offered through Deception Control, Inc., Ft. Lauderdale.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJE2725 CHART ANALYSIS, VALIDITY AND RELIABILITY
Validity and reliability of the polygraph is examined, along with an in-depth consideration of chart analysis. Course offered through Deception Control, Inc., Ft. Lauderdale.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJE2726 POLYGRAPH OPERATIONS PRACTICUM
Topics of polygraph techniques and examinations are considered with emphasis on conducting examinations in role playing situations in the laboratory. Course offered through Deception Control, Inc., Fort Lauderdale.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJE2770 FORENSIC PHOTOGRAPHY AND VISUAL DOCUMENTATION
The student is taught specific skills necessary to visually document and photographically preserve crime scenes and evidence, from both technical and legal standpoint.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJE2901 JUVENILE JUSTICE
An analysis of the criminal justice system as it relates to juveniles. Major topics include: police practices (such as detention, searches and interrogation) when dealing with juveniles, court procedure in juvenile cases and different theories of juvenile rehabilitation.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0007 INTRODUCTION TO LAW ENFORCEMENT
This course is designed to familiarize the student with the general process and procedures related to criminal investigations.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0008 LEGAL
This course is designed to provide students a foundation in the aspects of law relevant to the duties of criminal justice officers.
Lec Hrs=69 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0001 HUMAN ISSUES
This course is designed to familiarize the student with the human issues encountered by the law enforcement officer. These issues include, but are not limited to substance abuse, mental illness, physical and developmental disabilities.
Lec Hrs=40 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0017 COMMUNICATIONS
This course is designed to provide students the communication skills relevant to the duties of criminal justice officers.
Lec Hrs=76 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0020 VEHICLE OPERATIONS
This course presents the dynamics of emergency vehicle operations and develops skills in operating a motor vehicle in the law enforcement environment. A demonstration of proficiency is required.
Lec Hrs=24 Lab Hrs=24 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0031 FIRST AID FOR CRIMINAL JUSTICE OFFICERS
This course provides life-saving skills developed in emergency medical situations appropriate for the law enforcement officer, including treatment of wounds and illness.
Lec Hrs=24 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0040 FIREARMS
This course develops proficiency with the semi-automatic pistol used by a law enforcement officer. Qualification is required at various lighting levels.
Lec Hrs=48 Lab Hrs=76 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0051 CMS CRIMINAL JUSTICE DEFENSIVE TACTICS
This course is designed to provide the student defensive skills appropriate for the threat level, within Florida law. Demonstration of proficiency is required.
Lec Hrs=80 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0061 PATROL 1
This course is designed to familiarize the student with the law enforcement officer’s duties while on patrol. Community Oriented Policing, patrol and problem solving techniques, officer safety, arrest, custody and other related patrol functions.
Lec Hrs=58 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0062 PATROL 2
This course is designed to provide the student knowledge of procedures necessary to address various high risk situations, including: incident command system, crowd control, gangs and extremist groups, hazardous materials, bombs and explosives.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0071 CRIMINAL INVESTIGATIONS
This course is designed to familiarize the student with the general process and procedures related to criminal investigations.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0076 CRIME SCENE INVESTIGATIONS
This course is designed to familiarize the student with the general process and procedures for responding to and processing a crime scene.
Lec Hrs=52 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0082 TRAFFIC STOPPS
Course is based on the current curriculum, as developed and approved by the Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission. This course is designed to familiarize students with the general process and procedures related to traffic stops.
Lec Hrs=24 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0083 D.U.I. TRAFFIC STOPPS
Course is based on the current curriculum, as developed and approved by the Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission. This course is designed to familiarize the student with the general process and procedures related to traffic stops.
Lec Hrs=24 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0086 TRAFFIC CRASH INVESTIGATIONS
This course is designed to introduce students to traffic crash investigations, laws pertaining to traffic crashes and procedures for responding to a traffic crash.
Lec Hrs=32 Lab Hrs=1 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0096 CRIMINAL JUSTICE OFFICER PHYS FIT TRAINING-LE
This course is designed to introduce students to physical conditioning, aerobic capacity, and wellness conditioning and training.
Lec Hrs=60 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK01010 INTERPERSONAL SKILLS 1
Course is based on the current curriculum, as developed and approved by the Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission. This course is designed to familiarize the student with human behavior, human interaction, and physically handicapped persons.
Lec Hrs=62 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0101 INTERPERSONAL SKILLS 2
This course is based on the current curriculum, as developed and approved by the Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission. This course is designed to familiarize the student with human interaction to improve interpersonal skills, supervisory skills, and leadership.
Lec Hrs=60 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0102 CORRECTIONAL OPERATION
Course is based on the current curriculum, as developed and approved by the Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission. This course is designed to familiarize the student with how an officer needs to possess those basic skills to perform the tasks required of Correctional Officers.
Lec Hrs=64 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK012 CROSS-OVER CORRECTIONS TO LAW ENFORCEMENT: CJS III LAB
This course is designed to provide transitioning officers the firearms training (night-firing) required for the new discipline not previously completed by the officer. Qualification with the weapon is required. In addition, this course is mandated by the Florida Criminal Justice Standards and Training Commission for inclusion in the Crossover from Correctional Officer to Law Enforcement Officer training program effective May 11, 2005. This is a limited access course. It requires active certification and employment as a State of Florida correctional officer.
Lec Hrs=60 Lab Hrs=8 Clin Hrs=0 Oth Hrs=0 Fees=0.00

CJEK0123 CROSS-OVER CORRECTIONS TO LAW ENFORCEMENT TACT. APP.
This course is designed to provide transitioning officers the tactical application training required for the new discipline not previously completed by the officer. This course explores the knowledge and procedures necessary for an officer engaging in various activities, to include: court process, incident command system, bomb and explosive investigations, and security work. In addition, this course is mandated by the Florida Criminal Justice Standards and Training Commission for inclusion in the Crossover from Correctional Officer to Law Enforcement Officer training program effective May 11, 2005. This is a limited access course. It requires active certification and employment as a State of Florida correctional officer.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00
This course is designed to provide transitioning officers specific communication skills required to the duties of Correction officers.

Lec Hrs:47 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0227 CORRECTIONAL X-OVER TO LAW ENFORCE HUMAN

This course is designed to provide transitioning officers specific communication skills related to human issues required for the new discipline (and not previously completed by the officer). These issues include, but are not limited to, crisis intervention, disability awareness, and responding to juvenile.

Lec Hrs:32 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0227 CPO TO LE WELLNESS

Course is based on the current curriculum standards as developed and approved by the Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission. This course is designed to familiarize the student; with FCIC telecommunications, police radio procedures, professional behavior, the interview process and police report writing.

Lec Hrs:0 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0296 CRIMINAL JUSTICE COMMUNICATIONS

At the end of this course, students should be able to: understand the values and ethics required of criminal justice officers; understand amendments to the U.S. constitution applicable to police; articulate the legal justification for the use of force; understand civil and criminal liability as related to an officer’s performance of duties; understand the Fourth Amendment.

Lec Hrs:32 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0305 INTRODUCTION TO CORRECTIONS

At the end of this course, students should be able to: understand the values and ethics required of criminal justice officials; determine when a crime has been committed; understand the chain of custody and concepts of evidence; be able to articulate the legal justification for the use of force; understand civil and criminal liability as related to an officer’s performance of duties; understand the Fourth Amendment.

Lec Hrs:20 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0295 CROSSOVER TO CORRECTIONAL LAW ENFORCEMENT

This course introduces firearms, presents the laws governing the duties of Correctional Officers and how an officer needs to possess those basic skills to perform the physical tasks required of correctional officers.

Lec Hrs:48 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0281 CRIMINAL JUSTICE OFFICER PHYS FIT TRAINING

This course introduces the student to physical conditioning, aerobic capacity, and wellness conditioning and training. It will help the student to better understand the need for a criminal justice officer to maintain physical conditioning.

Lec Hrs:0 Lab Hrs:32 Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0285 CRIMINAL JUSTICE LEGAL 2

The student will know the basic provisions of the U.S. Constitution and comprehend the officer’s responsibility to defend and comply with the U.S. Constitution.

Lec Hrs:22 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0286 CRIMINAL JUSTICE COMMUNICATIONS

This course is designed to familiarize student; with telephone equipment; properly using portable radio units; prepare for and conduct an interview; take notes; obtain statements when appropriate; sort information by

Lec Hrs:24 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0294 CORRECTIONAL CROSSOVER TO LAW ENFORCEMENT

This course is designed to familiarize the student; with FCIC telecommunications, police radio procedures, professional behavior, the interview process and police report writing.

Lec Hrs:0 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0296 CRIMINAL JUSTICE COMMUNICATIONS

This course is designed to familiarize the student; with telephone equipment; properly using portable radio units; prepare for and conduct an interview; take notes; obtain statements when appropriate; sort information by

Lec Hrs:24 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0294 CORRECTIONAL CROSSOVER TO LAW ENFORCEMENT

This course is designed to familiarize student; with telephone equipment; properly using portable radio units; prepare for and conduct an interview; take notes; obtain statements when appropriate; sort information by

Lec Hrs:24 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0294 CORRECTIONAL CROSSOVER TO LAW ENFORCEMENT

This course is designed to familiarize the student; with telephone equipment; properly using portable radio units; prepare for and conduct an interview; take notes; obtain statements when appropriate; sort information by

Lec Hrs:24 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0294 CORRECTIONAL CROSSOVER TO LAW ENFORCEMENT

This course is designed to familiarize the student; with telephone equipment; properly using portable radio units; prepare for and conduct an interview; take notes; obtain statements when appropriate; sort information by

Lec Hrs:24 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0294 CORRECTIONAL CROSSOVER TO LAW ENFORCEMENT

This course is designed to familiarize the student; with telephone equipment; properly using portable radio units; prepare for and conduct an interview; take notes; obtain statements when appropriate; sort information by

Lec Hrs:24 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0294 CORRECTIONAL CROSSOVER TO LAW ENFORCEMENT

This course is designed to familiarize the student; with telephone equipment; properly using portable radio units; prepare for and conduct an interview; take notes; obtain statements when appropriate; sort information by

Lec Hrs:24 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0294 CORRECTIONAL CROSSOVER TO LAW ENFORCEMENT

This course is designed to familiarize the student; with telephone equipment; properly using portable radio units; prepare for and conduct an interview; take notes; obtain statements when appropriate; sort information by

Lec Hrs:24 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0294 CORRECTIONAL CROSSOVER TO LAW ENFORCEMENT

This course is designed to familiarize the student; with telephone equipment; properly using portable radio units; prepare for and conduct an interview; take notes; obtain statements when appropriate; sort information by

Lec Hrs:24 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0294 CORRECTIONAL CROSSOVER TO LAW ENFORCEMENT

This course is designed to familiarize the student; with telephone equipment; properly using portable radio units; prepare for and conduct an interview; take notes; obtain statements when appropriate; sort information by

Lec Hrs:24 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0294 CORRECTIONAL CROSSOVER TO LAW ENFORCEMENT

This course is designed to familiarize the student; with telephone equipment; properly using portable radio units; prepare for and conduct an interview; take notes; obtain statements when appropriate; sort information by

Lec Hrs:24 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0294 CORRECTIONAL CROSSOVER TO LAW ENFORCEMENT

This course is designed to familiarize the student; with telephone equipment; properly using portable radio units; prepare for and conduct an interview; take notes; obtain statements when appropriate; sort information by

Lec Hrs:24 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0294 CORRECTIONAL CROSSOVER TO LAW ENFORCEMENT

This course is designed to familiarize the student; with telephone equipment; properly using portable radio units; prepare for and conduct an interview; take notes; obtain statements when appropriate; sort information by

Lec Hrs:24 Lab Hrs: Cls Hrs:0 Oth Hrs:0 Fees:0.00
CJ0294 CORRECTIONAL CROSSOVER TO LAW En
At the end of this course, students should be able to: identify and interpret the effects of assault, fires, hazardous materials, riots, hostage incidents, facility management, and communication; interpret responsibilities for responding to the following emergencies: assaults - fires - hazardous materials - riots - hostage incidents - facility management.

This course is designed to familiarize the student with the safe weapon handling and identification of weapon nomenclature, parts and ammunition, handgun drawing and holstering, weapon loading and unloading, basic shooting principles, proficiency on the CJSTC Criminal Justice Firearms Courses of Fire with a handgun during daylight and nighttime, proficiency for weapon handling, proper intervention for weapon malfunctions.

The course is designed to familiarize the student with the principles of professionalism, supervision of diverse populations, and effectively supervise inmates within a correctional facility; process detainers on an inmate; know inmate security; differentiate among weapons; list types of correctional officer reports; use proper elements of report writing; troubleshoot and edit reports; write reports and use a computer for report writing.

At the end of this course, students are responsible for reading and reviewing the reports. Lecture Hours = 48 Lab Hours = 12 Clinical Hours = 0 Other Hours = 0 Fees = $0.00

CKJ0320 INTAKE AND RELEASE

At the end of this course, students should be able to: understand the process for accepting an inmate into a county detention facility; understand the process for accepting an inmate into a state detention facility; search an inmate and his or her property for contraband; inventory an inmate’s property for storage; identify types of personal items issued to inmates; understand the importance of taking clear fingerprint pictures of a subject; know the relationship between the Florida Crime Information Center and the National Crime Information Center (FCIC/NCIC); understand the importance of inventorying criminal history information; understand the use of an intake for placing inmates in appropriate housing areas; know inmate security levels; understand the process for releasing an inmate; explain how to check for any outstanding holds or approvals on an inmate.

Lecture Hours = 68 Lab Hours = 0 Clinical Hours = 0 Other Hours = 0 Fees = $0.00

CKJ0335 RESPONDING TO INCIDENTS AND EMERGENCIES

At the end of this course, students should be able to: identify and interpret the response to incidents and emergencies; list types of procedures used when responding to the following emergencies: - inmate escapes - medical emergencies - riots - hostage incidents - facility assaults - fires - hazardous materials - bomb threats - man-made and natural disasters; select the standard procedures for crime scene control; describe how to manage victims; write a report of suspect; explain investigation and reporting techniques; describe procedures for the chain of custody for evidence.

Lecture Hours = 16 Lab Hours = 0 Clinical Hours = 0 Other Hours = 0 Fees = $0.00

CKJ0422 DART-FIRING STUN-GUN

This course will introduce the student to the basics of both the stun-gun and the dart-firing stun-gun, and give them some fundamental knowledge of this emerging tool in criminal justice.

Lecture Hours = 8 Lab Hours = 0 Clinical Hours = 0 Other Hours = 0 Fees = $0.00

CKJ0414C POLICE SERVICE AIDE

This course (with specified corequisites) is designed to provide students the minimum skills necessary to perform the duties of a Police Service Aide (PSA) and is approved by the Criminal Justice Standards and Training Commission as prescribed by Florida State Statute 316.649.

Corequisite: CKJ0422 CKJ0451

Lecture Hours = 94 Lab Hours = 16 Clinical Hours = 0 Other Hours = 0 Fees = $0.00

CKJ0442 TRAFFIC ACCIDENT / CRASH INVESTIGATOR

(0)

This course is designed to provide students the minimum skills necessary to perform the duties of a Parking Enforcement Specialist (PES) and is approved by the Criminal Justice Standards and Training Commission as prescribed by Florida State Statute 316.640.

Lecture Hours = 68 Lab Hours = 12 Clinical Hours = 0 Other Hours = 0 Fees = $0.00

CKJ0451 PARKING ENFORCEMENT SPECIALIST

(0)

This course is designed to provide students the minimum skills necessary to perform the duties of a Parking Enforcement Specialist (PES) and is approved by the Criminal Justice Standards and Training Commission as prescribed by Florida State Statute 316.640.

Lecture Hours = 68 Lab Hours = 12 Clinical Hours = 0 Other Hours = 0 Fees = $0.00

CKJ0480 EMERGENCY PREPAREDNESS

Course is based on the current curriculum, as developed and approved by the Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission. This course is designed to familiarize the student with the safe weapon handling and identification of weapon nomenclature, parts and ammunition, handgun drawing and holstering, weapon loading and unloading, basic shooting principles, proficiency on the CJSTC Criminal Justice Firearms Courses of Fire with a handgun during daylight and nighttime, proficiency for weapon handling, proper intervention for weapon malfunctions.

Lecture Hours = 24 Lab Hours = 0 Clinical Hours = 0 Other Hours = 0 Fees = $0.00

CKJ0393 CROSSOVER PROGRAM UPDATES

This course is designed to familiarize the student with the principles of professionalism, supervision of diverse populations, and effectively supervise inmates within a correctional facility; process detainers on an inmate; know inmate security; differentiate among weapons; list types of correctional officer reports; use proper elements of report writing; troubleshoot and edit reports; write reports and use a computer for report writing.

At the end of this course, students should be able to: interpret arrangement of information in chronological order; follow correct format and content when writing a report; identify types of criminal justice officer reports; use proper elements of report writing; troubleshoot and edit reports; write reports and use a computer for report writing. Course Requirements: students are responsible for reading and reviewing the reports. Lecture Hours = 48 Lab Hours = 0 Clinical Hours = 0 Other Hours = 0 Fees = $0.00

CKJ0310 OFFICER SAFETY

At the end of this course, students should be able to: interact positively with inmates, visitors, and staff in a correctional setting; identify the root causes of miscommunication; use, understand, and interpret non-verbal cues; communicate properly using telephone equipment; communicate properly using portable radio unit; prepare for and conduct an interview; take notes; obtain statements when appropriate; sort information by category; arrange information in chronological order; interpret responsibilities for equipment management; interpret responsibilities for equipment accountability; describe equipment storage procedures; list common procedures for issuing, receiving, and documenting inventoried equipment; differentiate among weapons; list types of security equipment; identify hazardous equipment; interpret responsibilities for equipment management; identify hazardous equipment; interpret responsibilities for equipment accountability; describe the proper handling of sensitive supplies; identify standards for security and inspection; describe procedures for entering, exiting and moving within a facility; list elements important to maintaining good sanitation and health.

Lecture Hours = 8 Lab Hours = 0 Clinical Hours = 0 Other Hours = 0 Fees = $0.00

CKJ0315 FACILITY AND EQUIPMENT

At the end of this course, students should be able to: identify the effects of assault, fires, hazardous materials, riotous behavior, hostage incidents, facility management, and communication; interpret responsibilities for responding to the following emergencies: assaults - fires - hazardous materials - riots - hostage incidents - facility management.

Lecture Hours = 40 Lab Hours = 0 Clinical Hours = 0 Other Hours = 0 Fees = $0.00

CKJ0330 SUPERVISING IN A CORRECTIONAL FACILITY

At the end of this course, students should be able to: effectively supervise daily operations at a correctional facility; apply the disciplinary process when an inmate commits a rule or law violation; recognize an inmate’s distortion or chronological order; interpret responsibilities for equipment management; interpret responsibilities for equipment accountability; describe equipment storage procedures; list common procedures for issuing, receiving, and documenting inventoried equipment; differentiate among weapons; list types of security equipment; identify hazardous equipment; interpret responsibilities for equipment management; identify hazardous equipment; interpret responsibilities for equipment accountability; describe the proper handling of sensitive supplies; identify standards for security and inspection; describe procedures for entering, exiting and moving within a facility; list elements important to maintaining good sanitation and health.

Lecture Hours = 8 Lab Hours = 0 Clinical Hours = 0 Other Hours = 0 Fees = $0.00

CKJ0320 INTAKE AND RELEASE

At the end of this course, students should be able to: understand the process for accepting an inmate into a county detention facility; understand the process for accepting an inmate into a state detention facility; search an inmate and his or her property for contraband; inventory an inmate’s property for storage; identify types of personal items issued to inmates; understand the importance of taking clear fingerprint pictures of a subject; know the relationship between
CJT1140  CORRECTIONAL LAW  (5)
A course in practical law for correctional personnel. Study includes law regulating use of force, civil rights of prisoners, constitutional law, legal service, disciplinary procedures, parole and current case law.
Lec Hrs=48  Lab Hrs=0  Clin Hrs=0  Oth Hrs=0  Fees=0.00

CJT2568  CIVIL RIGHTS  (5)
A survey course of the Federal Rights legislation to include the 15th through 15th Amendments of the Reconstruction Era and the Civil Rights legislation of the 60's. Special topics include consideration of the American Disabilities Act, Age Discrimination in Employment Act, Equal Employment Opportunities Act, Equal Pay Act, Affirmative Action, and Sexual Harassment.
Lec Hrs=48  Lab Hrs=0  Clin Hrs=0  Oth Hrs=0  Fees=0.00

CNT2001  LOCAL AREA NETWORKING  (5)
This course is designed as a comprehensive study of microcomputer networking. Topics include the selection, installation, maintenance, and management of networking software and hardware.
Lec Hrs=48  Lab Hrs=0  Clin Hrs=0  Oth Hrs=0  Fees=0.00

CNT3504  NETWORKING  (5)
This course teaches the concepts necessary to design, deploy, integrate and administer a communications infrastructure. This course includes data communication concepts that cover telecommunications, the Internet and Internet working principles.
Lec Hrs=48  Lab Hrs=0  Clin Hrs=0  Oth Hrs=0  Fees=0.00

CNT3504  SYSTEM ADMINISTRATION AND
MAINTENANCE  (5)
This course will provide the IT professional with the knowledge and the management tools that are needed to design, select, apply, and deploy computer systems. The learned outcomes will allow the student an understanding in system administration concepts that will cover software, hardware, system configuration, databases, network documentation, internet, and maintenance.
Lec Hrs=48  Lab Hrs=0  Clin Hrs=0  Oth Hrs=0  Fees=0.00

CNT3702  INFRASTRUCTURE AND FACILITIES
PLANNING  (5)
Students integrate computer networking and software into a robust, secure, redundant and resilient infrastructure. Students will research and present findings related to enterprise projects in computer networking design. In addition to the technical requirements the student will learn the business principles of economies of scale, service level agreements, request for proposals, and outsourcing.
Prerequisite: CNT2001
Lec Hrs=48  Lab Hrs=0  Clin Hrs=0  Oth Hrs=0  Fees=0.00

COP100C  INTRODUCTION TO COMPUTER
PROGRAMMING  (5)
This course provides the beginning programmer with the student a solid foundation in building applications using an object-oriented /event-driven language. Students will write programs using C# controls and their main properties, methods and events. Students will also write programs that access sequential access files and will learn basic programming structures and manipulation of arrays in C#. The class assumes a working knowledge of basic programming control structures.
Prerequisite: CIS212C COP135C
Pre or Corequisite: COP256C
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=54.00

COP135C  INTRODUCTION TO C++  (7)
This course provides an introduction to computer programming using the C++ language. A structured, multi-phase, program development process featuring a series of steps involving problem definition, top-down design, and formal program specification is stressed. The course is ine Disciplines of software engineering. The programming student with the techniques needed to develop well-documented, structured computer programs. Students who do not possess computer programming experience are strongly encouraged to complete COP100C (Introduction to Computer Programming) before attempting this course.
Prerequisite: MAT0028
Pre or Corequisite: CIS100C
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=45.00

COP135C  INTERMEDIATE C++ PROGRAMMING  (7)
This course continues the study of structured programming and the C++ language begun in COP135C. Topics will include classes, polymorphism, inheritance, streams, templates, exception handling dynamic memory allocation, and memory management. An introduction to data abstraction principles will be included.
Prerequisite: CIS100C COP135C
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=40.00

COP2071C  DATABASE DESIGN AND PROGRAMMING
USING SQL  (7)
This course provides the student with a solid foundation in Relational Database Management Systems and RDBMS technology. It emphasizes an end-to-end solution, beginning with requirements and progressing through conceptual design, logical database design, physical database design, and database implementation, using a RDBMS and the SQL language. It involves extensive database manipulation and querying using SQL. It also stresses transaction management concepts, data integrity constraints, and performance issues.
Prerequisite: COP135C
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=40.00

COP2171C  VISUAL BASIC PROGRAMMING  (7)
This course teaches how to create Visual Basic based programs. Students write programs that access data from OLE/ODBC databases and applications, and act as an OLE Server and as an add-in. This class assumes a working knowledge of basic programming concepts.
Prerequisite: COP135C
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=40.00

COP256C  CF PROGRAMMING  (5)
This course teaches students how to create CF programs using a solid foundation in building applications using an object-oriented /event-driven language. Students will write programs that access sequential access files and will learn basic programming structures and manipulation of arrays in CF. The class assumes a working knowledge of basic programming control structures.
Prerequisite: CIS212C COP135C
Pre or Corequisite: COP256C
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=40.00

COP280C  JAVASCRIPT  (5)
This course introduces students to the JAVA Programming Language. Upon successful completion of this course, the students should be able to create Java programs that leverage the object-oriented features of the Java language, such as encapsulation, inheritance and polymorphism; use data types, arrays and other data collections; implement error-handling techniques excepts using exception handling; create an event-driven UI using programming components; and implement I/O functionality to read from and write to text files.
Prerequisite: CIS212C COP135C
Pre or Corequisite: COP256C
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=40.00

COP2847C  JAVA SCRIPTING  (5)
This course teaches students how to write JavaScript that can be executed on any computer running compatible software. These programs will be created using this object-based scripting language and designed to interact over the Internet or any other similar network with an appropriate Web browser. Students will learn JavaScript structure and syntax; how to interact with environment variables, use event handlers, perform simple error-handling and receive an overview of working with cookies. Students will conceptualize and develop interactive web sites using the full features of JavaScript.
Lec Hrs=32  Lab Hrs=0  Clin Hrs=0  Oth Hrs=0  Fees=35.00

COP285C  VISUAL BASIC DEVELOPMENT  (5)
This course focuses on how to create an active X control, how to create component object model (COM), how to incorporate active X and COM components within a visual basic program, how to write visual programs that access a database, and how to incorporate Internet technologies into a visual application.
Prerequisite: COP2171C
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=90.00

COP3703  DATABASE CONCEPTS  (5)
This course applies a relational model approach to logical and physical data structure and data concepts and modeling. It also applies a model based on conceptual database design and implementation using current software.
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=40.00

COP3847  WEB SYSTEMS AND TECHNOLOGIES  (5)
Information Technology (IT) applications are increasingly web based. Web technologies has grown to include a variety of businesses, academic, organizational and social applications.Diverse multi-cultural and multilingual user communities now depend on web technology. This knowledge area covers design, implementation and testing of web based applications including related software, databases, interfaces and digital media. It also covers social, ethical and security issues arising from the web and social software.
Prerequisite: COP3703
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=40.00

COP4858  INTEGRATIVE PROGRAMMING AND
TECHNOLOGIES  (5)
Organizations typically use many disparate technologies that need to communicate with and work with each other. A key component of the discipline of information technology is the integration of applications and systems. This knowledge area examines the various components and architectural structures of information technologies and relates that knowledge back to the principles of programming languages and their appropriate use. It also addresses the use of scripting languages, architectures, application programming interfaces and programming practices to facilitate the management, integration and security of the systems that support an organization.
Prerequisite: COP3847
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=40.00

COP6020  INTRODUCTION TO COMPARATIVE
GOVERNMENT  (5)
This course is a survey of political systems in the developed and the underdeveloped world. Non-Western, semi-Democratic, totalitarian and Federal systems will be analyzed and contrasted. Also the European community will be examined as an example of a multi-cultural cooperation.
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=40.00

COP9010  GOVERNMENT AND POLITICAL SCIENCES  (5)
An introduction to the understanding of Spain’s governmental processes, with an emphasis on the structure of Spanish politics, the constitutional framework, the working of the bureaucracy, and the role of interest groups within the context of Spain’s political system.
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=40.00

www.broward.edu      College Catalog   285
CRW 1001 CREATIVE WRITING I
The course is structured toward producing literary fiction, poetry, dramatic forms, creative non-fiction and other original expression. Student writing will be the primary basis for critical discussion with an emphasis on fundamentals of poetry, fiction, and/or drama, as illustrated in master writers’ work. Lectures, readings, craft analysis, discussions, exercises and workshops provide students with the opportunity to develop the craft of creative writing.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00
(3)

CRW 1100 FICTION WRITING
Lectures, readings, craft analysis, discussions, writing exercises, and workshops provide students with the opportunity to analyse fiction and practice the craft of writing fiction. The course is structured toward producing literary fiction. Student writing and master writers’ work will be the primary basis for critical discussion, with an emphasis on the fundamentals of fiction. Fiction emphasis.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00
(3)

CRW 1200 POETRY WRITING
Student writing as the basis for critical discussion with emphasis on analysis for the elements of poetry.
Prerequisite: ENC 1101
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00
(3)

CRW 2002 CREATIVE WRITING WORKSHOP II
A continuing development of creative writing ability.
Prerequisite: CRW 1001
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00
(3)

CRW 2003 ADVANCED CREATIVE WRITING WORKSHOP (3)
A continuing development of creative writing ability. Students may work on independent writing projects. Directed independent study. Instructor’s Approval or Prerequisite: CRW 2002
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00
(3)

CTC 1001 Connect 2 Complete Seminar TO BE DETERMINED
Lec Hrs=32 Lab Hrs=0 Clin Hrs=0 Oth Hrs=32 Fees=0.00
(3)

CTCS1106C UNIX
The UNIX Operating System Essentials course provides emphasis on the key features and capabilities of the UNIX OS. These include file and directory management, controlling the user work environment, archiving files and using remote commands. In addition, this course explains fundamental command-line features of the UNIX OS including file system navigation, the vi text editor, file permissions, access control lists (ACLs), command shells, file compression, basic network use, and reading shell scripts. This course prepares students to take the Sun Certified Solaris Associate (SCSAS) Exam.
Lec Hrs=48 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=4.00
(4)

CTCS1111C LINUX +
This course provides students with the knowledge and skills necessary to effectively administer UNIX workstations and servers. Students will plan, install, maintain, and troubleshoot UNIX operating system services. The skills developed by students completing this course will help prepare them for the CompTIA Linux+ certification exam.
Lec Hrs=48 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=5.00
(4)

CTCS1353 A - OPERATING SYSTEMS
This course provides students with the knowledge required to assemble components based on customer requirements, install, configure and maintain devices, PCs and software for end users, understand the basics of networking and security/forensics, properly and safely diagnose, resolve and document common hardware and software issues while applying troubleshooting skills. Successful candidates will also provide appropriate customer support; understand the basics of virtualization, desktop imaging, and deployment.
Lec Hrs=36 Lab Hrs=12 Clin Hrs=0 Oth Hrs=0 Fees=7.00
(3)

CTCS1354C NETWORK-
This course provides students with important knowledge and skills that could be used to implement a defined network architecture with basic network security to configure, maintain, and troubleshoot network devices using the Applicator Network tools, to understand the features and purpose of network technologies, and to make basic solution recommendations, analyze network traffic, and be familiar with common protocols and media types.
Lec Hrs=48 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=16.04
(3)

CTCS121C ADOBE PHOTOSHOP
This Adobe course teaches students how to fully utilize the latest Adobe Photoshop image editing tool to create and manipulate images. The course includes hands-on experiences with exercises and projects to provide students with a thorough working knowledge of Adobe Photoshop. In this course students learn to paint and retouch images, use layers, support video, work with vector tools, manage digital assets, work with RAW camera files, manage color, and prepare images for output to the web. The skills developed by students completing this course will help prepare them for the Adobe Certified Associate certification exam. Placement by test or
Prerequisite: CGS1060C
Lec Hrs=36 Lab Hrs=12 Clin Hrs=0 Oth Hrs=0 Fees=15.07
(3)

CTCS125C WINDOWS AND OUTLOOK FOR BUSINESS
This course teaches students to utilize Windows operating system to be more productive, more collaborative, and more efficient. The course covers the skills effectively administering the Windows OS environment. This course also teaches students advanced skills and design concepts for employing Microsoft Outlook to create, manage and organize messages, contacts and tasks. The skills developed by students completing this course will help prepare them for the Microsoft Office Specialist Windows and Outlook certification exams.
Prerequisite: CGS1060C
Lec Hrs=36 Lab Hrs=12 Clin Hrs=0 Oth Hrs=0 Fees=12.04
(3)

CTCS129C MICROSOFT SPECIALIST: WORD
This course teaches students advanced skills and design concepts for employing Microsoft Word to create and organize data. The course includes hands-on experiences with exercises and projects to provide students with a thorough working knowledge of Microsoft Word. This course is valuable for anyone wanting to be effective and efficient in creating and formatting presentation masters and templates, creating and formatting slide content, working with dynamic visual content and collaborating on and delivering presentations. The skills developed by students completing this course will help prepare them for the Microsoft Office Specialist PowerPoint certification exam.
Prerequisite: CGS1060C
Lec Hrs=36 Lab Hrs=12 Clin Hrs=0 Oth Hrs=0 Fees=12.04
(3)

CTCS132C MICROSOFT WINDOWS CLIENT
This course provides students with the knowledge and skills necessary to install and configure Microsoft Windows client. It will also provide them with the knowledge and skills to use the IT Pro tools and productivity applications that ship with a Microsoft Windows client. The skills developed by students completing this course will help prepare them for the Microsoft Windows client certification.
Prerequisite: CTCS135C
Lec Hrs=48 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=20.04
(4)

CTCS137C MICROSOFT WINDOWS NETWORK INFRASTRUCTURE
This course provides students with the knowledge and skills to implement and configure secure network access and implement fault tolerant storage technologies. Students will gain an understanding of the network technologies most commonly used with Windows Server 2008 network infrastructure. Students will learn to implement and configure secure network access and implement fault tolerant storage technologies. Students will gain an understanding of the network technologies most commonly used with Windows Server and IPv6 based networks. Students will also learn how to secure servers and maintain updates compliance.
Prerequisite: CTCS135C-CTCS137C
Lec Hrs=48 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=20.04
(4)
This course teaches students how to produce vector-based animated and interactive web sites using Adobe Flash toolset. The course will cover everything from the basic interface to advanced button design and form interaction. Students will learn to manipulate the multimedia features in Flash, and how to take advantage of it.

Prerequisite: CTS1851C  
Lec Hrs=56  Lab Hrs=12  Clin Hrs=0  Oth Hrs=0  Fees=157.00

CTS1852C  CASCADING STYLE SHEETS  
This course teaches students how to linearize and apply CSS to separate the content from the style of the web pages. Topics covered will include using CSS for positioning, layout, and future techniques. Students will gain a basic understanding of the computer, network, and web technologies. Students will gain a basic knowledge and/or competency of Internet skills and tools in 3 core content areas: Internet, Business Foundations, Site Development Foundations, and Network Technology Foundations. The skills and implement and students completing this course will prepare them for the CWI Foundations certification exam. Placement test or Prerequisite: CTS1345C  
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=138.00

CTS120C  SECURITY+  
This course provides the student with an understanding of the computing, network, infrastructure, information security issues faced by industry worldwide. Expertise necessary to combat and protect intellectual property from theft and destruction are also developed. The skills developed by students who complete this course will prepare them for the Security+ certification exam.  
Prerequisite: CTS154C  
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=158.00

CTS131C  A-PRACTICAL  
This course teaches students how to use the Adobe Dreamweaver Integrated Development Environment. Students learn project requirements, website usability, using rich media content, content control tools, website building techniques, collaboration and site testing, and how to manage and maintain websites.  
Prerequisite: CTS130C  
Lec Hrs=56  Lab Hrs=12  Clin Hrs=0  Oth Hrs=0  Fees=157.00

CTS181C  MACROMEDIA FLASH  
This course teaches students how to produce vector-based animated and interactive web sites and uses the Adobe Flash toolset. The course will cover everything from the basic interface to advanced button design and form interaction. Students will learn to manipulate the multimedia features in Flash, and how to take advantage of it.

Prerequisite: CTS1815C  
Lec Hrs=56  Lab Hrs=12  Clin Hrs=0  Oth Hrs=0  Fees=157.00

CTS1820C  INSTALLING AND CONFIGURING WINDOWS SERVER 2012  
This course will give students the initial skills to implement and configure Windows Server 2012 core services, such as Active Directory and the networking services.  
Prerequisite: CTS1245C  
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=0.00

CTS1431C  MICROSOFT SPECIALIST: ACCESS  
This course teaches students advanced skills and design concepts for employing Microsoft Access to quickly retrieve and manipulate enterprise data. The course includes hands-on experiences with exercises and projects to provide students with a thorough working knowledge of Microsoft Access programming. This course is valuable for anyone wanting to provide structure for information, forms interfaces, positioning, layout, and future techniques. The student will also quickly retrieve and manipulate enterprise data.  
Prerequisite: CTS1480C  
Lec Hrs=56  Lab Hrs=12  Clin Hrs=0  Oth Hrs=0  Fees=122.00

CTS124C  MICROSOFT WINDOWS ACTIVE DIRECTORY  
This Microsoft IT Academy course provides students with an understanding of how to design a Windows Server Network Infrastructure that meets business and technical requirements for network services, to design Active Directory forests, domain infrastructure, sites and replication, administrative structures, policy groups, and Public Key infrastructure solutions based on Windows Server to meet varying business and technical requirements.  
Prerequisite: CTS245C  
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=204.00

CTS2345C  MICROSOFT WINDOWS SERVER ADMINISTRATION  
This Microsoft IT Academy course provides students with the knowledge and skills necessary to analyze business requirements in a given scenario and then define technical solution architectures that will optimize business results by using Microsoft development tools.  
Prerequisite: CGS1100  
Pre or Corequisite: CTS251HC  
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=7.00

CTS2343C  MICROSOFT EXCHANGE SERVER  
This course will provide students with the knowledge and skills to install, configure, route and manage a Microsoft Exchange environment. They will also learn how to provide client access, backup and restore databases, and manage recipient objects such as mailboxes, distribution groups, and contacts. The skills developed by students completing this course will help prepare them for the Microsoft Exchange certification.  
Prerequisite: CTS245C  
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=204.00

CTS2342C  MICROSOFT WINDOWS ADMINISTRATION  
This course will provide students with the knowledge and skills necessary to analyze business requirements in a given scenario and then define technical solution architectures that will optimize business results by using Microsoft development tools.  
Prerequisite: CTS245C  
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=204.00

CTS2341C  MICROSOFT SYSTEM CENTER CONFIGURATION MANAGER  
This course provides students with the knowledge and skills to deploy/manage software and asset utilizing the Microsoft System Center Configuration Manager. The skills developed by students completing this course will help prepare them for the Microsoft System Center Configuration Manager certification.  
Prerequisite: CTS2342C  
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=204.00

CTS2340C  MICROSOFT SHAREPOINT SERVER  
This course provides students with the knowledge and skills to deploy, plan, design, and maintain a Microsoft Windows SharePoint Server in a production environment. The skills developed by students completing this course will help prepare them for the Microsoft Office Share Point Server certification.  
Prerequisite: CTS2342C  
Lec Hrs=48  Lab Hrs=16  Clin Hrs=0  Oth Hrs=0  Fees=204.00
This course provides students with the knowledge and skills necessary to implement applications programming concepts and procedures, and to apply these skills to design, develop, and implement solutions based on Access for Windows.

Prerequisite: CGS1540C COP2171C
Lec Hrs=48 Lab Hrs=16 Cln Hrs=0 Ot h Hrs=0 Fees=$80.00

CTSI240C MICROSOFT .NET FOUNDATIONS

In this Microsoft IT Academy course, students will develop the knowledge and skills to program Microsoft .NET Framework applications. At course completion, students will develop applications that give us type and functionality of business objects, manage common data by using collections, deploy and configure assemblies, monitor and debug applications, read access files, and deserialize data. Students will also use System.Drawing and System. Globalization, encrypt and hash data using cryptography, secure and use reflection, metadata, emitting objects services, threading, and application domains. This course will help students prepare for the Microsoft .NET Framework - Application Development Foundation certification.

Prerequisite: COP2520C COP2561C
Lec Hrs=48 Lab Hrs=16 Cln Hrs=0 Ot h Hrs=0 Fees=$135.00

CTSI242C MICROSOFT .NET WEB APPLICATION DEVELOPMENT

This course in the Microsoft IT Academy course, students will develop industry standard skills to design and implement applications using Microsoft .NET Framework web applications. At course completion, students will have knowledge of ASP.NET and web services. Students will also acquire data access by using either Visual Basic or C#. Students will also learn how to create and consume web services and build-in data-access tools. This course will help students prepare for the Microsoft .NET MCSD certification.

Prerequisite: COP2071C CTS240C
Lec Hrs=48 Lab Hrs=16 Cln Hrs=0 Ot h Hrs=0 Fees=$135.00

CTSI243C MICROSOFT SQL SERVER DEVELOPER I

This course teaches students how to implement a Reporting Services solution in an organization. The course discusses how to use the Reporting Services development tools to create reports, and how to use the Reporting Services management and administrative tools to manage a Reporting Services solution.

Prerequisite: CTP212C COP2071C
Lec Hrs=48 Lab Hrs=16 Cln Hrs=0 Ot h Hrs=0 Fees=$0.00

CTSI247C MICROSOFT SQL SERVER DATABASE ADMINISTRATION I

This course provides students with the knowledge and skills to design, optimize, and maintain a database administration solution for Microsoft SQL Server.

Prerequisite: COP2071C CTS154C
Lec Hrs=48 Lab Hrs=16 Cln Hrs=0 Ot h Hrs=0 Fees=$135.00

CTSI248C MICROSOFT SQL SERVER DATABASE ADMINISTRATION II

This course provides students with the knowledge and skills to design, optimize, and maintain a database administration solution for Microsoft SQL Server.

Prerequisite: COP2071C CTS154C
Lec Hrs=48 Lab Hrs=16 Cln Hrs=0 Ot h Hrs=0 Fees=$135.00

CTSI244C ORACLE DATABASE ADMINISTRATION I

This course is your first step towards success as an Oracle professional, designed to give you type and functionality of the Oracle database architecture and how its components work together with one another. Students will also learn how to create an operational database and properly manage the various structures in an effective and efficient manner including performance monitoring, database security, user management, and backup/recovery techniques. The lesson topics are reinforced with structured hands-on practices.

Prerequisite: CTP207C CTS1111C
Lec Hrs=48 Lab Hrs=16 Cln Hrs=0 Ot h Hrs=0 Fees=$76.00

CTSI244C ORACLE DATABASE ADMINISTRATION II

In this course, students gain a much deeper understanding of all of the most important features of Oracle - backup and recovery. The concepts and architecture that we explored in the previous course will include how to define and test your own backup and recovery scenarios. Also, the DBA learns how to manage memory effectively, and how to perform some performance evaluation and tuning tasks, including some of the advisors. All types of flashback technology are covered, including tools for scheduling and maintaining the Flashback Data Archive, as well as the new feature of Flashback Query. Students also gain experience in using the Oracle Real Application Security (RAS) suite to protect data in the database.

Prerequisite: CTP207C CTS1111C
Lec Hrs=48 Lab Hrs=16 Cln Hrs=0 Ot h Hrs=0 Fees=$76.00

CTSI245C ORACLE DEVELOPER II

This course starts with an introduction to PL/SQL and proceeds to list the benefits of this powerful programming language. Students are made aware of how to create PL/SQL blocks of application code that can be shared by multiple forms, reports, and data management applications. In addition, creation of anonymous PL/SQL blocks as well as stored procedures and functions are covered in this course.

Prerequisite: CTP207C CTP208C
Lec Hrs=48 Lab Hrs=16 Cln Hrs=0 Ot h Hrs=0 Fees=$76.00

CTSI246C SUN: ADVANCED JAVA PROGRAMMING

This course is designed to prepare students for the Sun Certified Programmer for Java Certification. Upon successful completion of this course, the students should be proficient in creating event driven GUI's using Swing components, creating multi-threaded programs and creating simple Transmission Control Protocol/Internet Protocol (TCP/IP) networked client that communicates through a server through sockets. Prerequisite: COP 2561C COP2810C
Lec Hrs=48 Lab Hrs=16 Cln Hrs=0 Ot h Hrs=0 Fees=$76.00

CTSI246C SUN: ADVANCED JAVA DEVELOPMENT

This course is designed to help prepare students for the Sun Certified Developer certification. Upon successful completion of this course, students should be able to implement a program from the ground up that could be used in a commercial context. In addition, students should be able to develop classes to connect programs to SQL database systems using the core aspects of the Java Database Connectivity (JDBC) application programming interface(API). Two-tier and three-tier Java technology applications will be created, as well as client/server and multi-threaded servers and remote objects using Java Remote Method Invocation(Java RMI).

Prerequisite: CTP207C CTS264C
Lec Hrs=48 Lab Hrs=16 Cln Hrs=0 Ot h Hrs=0 Fees=$76.00
Students will work with Server Side Scripting to create Internet-based applications. Students will learn to connect to databases, work with files, extract data from HTML forms, and how to build secure applications.

Prerequisite: COPI1346CTS1801C

CTS2854C CLIENT-SIDE SCRIPTING

This course teaches students about the features of the JavaScript language, design client-side, and platform independent solutions. Students learn how to use, exercises, and scripts programs, script for the JavaScript object model, control program flow, validate forms, animate images, target frames, and create cookies. Students will also understand and use the most popular applications of JavaScript.

Prerequisite: COPI1347CTS1811C

CTS2854 CIW: E-COMMERCE STRATEGIES AND PRACTICES I

This course teaches students how to conduct business online using both business-to-business and business-to-consumer e-commerce models. Students will also explore the technological issues associated with managing an electronic commerce web site. Students will examine strategies and products available for building electronic-commerce web sites, how sites are managed, and how they can complement an existing business infrastructure. This course, in combination with CTS2852C, prepares students for the CIW E-Commerce Strategies and Practises certification exam.

Prerequisite: CTS8151C

CTS2855C CIW: E-COMMERCE STRATEGIES AND PRACTICES II

This course allows students to explore real world scenarios as an E-Commerce Designer would and focuses on standards, technologies, and practices for both business-to-business and business-to-consumer e-commerce models. Students will understand and facilitate relationships among marketing, promotions, customer service, user interaction, purchasing methods, and secure transactions by using SSL and SET, payment gateway, inventory control, shipping and order information, and site performance testing and evaluation. This course, in combination with CTS2854C, helps prepare students for the CIW E-Commerce Strategies and Practices certification exam.

Prerequisite: CTS8254

CTS2857C SERVER-SIDE SCRIPTING

This course will help students understand and utilize Server Side Scripting technology.

Prerequisite: Permission of instructor or Prerequisite: DAA1101

Lec Hrs=0 Lab Hrs=64 Cln Hrs=0 Oth Hrs=0 Fees=0.00

DAA2202 MODERN DANCE III

A continuation of DAA1100 with an emphasis on advanced movement phrases and combinations necessary to perform modern dance repertory.

Further emphasis will be placed on the development of the students’ style and performance quality.

Coeducational. May be repeated for credit.

Prerequisite: Permission of instructor or Prerequisite: DAA1101

Lec Hrs=0 Lab Hrs=64 Cln Hrs=0 Oth Hrs=0 Fees=0.00

DAA2280 BALLET I

An academic study of techniques and theoretical concepts of ballet for the performance-oriented student. Includes warm-up, barre, and centre combinations. Coeducational.

Prerequisite: DAA2282 or permission of the instructor.

Lec Hrs=0 Lab Hrs=64 Cln Hrs=0 Oth Hrs=0 Fees=0.00

DAA2281 BALLET II


Prerequisite: Participation in semester dance concert required.

Lec Hrs=0 Lab Hrs=64 Cln Hrs=0 Oth Hrs=0 Fees=0.00

DAA2282 BALLET III

Continuation of DAA1205. Emphasis on developing strength and coordination in more complex phrasing and movement. This course will explore and develop an understanding of the vocabulary, techniques, and theoretical concepts of ballet on an intermediate level. Students are required to audition for RCC student dance ensemble, Coeducational. May be repeated for credit.

Prerequisite: Permission of instructor or Prerequisite: DAA2281

Lec Hrs=0 Lab Hrs=64 Cln Hrs=0 Oth Hrs=0 Fees=0.00

DAA3010 DANCE COMPOSITION

This course is designed to introduce the student to the creative process of dance composition. Through the use of set choreographic devices and choreographic devices, the student will create movement studies. Improvisation, aesthetic principles and the process of choreographic composition will be examined.

Prerequisite: DAA1101 or DAA2281.

Prerequisite: DAA1101

Lec Hrs=0 Lab Hrs=64 Cln Hrs=0 Oth Hrs=0 Fees=0.00

DANS089 MUSIC FOR DANCE

Designed specifically for dance and choreographer with the musical knowledge and tools to enhance how they use music in their discipline and how they communicate their musical needs to musicians.

Prerequisite: Permission of instructor or Prerequisite: Lec Hrs=32 Lab Hrs=0 Cln Hrs=0 Oth Hrs=0 Fees=0.00

DAA2100 INTRODUCTION TO DENTISTRY

An overview of dentistry and the dental assisting profession including its history, ethical and legal issues, interpersonal and communication skills, and organization of the dental assistant. 3 hrs. Lec. Term I: Introductory course or Prerequisite: DAA0052

Lec Hrs=3 Lab Hrs=0 Cln Hrs=0 Oth Hrs=0 Fees=0.00

DAA2005 PRE CLINICAL

Designed to orient the student to the dental office and the use and sterilization of all instruments and equipment used in the practice of dentistry. Special fee charged.

4 hrs. Lec. Term I: Instructor’s approval or Prerequisite: DEA0005 DES0015 DES0844

Lec Hrs=4 Lab Hrs=0 Cln Hrs=0 Oth Hrs=0 Fees=0.00

DAA2015 PRECLINICAL LABORATORY

Laboratory/clinical portion of DAA2005. Provides hands-on instruction of use and sterilization of all instruments and equipment used in the practice of dentistry. Special fee charged. 8 hrs. Lab./Clinical. Term I. Instructor approval or Prerequisite: DEA0025 DES0015 DES0845

Lec Hrs=0 Lab/Hrs=120 Cln Hrs=0 Oth Hrs=0 Fees=0.00

DAD013 ALLIED DENTAL THEORY

Designed to acquaint the student with basic body structures, functions, and diseases which affect the mouth and supporting structures and their role in the overall health of the patient. 1 hr. Lec. Term II. Instructor approval or

Prerequisite: DEA0205 DES08205

Lec Hrs=0 Lab Hrs=0 Cln Hrs=0 Oth Hrs=0 Fees=0.00

DAD016 ALLIED DENTAL PRACTICE

This course will offer material on the basic theories of psychology which enable the dental assistant to possess a greater understanding of why people act as they do. Included in the course are practical techniques for effective patient management and basic guidelines for establishing a better interpersonal relationship between the dental assistant and the patient. 1 hr. Lec. Term II. Instructor approval or

Prerequisite: DEA0000 DEA0025 DES08844

Lec Hrs=0 Lab Hrs=0 Cln Hrs=0 Oth Hrs=0 Fees=0.00
INTRODUCTION TO DENTISTRY (ATD) (2)
An overview of dentistry and the dental assisting profession including its history, ethical and legal aspects, duties and responsibilities of the dental health team, professional organizations, and proper conduct and grooming of the dental assistant. Instructor approval or
Corequisite: DEIA1035

PRE CLINICAL (ATD) (4)
Designed to orient the student to the dental office and the use and sterilization of all instruments and equipment used in the practice of dentistry. Special fee charged. In Clinical. Term I. Instructor approval or
Corequisite: DEIA1050, DEIS100 DEIS1840

PRE CLINICAL LABORATORY (ATD) (4)
Laboratory-clinical portion of DEIA0005. Provides hands-on instruction of use and sterilization of all instruments and equipment used in the practice of dentistry. Special fee charged. In Labs/ Clinical. Term I. Instructor approval or
Corequisite: DEIA1050, DEIS100 DEIS1840

ALLIED DENTAL THEORY (ATD) (2)
Designed to acquaint students with basic body structure, functions, and diseases which affect dentistry. Basic concepts of microbiology and their relevance to clinical dentistry will be covered. Additional consideration will be given to the pharmacological properties, therapeutic applications and adverse reactions of drugs and medications commonly used in dentistry. Essential material on the structures, treatment, and equipment required to render adequate care for the common office emergencies will be covered.
Instructor approval or
Prerequisite: DEIA1035, DEIA1820

DEA1055 DENTAL PSYCHOLOGY (ATD) (2)
This course will offer material on the basic theories of psychology which enable the dental assistant to possess an understanding of why people act as they do. Included in the course are practical techniques for effective patient management and basic guidelines for establishing a better interpersonal relationship between the dental assistant, dental staff and the dental patient. Instructor approval or
Prerequisite: DEIA1035 DEIA1805 DEIA1840

DEH1002 PRECLINICAL DENTAL HYGIENE I (2)
A course designed to provide knowledge of the principles of dental hygiene with a detailed study of instrumentation. The course includes data collection and mastery of beginning techniques in dental care.
Pre or Corequisite: DEH1002L DEH1840 DEH1840L

DEH1002L PRECLINICAL DENTAL HYGIENE LAB (5)
The laboratory portion of this course is designed to provide hands-on instruction in the application of dental hygiene procedures with a detailed study of instrumentation. The course includes data collection and mastery of beginning techniques in dental patient care.
Prerequisite: BSC2086 BSC2086L DEH1002

DEH1130 ORAL HISTOLOGY AND EMBRYOLOGY (2)
This course studies the embryonic development and the histology of the components of the oral cavity. This includes a comprehensive study of the tissues of the oral cavity.
Pre or Corequisite: DEH1002 DEH1802 DEH1802L

DEH1182 ORAL HISTOLOGY I (2)
This course presents the etiology and classification of periodontal disease and principles of periodontia pertinent to dental hygiene practice. Principles of occlusion and periodontal surgery techniques are discussed through the use of case presentations.
Prerequisite: DEH1800 DEH1800L DEH2300

DEH1602 PERIODONTOLOGY LAB (1)
This laboratory encompasses a continuation of learning current periodontal trends in the dental office. The student will gain knowledge in the origin, physical and chemical properties, modes of administration and effects upon the body system.
Prerequisite: DEH1002 DEH1002L DEH1840

DEH1802 DENTAL HYGIENE II (4)
This course will provide clinical experience in treatment planning, periodontal charting, ultrasonic scaling and comprehensive dental hygiene care.
Pre or Corequisite: DEH1802 DEH1802L DEH1802L

DEH2701 COMMUNITY DENTAL HEALTH (1)
This course will teach the student the concepts of community dental health. Topics covered include the measurement of dental disease, prevention programs, community outreach programs, and simple statistical skills. Prerequisite:
Corequisite: DEH1130

DEH2944L ADVANCED DENTAL HYGIENE III CLINIC (2)
This laboratory portion of this course provides advanced application of the principles of preventive dental hygiene and oral prophylaxis techniques on patients in the clinic under supervision.
Prerequisite: DEH1840 DEH1840L

DEH2871L COMMUNITY DENTAL HEALTH LAB (1)
This course is the follow through for DEH1701. The student will apply community health principles by designing and presenting dental health education principles to various community audiences.
Prerequisite: DEH1130 DEH1800

DEH2894L ADVANCED DENTAL HYGIENE IV CLINIC (2)
This laboratory course provides continuing clinical experience with patients, developing previously learned skills and knowledge. The emphasis is placed on advanced instrumentation and patient management skills necessary to treat the more difficult patient.
Prerequisite: DEH1802 DEH1802L DEH1802L DEH1840 DEH2400 DEH1840L

DEH2805L DENTAL HYGIENE IV CLINIC (2)
This laboratory course is designed to provide the dental hygiene students with basic concepts of computer technology and dental software used in the current practice of dentistry. The course will focus on advanced technologies which include dental software programs, intraoral camera, microscope, digital radiography, clinical assessments and practice management. Dental hygiene students will get hands on opportunities all software programs assuring their future success.
Pre or Corequisite: DEH1802 DEH1802L DEH1800 DEH1800L DEH1800L DEH2400 DEH2400

DEP2002 DEVELOPMENTAL PSY 1 CHILD PSYCHOLOGY (5)
Study of the concepts and principles of growth and development in infancy and childhood.
Prerequisite: DEH1002 DEH1820L DEH1820L

DEP2003 DEVELOPMENTAL PSY 2 CHILD PSYCHOLOGY (5)
The laboratory portion of this course provides advanced application of the principles of preventive dental hygiene and oral prophylaxis techniques on patients in the clinic under supervision.
DES1092 DENTAL OFFICE MANAGEMENT (ATD) (2)
The study of efficient dental office management.
Basic concepts to be presented will include telephone etiquette, computer terminology, guidelines for better interpersonnal relations, methods for effective appointment control, dental bookkeeping systems and practice bookkeeping techniques, collection and billing, filing of patents records and procedures for tax and health insurance forms. Computer proficiency must be demonstrated by the student for course completion.
Prerequisite: DEA1030 Corequisite: DES1090
Lec Hrs=2 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

DES1805 CLINICAL PROCEDURES 1 (ATD) (2)
Lecture series acquaints the student with the necessary background material and assisting procedures involved in each dental specialty. Special fee charged.
Prerequisite: DEA1030 DES1030L
Lec Hrs=.32 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

DES1805L CLINICAL PROCEDURES 1 LAB (ATD) (4)
Practicum phase provides the opportunity for each student to receive closely supervised individual instruction in all phases of chairside assisting. Special fee charged. Instructor’s approval or prerequisite: DEA1030 DES1030L
Lec Hrs=.00 Lab Hrs=0 Clin Hrs=1.65 Oth Hrs=0 Fees=245.33

DES1807 CLINICAL PROCEDURES II (ATD) (1)
Practicum phase is a continuation of DES1805 with the addition of a supervised externship program utilizing dental offices and public health facilities in the community. Lecture-demonstration series focuses on selected dental topics pertaining to effective dental assisting and the additional duties permitted by rules and regulations of the Florida State Board of Dentistry.
Prerequisite: DEA1030 DES1030L DES1805L Corequisite: DES1805L
Lec Hrs=.32 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

DES1807L CLINICAL PROCEDURES II LAB (ATD) (5)
Practicum phase is a continuation of DES1805 with the addition of a supervised externship program utilizing dental offices and public health facilities in the community. Special fee charged. Field experience. 30 hrs. minimum per week.
Prerequisite: DEA1030 DES1030L DES1805L DES1805L Corequisite: DES1805L
Lec Hrs=0 Lab Hrs=0 Clin Hrs=1.35 Oth Hrs=0 Fees=16.53

DES1832 EXPANDED FUNCTIONS 1 (ATD) (4)
The course is designed to provide the basic knowledge and clinical practice necessary for the dental assisting student to perform the expanded functions permitted by the rules and regulations of the Florida State Board of Dentistry; Pre or Corequisite: DEA1030 DES1030L
Lec Hrs=.00 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

DES1832 EXPANDED FUNCTIONS II (ATD) (2)
The course is designed to be a continuation of dental assistant expanded functions I. It will provide an opportunity to work under the guidance of an experienced instructor to perform the more complex expanded functions permitted by the rules and regulations of Florida State Board of Dentistry.
Prerequisite: DEA1030L DEA1832 Corequisite: DES1805L DES1832L
Lec Hrs=0 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

DES1832L EXPANDED FUNCTION II LAB (ATD) (2)
The course is designed to be a continuation of dental assistant expanded functions I. It will provide the clinical practice necessary to perform the more complex expanded functions permitted by the rules and regulations of Florida State Board of Dentistry. Special fee charged.
Prerequisite: DES1805L DES1805L DES1832L
Lec Hrs=.00 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=180.33

DES1840 PREVENTIVE DENTISTRY (ATD) (2)
Emphasis is placed on the development of a plaque control program to meet individual patient needs. Materials on methods of toothbrushing, supplementary aids for oral prophylaxis and the use of fluoride, and nutritional counseling in preventive dentistry will be presented.
Corequisite: DES1800L
Lec Hrs=.32 Lab Hrs=.00 Clin Hrs=0 Oth Hrs=0 Fees=0.00

DIG120C WEB DEVELOPMENT I (3)
The student will learn the basics of using browsers to view web sites, create a web site and will put into practice the processes of analysis, design, development, and implementation of complete web sites using HTML, XHTML, XML language with text editors. This course includes Web Programming with HTML, XHTML, XML, with emphasis on CSS on layout and structure of web sites, hyperlinks, multimedia, forms, tables, testing, maintenance and uploading web sites to servers, applying good web design and web site usability.
Lec Hrs=.32 Lab Hrs=.32 Clin Hrs=0 Oth Hrs=0 Fees=35.00

DIG120C WEB DEVELOPMENT 2 USING DREAMWEAVER (3)
This course addition of a supplement to the previously taught web design skills. Students will gain an in-depth knowledge and skill needed for video production to include hands-on experience in video pre-production, layout, structure, and Internet Services Provider (ISP) of websites. Students will test and debug their websites from your host ISP. Students should have complete knowledge of graphics and XHTML.
Lec Hrs=.32 Lab Hrs=.32 Clin Hrs=0 Oth Hrs=0 Fees=38.00

DIG120C DIGITAL PUBLISHING WITH INDESIGN (3)
This course is designed to teach desktop publishing with emphasis on typography and desktop publishing techniques. Student will learn to layout and design documents with visual impact. Effective use of graphics, color, print separations, export to PDF, and preflight topics as they are used with desktop publishing are covered.
Lec Hrs=.32 Lab Hrs=.16 Clin Hrs=0 Oth Hrs=0 Fees=28.00

DIG212C DIGITAL IMAGE FUNDAMENTALS USING PHOTOSHOP (3)
This course uses Adobe Photoshop software to create images for digital media applications. Students will learn to create, manipulate graphics. Color theory, resolution, special effects, output, and design will be covered.
Lec Hrs=.16 Lab Hrs=.62 Clin Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=46.00

DIG212C DIGITAL IMAGE ADVANCED (3)
The student will learn the advanced image processing techniques to prepare images for various output venues for web and multimedia. Multimedia and web developers use sophisticated graphic software (Fireworks and Photoshop or other similar software) to create interactive and stunning visuals that are easily integrated into dynamic and web pages.
Prerequisite: DIG2116C
Lec Hrs=.32 Lab Hrs=.32 Clin Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=46.00

DIG216C DIGITAL ART & DESIGN WITH ILLUSTRATOR (3)
This course provides a sound theoretical introduction to the concepts, principles, and techniques of digital art and design. Explores the use of the computer as an art production and drawing tool using drawing and illustration software such as Adobe Illustrator to create and generate visuals.
Lec Hrs=.32 Lab Hrs=.32 Clin Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=35.00

DIG228C DIGITAL VIDEO/AUDIO EDITING (3)
This course is designed to teach students scriptwriting, directing, shooting, video editing as it relates to web-based projects. The course will use Adobe Premiere Pro, SoundBooth, Audition and Flash to produce and design interactive animation. Students will create video and audio content using the tools of the trade. Students will learn to manipulate graphics. 3d models and animations, and background elements in projects. Students will become familiar with match-moving and compositing techniques.
Lec Hrs=.16 Lab Hrs=.52 Clin Hrs=0 Oth Hrs=0 Fees=89.00

DIG230C 3D ANIMATION 1 (3)
This course covers 3D modeling, mapping, and rendering. Students will also learn techniques used in moving images and simulations as well as applying lighting and materials to 3D objects.
Lec Hrs=.52 Lab Hrs=.32 Clin Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=72.00

DIG230C 3D ANIMATION 2 (3)
Continuation of DIG230C with more animation and modeling techniques. Development of complex 3D models such as aircraft, cars, & boats. Learn virtual film-making with Maya 3D. Apply Cloth, Particle, Paint, and Fluid dynamics.
Prerequisite: DIG230C
Lec Hrs=.52 Lab Hrs=.32 Clin Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=82.00

DIG231C FUNDAMENTAL OF DIGITAL MEDIA USING FLASH (3)
Web developers use Flash (or another animation tool) to create beautiful, restorable, and extremely small and compact navigation interfaces, technical illustrations, long-form animations, and dazzling effects for web sites and other Web-enabled devices (such as WebTV). Students will create graphics and animations using drawing tools or imported vector artwork that animate that artwork, and make interactive movies.
Lec Hrs=.32 Lab Hrs=.32 Clin Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=49.00

DIG236C ADVANCED WEB ANIMATION WITH FLASH (3)
This course will teach students to write ActionScript code to control movie clips on any computer running compatible software. These programs will be created using object-based scripting language and designed to interact over the internet or any other similar network with an appropriate Web Browser. Students will learn ActionScript structure and syntax, how to interact with environment variables, use event handlers, functions, and methods and receive an overview of working with ActionScript methodologies.
Lec Hrs=.32 Lab Hrs=.32 Clin Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=49.00

DIG236C 3D ANIMATION 3 (3)
Using Maya 3D software (similar) you will create advanced 3D animation for characters; rigging techniques for body parts to create realistic and believable movements. You'll learn advanced rigging concepts that involve MEL scripting and advanced deformation techniques and even how to set up a character pipeline.
Prerequisite: DIG230C
Lec Hrs=.52 Lab Hrs=.32 Clin Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=82.00

DIG231C DIGITAL VIDEO/AUDIO EDITING (3)
This course is designed to teach students to edit pre-production, layout and designed content. Students will gain an in-depth knowledge and skill needed for video production to include hands-on experience in video pre-production and video editing for the creation of video/audio projects to include but not limited to documentaries/musical videos/encyclopedic events and web site announcements. Software used: the Adobe Production Suite including Premiere Pro, SoundBooth, Audition and Flash.
Lec Hrs=.16 Lab Hrs=.62 Clin Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=49.00

DIG229C DIGITAL VIDEO/AUDIO EDITING (3)
This course is an introduction to video/audio production for digital media/multimedia. Students will gain an in-depth knowledge and skill needed for video production to include hands-on experience in video pre-production and video editing for the creation of video/audio projects to include but not limited to documentaries/musical videos/encyclopedic events and web site announcements. Software used: the Adobe Production Suite including Premiere Pro, SoundBooth, Audition and Flash.
Lec Hrs=.16 Lab Hrs=.62 Clin Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=49.00

DIG229C DIGITAL VIDEO POST PRODUCTION WITH AFTER EFFECTS (3)
This course focuses on digital post-production used for film, animation, video, digital media, and the web. Using Adobe After Effects students integrate both technical and aesthetic 2d
A course designed to guide native speakers of other languages designed principally to guide the students to the development of basic grammar and writing structures as applied to academic English. Students will develop writing skills in the context of guided discourse on personal topics with an emphasis on logical thought and mechanics. The requirement to move to the next level is determined by successful completion of EAP020C (a grade of «C» or higher). With a «D» or F, a student must repeat EAP020C.

**EAP0120C** ESL READING I

This is a level 100 beginning ESL reading course designed as an introduction to academic reading. Placement in EAP0120C is determined by assessment tests and/or referral. Students must earn a «C» or higher to proceed to EAP020C.

**EAP0815C** ESL GRAMMAR/WRITING I

A low-beginning combined skills course for speakers of other languages designed principally to guide the students to the development of basic grammar and writing structures as applied to academic English. Students will develop writing skills in the context of guided discourse on personal topics with an emphasis on logical thought and mechanics. The requirement to move to the next level is determined by successful completion of EAP020C (a grade of «C» or higher). With a «D» or F, a student must repeat EAP020C.

**EAP020C** ESL READING III

This is a level 300, low intermediate ESL reading course designed for students in English for Academic Purposes (EAP) programs. It emphasizes vocabulary and comprehension on an intermediate level. Placement in EAP020C is determined by successful completion of EAP020C (a grade of «C» or higher) or assessment tests and/or department recommendation. Students must earn a «C» or higher to proceed to EAP030C.

**EAP030C** ESL GRAMMAR/WRITING II

A high-beginning level combined skills course for speakers of other languages designed principally to guide the students to the mastery of complex grammar and sentence structures, and basic paragraph writing. The requirement to move to the next level (EAP0400C) is determined by successful completion of EAP030C (a grade of «C» or higher) or assessment tests and/or department recommendation. Students must earn a «C» or higher to proceed to EAP0400C.

**EAP0400C** ESL COMMUNICATION SKILLS IV

This course is designed to guide the students toward applying pronunciation, phrasing, and intonation of oral American English in conversation situations such as following conversations, giving directions, and responding to questions in oral American English. Prerequisite: EAP0420C.

**EAP0420C** ESL READING IV

This is a level 300 high intermediate ESL reading course designed for students in English for Academic Purposes (EAP) programs. It emphasizes vocabulary and comprehension on an intermediate level. Placement in EAP0420C is determined by successful completion of EAP020C (a grade of «C» or higher) or assessment tests and/or referral. Students must earn a «C» or higher to pass the course and take the reading section of the CPT for further referral. Prerequisite: EAP020C.

**EAP0485C** ESL GRAMMAR/WRITING IV

A high intermediate combined skills course for speakers of other languages designed principally to guide the students to the mastery of complex grammar and sentence structures, and basic paragraph writing. The requirement to move to the next level (EAP0500C) is determined by successful completion of EAP0400C (a grade of «C» or higher). With a «D» or F, a student must repeat EAP0400C. Prerequisite: EAP0420C.

**EAP0500C** ESL COMMUNICATION SKILLS V

This course is designed to guide the students toward applying pronunciation, phrasing, and intonation of oral American English in conversation situations such as following conversations, giving directions, and responding to questions in oral American English. Prerequisite: EAP0485C.

**EAP0485C** ESL ADVANCED COMPOSITION I

A composition course in English for speakers of other languages. Designed principally to guide the student to the mastery of paragraph structure using various sentence modes and the multi-paragraph essay. The grammar focus is on elements which closely co-occur in composition, e.g., connectors and sentence combining. With a «D» or F, a student must repeat EAP1540C. Special fee is charged.

**EAP1540C**
A course designed to provide training in a variety of measures combine to provide an accurate picture of student progress and achievement in the current multicultural classroom, develop knowledge and skills necessary to measure and assess learner progress effectively and improve classroom instruction. Assessment strategies include the basic principles of measurement, formative and summative assessment strategies, test construction, performance assessments, reading and interpreting data from state and standardized achievement tests, and fairness in accommodating diverse learners.

Prerequisite: EDF2280

EEDG530 SPECIAL TOPICS IN TEACHER EDUCATION (1)

This course focuses on current and emerging issues in teacher education. It's format and topic will vary by semester.

Lec Hours=48 Lab Hours=0 Clin Hours=0 Oth Hours=15 Fees=0.00

EEDG249 CO-OP WORK EXPERIENCE

A course required to provide training in a students field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by student and employer. Prerequisite: Co-Op Department approval. Students will be assigned specific course preface related to their academic major prior to registration. All students must contact the Cooperative Education Office to obtain registration approval.

Lec Hours=0 Lab Hours=0 Clin Hours=0 Oth Hours=144 Fees=0.00

EEDG410 CLASSROOM MANAGEMENT

This course provides an identification and knowledge of classroom management and communication theories, strategies, and concerns. Emphasis will be placed on Behavior Management, Discipline and Reward Strategies, Accommodating Special Needs Pre-professional educators, Managing Diverse Cultures, Establishing Rapport and Creating an Effective Learning Environment, and Legal and Safety Issues as they apply and relate to the classroom setting.

Prerequisite: Pre or Corequisite: RED3552

EEDP400 PRINCIPLES OF EDUCATIONAL PSYCHOLOGY

This course provides a foundation in educational psychology and its application to classroom settings. Special emphasis is placed on development, learning theory, cognition, motivation, diversity, teaching, and assessment.

Pre or Corequisite: EDF1005 EDF2085 EME2040

Lec Hours=48 Lab Hours=0 Clin Hours=0 Oth Hours=0 Fees=0.00

EEDC1200 EARLY CHILDHOOD EDUCATION

This course reviews the history and present day aspects of early childhood education for infants, toddlers, preschool, and school children. Basic principles and foundations of early-childhood education are covered.

Lec Hours=48 Lab Hours=0 Clin Hours=0 Oth Hours=0 Fees=0.00

EEDC1630 CHILD GUIDANCE

This course provides child guidance and group management techniques to foster the development of self-esteem, self-control, and social skills in young children.

Lec Hours=48 Lab Hours=0 Clin Hours=0 Oth Hours=0 Fees=0.00

EETI010C DC CIRCUITS

This is a first course in electric circuits. Upon completion of this course the student should demonstrate an understanding of the definitions and interrelationships of voltage, current and power in circuits containing passive circuit elements and multiple sources. Extensive laboratory exercises are included.

Prerequisite: EETI084C

Lec Hours=52 Lab Hours=16 Clin Hours=0 Fees=0.00

EETI020C AC CIRCUITS

Upon completion of this course the student shall demonstrate an knowledge of circuit analysis using alternating voltage sources, including the behavior of resistive and reactive passive circuit elements, and frequency and transient response. Magnetic circuits, resonance and ideal transformers are also introduced. Extensive laboratory experience is included.

Prerequisite: EETI084C MACI105

Lec Hours=52 Lab Hours=16 Clin Hours=0 Fees=4.00

EETI084C INTRODUCTION TO ELECTRONICS

This course provides an introduction to the basic fundamentals, terminology, and applications used in the electronics industry. The course will include basic circuit theory principles, electronic components, transistor usage, amplifiers, power supplies, digital logic, and analog electronic instruments. This course will also include some basic laboratory exercises to strengthen the topic coverage as it pertains to basic measurement involving all analog and digital circuits.

Lec Hours=48 Lab Hours=16 Clin Hours=0 Oth Hours=0 Fees=0.00
This is the first course covering semiconductor devices and laboratory experiments. Topics covered include: semiconductors, rectifier diodes, zener diodes, BJTs, negative feedback amplifiers, field effect transistors and FETs. Extensive laboratory experience is included.

Prerequisite: EET141C
Le c H r s = 4 8   L a b H r s = 1 6   C l n H r s = 0    O t h H r s = 0     F e e s = 4 . 0 0

This is the second course covering semiconductor devices and laboratory experiments. The topics covered are: signal modulation, frequency response of amplifiers, thyristors, LED and special diodes, operation amplifiers, filters, voltage regulated bias and power supplies, and programmable analog devices. The student will be able to use computer software to solve technical problems, program arrays, and aid in measurement systems. The course requires an extensive laboratory experience. A student fee is charged.

Prerequisite: EET141C
Le c H r s = 3 2   L a b H r s = 1 6   C l n H r s = 0    O t h H r s = 0     F e e s = 2 . 0 0

This course introduces the student to basic electronic communications systems, RF amplifiers and oscillators, and emphasis on modulation, single side band modulation, frequency and phase modulation, pulse modulation, pulse modulation, demodulation, and digital communication methods. Extensive laboratory experience.

Prerequisite: EET141C
Le c H r s = 3 2   L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 0 . 0 0

The student will study data communications systems including pulse amplitude, pulse width modulation, RS-232, RS-422, HEE-488. Descriptions of BISYNC, HDLC and local area networks will be included. UART and MODEM implementation.

Le c H r s = 4 8   L a b H r s = 1 6   C l n H r s = 0    O t h H r s = 0     F e e s = 2 . 0 0

This is an advanced course in telecommunication technology, with topics in analog and digital communication, switching systems, Digital Modulation, Wireless communication systems, Personal Communication Systems, and Paging and Wireless Network Protocols. Extensive laboratory practice is included.

Prerequisite: EET141C
Le c H r s = 4 8   L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 0 . 0 0

This is an overview course examining issues related to transition planning for secondary (high school) exceptional education students. Emphasis will be placed on data collection, analysis, and intervention related which address problem behaviors and academic skills. Federal requirements for the development of the Transition Individualized Education Plan (IEP) will be reviewed and transition process from school to post school will be covered.

Prerequisite: EEX3011
Le c H r s = 5 2   L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 6 . 0 0

This is an overview course examining issues related to positive behavioral supports for exceptional students. Emphasis will be placed on data collection, analysis, and interventions related which address problem behaviors and academic skills.

Le c H r s = 4 8   L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 5 . 5 0

This course will focus on the characteristics and needs of students with disabilities. Course content will include the different types of programs and services available to exceptional student education (ESE) and the history on how they came to exist. The Introduction to

Exceptional Student Education course will serve as the foundation for the development of a personal and professional understanding and philosophy of ESE.

Pre or Corequisite: EDF1005 EDF2085 EME2040
Le c H r s = 4 8   L a b H r s = 0    C l n H r s = 0    O t h H r s = 1 0     F e e s = 5 . 0 0

This is an overview course examining issues in providing educational services to individuals with Autism Spectrum Disorder Students (ASD). Emphasis will be placed on definitions of classification, prevalence, behavioral characteristics covered include: communication, intervention strategies, classroom technology, multicultural issues, and family involvement. Service delivery systems, curriculum and current trends discussed. 10 school-based hours.

Prerequisite: EEX3011
Le c H r s = 4 8   L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 9 . 5 0

This course is designed for students enrolled in the Bachelor of Science Degree program in Teacher Education. This 10-credit course requires a candidate to demonstrate and apply teaching competencies during an internship in a public school approved by the department. A minimum of 36 contact hours per month for 12 weeks are required for internship. Eight hours of seminar accompanies this course.

Le c H r s = 3 0   L a b H r s = 0    C l n H r s = 0    O t h H r s = 6 0    F e e s = 9 . 5 0

This course requires departmental approval. Certification Examination. Admission to this course requires departmental approval.

96 hrs. Le c H r s = 9 6   L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 0 . 0 0

This is a course designed to provide training in a basic introduction to engineering. It will explore the various engineering fields, engineering problem solving, and basic math and physics used by engineers. Other topics such as safety, ethics, and engineering communications will also be addressed.

Le c H r s = 4 8   L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 5 . 0 0

This course is a basic introduction to engineering. It will explore the various engineering fields, engineering problem solving, and basic math and physics used by engineers. Other topics such as safety, ethics, and engineering communications will also be addressed.
EMSS311 EMT LEADERSHIP
Introduces the student to professional issues in EMS through special projects. Prerequisite: EMT and paramedic core courses. 32 hrs. Lect 1 Term 1. (Term 1 only)
Lec Hrs=32 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

EMSS239I PARAMEDIC REVIEW RECERTIFICATION
This course is based on the department of transportation (USDOT), paramedic refresher training course and is designed to review and update the graduate in the delivery of emergency medical services. Successful completion of the course with a grade of C+ or higher provides eligibility for State of Florida Paramedic Recertification. 32 hrs. Lect. Lab=0 Cls=0 Oth=0 Fees=0.00

EMSS311L PARAMEDIC REVIEW RECERTIFICATION LAB.
Application of skills and procedures involved in the Department of Transportation's Paramedic Refresher Course. 32 hrs. Lab=Lect=0 Cls=Oth=0 Fees=33.00

EMSS411 EMT HOSPITAL CLINICAL
Practical application of EMT, emergency medical technician clinical knowledge and skills under professional supervision in the Hospital setting. Course emphasizes the development of student skill in recognition of signs and symptoms of illness and injuries and in the proper procedures of emergency care. Successful completion of EMSS119, 119L, 141L and 142L provide eligibility for Florida State EMT Clinical. Hospital, emergency care, Health and accident insurance recommended. Liability insurance required. 32 hrs. Lab=Lect=0 Cls=52 Oth=0 Fees=53.53

EMSS421 EMERGENCY MEDICAL TECHNICIAN (EMT) FIELD CLINICAL
Practical application of EMT emergency medical technician clinical knowledge and skills under the professional supervision in the prehospital or field setting. Provides for observation and patient care experiences in EMS rescue vehicles. Course emphasizes the development of student skill in recognition of signs & symptoms of illness and injuries and in the proper procedures of emergency care. Successful completion of EMSS119, 119L, 141L and 142L provide eligibility for Florida State EMT Clinical. Hospital, emergency care, Health and accident insurance recommended. Liability insurance required. 48 hrs. Lab=Lect=0 Cls=48 Oth=0 Fees=16.53

EMSS210 BODY SYSTEMS FOR THE PARAMEDIC
This course presents an introduction to the medical structure and function of the human body. The general concepts of anatomy and physiology for the assessment and management of patients by the paramedic in the prehospital field area will be emphasized. The interaction of the body systems as they maintain homeostasis will be presented with particular attention placed on the nervous, cardiovascular and respiratory systems will be covered. United States Department of Transportation (USDOT) National Standard Paramedic Curriculum anatomy and physiology will be included. 48 hrs. Lab=Lect=0 Cls=48 Oth=0 Fees=0.00
Second of four field courses that provides for directed, supervised experiences on Advanced Life Support (ALS) vehicles. Emphasis on clinical activities related to trauma clinical emergencies, obstetrics, pediatrics, geriatrics and specialty areas. Health and Liability insurance required.

P r e r e q u i s i t e :  E M S 2 6 3 2  E M S 2 6 3 2 L  E M S 2 6 3 3  E M S 2 6 4 1

L e c  H r s = 0  L a b  H r s = 0  C l n  H r s = 0  O t h  H r s = 0  F e e s = 0 . 0 0

EMSC2632 PARAMEDIC SCIENCE I FIELD (3)

Fourth of four field courses that includes the application of didactic material in the rescue field. Provides for directed, supervised experiences on Advanced Life Support (ALS) vehicles. Emphasis on clinical activities and observations related to the US Department of Transportation (DOT) National Paramedic Curriculum, Module 1 and 8. Activities limited to practice of basic life support skills, assisting as a member of the EMS team and observation of paramedic level skills and activities. Documentation of patient situations and patient care experiences using web based data collection system is required. Student health, accident and liability insurance required.

C o r e q u i r e m e n t :  E N C 1 1 0 1  C O M P O S I T I O N I   (3)

L e c  H r s = 4 8   L a b  H r s = 1 6   C l n  H r s = 0   O t h  H r s = 0   F e e s = 2 0 . 0 0

EMSC2633 PARAMEDIC SCIENCE II FIELD (3)

Third of four field courses that provides for invasive procedures for IV therapy and directed, supervised experiences on EMS Advanced Second of four field courses that provides for accident and liability insurance is required. Collection system is required. Student health, practice of basic life support skills, assisting

C u r r i c u l a m .  M o d u l e  1  a n d  8 .  A c t i v i t i e s  l i m i t e d  t o  p r a c t i c e  o f  b a s i c  l i f e  s u p p o r t  s k i l l s ,  a s s i s t i n g

C o r e q u i r e m e n t :  E N C 0 0 1 7 C  A C C E L E R A T E D  L I T E R A C Y  R E A D I N G /

L e c  H r s = 4 8   L a b  H r s = 0   C l n  H r s = 9 6   O t h  H r s = 0   F e e s = 1 1 . 0 0

ENL2021 BRITISH LITERATURE SINCE 1798 (3)

Students will be introduced to works that represent the diverse literature of British literature published since 1798 to the present. Texts may be selected from major authors such as Amis, Austen, Blake, the Brontës, the Careers: ENC0210 C A R E E R  I N T R O D U C T I O N  (1)

L e c  H r s = 0  L a b  H r s = 0  C l n  H r s = 0  O t h  H r s = 0  F e e s = 0 . 0 0

ENL2150 DEVELOPMENTAL WRITING 1 LAB A laboratory component that will augment classroom instruction in ENC0025. Inclusion/exclusion criteria and usage principles including an overview of the strategies of paragraph and essay development. Writing «C» or an «F», a student must repeat the course.

C o r e q u i r e m e n t :  E N C 0 0 2 5 2  E N C 0 0 2 5 L  E N C 0 0 2 6  E N C 0 0 2 7

L e c  H r s = 0  L a b  H r s = 0  C l n  H r s = 9 6   O t h  H r s = 0   F e e s = 2 5 . 0 0

ENC2120 PROFESSIONAL AND TECHNICAL WRITING (3)

A composition course focusing on writing for business, science, and technology. Assignments include letters, memos, reports, proposals, an oral presentation, and the use of

L e c  H r s = 0  L a b  H r s = 0  C l n  H r s = 0  O t h  H r s = 0  F e e s = 0 . 0 0

ENL2330 INTRODUCTION TO SHAKESPEARE (3)

This course introduces students to the background of Shakespeare`s life and work. Shakespeare`s sonnets or narrative poems and

L e c  H r s = 4 8   L a b  H r s = 0   C l n  H r s = 0   O t h  H r s = 0   F e e s = 0 . 0 0
This course covers the design and installation of solar/photovoltaic systems and integrates with the electrical grid. This course is the first of a series of courses (ETE2438C) that will prepare the student for the North American Board of Certified Energy Practitioners (NABCEP) certification. This course will cover the fundamentals of solar photovoltaic energy systems. This course covers advanced topics in solar photovoltaic systems and integrates with the electrical grid. This course is the first of two parts of a two-part course series (ETE2515C) that will prepare the student for the North American Board of Certified Energy Practitioners (NABCEP) certification. This course teaches the fundamental principles of programmable logic controllers (PLCs), and how they are used to control industrial processes. Topics covered are PLC hardware, number systems and codes, fundamentals of logic, PLC programming, wiring diagrams, program timers, and programming counters. This course covers the basic principles of solar photovoltaic systems. This course covers additional topics in AutoCAD which include the use of design add-in tools, the design and installation of solar/photovoltaic systems, the use of advanced tools for drawing and the use of advanced tools for creating 2D and 3D models.

This course focuses on the theories and principles of operational safety and health in a practical environment for work-related injuries and illnesses. The course will provide an introduction to the Occupational Safety and Health Administration (OSHA) standards, safety, and waste management. This course teaches the fundamentals of solar photovoltaic energy systems and integrates with the electrical grid. This course is the first of a two-part course series (ETE2515C) that will prepare the student for the North American Board of Certified Energy Practitioners (NABCEP) certification. This course covers advanced topics in solar photovoltaic systems and integrates with the electrical grid. This course is the first of two parts of a two-part course series (ETE2515C) that will prepare the student for the North American Board of Certified Energy Practitioners (NABCEP) certification. This course teaches the fundamental principles of programmable logic controllers (PLCs), and how they are used to control industrial processes. Topics covered are PLC hardware, number systems and codes, fundamentals of logic, PLC programming, wiring diagrams, program timers, and programming counters. This course covers advanced topics in AutoCAD which include the use of design add-in tools, the design and installation of solar/photovoltaic systems, the use of advanced tools for drawing and the use of advanced tools for creating 2D and 3D models.

This course covers the basic principles of solar photovoltaic systems. This course covers additional topics in AutoCAD which include the use of design add-in tools, the design and installation of solar/photovoltaic systems, the use of advanced tools for drawing and the use of advanced tools for creating 2D and 3D models.

This course covers the basic principles of solar photovoltaic systems. This course covers additional topics in AutoCAD which include the use of design add-in tools, the design and installation of solar/photovoltaic systems, the use of advanced tools for drawing and the use of advanced tools for creating 2D and 3D models.

This course covers the basic principles of solar photovoltaic systems. This course covers additional topics in AutoCAD which include the use of design add-in tools, the design and installation of solar/photovoltaic systems, the use of advanced tools for drawing and the use of advanced tools for creating 2D and 3D models.

This course covers the basic principles of solar photovoltaic systems. This course covers additional topics in AutoCAD which include the use of design add-in tools, the design and installation of solar/photovoltaic systems, the use of advanced tools for drawing and the use of advanced tools for creating 2D and 3D models.

This course covers the basic principles of solar photovoltaic systems. This course covers additional topics in AutoCAD which include the use of design add-in tools, the design and installation of solar/photovoltaic systems, the use of advanced tools for drawing and the use of advanced tools for creating 2D and 3D models.

This course focuses on the theories and principles of operational safety and health in a practical environment for work-related injuries and illnesses. The course will provide an introduction to the Occupational Safety and Health Administration (OSHA) standards, safety, and waste management. This course teaches the fundamentals of solar photovoltaic energy systems and integrates with the electrical grid. This course is the first of a two-part course series (ETE2515C) that will prepare the student for the North American Board of Certified Energy Practitioners (NABCEP) certification. This course covers advanced topics in solar photovoltaic systems and integrates with the electrical grid. This course is the first of two parts of a two-part course series (ETE2515C) that will prepare the student for the North American Board of Certified Energy Practitioners (NABCEP) certification. This course teaches the fundamental principles of programmable logic controllers (PLCs), and how they are used to control industrial processes. Topics covered are PLC hardware, number systems and codes, fundamentals of logic, PLC programming, wiring diagrams, program timers, and programming counters. This course covers the basic principles of solar photovoltaic systems. This course covers additional topics in AutoCAD which include the use of design add-in tools, the design and installation of solar/photovoltaic systems, the use of advanced tools for drawing and the use of advanced tools for creating 2D and 3D models.

This course covers the basic principles of solar photovoltaic systems. This course covers additional topics in AutoCAD which include the use of design add-in tools, the design and installation of solar/photovoltaic systems, the use of advanced tools for drawing and the use of advanced tools for creating 2D and 3D models.

This course covers the basic principles of solar photovoltaic systems. This course covers additional topics in AutoCAD which include the use of design add-in tools, the design and installation of solar/photovoltaic systems, the use of advanced tools for drawing and the use of advanced tools for creating 2D and 3D models.

This course covers the basic principles of solar photovoltaic systems. This course covers additional topics in AutoCAD which include the use of design add-in tools, the design and installation of solar/photovoltaic systems, the use of advanced tools for drawing and the use of advanced tools for creating 2D and 3D models.

This course covers the basic principles of solar photovoltaic systems. This course covers additional topics in AutoCAD which include the use of design add-in tools, the design and installation of solar/photovoltaic systems, the use of advanced tools for drawing and the use of advanced tools for creating 2D and 3D models.

This course focuses on the theories and principles of operational safety and health in a practical environment for work-related injuries and illnesses. The course will provide an introduction to the Occupational Safety and Health Administration (OSHA) standards, safety, and waste management. This course teaches the fundamentals of solar photovoltaic energy systems and integrates with the electrical grid. This course is the first of a two-part course series (ETE2515C) that will prepare the student for the North American Board of Certified Energy Practitioners (NABCEP) certification. This course covers advanced topics in solar photovoltaic systems and integrates with the electrical grid. This course is the first of two parts of a two-part course series (ETE2515C) that will prepare the student for the North American Board of Certified Energy Practitioners (NABCEP) certification. This course teaches the fundamental principles of programmable logic controllers (PLCs), and how they are used to control industrial processes. Topics covered are PLC hardware, number systems and codes, fundamentals of logic, PLC programming, wiring diagrams, program timers, and programming counters. This course covers the basic principles of solar photovoltaic systems. This course covers additional topics in AutoCAD which include the use of design add-in tools, the design and installation of solar/photovoltaic systems, the use of advanced tools for drawing and the use of advanced tools for creating 2D and 3D models.

This course covers the basic principles of solar photovoltaic systems. This course covers additional topics in AutoCAD which include the use of design add-in tools, the design and installation of solar/photovoltaic systems, the use of advanced tools for drawing and the use of advanced tools for creating 2D and 3D models.
EV8109 ENVIRONMENTAL SCIENCE
Study of the physical environment, its relationship with the biosphere, and man's impact upon natural systems. Prerequisite: Department. Prerequisite: MAT0028.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

EV8588 ENVIRONMENTAL REGULATION
This course deals with the generation of federal, state, and local environmental laws and its impact on South Florida and the larger world community. Reason for protection of the environment, compliance with legislation, and the concept of due diligence are discussed. Course use of the case studies approach will be used to illustrate the application of law. Placement by Testing Department.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

EV8930 ENVIRONMENTAL SCIENCE SEMINAR
Selected current topics in environmental science and related subjects are discussed. Placement by Testing Department.
Lec Hrs=16 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

EV8949 CO-OP WORK EXPERIENCE
A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by student and employer. Prerequisite: Co-Op Department approval. Students are assigned the specific course prefix related to their academic major prior to registration. All students must contact the Co-operative Education Office to obtain registration approval. Placement by Testing Department.
Lec Hrs=0 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=144 Fees=0.00

EVS2005 WATER SUPPLY AND WASTE WATER DISPOSAL
A single course covering the sources, treatment and distribution of fresh water and the collection, treatment and disposal of wastewater. Field trips include inspection of local facilities.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

EVS893C ENVIRONMENTAL SAMPLING AND ANALYSIS
This course provides an introduction to EPA and DEP-approved methods for the collection and analysis of environmental samples. The laboratory is integrated with class theory. Topics include: sampling of water, soils, sediments and hazardous waste; application of field and laboratory-based analytical methods; documentation procedures; method validation including the use of precision, accuracy, and detection limits; writing comprehensive and project-specific quality assurance plans.
Prerequisite: CHM1025 CHM1025L.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FES1010 INTRODUCTION TO EMERGENCY MANAGEMENT
Covers the study of Emergency Management, including the current organizational and emergency management programs, the 4 phases of emergency management: mitigation, preparedness, response and past and current emergency management systems.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF1000 INTRODUCTION TO FIRE SCIENCE
This introductory course will examine the evolution of the fire department, chemistry and physics of fire, fire hazard properties of materials, and emphasis on hazards that impact Florida.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF1059 FIRE PREVENTION PRACTICES
Fundamentals of fire prevention are introduced with examination of fire causes and effects. The functions of fire prevention bureaus, building legislation regulations and standards are discussed. Additional areas of study include the inspection process, fire code enforcement, local decisions, fire investigations, records and reports.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF1100 CODES AND STANDARDS
Review of codes and specific course prefixes that have a direct influence on life safety in both new and existing structures. Include study of the requirements for property protection.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF1400 PRIVATE FIRE PROTECTION SYSTEMS I
This course examines requirements for testing of fire sprinkler and standpipe systems, chemical systems, detection and alarm systems.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF1740 FIRE SERVICE COURSE DELIVERY
Examines the instructor's role and responsibility in the teaching/learning process, introduction of teaching/learning styles, job task analysis, learning objectives, lesson planning and development, testing and evaluation, and administration of programs. 3 hrs. lab.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF1775 FIRE AND LIFE SAFETY EDUCATOR I
This course will prepare the public educator with the knowledge and skills to successfully perform as a fire and life safety educator. Case study topics include fire behavior, community assessment, injury prevention and juvenile fire-setting. The student will also develop public service skills and learn how to format public education programs. This course meets state and national certification criteria for Fire and Life Safety Education. Level I.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF1810 FIREFIGHTING TACTICS & STRATEGY
A study of tactical considerations and strategic options employed in the extinguishment of fires; Pre-planning and use of company level field operations will be analyzed with application of course concepts.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF2290 INTRODUCTION TO HAZARDS
An in-depth study of the details and dynamics of natural and man-made hazards. Includes methods and means to measure, monitor and predict the physical impact of hazards on society. Special emphasis on hazards that impact Florida.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF2211 FIRE CHEMISTRY
Study of the physical and chemical properties of matter, with a particular emphasis on hazardous materials, hydrocarbons, oxidation-reduction chemistry, and residues of pyrolysis. Topics covered include basic structure, periodic table, chemical bonding, chemical measurement, stoichiometry, and the study of chemical properties according to group, class, and reactivity. Sample collection and analysis is included as a practical component of the course.
Prerequisite: Municipal Fire Inspector Certification.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF2212 FIRE SERVICE BUILDING CONSTRUCTION
Course offers study in evolution of fire department in arson suppression. Includes the study of building construction, Florida building code requirements for various types of occupancies, classification by types of building materials, building materials; combustion; theory of fire control; and physics of fire, fire hazard properties of materials; and emphasis on hazards that impact Florida.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF2301 FIRE HYDRAYS
Study of the physical properties of water used in fire protection. Includes the use of hydraulic measuring units, facts, theories and formulas for problem solving.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF2302 FIRE APPARATUS AND PROCEDURES
This course offers study in evolution of fire apparatus, apparatus construction, pumps and pump accessories; pumping procedure; pump testing; trouble shooting; aerial ladders; aerial platforms; maintenance of fire apparatus.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF2421 HAZARDOUS MATERIALS I
Study of types of chemicals and processes, storage, and transportation of chemicals; hazards of radioactive materials; precautions to be taken in fire fighting involving hazardous materials; laws of federal, state and local levels pertaining to such materials.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF2422 HAZARDOUS MATERIALS II
A continuation and expansion of FPF2401 to include radiative materials, corrosives, pesticides, rocket propellants, and other related materials.
Prerequisite: FPF2401
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF2521 CONSTRUCTION DOCUMENTS AND PLANS REVIEW
Students will review actual building plans and apply codes, standards and inspection techniques, to find errors and omissions. Students shall make appropriate corrections according to the code, and with preferences identified.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF2541 PRIVATE FIRE PROTECTION SYSTEMS II
This course is an in-depth study of pre-engineered and portable systems, extinguishing agents, inspection procedures for code compliance and enforcement, and alarm systems. Contemporary systems are examined through case studies. This course is part of the Fire Inspector II State Certification.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF2610 ORIGIN & CAUSE
A study of the arson and investigation problems examining facts and figures, motives and the role of fire department in arson suppression. Reviewing chemistry of explosives. Analyzing the juvenile arson problem. Analysis of urban fires, automobile fires, and reports, interrogation and presenting the arson case in the courtroom.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

FPF2630 LATENT INVESTIGATION
Study of proper crime scene and fire scene investigation techniques. Includes appropriate documentation, collection and preservation of evidence, and the qualitative analysis of data to determine whether or not prosecution for the crime of arson is indicated. Special situations/ problems will be examined including the arsonist's use of explosive and hazardous materials. Motives for arson will be discussed, and distinctions made between civil and criminal situations.
Prerequisite: FPF2120 FPF1500 FPF1510 FPF1400 FPF2521
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=4 Fees=0.00

FPF2670 LEGAL ISSUES FOR INVESTIGATORS
Study of the applicable laws and attending legal considerations associated with the successful prosecution of arson cases. Specific areas of concentration include statutes and case law, interviews, interrogations, depositions, and written reports. Expert qualification and effective courtroom testimony will be examined and evaluated. Distinctions will be discussed between civil and criminal situations. Students will be required to prepare a case for prosecution from evidence gathered and/or provided in class, and present their testimony in a mock trial activity.
Lec Hrs=48 Lab Hrs=0.00 Cls Hrs=0.00 Oth Hrs=0.00 Fees=0.00

www.broward.edu College Catalog Broward College

College Catalog

312

313
Churches, flammable gases and liquids, in FFP1400 to specific fire problems, e.g., This course applies the basic principles learned in FFP1490 to specific fire problems, e.g., natural and man-made hazards.

A study of emergency planning models designed to plan for and assist in disaster response efforts and disaster recovery efforts.

A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of documentation of learning as reported by student and employer. Prerequisite: Co-Op Department approval. Students will be assigned specific course priority, conflicts to their academic major prior to registration. All students must contact the Cooperative Education Office to obtain registration approval.

This course is a workshop in which students will develop the introductory interview questions, while learning basic narrative structure for feature length screenplays. Student objectives: learn to break down and analyze popular screenplays.

This is a course designed to provide training in a student's field of study through work experience. The course will cover all elements of finance and its related decision-making framework faced by a financial manager. Topics include time value of money, risk and rates of return, asset valuation, financial planning and forecasting, working capital management and international financial management.

This course provides a survey of international trade. Topics studied include transportation modes, cargo insurance and the various special terms and techniques used in overseas transactions. Also covered are import/export, foreign exchange, pricing and quotations, import/export documentation and procedures, documentary credits, international payments and collections, bank financing sources for international trade and alternative financing techniques.

This course prepares the student to serve effective as an organizational spokesperson, according to current communications and the role of the Public Information Officer's role in the Incident Command System. This course is part of the Fire Officer II and Fire Inspector II State Certification programs.

This course provides a survey of international trade. Topics studied include transportation modes, cargo insurance and the various special terms and techniques used in overseas transactions. Also covered are import/export, foreign exchange, pricing and quotations, import/export documentation and procedures, documentary credits, international payments and collections, bank financing sources for international trade and alternative financing techniques.

This course is designed to provide an introduction to film as an art form, cultural product and social artifact. It will include understanding of basic analytical and technical forms, concepts, issues and development of critical skills. It will include the history, development, theory and criticism of film art, as well as the basic principles of film making and film production.

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides student must contend. Course content guides

This course is designed to provide an introduction to film as an art form, cultural product and social artifact. It will include understanding of basic analytical and technical forms, concepts, issues and development of critical skills. It will include the history, development, theory and criticism of film art, as well as the basic principles of film making and film production.

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course is designed to provide an introduction to film as an art form, cultural product and social artifact. It will include understanding of basic analytical and technical forms, concepts, issues and development of critical skills. It will include the history, development, theory and criticism of film art, as well as the basic principles of film making and film production.

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides

This course prepares the student to serve as a Fire Officer in the fire service with an emphasis on the emergency function of the Fire Officer II and Fire Inspector II State Certification programs. This course is a survey of fire service issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks individuals must contend. Course content guides
FRE100 ELEMENTARY FRENCH CONVERSATION

A custom made course for those residents in the community who require a cursory knowledge of French to help themselves. French speaking people, one hour language laboratory weekly. Special Fee Charged.
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=15.00

FRE110 BEGINNING FRENCH I

Fundamentals of speaking, listening, comprehension, reading, writing, and Francophone culture. Classroom practice and exercises supplemented by audiovisual materials designed to develop and enhance communicative competence. Reading and written assignments designed to develop the concept of the grammatical and idiomatic structures. Prerequisite: FSS1203C or instructor’s approval.
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

FRE111 BEGINNING FRENCH II

A continuation of FRE 110 which further develops the basic skills in speaking, listening, comprehension, reading, writing, and appreciation of Francophone culture. Classroom practice and exercises supplemented by audiovisual materials designed to develop and enhance communicative competence. Reading and written assignments designed to develop the concept of the grammatical and idiomatic structures. Prerequisite: FRE1121C.
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

FRE115 FRENCH STUDY TRAVEL

A course designed for students who wish to combine the study of French with subsequent travel to a French speaking region. Prerequisite: FRE1120 or FRE1150 or instructor’s approval.
Lec Hrs=48 Lab Hrs=0 Cls Hrs=356 Oth Hrs=0 Fees=0.00

FRE220 INTERMEDIATE FRENCH I

A continuation of FRE 1121 which further develops the most essential grammatical structures and an introduction of new grammatical and idiomatic material, comprehension, reading, writing, and French prose and culture. Conversation at an easy and enjoyable pace. Upon successful completion of this course, the student should be able to demonstrate an understanding of the most complex concepts of the grammatical and idiomatic structures and competency in oral and written tasks. Students observe preparation skills, write recipes, practice correct serving techniques, and taste the prepared food. Instructor’s approval or Prerequisite: FSS240C.
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

FRE221C BAKING AND PASTRIES I

Students will acquire knowledge of the comprehensive basic skills and properties of baking ingredients. They will utilize the proper equipment and tools, and standardized recipes to prepare yeast breads, rolls, pastries, and cakes in the food service laboratory. The instructor will evaluate the products prepared based on established food service standards. Prerequisite: FSS221C.
Lec Hrs=52 Lab Hrs=52 Cls Hrs=0 Oth Hrs=0 Fees=0.00

FRE246 CATERING

This course provides a survey of catering operations. Topics covered include the preparation and estimating of cost and food quantities, planning the room arrangement, the setup of buffet and service tables, and the performance of services. In addition, the allocation of time to prepare, transport, and setup the equipment and food for a catered affair are studied.
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

FRE248 QUANTITY OF FOOD PRODUCTION 2

This course will enable students to learn and execute various cooking techniques in French, starch, meat, fish, and poultry cookery, including the basic cooking technique of sautéing, roasting, poaching, sauces, and batteries. Prerequisite: FRE221C.
Lec Hrs=52 Lab Hrs=52 Cls Hrs=0 Oth Hrs=0 Fees=0.00

FRE250C QUANTITY OF FOOD PRODUCTION 3

Students will focus on the knowledge and preparation of job descriptions. Students will utilize all efficiency in respect to the methods of recruiting a successful staff. Menu selection, staffing, and balance will be studied. The course also emphasizes safety and sanitation procedures. Students will learn about common problems in hiring and supervising employees. Prerequisite: FRE222C.
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

FRE224C INTERNATIONAL CUISINE

This course covers international cookery as it applies to modern menu use and selection. It includes preparation of cold buffet, entrees, dinner accompaniment, and flambe dessert. The students observe preparation skills, write recipes, practice correct serving techniques, and taste the prepared food. Instructor’s approval or Prerequisite: FSS240C.
Lec Hrs=48 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=0.00

FRE247C BAKING AND PASTRIES II

Students will continue to build knowledge of the comprehensive basic skills and properties of baking ingredients. They will utilize the proper equipment and tools, and standardized recipes to prepare yeast breads, rolls, pastries, and cakes in the food service laboratory. The instructor will evaluate the products prepared based on established food service standards. Prerequisite: FSS221C.
Lec Hrs=48 Lab Hrs=48 Cls Hrs=0 Oth Hrs=0 Fees=0.00

FRE224C BAKING AND PASTRIES I

Students will acquire knowledge of the comprehensive basic skills and properties of baking ingredients. They will utilize the proper equipment and tools, and standardized recipes to prepare yeast breads, rolls, pastries, and cakes in the food service laboratory. The instructor will evaluate the products prepared based on established food service standards. Prerequisite: FSS221C.
Lec Hrs=52 Lab Hrs=52 Cls Hrs=0 Oth Hrs=0 Fees=0.00

FRE228G GARDE MANGER

Students will acquire knowledge and demonstrate skills in the cold foods area of the kitchen. The key topics will include sausages, pates, terrines, cured and smoked foods, cheese making, hors d’oeuvres, appetizers, condiments, garnishing and ice carving.
Lec Hrs=52 Lab Hrs=52 Cls Hrs=0 Oth Hrs=0 Fees=0.00

FRE225I FOOD AND BEVERAGE MANAGEMENT

Covers the principles and procedures involved in an effective food and beverage control system, including standards determination, the operating budget, cost-volume-profit analysis, income and cost control, menu pricing, theft prevention, labor control, and computer applications. Prerequisite: FRE223C.
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

FRE229B FOOD SERVICE CONTROLLING AND COSTS

This course provides a sound approach to cost control procedures for the study of food and labor costs to selling prices; control procedures for recipes and menus; pre-cost and pre-control techniques; the preparation and utilization of management reports. A review of mathematics and its application to practical problems is covered. Emphasis is placed on the utilization of controls as a tool of management.
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

GEA2000 WORLD GEOGRAPHY

Regional geographical characteristics, area relationships and major regional inland as well as interaction of areas will be emphasized. The theme of this course is to impart geographic knowledge at the world regional level, then explain how these factors create global contrasts. Special emphasis will be placed on areas of the world that have become more interdependent due to complex economic systems that have evolved and become more specialized.
Lec Hrs=48 Lab Hrs=48 Cls Hrs=0 Oth Hrs=0 Fees=0.00

GEA200 GEOGRAPHY OF THE EASTERN WORLD

A regional survey of the human/cultural and physical/environmental aspects of the non-western world including the following regions: North Africa & SW Asia, Sub-Saharan Africa, South Asia, Southeast Asia, East Asia, and the Pacific Island Realm. The characteristics and special problems of each region will be analyzed from a geographical perspective in order to understand global diversity and the forces and issues that help shape the world.
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

GEA240 GEOGRAPHY OF THE WESTERN WORLD

A regional survey of the human/cultural and physical/environmental aspects of the western world including the following regions: Europe, Russia, the U.S.A., Latin America, Middle America, South America, and Australia. The characteristics and special problems of each region will be analyzed from a geographical perspective in order to understand global diversity and the forces and issues that help shape the world.
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

GBR101 INTRODUCTION TO BUSINESS

This course provides a basic study of business activity and how it relates to our economic society. Topics covered include how businesses are owned, organized, managed and controlled. Course content emphasizes business vocabulary, areas of business specialization, and career opportunities.
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

GBR112 ENTREPRENEURSHIP

This course presents a modern treatment of business. It explains the startup-outcome cycle. Franchising, business plans, marketing plans, human resources, financial planning, legal forms, products/services, selling, advertising, management policies, accounting systems, taxation, management reports, computers, risk management, and ethical issues.
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

GBR240 BUSINESS ETHICS

A brief practical approach to recognizing, understanding and solving ethical problems confronting today’s business people and organizations. Students will review the historical development of ethics and examine a variety of ethical dilemmas, and will practice resolving them through ethical reasoning. Reference to statutory and professional codes will be addressed. Logical and responsible decision-making will be stressed with individual, organizational and societal needs being taken into account.
Lec Hrs=16 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00
GBE249 CO-OP WORK EXPERIENCE
A course designed to provide training in a student's field of study through work experience. Students are graded as pass or fail. Prerequisite: Co-Op Department approval.

GBE255 INTERNATIONAL CURRENT BUSINESS PRACTICES
Upon successful completion of this course, students should have a broad conceptual viewpoint of international business physical systems in areas such as finance, marketing, production and manufacturing. This course covers the nature and purpose of business between nations as well as the concepts of the multinational corporation and its importance in the world marketplace. Business concepts of other nations are studied through actual visits to foreign business enterprises. Emphasis is given to the differences in business policies between countries and their relationship to business activity.

GBE231 BUSINESS WRITING
This course focuses on techniques to improve writing skills. The course will use a workshop format that relies on writing assignments, discussions, and classroom activities. An emphasis on global business writing will be included.

GEOL001 INTRODUCTION TO GEOGRAPHY
This course is a study of the geographical patterns of both human and physical phenomenon and the interaction between humans and their environment. The course will be divided into the three physical systems including landforms, hydrology, and climates; human systems such as culture, population and economic/urban development, and human impacts on the world's natural resources. A student must earn a grade of C or higher to meet the requirements of the General Rule.

GBE220 PHYSICAL GEOGRAPHY
This course serves as an introduction to the manner in which natural systems function at global and regional scales. This course uses a geographical perspective to analyze landforms, climate, the water cycle, and the biosphere, examining spatial relationships and regional variations and addressing spatial patterns of human activity as related to environmental phenomenon.

GBE230 CONSERVATION OF NATURAL RESOURCES
A survey of the use and management of natural resources within the environment, including problems of pollution, biospheric systems, population, population depletion and technology. Special emphasis will be placed upon the protection of natural resources. This course may be offered as GEOL1057.

GBE240 INTRODUCTION TO HUMAN/CULTURAL GEOGRAPHY
This course will introduce students to geographical concepts as applied to human/cultural issues and problems of the world today. Emphasis will be placed upon the role of human activity as related to environmental change. 

GBE121 BEGINNING GERMAN I
Fundamentals of speaking, listening-comprehension, reading and writing in German are covered. Emphasis is placed on the German language and culture. Classroom practice is supported by on-line, laboratory and/or multi-media exercises, designed to develop student proficiency and confidence. Students are expected to further their skills in GER121 and GER222.

GER100 ELEMENTARY GERMAN CONVERSATION
A custom made course for those residents in the community who require a cursory knowledge of German to help them communicate with German speaking people. One hour language laboratory weekly. Special fee charged.

GER121 BEGINNING GERMAN I
Fundamentals of speaking, listening-comprehension, reading and writing in German are covered. Emphasis is placed on the German language and culture. Classroom practice is supported by on-line, laboratory and/or multi-media exercises, designed to develop student proficiency and confidence. Students are expected to further their skills in GER121 and GER222.

GER122 BEGINNING GERMAN II
Further development of skills learned in GER121. Classroom practice is supported by on-line, laboratory and/or multi-media exercises, designed to develop student proficiency and confidence. Students are expected to further their skills in GER222.

GIS220 INTERMEDIATE GERMAN I
Continued practice of speaking, listening-comprehension, reading and writing in German. Students acquire more in-depth knowledge about the German speaking world, German language and culture. Classroom practice is supported by on-line, laboratory and/or multi-media exercises, designed to develop student proficiency and confidence. Students are expected to further their skills by studying abroad.

GIS130 REMOTE SENSING AND APPLICATIONS
This course introduces basic concepts and fundamentals of remote sensing, image processing, and the global positioning system (GPS). The principles and processes involved in satellite interpretation will be reviewed and examined. Image processing techniques will be reviewed from practical and mathematical points of view. The course is intended to provide the student with the background information necessary to successfully use remotely sensed imagery and GPS in conjunction with GIS technology. Prerequisite: Knowledge of Windows operating system.

GIS140C INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS I
The intent of this course is to provide the student with a detailed introduction in geographic information systems (GIS) and support this information with laboratory activities. The course will cover all working knowledge of the theory aspects of geographic information systems including data collection, preprocessing, data management and data analysis as well as an introduction to the applications of these systems.

GIS140C INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS II
This course will build upon the student's fundamental knowledge of GIS gained in the prerequisite course titled -Introduction to Geographic Information System I-. The student will learn how to implement the GIS concepts in GIS systems. The course will provide the student with the fundamental of computing and information science systems and cartography. It will introduce the student to the theory and practice of computer-aided cartography. In addition, the student will deliver an orally and into data representation, manipulation and presentation.

GIS148C APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS
A combined lecture and laboratory course in which students will draw upon the principles learned in GIS I and GIS II to increase/refine skills and apply them to individual and/or group projects.

GLY101 EARTH SCIENCE
An introduction to the basic disciplines of the earth sciences, geology, meteorology, and oceanography.

GLY101L EARTH SCIENCE LABORATORY
This course will have experiments and exercises that will be investigating the hydrosphere, lithosphere and atmosphere of earth. The earth will also be mapped and investigated as an object in space. At least 3 of the following five will be covered: (1)Introduction to Laboratory; (2) The Solid Earth; (3) Earth’s Water; (4) Earth’s Atmosphere and (5) Mapping. A special fee will be charged. These units must be covered.

GLY101O PHYSICAL GEOLOGY
Study of geologic events upon life and human relations is discussed. Students registering in GLY101O are strongly urged to register in the companion lab GLY101OL. Some senior institutions require a 4 credit geoscience course. Three hours weekly. Placement by Testing Department.

GLY1010L PHYSICAL GEOLOGY LABORATORY
Study of common rocks and minerals including their classification and origin and the interpretation of landforms by the study of geologic maps. One 3-hour laboratory weekly. Placement by Testing Department.

GLY1100 HISTORICAL GEOLOGY
A study of the origin and evolution of the Earth and the history of life on our planet. The course encompasses the causes and effects geologic change and the evolution of life, and the role of the earth sciences in understanding the geologic and biologic evolution of Earth. Emphasis is placed on how and why past geologic and biologic change occurred. Interpretations of Earth’s past history are also used to help explain current events and predict future trends. Field trips are optional.
This course is an introduction to computerized typography. The emphasis is on the visual effects of type as it applies to graphic communication. Students will form an understanding of the fundamental rules related to type design, such as kerning using principles to the primary focus of the instruction will be in how type is used in market design applications, but some practice in hand lettering will be included as well as a study of the how various type styles are designed. Also included is a study of font families and handling of digital files. Students will solve a variety of problems commonly encountered in the print production body of type for both print and electronic output.

Prerequisite: ART1300C

This course introduces the student to principles governing page layout and the design of publications. The industry standard software will be used to design advertising, professional looking publications which may include magazines, newsletters, catalogs, newspapers, books, or annual reports. Topics covered include the basic principles of effective typography: the use of grid, integration of graphics and photos into publication design principles, working with spot, process color and separations, principles of page assembly and other methodologies to design, and production of a variety of single- and multi-page publications.

Prerequisite: GRA2121C

This is an advanced level course where students will solve hand or digital imaging, illustration, and composing problems that require both 2D and 3D special effects. Students will be introduced to the fundamentals of creating and animating 3D images using 3D animation and modeling software packages, editing existing objects, building models, animating, creating a scene, applying textures and paint, setting lights and cameras and rendering process for analyzing client needs, conducting research and developing a concept for production within a budget.

Prerequisite: GRA2190C

This course addresses the concepts and techniques necessary to create computer-generated illustrations. The course will introduce the student to the use of software and multimedia applications. Students will work with software packages utilized by professional designers. Assignments include graphic design, mapping, illustrations, business graphics (charts, maps, tables, and diagrams) and art for other applications. The course is designed to help students develop a workflow and graphic skills in the production of a portfolio that represents their mastery of the skills and standards of the graphic design program. This capstone class will include business practices, ethics, contracts and copyright issues. Issues of sustainability and environmental sensitivity will be stressed.

Prerequisite: GRA2160C

This class will extend students' expertise in web design, this class will add advanced CSS, HTML5, Flash, search engine optimization, content management system and integration, as well as usability assessment and interface design. The student will also integrate social media, podcasting and blogging into web development.

Prerequisite: GRA2144C

This course is a basic course in organizing web pages, web site architecture and navigation. Students will be instructed in the most current applications used for web page development. Proper coding of the pages using current web tools, with consideration of various platforms, will be provided. A special emphasis will be placed on interactivity design and page layout, and proper use of scripting languages, objects, building for models, animating, creating a scene, applying textures and painting, setting lights and cameras and rendering process. Designing process for analyzing client needs, conducting research and developing a concept for production within a budget.

Prerequisite: GRA2130C

This course is an introduction to the theory, practice, materials, techniques, and production methods used in graphic arts, pointing out how various layout techniques lead to a printed piece. Intended for art majors who wish to pursue a BFA degree in graphic design or want to seek entry-level employment.

Prerequisite: ART1201C ART1300C

Communication and creativity theory for graphic designers, featuring preparation of art for reproduction using the computer as a graphic design problem-solving tool, combining text, image and graphic design. Intended for art majors who wish to pursue a BFA degree in Graphic Design or want to seek entry-level employment.

Prerequisite: GRA2190C

Students in this course will gain a comprehensive understanding of the skills required of project managers. This includes software presentation training, interaction in monitoring and controlling projects, procurement planning techniques, and an introduction to using project management software.

Prerequisite: GRA2190C

This is a basic course in the organizing web pages, web site architecture and navigation. Students will be instructed in the most current applications used for web page development. Proper coding of the pages using current web tools, with consideration of various platforms, will be provided. A special emphasis will be placed on interactivity design and page layout, and proper use of scripting languages, objects, building for models, animating, creating a scene, applying textures and painting, setting lights and cameras and rendering process. Designing process for analyzing client needs, conducting research and developing a concept for production within a budget.

Prerequisite: GRA2130C

This course introduces the student to principles governing page layout and the design of publications. The industry standard software will be used to design advertising, professional looking publications which may include magazines, newsletters, catalogs, newspapers, books, or annual reports. Topics covered include the basic principles of effective typography: the use of grid, integration of graphics and photos into publication design principles, working with spot, process color and separations, principles of page assembly and other methodologies to design, and production of a variety of single- and multi-page publications.

Prerequisite: GRA2121C

This advanced illustration class will expand the students' visual problem-solving vocabulary to include advanced graphic design concepts, mapping, illustrations and technical illustration. Illustrations will use digital 2D and 3D solutions. In addition, students will incorporate natural material and construction techniques in the process of illustration design. For informational graphics, students will research complex ideas and synthesize them into easily understood visual representations. Prerequisite: ART2101C

This course will introduce advertising and marketing principles. Students will apply design and technical skills introduced in foundational level classes. The focus will be on solving real-world advertising and promotional problems, culminating with projects from initial concept to final presentation of the product. Projects will satisfy the current industry in the client production body of type for both print and electronic output.

Prerequisite: GRA1510C

This course will introduce advertising and marketing principles. Students will apply design and technical skills introduced in foundational level classes. The focus will be on solving real-world advertising and promotional problems, culminating with projects from initial concept to final presentation of the product. Projects will satisfy the current industry in the client production body of type for both print and electronic output.

Prerequisite: GRA1510C

This course will introduce advertising and marketing principles. Students will apply design and technical skills introduced in foundational level classes. The focus will be on solving real-world advertising and promotional problems, culminating with projects from initial concept to final presentation of the product. Projects will satisfy the current industry in the client production body of type for both print and electronic output.

Prerequisite: GRA1510C

This course is an introduction to the theory, practice, materials, techniques, and production methods used in graphic arts, pointing out how various layout techniques lead to a printed piece. Intended for art majors who wish to pursue a BFA degree in graphic design or want to seek entry-level employment.

Prerequisite: ART1201C ART1300C

This course is a basic course in the organizing web pages, web site architecture and navigation. Students will be instructed in the most current applications used for web page development. Proper coding of the pages using current web tools, with consideration of various platforms, will be provided. A special emphasis will be placed on interactivity design and page layout, and proper use of scripting languages, objects, building for models, animating, creating a scene, applying textures and painting, setting lights and cameras and rendering process. Designing process for analyzing client needs, conducting research and developing a concept for production within a budget.

Prerequisite: GRA2130C

This course introduces the student to principles governing page layout and the design of publications. The industry standard software will be used to design advertising, professional looking publications which may include magazines, newsletters, catalogs, newspapers, books, or annual reports. Topics covered include the basic principles of effective typography: the use of grid, integration of graphics and photos into publication design principles, working with spot, process color and separations, principles of page assembly and other methodologies to design, and production of a variety of single- and multi-page publications.

Prerequisite: GRA2121C

This advanced level course where students will solve hand or digital imaging, illustration, and composing problems that require both 2D and 3D special effects. Students will be introduced to the fundamentals of creating and animating 3D images using 3D animation and modeling software packages, editing existing objects, building models, animating, creating a scene, applying textures and paint, setting lights and cameras and rendering process. Designing process for analyzing client needs, conducting research and developing a concept for production within a budget.

Prerequisite: GRA2190C

This is a basic course in the organizing web pages, web site architecture and navigation. Students will be instructed in the most current applications used for web page development. Proper coding of the pages using current web tools, with consideration of various platforms, will be provided. A special emphasis will be placed on interactivity design and page layout, and proper use of scripting languages, objects, building for models, animating, creating a scene, applying textures and painting, setting lights and cameras and rendering process. Designing process for analyzing client needs, conducting research and developing a concept for production within a budget.

Prerequisite: GRA2130C

This course is an introductory course to the theory, practice, materials, techniques, and production methods used in graphic arts, pointing out how various layout techniques lead to a printed piece. Intended for art majors who wish to pursue a BFA degree in graphic design or want to seek entry-level employment.

Prerequisite: ART1201C ART1300C

This course is a basic course in the organizing web pages, web site architecture and navigation. Students will be instructed in the most current applications used for web page development. Proper coding of the pages using current web tools, with consideration of various platforms, will be provided. A special emphasis will be placed on interactivity design and page layout, and proper use of scripting languages, objects, building for models, animating, creating a scene, applying textures and painting, setting lights and cameras and rendering process. Designing process for analyzing client needs, conducting research and developing a concept for production within a budget.

Prerequisite: GRA2130C

This course introduces the student to principles governing page layout and the design of publications. The industry standard software will be used to design advertising, professional looking publications which may include magazines, newsletters, catalogs, newspapers, books, or annual reports. Topics covered include the basic principles of effective typography: the use of grid, integration of graphics and photos into publication design principles, working with spot, process color and separations, principles of page assembly and other methodologies to design, and production of a variety of single- and multi-page publications.

Prerequisite: GRA2121C

This advanced level course where students will solve hand or digital imaging, illustration, and composing problems that require both 2D and 3D special effects. Students will be introduced to the fundamentals of creating and animating 3D images using 3D animation and modeling software packages, editing existing objects, building models, animating, creating a scene, applying textures and paint, setting lights and cameras and rendering process. Designing process for analyzing client needs, conducting research and developing a concept for production within a budget.

Prerequisite: GRA2190C

This course is an introductory course to the theory, practice, materials, techniques, and production methods used in graphic arts, pointing out how various layout techniques lead to a printed piece. Intended for art majors who wish to pursue a BFA degree in graphic design or want to seek entry-level employment.

Prerequisite: ART1201C ART1300C

This course is an introductory course to the theory, practice, materials, techniques, and production methods used in graphic arts, pointing out how various layout techniques lead to a printed piece. Intended for art majors who wish to pursue a BFA degree in graphic design or want to seek entry-level employment.

Prerequisite: ART1201C ART1300C

This course introduces the student to principles governing page layout and the design of publications. The industry standard software will be used to design advertising, professional looking publications which may include magazines, newsletters, catalogs, newspapers, books, or annual reports. Topics covered include the basic principles of effective typography: the use of grid, integration of graphics and photos into publication design principles, working with spot, process color and separations, principles of page assembly and other methodologies to design, and production of a variety of single- and multi-page publications.

Prerequisite: GRA2121C

This advanced level course where students will solve hand or digital imaging, illustration, and composing problems that require both 2D and 3D special effects. Students will be introduced to the fundamentals of creating and animating 3D images using 3D animation and modeling software packages, editing existing objects, building models, animating, creating a scene, applying textures and paint, setting lights and cameras and rendering process. Designing process for analyzing client needs, conducting research and developing a concept for production within a budget.

Prerequisite: GRA2190C
HFR1121 BEGINNING HEBREW I
Covers fundamentals of listening & understanding reading & writing. Classroom practice & exercises supplemented by laboratory sessions. Students are developed to confidence and a basic proficiency in Modern Hebrew. Student is expected to continue to develop proficiency upon the completion of this course with the Text Chagdol.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=15.00

HFR1121 BEGINNING HEBREW II
Continuation of HFR 1121. Further development of the basic language skills already mastered. Classroom discussions and practice are supplemented by exercises and multi-media activities designed to maintain and enhance communication. Skills and concepts are further polished in HRR 2220.
Prerequisite: HFR1121
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=15.00

HHR220 INTERMEDIATE HEBREW I
HHR 2220 supplements the groundwork laid in HRR 1120 and HRR 1121. Classroom discussion and practice are supplemented by exercises and multimedia activities designed to develop and enhance communication and cultural awareness. Students will acquire a basic understanding of Hebrew syntax, grammar, and morphology, as well as an introduction to Hebrew literature of various eras.
Prerequisite: HHR1121
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=15.00

HCP9001 HEALTH CAREERS CORE CURRICULUM
The Health Careers Core curriculum presents basic knowledge & skills for students majoring in a health science degree program. The course introduces students to a health care delivery system, the health occupations, and teaches basic medical and employability skills.
Lec Hrs=45 Lab Hrs=30 Clin Hrs=0 Oth Hrs=0 Fees=100.00

HFT1056 INTRODUCTION TO TOURISM INDUSTRIES ADMINISTRATION
This course provides a survey of the history, organization, problems, opportunities and future trends in the areas of the travel and tourism industries. Emphasis is placed on the economic benefits and social implications of tourism. This course provides basic training in front office systems and practices relating to the control of employees, and developing sound methods of controlling costs, development of cost This course provides training on the art of purchasing of tourism services as well as the tourism. This course is beneficial to the economic benefits and social implications of tourism industries. Emphasis is placed on the trends in the areas which comprise the travel and tourism. This course provides a survey of the history, organization, supervision and direction of operations in the hospitality/restaurant/travel industries. It analyzes the internal organizational structures and its administrative roles and functions. The course considers practices such as employee training, promotions, job specifications, discipline and morale. The course barrows from the behavioral sciences by emphasizing the human dimensions of management.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

HFT2208 HOTEL MANAGEMENT
This course provides a study of the growth and progress of the hotel industry and how hotels are developed, organized, financed and operated.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

HFT2410 FRONT OFFICE SYSTEMS AND PROCEDURES
This course provides basic training in front office procedures, standards, and practice with current software packages common to the industry.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

HFT2406 FINANCIAL MANAGEMENT
A study of accounting systems for the hospitality/ restaurant industries with emphasis on operating statistics and financial reports. The utilization of financial statements by management is studied.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

HFT2500 MARKETING
This course emphasizes how to sell and promote the services the hospitality/restaurant/travel industries offer. It covers the development of business through personal selling, media advertising and publicity. In addition, the operations of sales and convention department are studied.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

HFT2511 CONVENTION AND GROUP BUSINESS MARKETING MANAGEMENT
This course covers the functions of the convention organizer and tour wholesaler in relation to the suppliers of travel and hospitality services. The responsibilities of each organization in the marketing of facilities and activities to organizers, retailers, and/or consumers are emphasized.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

HFT2504 OPERATIONS AND SERVICE PRACTICUM
This course requires practical work experience or participation in formalized internship program in related approved segment of the hospitality/restaurant/travel industries and is coordinated with a weekly seminar. Faculty makes regular visit to the internship sites to evaluate progress through on-site visitations and consultation with supervisors. Emphasis is placed on the job related to the satisfaction of customer needs. In addition, the essence of the service transaction offered by the hospitality/travel industries is studied.
Lec Hrs=16 Lab Hrs=0 Clin Hrs=0 Oth Hrs=240 Fees=0.00

HFT2721 TRAVEL AGENCY MANAGEMENT & OPERATIONS
This course provides familiarity with travel agency operations including the selling, transporting, storing, advertising, planning, and management of travel services. The course also provides hands-on training in computerized reservations (SABRE) and keyboarding, and incorporates key aspects of managing corporate travel programs.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

HFT2730 TOUR PACKAGING
This course provides a study of how to create, develop and sell package tours. Methods of customizing tours through the proper matching of destinations with market segments are covered.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

HFT2942 MANAGEMENT AND CONTROL PRACTICUM
This course requires practical work experience or participation in a formalized internship program in related disciplines in an approved segment of the hospitality/restaurant/travel industries and is coordinated with a weekly seminar. Faculty makes regular visit to the internship sites to evaluate progress through on-site visitations and consultations with supervisors. Emphasis is placed on the job related to the satisfaction of customer needs.
Lec Hrs=16 Lab Hrs=0 Clin Hrs=0 Oth Hrs=240 Fees=0.00

HFT2949 CO-OP WORK EXPERIENCE
A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by students and employer.
Lec Hrs=0 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

HIM1000 INTRO TO HEALTH INFORMATION TECHNOLOGY MANAGEMENT
This course introduces the student to the initial and introductory course to the health information technology program. This course introduces the student to the basic technology, learning styles, and oral competencies to enhance their degree of success entering the program. The course continues by introducing the student to the program and the Health Information Management professional. The student will also learn about the protected health record, healthcare delivery systems, ethical standards related to coded and protected health records, functions and responsibilities of the health information management department.
Prerequisite: HSC1551
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=0.00

HIM1110 HEALTH DATA CONCEPTS
This course provides an introduction to the basic concepts and techniques for managing and maintaining health records systems. Topics include: record content, format and uses of healthcare data, record systems, storage and retrieval, quantitative analysis of health data, forms design and control, release of information, function of indexes and registers, certification, accreditation and licensure standards applicable to healthcare facilities. Through the Virtual Healthcare Systems Lab, students will be given access to work on a variety of healthcare electronic system enhancing their technology skills and knowledge such as: Athena/Corner Electronic Health Records, QuadraMed MPI QuadraMed Smart ID, QuadraMed Encoder, and McKesson Horizons. Students will be given the opportunity to utilize and practice with current software packages common to the industry.
Pre or Corequisite: HIM1111L
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=5.00

HIM1110L HEALTH DATA CONCEPTS LAB
This course provides an introduction to the basic concepts and techniques for managing and maintaining health record systems. Through the Virtual Healthcare System Lab, students will be given access to work on a variety of healthcare electronic system enhancing their technology skills and knowledge such as: Athena/Cerner Electronic Health Records, QuadraMed MPI QuadraMed Smart ID, QuadraMed Encoder, and McKesson Horizons. Students will be given the opportunity to utilize and practice with current software packages common to the industry.
Prerequisite: HIM1100
Corequisite: HIM1110
Lec Hrs=48 Lab Hrs=48 Clin Hrs=0 Oth Hrs=45 Fees=43.00

HIM1253 CODING I
This course is designed to provide an introduction into basic ICD coding and coding guidelines. The course will focus on defining basic coding definitions, reviewing of coding guidelines, introduction to billing methodology and application of codes to specific basic coding assignments utilizing ICD. This will be taken in conjunction with the Coding I Lab course.
Prerequisite: HIM145L
Lec Hrs=48 Lab Hrs=48 Clin Hrs=0 Oth Hrs=29.00 Fees=0.00
HIM1253 CODING I LAB
This lab course provides HIM students an opportunity to apply basic concepts and techniques for ICD-9-CM coding using actual patient records and simulated patient records; both paper and electronic format from different treatment venues. Students will be guided through the practice coding by an experienced coding instructor with a detailed analysis of correct coding techniques. Students will be able to assess their own level of proficiency and access assistance in areas of clinical coding weaknesses. Students will be introduced to encoding systems: 3M and QuadraMed. 
Prerequisite: HIM1253 or HIM1435
Corequisite: HIM1253

Lec Hrs=0 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=0.00

HIM260 REIMBURSEMENT METHODOLOGY
This course examines the complex financial systems within today's healthcare environment and provides an understanding of the basics of health insurance and public funded programs, managed care contracting and how it is paid. This course will review the history of reimbursement systems and a discussion of claims management. 
Prerequisite: HIM1000 HIM1253L

Lec Hrs=32 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=0.00

HIM300 HEALTHCARE DELIVERY SYSTEMS
This full-on course is an introduction to the historical development, current structure, operation, financing, and future directions of the major components of the U.S. healthcare delivery system. A population perspective is used. Upon completion, students should be able to identify the major components, issues and trends in the U.S. healthcare delivery system. 
Prerequisites: HSC2008L, HSC2088L, Corequisite: HIM1000 HIM1435

Lec Hrs=32 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=0.00

HIM430 SURVEY OF HUMAN STRUCTURE AND DISEASE I
This is the first of a 2 course series that will be a survey of the structure, function, and disease processes of the human body along with the current diagnosis and clinical treatment modalities. This course is geared to the health information technology student who will be utilizing this knowledge to code and classification diagnoses, procedures, diagnostic services rendered to patients in the healthcare environment. In Part I of this course, the student will learn about the basic structure and functions of systems, basic diagnostic testing and pharmacological treatment for conditions found in the following systems: Skeletal, Muscular, Integumentary, and Nervous. Students will be introduced to basic pharmacology throughout the course and will learn the 50 most commonly prescribed medications. The medications studied will be by body systems so as to give the student a comprehensive understanding of the clinical treatment modalities. 
Prerequisite: HSC1531

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

HIM1800 PROFESSIONAL PRACTICE EXPERIENCE: BASIC
This is an introductory level course giving the students their initial supervised Professional Practice experience in the health information management department. Emphasis is on record assembly, analysis, filing, admission and discharge procedures. Basic doing will be addressed in the first quarter, the student shall be responsible for the daily functional operations of a health information management department with the expectation the student will be responsible for completion of a Professional Practice I Workbook. 
Prerequisite: HIM1253 HIM1260

Lec Hrs=16 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=26.35

HIM2120 HEALTH RECORDS LAW
This course is designed to provide HIM students an understanding of the legal and ethical issues in health information management. Topics include an overview of: the branches of government and federal and state laws; privacy and release of information; subpoenaed information; record retention and security; information consent; liability; patient rights; negligence and malpractice; and ethics. Upon completion, students should be able to discuss legal and regulatory requirements and be aware of legislative and regulatory trends. 
Prerequisite: HIM1110

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

HIM1212 ELECTRONIC MEDICAL RECORD AND TECHNOLOGY
This is a course in review the history of the electronic health record and current trends in healthcare information applications such as clinical information systems, coding manuals and automated coder/groupers. Students will be expected to understand code assigned cases utilizing informatics systems, and management support systems. Students will explore the transition from a paper-based health record to an electronic health record and associated rules. 
Prerequisite: HIM1800

Corequisites: HIM2012 HIM2630

Lec Hrs=32 Lab Hrs=16 Cls Hrs=0 Oth Hrs=0 Fees=0.00

HIM2141 HEALTH STATISTICS
This hands-on lab course covers the collection, compilation, analysis, verification and display of healthcare statistics. Topics include: the uses for statistics, basic statistical principles, commonly computed rates, vital health statistics, uniform reporting requirements, data display and the role of the HIM department. 
Prerequisite: HIM1253

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

HIM2232 CODING II
This coding course is designed to build onto the HIM1253 Coding I course by enhancing the students quality of coding and understanding of sequencing for ICD-9-CM. The student will be introduced to basic CPT coding using both a manual system and automated encoder. Introduction to DRG logic, APCA, RBVRS, PPS as well as Coding Guidelines for Hospital-Based Outpatient Services, Emergency Room, Physician Offices. Different levels of HCPCS as well as outpatient reimbursement issues will be covered. 
Prerequisite: HIM1253 HIM1260L

Pre or Corequisite: HIM2232L

Lec Hrs=32 Lab Hrs=Cl Hrs=0 Oth Hrs=0 Fees=0.00

HIM2232L CODING II LAB
This lab course provides HIM students an opportunity to apply basic concepts and techniques for CPT-4 and ICD coding using actual patient records and simulated patient records; both paper and electronic format from different treatment venues. Students will be guided through the practice coding by an experienced coding instructor with a detailed analysis of correct coding techniques. Students will be able to assess their own level of proficiency and access assistance in areas of identified coding weaknesses. Students will be introduced to encoding systems: 3M and QuadraMed. 
Prerequisite: HIM1253L

Lec Hrs=0 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=0.00

HIM2254C ADVANCED CODING CONCEPTS
This is an advanced coding lecture lab course giving the student extensive hands-on experience in coding complex and sophisticated cases from inpatient, outpatient and physician office settings typically handled by the coding specialist on duty. Emphasis will be placed on quality of specific coding, sequencing, coding compliance and billing methodology. Students will be expected to code assigned cases utilizing the ICD-9-CM, ICD-10-CM, ICD-10-PCS and CPT coding manuals and automated coder/groupers. All coding exercises will be timed, conducted and verified in the classroom. 
Prerequisite: HIM2120

Lec Hrs=16 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=77.00

HIM2500 PERFORMANCE IMPROVEMENT
This course is an introduction to the principles of performance improvement and quality management in healthcare. Topics include: clinical quality improvement; utilization management; risk management; medical staff credentialing and peer review; accreditation standards and regulations; tools for data collection, analysis, and display; and the regulatory environment. Upon completion, students should be able to apply performance improvement techniques; collect, analyze, and display data; and support a range of quality management activities. 
Prerequisite: HIM1252

Lec Hrs=32 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

HIM2512 SUPERVISION & ORGANIZATIONAL LIFE
This course covers management and supervision principles as they are applied to healthcare settings. A study of the aspects and techniques of planning, organizing, motivating, and controlling is presented with emphasis on communication, coordination, and decision making. 
Prerequisite: HIM1252

Lec Hrs=52 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

HIM2652 HEALTH INFORMATION SYSTEMS
This course is an introduction to information technology as related to healthcare and the automated tools and techniques for collecting, storing, and retrieving data. Topics include: systems analysis, design, and security; file structure, networking, telecommunications, document imaging, medical informatics, the electronic health record, and implementation issues. Activities include HIM computer applications. Upon completion, students should be able to assist in the design, implementation, evaluation, and maintenance of automated information systems in healthcare. 
Prerequisites: CSS1100 HIM1800

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00
This coding course is designed to provide an introduction to basic ICD procedural coding and coding guidelines. The course will focus on defining basic coding definitions, and review of coding guidelines. This course is taught in conjunction with a team class to allow the student sufficient hands on interventional procedural coding experience.

**Corequisite:** HIM2728

HIM2728 CODING III

This lab course provides HIM students an opportunity to apply coding techniques and principles for ICD-10-PCS coding using actual patient records and simulated patient charts. It will cover preparation for and assistance with different treatment venues. Students will be guided through the practice coding by an experienced coding instructor with a detailed analysis of correct coding technique. Students will be able to assess their own level of proficiency and access assistance in areas of identified coding weaknesses. Students will be introduced to encoding systems.

**Corequisite:** HIM2728

HIM2810 PROFESSIONAL PRACTICE 2

This class is a continuation of the supervised professional practice experience in a health information management environment. Emphasis is on health information systems, coding, and law and ethics. Upon completion, students should be able to apply health information to practice. Each student will be responsible for completion of a Professional Practice Workbook.

**Prerequisite:** HIM1800 HIM2812 HIM2832

Corequisite: HIM2834C

HIM3500 TRANSITION SEMINAR LAB

This hands on lab course will focus on assisting the student to begin integration into the health information management field by exploring career options, developing a professional development plan, creating a resume, exploring credentialing requirements, and preparing the students to leave the classroom and enter the workplace. Activities conducted in the classroom will assist the student to enter the workplace as a team player with positive attitude and team communication skills.

The course will introduce the student to the preparation needed for the RHIT National Examination by AHIMA. To pass this course, the student must pass the final Mock RHIT Exam with a score of 79% or higher required for the RHIT National Examination.

**Prerequisite:** HIM1800back to text

HSC2100 PERSONAL AND COMMUNITY HEALTH (3)

This study of health problems relating to the individual community including mental health, physical fitness, nutrition, the use of tobacco, alcohol and drugs, marriage and family living, stress, and the safety of diseases.

**Elective credit only.**

HSC2400 FIRST AID AND SAFETY (3)

Accepted practices and training in first aid care of the injured and medical self help for survival in emergencies. Course includes suggested procedures effective until adequate medical assistance can be obtained. Principles of safety problems and accident prevention are included. Elective credit only.

HSC2780 HUMANITIES TRAVEL STUDY (3)

An examination of the styles and influences of Music, Art, Theology, Literature, and Philosophy in selected geographical areas. Course combines classroom preparation and travel. 3 hrs. lec. or with permission of the instructor. 3 hrs. lec.

**HSC2780 HUMANITIES TRAVEL STUDY (3)**

The same general description applies to this course as given to the Humanities Travel Study offered for three semester hours. However, a longer itinerary of the location(s) to be visited will result in more extensive course requirements.

HUN1200 ESSENTIALS OF NUTRITION & DIET THERAPY (5)

A study of nutritional science, the nutrient, interrelationships and the nutritional needs of persons at various stages of life cycle. HSC1531 provides a broad survey of the language of medicine and health technologies. Emphasis is placed primarily on the building of medical terms from word parts. The course is intended to be the foundation of a working medical vocabulary for individuals preparing for careers in both the health professions and other areas where this knowledge is essential.

HSC1949 HEALTH SERVICE WORK EXPERIENCE (20)

Students with a Postgraduate Adult Vocational Certificate (PVAVC) may credit for classroom and work experience based upon departmental review. Credits may apply only to students seeking an A.S. degree in Health Service Management.

**Elective credit only.**

HSC2100 PERSONAL AND COMMUNITY HEALTH (3)

This study of health problems relating to the individual community including mental health, physical fitness, nutrition, the use of tobacco, alcohol and drugs, marriage and family living, stress, and the safety of diseases.

**Elective credit only.**

HSC2780 HUMANITIES TRAVEL STUDY (3)

An examination of the styles and influences of Music, Art, Theology, Literature, and Philosophy in selected geographical areas. Course combines classroom preparation and travel. 3 hrs. lec. or with permission of the instructor. 3 hrs. lec.

**HSC2780 HUMANITIES TRAVEL STUDY (3)**

The same general description applies to this course as given to the Humanities Travel Study offered for three semester hours. However, a longer itinerary of the location(s) to be visited will result in more extensive course requirements.

HUN1200 ESSENTIALS OF NUTRITION & DIET THERAPY (5)

A study of nutritional science, the nutrient, interrelationships and the nutritional needs of persons at various stages of life cycle. HSC1531 provides a broad survey of the language of medicine and health technologies. Emphasis is placed primarily on the building of medical terms from word parts. The course is intended to be the foundation of a working medical vocabulary for individuals preparing for careers in both the health professions and other areas where this knowledge is essential.
IDH121 HONORS INTERDISCIPLINARY STUDIES IN GEN. EDUCATION (5)
The Honors Interdisciplinary Studies Seminar is the capstone course in the Honors Program. It is open to Honors Institute students who have attended Broward College for at least one term and have met half or laboratory requirements for graduation from the Honors Institute. The course will be organized and unified around a specific theme, event, or issue/controversy, or concept, which will then be explored through at least two distinct and discernible academic disciplines. Two or more academic fields of study will come from within or across one or more of Broward College’s broad disciplinary units: Visual/Performing Arts, Criminal Justice, Business, Social Science, Psychology, Biological Sciences, Behavioral Sciences, Communication, Education, Natural Sciences, Computer Science, and English / Literature.

IDPS31 INTERDISCIPLINARY LEADERSHIP STUDIES (5)
This seminar focuses on the refinement of leadership skills, provides an enhanced leadership and group dynamic theory, and will assist the student in developing a personal philosophy of leadership and awareness of the moral and ethical responsibilities of leadership. Topics include decision making, goal setting, building trust, entrepreneurship, and social responsibility for all interdependent economic system. Students must understand the students’ entire leadership experience, both in and out of college, as a means of evaluating their personal leadership experience.

IDPS35 INTRODUCTION TO TEAM SELF-MANAGEMENT WITH SOCIAL JUSTICE TOPICS (2)
This course provides an introduction to Team Self-Management (TSM) theory and practice including its application in academic and work organizations. The course explores the connection among the student’s purposes, intentions and behaviors; the course also develops the self-management skills required to attain personal, academic, and professional goals. The course will also provide students with an educational plan.

IDPS40 TEAM SELF-MANAGEMENT WITH SOCIAL JUSTICE TOPICS (3)
Introduction to Team Self-Management (TSM) with Social Justice Topics provides the theory and practice of team self-management, including leading and working on a self-managing team, developing team project management skills. Additional topics include: gaining an in-depth understanding of a social justice issue through utilizing primary-based research, and scenario planning methodologies.

IDPS99C RESEARCH IN SOCIAL JUSTICE MANAGEMENT (5)
Develops professional skills that lead to professional career success. Skills include using scientific method-based approach for research and comprehension, reading, writing, and critically analyzing and interpreting current research and literature.
political, and economic developments of modern
Gordon Rule.
grade of C to meet the requirements of the
beginning with the origins of the Hebrews,
follow the historical development which led to
attract participants in recreational activities.
leaders in the field.
ment of learning acquired as reported by student and
employers.
In this course students will examine works that cover such
topics as the future, technology, science,
other worlds, paranormal life forms and
imaginary worlds, and perpetuates sex roles and stereotypes.
written by investigators of the plot, characters, settings, motifs,
and perpetuates sex roles and stereotypes.
and perpetuates sex roles and stereotypes.
and perpetuates sex roles and stereotypes.
and perpetuates sex roles and stereotypes.
and perpetuates sex roles and stereotypes.
and perpetuates sex roles and stereotypes.
MAE1106 COLLEGE ALGEBRA
A college algebra course containing topics such as solving, graphing and applying linear and quadratic equations; exponential and logarithmic properties; rational, absolute value, square root, cubic, and reciprocal equations and their graphs; linear and nonlinear inequalities, all with applications throughout the course. Recommendation of the Mathematics Department or at least a grade of C- in the prerequisite course required.
Prerequisite: MAT1035
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 0 FEE = $23.00

MAC1141 TRIGONOMETRY
This course, in conjunction with MAC1140, is designed to prepare the student for the study of calculus. Topics include a functional approach to trigonometry: trigonometric identities; solving triangles; DeMoivre's Theorem; vectors; polar coordinates; and parametric equations. A graphing calculator may be required. Recommendation of the Mathematics Department or at least a grade of C- in the prerequisite course required.
Prerequisite: MAC1140
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 0 FEE = $0.00

MAC1145 PRE CALCULUS ALGEBRA
This course, in conjunction with MAC1144, is designed to prepare the student for the study of calculus. Topics include sequence; series; mathematical induction; matrices; determinants; and systems of equations. Also included are polynomial, rational, exponential, and logarithmic functions and equations and polynomial and rational inequalities. Functions and graphs are emphasized. A graphing calculator may be required. Recommendation of the Mathematics Department or at least a grade of C- in the prerequisite course required.
Prerequisite: MAC1140
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 0 FEE = $0.00

MAC1147 PRECALCULUS ALGEBRA AND TRIGONOMETRY
This course is designed to satisfy the dual requirements of MAC1145 and MAC1144, thus preparing the student for the study of calculus. In this course the student will study various function families (e.g.: polynomial, exponential, logarithmic, trigonometric) from both analytic and graphical viewpoints, and will use them to model real-life situations. The student will be exposed to additional topics that will deepen their mathematical understanding, including systems, augmented matrices and repeated problem-solving techniques. A graphing calculator may be required. Recommendation of the Mathematics Department or at least a grade of B- in the prerequisite course is required.
Prerequisite: MAC1105
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 0 FEE = $0.00

MAC2332 CALCULUS FOR BUSINESS, SOCIAL, AND LIFE SCIENCES
This is a general education course which includes the college-level skills of calculus such as functions, analytic techniques, differentiation, integration, average and instantaneous rates of change, and other applications. Recommendation of the Mathematics Department or at least a grade of C- in the prerequisite course is required.
Prerequisite: MAC1144
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 0 FEE = $0.00

MAC2311 CALCULUS AND ANALYTICAL GEOMETRY I
This is the first of a three-course sequence in calculus. Students may need to use a graphing calculator throughout the sequence of courses. Topics include: analytic geometry, functions, limits, continuity, derivatives and their applications, transcendental functions, antiderivatives, and definite integrals. Certain sections of this course may require the use of a graphing calculator. Recommendation of the Mathematics Department or at least a grade of C- in each of the prerequisite courses is required.
Prerequisite: MAC1144
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 0 FEE = $0.00

MAC2312 CALCULUS AND ANALYTICAL GEOMETRY II
This is the second of a three-course sequence in calculus. Topics include techniques of integration, conics, polar coordinates, improper integrals, volume, arc length, surface area, work, and other applications of integration. A graphing calculator may be required in certain sections of this course. Recommendation of the Mathematics Department or at least a grade of C- in the prerequisite course is required.
Prerequisite: MAC2311
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 0 FEE = $0.00

MAC2313 CALCULUS AND ANALYTICAL GEOMETRY III
This is the third in a three-course sequence in calculus. Topics include vectors in 3 space, 3 dimensional surfaces, multivariate functions, cylindrical and spherical coordinates, multiple integrals, partial derivatives, vector fields, Green's Theorem, and Stokes' Theorem. A graphing calculator is required in certain sections of this course. Recommendation of the Mathematics Department or at least a grade of C- in the prerequisite course is required.
Prerequisite: MAC2312
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 0 FEE = $0.00

MAC2104 DISCRETE MATHEMATICS
This course will emphasize mathematical theory, formal mathematical arguments, and problem-solving techniques. Topics include formal proof, sets, logic, functions, probability, relations, graphs, trees, and Boolean algebra. Recommendation of the Mathematics Department or prerequisite: MAC1140
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 0 FEE = $0.00

MAC3433 INTERACTIVE MIDDLE SCHOOL MATHEMATICS PROJECTS
This course is designed for students who are majoring in middle and secondary mathematics education and who will be obtaining teaching certification in grades 5-9 and 6-12. In this course students learn principles of effective teaching methodology and apply these principles by designing and developing interactive multimedia mathematics curriculum projects for middle school students. This course is required for clinical placement in which students present their projects in a middle school classroom environment. This course addresses specific Sunshine State Standards, subject matter competencies, and pedagogy pertinent to the discipline and required certification. (20 school-based hours).
Prerequisite: MAE3250
PRE COREQ: MAE2941
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 25 FEE = $9.50

MAC941 TEACHING MIDDLE AND SECONDARY SCHOOL MATHEMATICS
This course is designed to provide the student with the opportunity to apply learned concepts by observing and teaching small groups and whole class lessons in the mathematics classroom. Emphasis is placed on the components of a lesson in the form of a journal is required. Forty hours (40) of structured school-based hours is required.
Prerequisite: MAC2314 MAE2210 MAE2650 MAE2103 MTH4404 MTG3212
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 60 FEE = $9.50

MAC6110 METHODS OF TEACHING MATH IN ELEMENTARY SCHOOL
This course introduces conceptually and developmentally appropriate mathematics content based on the five content areas identified by the Florida Sunshine State Standards. These are Numeration & Number Sense, Geometry, Measurement, Algebraic Thinking, and Data Analysis & Probability.
Prerequisite: EDIS2980
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 15 FEE = $0.00

MAC6115 MIDDLE AND SECONDARY SCHOOL MATHEMATICS PROJECTS
This course introduces conceptually and developmentally appropriate mathematics content based on the five content areas identified by the Florida Sunshine State Standards. These are Numeration & Number Sense, Geometry, Measurement, Algebraic Thinking, and Data Analysis & Probability.
Prerequisite: EDIS2980
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 15 FEE = $0.00

MAC6116 INTERACTIVE MIDDLE SCHOOL MATHEMATICS PROJECTS
This course is designed to support the discipline in the middle and secondary school mathematics curriculum projects for high school students. This course addresses specific Sunshine State Standards subject matter competencies and pedagogy pertinent to the discipline. Instruct concepts for details regarding 20 hours of field.
Prerequisite: EDIS2980 MAC2511
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 15 FEE = $0.00

MAN6941 STUDENT TEACHING IN MIDDLE SCHOOL
This course is related to student teaching in middle school. Emphasis is placed on the management of classroom procedures, the use of technology, understanding the diverse learner, multiple means of assessment and learning styles. In this course, the pre-professional educator learns principles of effective curriculum design and assessment and applies these principles by designing and developing interactive mathematics curriculum projects for middle school students. This course addresses specific Sunshine State Standards subject matter competencies.
Prerequisite: EDF3280 MAC2511
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 15 FEE = $9.50

MAN6942 INTERACTIVE MIDDLE SCHOOL MATHEMATICS PROJECTS
This course introduces methodological procedures and strategies that have been proven to be effective for teaching secondary school mathematics. Topics in appropriate instructional techniques and selection of appropriate resources for diverse classroom activities, real world applications, the use of technology, understanding the diverse learner, multiple means of assessment and learning styles. The pre-professional educator learns principles of effective curriculum design and assessment and applies these principles by designing and developing interactive mathematics curriculum projects for high school students. This course addresses specific Sunshine State Standards subject matter competencies and pedagogy pertinent to the discipline. Instruct concepts for details regarding 20 hours of field.
Prerequisite: EDIS2980 MAC2511
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 15 FEE = $0.00

MAN6943 INTRODUCTION TO MANAGEMENT
This course covers fundamental management principles and concepts. Emphasis is placed on the management of planning, organizing, staffing, directing and controlling. Principles of scientific management, motivation, and economic analysis are studied relative to their use in business decisions.
Prerequisite: EDF3280
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 15 FEE = $0.00

MAN6944 INTERNATIONAL BUSINESS ENVIRONMENT
A basic course in international business theory and practice focusing on the challenges of managing the strategy of multinational corporations in a multinational business in diverse legal, political, economic, and cultural environments. Emphasis is placed on strategic planning and decision-making for the international operations of domestic, foreign and multinational corporations.
Prerequisite: EDF3280
LEC HRS = 48 LAB HRS = 0 CLIN HRS = 0 OTH HRS = 15 FEE = $0.00
A course designed to provide training in a student field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by students and employers.

MAN 2949 CO-OP WORK EXPERIENCE

This course focuses on current and emerging issues in business management. Its format and topic will vary but it will be a seminar which will address a specific business and management topic such as financial markets, international trade, human resources, cultural issues or economic subjects. The requirements of each student will vary with the topics in question. This course may not be repeated, and will only be offered in the Fall Semester.

Lec Hrs=16 Lab Hrs=0 Cln Hrs=0 Ot h Hrs=0 Fees=0.00

MAN 3931 SEMINAR IN BUSINESS AND MANAGEMENT I

This course focuses on current and emerging issues in business management. Its format and topic will vary but it will be a seminar which will address a specific business and management topic such as financial markets, international trade, human resources, cultural issues or economic subjects. The requirements of each student will vary with the topics in question. This course may not be repeated, and will only be offered in the Winter Semester.

Lec Hrs=16 Lab Hrs=0 Cln Hrs=0 Ot h Hrs=0 Fees=0.00

MAN 3500 MANAGEMENT AND LEADERSHIP

This course teaches the basic concepts, principles, and techniques of business leadership. Emphasis is on developing a solid leadership foundation while covering the underlying real themes, demands, and opportunities of an evolving and dynamic business workplace. The course incorporates basic leadership skill development as it relates to the core aspects of management practice.

Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Ot h Hrs=0 Fees=0.00

MAN 4102 MANAGING CULTURAL DIVERSITY

This course represents the basic concepts, principles, and techniques associated with leading cultural diversity in the global marketplace. Emphasis will be on the students developing an understanding of the interplay between leadership, cultural diversity, and the global business models. Students will also gain an understanding of how these concepts relate to and are applied in the global marketplace. For example, Latin America, Europe, Africa and the Middle East.

Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Ot h Hrs=0 Fees=0.00

MAN 4120 LEADERSHIP CHALLENGES AND SUPERVISION

This course applies the application of leadership theories, which include skill formation to develop leadership abilities. Team building skills are emphasized and discussed to enhance leadership effectiveness. Students learn the importance of visioning in their organizations.

Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Ot h Hrs=0 Fees=0.00

MAN 4045 OPERATIONS MANAGEMENT

This course focuses on the key issues in the development and implementation of manufacturing management techniques to improve the processes and productivity in organizations. Topics discussed are quality and outcomes; efficiency; forecasting; work flow processes; inventory control; design of goods and services; waiting lines; and critical path. Managing a project from beginning to end, including how to identify needs, and define, assign, and track items, is addressed.

Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Ot h Hrs=0 Fees=0.00

MAN 4103 SEMINAR IN BUSINESS AND MANAGEMENT II

This course is intended to introduce the concepts, principles, and techniques of purchasing physical resources. Students will develop a basic knowledge of sound procurement practices within a managerial setting for all types of organizations.

Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Ot h Hrs=0 Fees=0.00

MAN 4105 STRATEGIC MANAGEMENT AND POLICY

This course emphasizes strategic planning and implementation of strategies in an organization. Students learn how to perform internal and external audits, identify problems, and formulate goals and objectives. Students will develop action plans, and evaluate the effectiveness of the outcome of the plan. Case studies are used to promote decision-making abilities.

Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Ot h Hrs=0 Fees=0.00

MAN 4108 CAPSTONE PROJECT

This capstone course provides the opportunity for the student to demonstrate that he/she has learned the material from the program and can apply it in the real world. It should be taken during the student’s last semester at the college. It provides to the student with the opportunity to solve a problem dealing with management and organizational leadership issues of today. The student will choose one major plan to address the problem in detail.

Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Ot h Hrs=0 Fees=0.00

MAP 2202 DIFFERENTIAL EQUATIONS

Topics include the classification, solution, and application of differential equations, including numerical methods, Laplace transforms, linear systems, and series solutions.

Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Ot h Hrs=0 Fees=0.00

MAR 2011 PRINCIPLES OF MARKETING

An introductory course covering the marketing management process. Topics include the marketing manager’s role in a market-directed economy, marketing objectives, strategic planning, and developing marketing mixes for target markets. Material is presented as it relates to the four ‘P’s of marketing: product, place, promotion, and price.

Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Ot h Hrs=0 Fees=0.00

MAT 1101 LINEAR ALGEBRA

A first course in linear algebra, emphasizing the algebra of matrices and vector spaces. Recommended for students majoring in mathematics or related areas. Recommendation of the Mathematics Department or at least a grade of «C» in each of the prerequisite courses is required.

Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Ot h Hrs=0 Fees=0.00

MAT 4300 ABSTRACT ALGEBRA WITH INTRODUCTORY NUMBER THEORY

A course for math and education majors. Abstract algebra introduces the student experienced with using mathematical calculations to solve problems, and who wishes to analyze the underlying structures of these calculations; legitimacy. In MAT 4300 the student will develop properties shared by seemingly disparate mathematical structures called groups, rings, and fields, by abstracting their common underlying features and creating proof-based upon these commonalities. Number theory topics that are foundational to this course will be studied as well.

Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Ot h Hrs=0 Fees=0.00

MAT 1005 DEVELOPMENTAL MATHEMATICS I

A course designed to improve the student’s abilities with arithmetic, basic algebra, and problem solving. Topics to be studied include number families, arithmetic, order of operations, geometric formulas, unit analysis, linear equations in one variable, and data analysis. Problem solving is an integral part of this course. This course teaches the student to understand and communicate concepts of arithmetic and algebra, both orally and written, and prepare the student for college-level mathematics and math-based courses. It is nontransferable. Due to the nature of the course, calculators are not permitted.

Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Ot h Hrs=0 Fees=0.00

Students will have the opportunity to participate in Delta Epsilon Chi activities.

Lec Hrs=48 Lab Hrs=0 Cln Hrs=0 Ot h Hrs=0 Fees=0.00
MAT0018L DEVELOPMENTAL MATHEMATICS I LABORATORY

A course designed to improve the student's abilities with arithmetic, algebra, and problem solving. Topics to be studied include number families, arithmetic, order of operations, geometric formulas, linear equations in one variable, and data analysis. Problem solving is an integral part of this course. This course teaches the student to understand and communicate concepts of algebra in the language of mathematics, both orally and written, and helps prepare the student for college-level mathematics and math-based courses. It is nontransferable. Due to the nature of this course, calculators are not permitted.

Pre or Corequisite: MAT0018

MAT0022 DEVELOPMENTAL MATHEMATICS I COMBINED LAB

A course designed to satisfy the requirements of both MAT0018 and MAT0022 in one semester. Topics to be studied include arithmetic, basic algebra, and basic linear graphing. Problem solving involving real-life scenarios is an integral part of this course. This course teaches the student to understand and communicate concepts of algebra in the language of mathematics, both orally and written. This course helps prepare the student for college-level mathematics and math-based courses. It is nontransferable. Due to the nature of this course, calculators are not permitted.

Pre or Corequisite: MAT0022

MAT0028 DEVELOPMENTAL MATHEMATICS II LAB

A course designed to broaden the student's arithmetic and equation-solving skills to include solving linear inequalities in one variable, polynomial factoring, solving quadratic equations, laws of exponents, rational and radical expressions, and graphing linear. Problem solving involving real-life scenarios is an integral part of this course. This course teaches the student to understand and communicate concepts of algebra in the language of mathematics, both orally and written, and helps prepare the student for college-level mathematics and math-based courses. It is nontransferable. Due to the nature of this course, calculators are not permitted.

Pre or Corequisite: MAT0028

MAT0028L DEVELOPMENTAL MATHEMATICS II LAB

A course designed to broaden the student's arithmetic and equation-solving skills to include solving linear inequalities in one variable, polynomial factoring, solving quadratic equations, laws of exponents, rational and radical expressions, and graphing linear. Problem solving involving real-life scenarios is an integral part of this course. This course teaches the student to understand and communicate concepts of algebra in the language of mathematics, both orally and written, and helps prepare the student for college-level mathematics and math-based courses. It is nontransferable. Due to the nature of this course, calculators are not permitted.

Pre or Corequisite: MAT0028

MAT0091 DEVELOPMENTAL MATHEMATICS LAB

A course designed to satisfy the requirements of both MAT0018 and MAT0022 in one semester. Topics to be studied include arithmetic, basic algebra, and basic linear graphing. Problem solving involving real-life scenarios is an integral part of this course. This course teaches the student to understand and communicate concepts of algebra in the language of mathematics, both orally and written. This course helps prepare the student for college-level mathematics and math-based courses. It is nontransferable. Due to the nature of this course, calculators are not permitted.

Pre or Corequisite: MAT0022

MAT0100 DEVELOPMENTAL MATHEMATICS III LAB

A course designed to satisfy the requirements of both MAT0018 and MAT0022 in one semester. Topics to be studied include arithmetic, basic algebra, and basic linear graphing. Problem solving involving real-life scenarios is an integral part of this course. This course teaches the student to understand and communicate concepts of algebra in the language of mathematics, both orally and written. This course helps prepare the student for college-level mathematics and math-based courses. It is nontransferable. Due to the nature of this course, calculators are not permitted.

Pre or Corequisite: MAT0022

MAT0025 DEVELOPMENTAL MATHEMATICS FOR STATISTICS

This course introduces basic statistical concepts and focuses on data analysis and quantitative reasoning. It will concentrate on statistical concepts taught and applied in the context of upper level developmental math in modular format. This course is for students who score between 109 and 112 on the PERT placement score. Students will then be given the PERT Diagnostic to identify skills in the developmental math sequence that have not yet been mastered. An individual learning plan will be established and students will be assigned to the module(s) containing those competencies not yet mastered.

Topics for study determined by student P.E.R.T Diagnostic test results. This course will teach students to understand and communicate concepts of algebra in the language of mathematics, both orally and written. Successful completion of this course requires a passing score on the departmental final exam.

Pre or Corequisite: MAT0025

MAT0090 DEVELOPMENTAL MATHEMATICS: A MODULAR APPROACH

A course designed to satisfy the requirements of both MAT 0018 and MAT 0028 in modular format. This course offers a comprehensive review of the module(s) containing those competencies not yet mastered.

Topics for study determined by student P.E.R.T Diagnostic test results. This course will teach students to understand and communicate concepts of algebra in the language of mathematics, both orally and written. Successful completion of this course requires a passing score on the departmental final exam.

Pre or Corequisite: MAT0090

MAT0030 DEVELOPMENTAL MATHEMATICS MODULE I

A course designed to satisfy the requirements of both MAT 0018 and MAT 0028 in modular format. This course is for students who score between 109 and 112 on the PERT placement score. Students will then be given the PERT Diagnostic to identify skills in the developmental math sequence that have not yet been mastered. An individual learning plan will be established and students will be assigned to the module(s) containing those competencies not yet mastered.

Topics for study determined by student P.E.R.T Diagnostic test results. This course will teach students to understand and communicate concepts of algebra in the language of mathematics, both orally and written. It is nontransferable. Due to the nature of this course, calculators are not permitted.

Successful completion of this course requires a passing score on the departmental final exam.

Pre or Corequisite: MAT0030

MAT0031 DEVELOPMENTAL MATHEMATICS MODULE II

A course designed to satisfy the requirements of both MAT 0018 and MAT 0028 in modular format. This course is for students who score between 109 and 112 on the PERT placement score. Students will then be given the PERT Diagnostic to identify skills in the developmental math sequence that have not yet been mastered. An individual learning plan will be established and students will be assigned to the module(s) containing those competencies not yet mastered.

Topics for study determined by student P.E.R.T Diagnostic test results. This course will teach students to understand and communicate concepts of algebra in the language of mathematics, both orally and written. It is nontransferable. Due to the nature of this course, calculators are not permitted.

Successful completion of this course requires a passing score on the departmental final exam.

Pre or Corequisite: MAT0031

CHM1045L CHM1046 CHM1046L

This laboratory course will complement lecture topics and include the application of fundamental techniques in the isolation cultivation, and identification of microorganisms. Prerequisite: Four hours of coursework in the biological sciences, including laboratory, and three hours of chemistry, with a minimum grade of C-.

Placement by Testing Department or Prerequisite: BSC1020 BSC1020L CHM1045

Pre or Corequisite: CHM1045L

Lec Hrs=48 Lab Hrs=4 Chl Hrs=0 Oth Hrs=0 Fees=0.00

CHM1045 DEVELOPMENTAL CHEMISTRY I LAB

This laboratory course will complement lecture topics and include the application of fundamental techniques in the isolation cultivation, and identification of microorganisms. Prerequisite: Four hours of coursework in the biological sciences, including laboratory, and three hours of chemistry, with a minimum grade of C-. Placement by Testing Department or Prerequisite: BSC1020 BSC1020L CHM1045

Pre or Corequisite: CHM1045L

Lec Hrs=48 Lab Hrs=4 Chl Hrs=0 Oth Hrs=0 Fees=0.00

CHM1045 DEVELOPMENTAL CHEMISTRY I LAB

This laboratory course will complement lecture topics and include the application of fundamental techniques in the isolation cultivation, and identification of microorganisms. Prerequisite: Four hours of coursework in the biological sciences, including laboratory, and three hours of chemistry, with a minimum grade of C-. Placement by Testing Department or Prerequisite: BSC1020 BSC1020L CHM1045

Pre or Corequisite: CHM1045L

Lec Hrs=48 Lab Hrs=4 Chl Hrs=0 Oth Hrs=0 Fees=0.00

CHM1020L DEVELOPMENTAL MICROBIOLOGY LAB

This course will introduce students to the study of microorganisms and viruses. Prerequisite: Four hours of coursework in the biological sciences, including laboratory, and three hours of chemistry, with a minimum grade of C-.

Placement by Testing Department or Prerequisite: BSC1020 BSC1020L CHM1015

Pre or Corequisite: CHM1020L

Lec Hrs=48 Lab Hrs=4 Chl Hrs=0 Oth Hrs=0 Fees=46.00

CHM1020 DEVELOPMENTAL MICROBIOLOGY

Structure, nutrition and growth of microorganisms; characteristics of microorganisms and viruses; metabolic properties and introduction to microbial genetics, pathogenicity, ecology and industrial applications of microorganisms. Prerequisite: BSC1020 BSC1020L BSC1020L CHM1045 CHM1045L CHM1046 CHM1046L

Pre or Corequisite: CHM1020L

Lec Hrs=48 Lab Hrs=4 Chl Hrs=0 Oth Hrs=0 Fees=0.00

CHM1020L DEVELOPMENTAL MICROBIOLOGY LAB

This laboratory course will complement lecture topics and include the application of fundamental techniques in the isolation cultivation, and identification of microorganisms and viruses. Prerequisite: BSC1020 BSC1020L BSC1020L CHM1045 CHM1045L CHM1046 CHM1046L

Pre or Corequisite: CHM1020L

Lec Hrs=48 Lab Hrs=4 Chl Hrs=0 Oth Hrs=0 Fees=0.00

MCB2010L GENERAL MICROBIOLOGY LAB

This laboratory course will complement lecture topics and include the application of fundamental techniques in the isolation cultivation, and identification of microorganisms and viruses. Prerequisite: BSC1020 BSC1020L BSC1020L MCB2010 MCB2010L

Pre or Corequisite: MCB2010L

Lec Hrs=48 Lab Hrs=4 Chl Hrs=0 Oth Hrs=0 Fees=0.00

MCB2010L GENERAL MICROBIOLOGY

This laboratory course will complement lecture topics and include the application of fundamental techniques in the isolation cultivation, and identification of microorganisms and viruses. Prerequisite: BSC1020 BSC1020L BSC1020L MCB2010 MCB2010L

Pre or Corequisite: MCB2010L

Lec Hrs=48 Lab Hrs=4 Chl Hrs=0 Oth Hrs=0 Fees=0.00

MCB2010GENERAL MICROBIOLOGY LAB

This laboratory course will complement lecture topics and include the application of fundamental techniques in the isolation cultivation, and identification of microorganisms and viruses. Prerequisite: BSC1020 BSC1020L BSC1020L MCB2010 MCB2010L

Pre or Corequisite: MCB2010L

Lec Hrs=48 Lab Hrs=4 Chl Hrs=0 Oth Hrs=0 Fees=0.00
Microbiology/Bacteriology. Consists of 4 hours of laboratory on a mini-semester. Professional environment required.

Pre or Corequisites: HSC151I MEA0255
Lec Hrs=0 Lab Hrs=60 Cls Hrs=0 Oth Hrs=0 Fees=30.00

MEA0256 MEDICAL OFFICE PROFESSIONAL II

Lecture portion of MEA0256L. Includes instruction in basic office management, communication, and the role of office management as an office assistant. Special Fee Charged.

Pre or Corequisites: HSC151J MEA0256L
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

MEA0256L MEDICAL OFFICE LABORATORY II

Laboratory portion of MEA0256. Includes basic knowledge of specimen collection and preparation, laboratory sterilization, preparation of medications, and medical terminology. Special Fee Charged.

Pre or Corequisite: HSC151J MEA0256L
Lec Hrs=0 Lab Hrs=16 Cls Hrs=0 Oth Hrs=0 Fees=0.00

MEA0382 MEDICAL LAW AND ETHICS

Lecture portion of MEA0382L. Includes instruction in the legal and ethical responsibilities regarding patient care. Special Fee Charged.

Pre or Corequisite: HSC1512 MEA0382L
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

MEA0334L ADMINISTRATIVE OFFICE LABORATORY II

Laboratory portion of MEA0334L. Includes instruction in the legal and ethical responsibilities regarding practice in filling insurance claims, diagnostic and procedural coding, setting appointments, managing the medical record, processing mail and other financial responsibilities associated with the medical office. Special Fee Charged.

Pre or Corequisite: HSC1512 MEA0334L
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

MEA0354L ADMINISTRATIVE OFFICE LAB

Laboratory portion of MEA0354. Dealt with financial management of the medical office. Basic accounting procedures consisting of pegboard, billing, collection, and other financial responsibilities associated with the medical office. Special Fee Charged.

Pre or Corequisite: HSC1512 MEA0354
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=30.00

HSC1531 MEDICAL OFFICE PROCEDURES I (1)

Lecture course designed to serve as a review for medical assistant students in preparation for their national certification examination. Selected areas of the curriculum will be emphasized as needed.

Pre or Corequisite: HSC0801
Lec Hrs=38 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

MGF1106 MATHEMATICS FOR LIBERAL ARTS II (3)

This is a general education course which includes the college-level skills not included in the courses MAT0102 Pre-Algebra, MAT0104 Elementary Algebra, and MAT0105 Intermediate Algebra. The course will include topics in logic, geometry, set theory, probability, and statistics. This course will also emphasize applications to real world situations and the integration of other disciplines, including but not limited to, business and the physical sciences. Recommended for the business, non-science major with at least four selected topics from among: mathematics of finance, linear and exponential functions; number systems; history of mathematics; elementary number theory; graph theory; number bases and algorithms; geometric theory; voting and apportionment theory; and student project(s) (strongly recommended).

This course will also emphasize applications to real-world situations and the integration of other academic disciplines, including (but not limited to) business and the physical and social sciences.

Recommendation of the Mathematics Department or at least a grade of «C» in the prerequisite course is required.

Pre or Corequisite: MAT0105
Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=24.00

MEAS008 PRACTICUM IN MEDICAL ASSISTING (7)

Student assigned to physician's office, clinic, or laboratory for a total of two hundred hours. Conference meetings will be arranged on an individual or group basis at a time and place to be arranged by the student and the coordinator.

Attendance at group orientation prior to financial assignment is mandatory. Prerequisite: all courses suggested in Term I. Corequisite: all practicum courses.

Pre or Corequisite: HSC0801
Lec Hrs=50 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

MEA0540L BASIC ELECTROCARDIOGRAPHY

Lecture portion of MEA0540L. Includes instruction in basic principles of electrocardiography, a brief discussion of the cardiovascular system, the role of the Medical Assistant in performing electrocardiograms, reporting abnormal EKG patterns and mounting the EKG. Special Fee Charged.

Pre or Corequisite: HSC151I MEA0540L
Lec Hrs=37 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

MGF1107 MATHEMATICS FOR LIBERAL ARTS II (3)

This is a general education course which includes the college-level skills not included in the courses suggested in Term II. Corequisites: all practicum courses suggested in Term I. Corequisite: all practicum courses.

This course will also emphasize applications to real-world situations and the integration of other disciplines, including (but not limited to) business and the physical and social sciences.
The main aim of this course is to introduce the student to the study of the history of Mathematics. The study will include the development of mathematics through history, the impact of mathematics on society and how mathematics has broadened our knowledge of the world. Throughout the course students will be shown and encouraged to discover connections to mathematics as it is applied today. This course is designed to be of interest to persons of various backgrounds. This course will help students who want to understand the development of mathematics, teachers of mathematics at all levels and those students who have an interest in social and cultural history.

MKA1012 SEAMANSHIP

Through a combination of principles and techniques, this course identifies the why, what, how and when of selling. Students develop skills in prospecting, opening the sale, presenting customer benefits, overcoming objections, and closing the sale. Students will prepare an oral presentation based on the DECA Sales Representative contest. 

MKA151 Advertising

This course introduces the use of promotional strategies and marketing communications in achieving marketing objectives. It focuses on how product features/benefits can be translated into promotional appeals that will influence customer purchasing behavior. Topics include promotional objectives, product positioning, selecting media, creative analyses, budgeting and measuring promotional effectiveness. As a learning activity, students prepare an advertising campaign for a product, business, or not-for-profit organization. Students will have the opportunity to participate in Delta Epsilon Chi activities.

MKA1910 SENIORS: MARKETING IN PERSPECTIVE

This course includes marketing management related activities such as individual projects in promotion and entrepreneurship, marketing research and career planning. The students have the opportunity to develop leadership skills through participation in Delta Epsilon Chi activities.

MKA2949 CO-OP WORK EXP

A course designed to provide training in a student’s field of study through work experience. Students will be assigned specific course prefixes related to their academic major prior to registration.

MCC1000 INTRO TO MASS COMMUNICATION

Overview of contemporary mass media and its historical background. Includes processes and effects of participation in the mass media and society. Deals with the media industry, its responsibilities, legalities, and careers. Media discussed may include newspapers, magazines, books, radio, television, advertising, public relations, and the movie and recording industries.

MNA1161 CUSTOMER SERVICE TRAINING

This course provides the student with the basic concepts and current trends in the customer service industry. Through actual case studies, the students analyze organizations which have implemented successful customer service strategies.

MNA2116 INTRODUCTION TO E-COMMERCE

This course examines the history, basic tools, and other important issues surrounding the many forms of Electronic Commerce. The students develop skills and gain knowledge and experience with a networked community designed for business function and transactions. Subject areas include: types of E-Commerce: E-Marketing, E-Accounting, E-Customer Service; effective E-Commerce solutions and the development of new technologies; and improving communication and conflict resolution skills.

MNA2148 INDUSTRY WORK EXPERIENCE

Students with a postsecondary adult vocational certificate or equivalent may apply to this course for credit. Students may apply only to students seeking an A.S. in Industrial Management.

MNA250 Principles of Supervision

This course provides an overview of fundamentals of supervision and the management of people. It emphasizes the role of supervision in business organizations by focusing on supervisory processes; examining functions of planning, organizing, directing, controlling and their relationships to daily responsibilities of the supervisor.

MNA290 Independent Study in Industrial Management

A directed study course available to both majors and non-majors who wish to investigate a particular concern or related issue in the field of Industrial Management. The student must submit an application for the course to the program manager. All students must contact the program manager to obtain registration approval.

MNA2949 CO-OP WORK EXPERIENCE

A course designed to provide training in a student’s field of study through work experience. Students are graded on the basis of documentation and employer evaluations. Program Manager approval is required. All students must contact the program manager to obtain registration approval.

MSS0156 ANATOMY AND PHYSIOLOGY FOR MASSAGE

The structure and function of human organs as they service massage therapy are presented. Basic pathophysiology of the major body systems and organs as they apply to massage therapy are discussed in relationship to appropriate care by the massage therapist. Systemic contraindications, local contraindications and cautions that influence massage care are presented.

MSS0156 ANATOMY AND PHYSIOLOGY FOR MASSAGE THERAPY II

This course provides an opportunity for students to develop an understanding of neuromusculoskeletal anatomy. Practical analysis is presented. Students study the major muscles of the body, their insertions, tension of attachment, and actions; as well as associated bones, ligaments, and stabilizing ligaments for each joint. Plans of movement and lever classification are discussed.

MSS0156 ANATOMY AND PHYSIOLOGY MASSAGE THERAPY LAB II

This course provides an opportunity for students to develop an understanding of neuromusculoskeletal anatomy into therapeutic application of massage. Massage techniques are presented sequentially with review of positions, appropriate strokes, ethical situations, appropriate draping, etc. Throughout the course, charting and interviewing skills are taught and practiced.
Course presents an introduction to the massage therapy profession. Effective and appropriate communication techniques are used for management of the client-therapist relationship; communication skills necessary for working with colleagues in the health care community are acquired; and responsibility to the professional community and one's own community, through civic participation and membership in a professional organization, are developed. The theory and history of massage therapy are explored.

Prerequisite: MSS0250
Pre or Corequisite: MSS0250L
Lec Hrs=15 Lab Hrs=120 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MSS0250 INTRODUCTION TO MASSAGE THERAPY LAB
Course explores the effects, precautions and variations associated with basic massage strokes and issues associated with touch and trust. Students learn how to perform a full body massage that includes the five basic Swedish massage strokes and variations plus compression and fascia release. Proper draping, lubrication, bolster use and turning procedures during the massage are also taught as well as appropriate use of pressure, rhythm and movement to enhance the massage's effects. The ability to locate areas of tension or discomfort in clients is developed. Efficient body mechanics, hypnotic and self-care while performing massage are practiced. Introductory record keeping as well as administering and charting techniques are practiced.

Pre or Corequisite: MSS0801
Lec Hrs=15 Lab Hrs=170 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MSS0260 ALLIED MODALITIES
Basic principles of allied modalities such as Polarity Therapy, Acupressure, Acupuncture, trigger point therapy, deep tissue massage, reflexology, myofascial massage, massage energy techniques and others are explored and demonstrated. Specific techniques are related to the activities or needs of unique professional applications. Students are prepared to provide care in case conferences and other professional discussions. Introduction to the basic elements of other natural health care disciplines is presented.

Prerequisite: MSS0250 MSS0260L
Pre or Corequisite: MSS0250L
Lec Hrs=15 Lab Hrs=150 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MSS0281 ALLIED MODALITIES - LAB
Students learn how to help promote relaxation and relieve muscle tension via palpatio as well as by determining joint range of motion, proper body mechanics and applied therapy. Prerequisite: completion of all massage courses and at least 75 hours of massage therapy experience.

Prerequisite: MSS0260 MSS0280L
Pre or Corequisite: MSS0260L
Lec Hrs=15 Lab Hrs=110 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MSS0301 HYDROTHERAPY MODALITIES
The therapeutic use of superficial heat and cryotherapy is discussed with an emphasis on determining proper parameters and techniques used to promote relaxation in clients. The use of hot and cold clinical techniques and the application of these techniques is presented. Clinical techniques are related to the activities or needs of unique professional applications. Students are prepared to provide care in case conferences and other professional discussions.

Prerequisite: MSS0260 MSS0301L
Pre or Corequisite: MSS0301L
Lec Hrs=15 Lab Hrs=15 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MSS0301L HYDROTHERAPY MODALITIES - LAB
Clinical experience in the use of ice, heat, and hydrotherapies. Proper draping, lubrication, bolster use and turning procedures during the massage are also taught as well as appropriate use of pressure, rhythm and movement to enhance the massage's effects. The ability to locate areas of tension or discomfort in clients is developed. Efficient body mechanics, hypnotic and self-care while performing massage are practiced. Introductory record keeping as well as administering and charting techniques are practiced.

Pre or Corequisite: MSS0301
Lec Hrs=15 Lab Hrs=15 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MSS0302 MASSAGE THERAPY CLINICAL PRACTICUM
Course emphasizes synthesis and integration of principles and techniques learned across the curriculum. Students provide comprehensive care services in the Massage Therapy Lab under direct supervision, including specific upper and lower body techniques. Introduces the opportunity of working in a massage clinic including learning principles of relating to clients, keeping records, determining fees, billing insurance, marketing and building a massage practice, maintaining hygiene standards and other student responsibilities in a business setting. Students participate in case conferences and other professional discussions. In addition to laboratory sessions, students are required to engage in practice massage sessions outside of scheduled class hours, and must complete a minimum community service requirement.

Prerequisite: MSS0301L MSS0302L
Pre or Corequisite: MSS0302L
Lec Hrs=15 Lab Hrs=110 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MTB1103 BUSINESS MATHEMATICS
This course emphasizes the application of mathematics to selected business topics and problems. Emphasis is placed on developing the ability to use mathematics to solve practical business problems. MATH 0600 is recommended for those students planning to continue in business-related fields.

Prerequisite: MTB1102
Lec Hrs=16 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MTE104C INTRODUCTION TO MARINE TECHNOLOGY
This course provides the student with the basic skills needed in repairing the marine engine. Hands-on training includes safety rules and regulations; use of tools, identification of fasteners, gaskets, and seals; use of parts and electrical symbols for wiring diagrams; and troubleshooting equipment.

Prerequisite: MTE1004C
Lec Hrs=16 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=$73.53

MTE108C RIGGING AND MAKE READY
Preparation and deliverable of sales merchandise, mounting of various accessories, rigging cables, wiring, control boxes, media maintenance and lubrication of systems are covered.

Prerequisite: MTE1004C
Lec Hrs=16 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=$115.83

MTE109C MARINE DIESEL ENGINES 1
Course covers theory and hands-on application of the marine diesel engine and related systems. Instruction includes disassembling, reassembling, inspection, cleaning and troubleshooting engine parts and systems.

Prerequisite: MTE1004C
Lec Hrs=16 Lab Hrs=64 Clin Hrs=0 Oth Hrs=0 Fees=$70.83

MTE1062C MARINE CORROSION & PREVENTION
Upon completion of this course the student will be able to describe the basic theory of galvanic, electrolysis, fatigue, biological corrosion and chemical corrosion as it pertains to the marine industry. Zinc sacrificial anodes and other current commercial control systems are demonstrated and discussed. Composition, structure, application, and evaluation of commercial classes of protective coating for metals, proper metal preparation, and coating applications are covered. Classroom instruction and tasks performed will be in accordance with applicable American Boat and Yacht Council (ABYC) Standards and industry best practices.

Prerequisite: MTE1312C
Lec Hrs=30 Lab Hrs=50 Clin Hrs=0 Oth Hrs=0 Fees=$206.83

MTE1073C GASOLINE ENGINE DIAGNOSTICS AND REPAIR
A course on four and two-cycle in-line, and V-type inboard and outboard gasoline engines. Labs include troubleshooting with various kinds of test equipment, disassembly, and inspection and cleaning of various types of inboard gas engines by major manufacturers.

Prerequisite: MTE1010C
Lec Hrs=30 Lab Hrs=50 Clin Hrs=0 Oth Hrs=0 Fees=$151.83

MTE1167C MARINE FUEL SYSTEMS, DIESEL & GAS
Course provides theory, operation, and service of gasoline and diesel fuel systems as well as conventional systems, characteristics of fuels and their oil mixture; safety; marine carburetors, tank construction and installation; and troubleshooting test equipment using a dynamometer.

Prerequisite: MTE1004C
Lec Hrs=16 Lab Hrs=64 Clin Hrs=0 Oth Hrs=0 Fees=$89.83

MTE1312C ADVANCED MARINE COMPOSITES, PAINTING & REFINISH
Principles of advanced composite marine construction and repair. Painting and refinishing surface fundamentals.

Prerequisite: MTE1004C
Lec Hrs=16 Lab Hrs=64 Clin Hrs=0 Oth Hrs=0 Fees=$178.83

MTE148C MARINE ELECTRICITY
Basic electrical theory for both AC and DC circuits in marine systems. Application of electrical theory to the generating, starting and auxiliary circuits of a marine engine. Emphasis on theory of operation and repair of equipment in the field with special attention to marine power distribution in a variety of environments.

Prerequisite: MTE1004C
Lec Hrs=16 Lab Hrs=64 Clin Hrs=0 Oth Hrs=0 Fees=$155.83

www.broward.edu
College Catalog 
Broward College 
College Catalog 
Broward College
Lec Hrs = 16   Lab Hrs = 64   Clin Hrs = 0   Other Hrs = 0   Fees = 46.83

**MTG2094 GEOMETRY FOR TEACHERS**
This course is designed for middle and high school mathematics teachers. The course emphasizes Euclidean plane geometry with an introduction to the non-Euclidean geometries. The problems proofs, and constructions involve line segments, angles, triangles, circles, parallel lines, and similarity. Credit for this course may not be used to meet general education requirements for the A.A. degree.

Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUE1400C INTRODUCTION TO RECORDING STUDIO PROCEDURES**
Fundamentals and techniques of modern multi-track recording. Areas of concentration are studio procedures, equipment operation, microphone selection and placement, signal processors, musical instrument isolation, and acoustical properties.

Lec Hrs = 48   Lab Hrs = 32   Clin Hrs = 0   Other Hrs = 0   Fees = 100.00

**MUI2112 MUSIC HISTORY AND LITERATURE**
A survey course tracing the history of music from the beginning of the 19th century to the present, showing the significance of music development resulting from social, international and cultural influences.

Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUI2105 MUSIC APPRECIATION**
Course for music majors, designed to develop a basic music vocabulary, establish critical listening skills, and survey the evolution of Western music within a framework of world cultures.

Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUL255 SEMINAR IN SPECIAL INTERNATIONAL STUDIES**
A combination of classroom preparation and foreign travel with an emphasis on in-depth study of major musical works.

Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUI2601C ADVANCED RECORDING ENGINEERING**
This class focuses on advanced application of recording and mix-down techniques, incorporating the use of overdubs and special effects. A multi-track recording project will be required.

Lec Hrs = 48   Lab Hrs = 32   Clin Hrs = 0   Other Hrs = 0   Fees = 100.00

**MUI2700 INTRODUCTION TO MUSIC BUSINESS**
An introduction to the music industry, including business principles and practices of the music industry. A systematic survey of the career options in the music industry. Topics include recording, publishing, licensing, copyright, promotions, arts management, music and instrument merchandising, concert music, mass communication, the internet and the music industry, live performance on a local and national basis, career options and career development with emphasis on commercial enterprise.

Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUI2750 MUSIC MARKETING AND PROMOTION**
Music business marketing is a multifaceted and integrated approach that will teach the student an effective worldwide music marketing strategy and how to plan their active marketing plans tailored to the student’s strengths and budget. The student will learn to time a marketing campaign effectively.

Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUI2819 DEVELOPMENT OF AMERICAN POPULAR MUSIC**
Popular music in the United States, from 1820 to the present. Focus on the Big Band Era, Country and Western, Jazz, Black Music, and the Rock scene (beginning in 1955).

Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUI2911 MUSIC HISTORY AND LITERATURE**
A survey course tracing the history of music from antiquity through the Classical Period. Emphasis is placed on major composers and their works. Recommended for second-year music students.

Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUI3110 COLLEGE SINGERS**
Open to all students by audition. Three hours rehearsal weekly. May be taken four times for transfer credit.

Lec Hrs = 48   Lab Hrs = 32   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUI3130 VOCAL ENSEMBLE**
A select vocal ensemble performing a wide variety of literature, including Jazz and Pop. Open to all students by audition. May be taken four times for transfer credit.

Lec Hrs = 48   Lab Hrs = 32   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUI3141 SEAHAWK SINGERS**
A select vocal ensemble performing a variety of literature designed to serve the jazz and pop. Open to all students by audition. May be taken four times for transfer credit.

Lec Hrs = 48   Lab Hrs = 32   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUI32700 CONCERT BAND**
Open to all students, faculty, and members of the community who play a band instrument. Chairs assigned by the conductor through audition. Three hours rehearsal weekly. May be taken four times for transfer credit.

Lec Hrs = 48   Lab Hrs = 32   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUI3280 ORCHESTRA**
Open by audition to all students, faculty and members of the community who play an orchestral instrument. Chairs assigned by the conductor. Three hours rehearsal weekly. May be taken four times for transfer credit.

Lec Hrs = 48   Lab Hrs = 32   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUI3300 MUSIC APPRECIATION**
Course for music majors, designed to develop a basic music vocabulary, establish critical listening skills, and survey the evolution of Western music within a framework of world cultures.

Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUI3350 SEMINAR IN SPECIAL INTERNATIONAL STUDIES**
A combination of classroom preparation and foreign travel with an emphasis on in-depth study of major musical works.

Lec Hrs = 48   Lab Hrs = 0   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUI3410 VOCAL ENSEMBLE**
A select vocal ensemble performing a wide variety of literature, including Jazz and Pop. Open to all students by audition. May be taken four times for transfer credit.

Lec Hrs = 48   Lab Hrs = 32   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUI3500 VOCAL ENSEMBLE**
A select vocal ensemble performing a wide variety of literature, including Jazz and Pop. Open to all students by audition. May be taken four times for transfer credit.

Lec Hrs = 48   Lab Hrs = 32   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUI3510 COLLEGE SINGERS**
Open to all students by audition. Three hours rehearsal weekly. May be taken four times for transfer credit.

Lec Hrs = 48   Lab Hrs = 32   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00

**MUI3540 VOCAL ENSEMBLE**
A select vocal ensemble performing a wide variety of literature, including Jazz and Pop. Open to all students by audition. May be taken four times for transfer credit.

Lec Hrs = 48   Lab Hrs = 32   Clin Hrs = 0   Other Hrs = 0   Fees = 0.00
MUN1380 BROWARD CHORAL SOCIETY
Open to all student, faculty and members of the community who have experience in the art of singing. Three hours of music and show presentation may be taken four times for transfer credit.
Lec Hrs=48 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUN1430 BRASS ENSEMBLE
A select instrumental ensemble that performs music written or arranged for Brass instruments.
Enrollment is determined by the director through audition. May be taken four times for transfer credit.
Lec Hrs=48 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUN1440 PERCUSSION ENSEMBLE
A select instrumental ensemble that performs music written or arranged for Percussion instruments. Enrollment is determined by the director through audition. May be taken four times for transfer credit.
Lec Hrs=48 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUN1460 CHAMBER ENSEMBLE
Small group whose members are selected by the director through audition. Study and performance of repertoire appropriate to the specific chamber media. Three hours rehearsal weekly. May be taken four times for transfer credit.
Lec Hrs=48 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUN1480 CLASSICAL GUITAR ENSEMBLE
Open to all students, faculty and members of the community who play guitar. Enrollment is determined by the director through audition. Participants will study and perform music from all periods in preparation for public performance. May be taken four times for transfer credit.
Lec Hrs=48 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUN1712 COMBO LAB
Enrollment is determined by the director through audition. Study and performance of music associated with the popular music and show presentation fields. May be taken four times for transfer credit.
Lec Hrs=48 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUS1340C INTRODUCTION TO MUSIC TECHNOLOGY AND SOUND DESIGN
This course will offer the student a comprehensive overview of the music production process, including composing, arranging, mixing, advanced synthesis techniques and delivery. Topics include commonly encountered acoustical problems and an investigation of equipment and techniques used to overcome them.
Pre or Corequisite: MUS1340C MUS3544C Pre or Corequisite: MUS1340C MUS3544C Fees=100.00

MUS2905 INDEPENDENT STUDY: MUSIC
A directed, independent study course available to both majors and non-majors who wish to investigate topics of special interest to students or instructors. Prerequisite: Instructor approval.
Lec Hrs=48 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUS2940 ADVANCED PROJECTS IN MUSIC PRODUCTION
This course will offer the student a comprehensive overview of the music production process, including composing, arranging, mixing, advanced synthesis techniques and delivery.
Pre or Corequisite: MUS1500C MUS2544C Pre or Corequisite: MUS1500C MUS2544C Fees=100.00

MUS2950 MUSICAL SPECIAL TOPICS
Course centers around topics of current interest or of special interest to students or instructors. Topics or focus may vary from semester to semester. Topics will be identified by the MUS2550 course title published in the course schedule for each term that the course is offered. Special Topics credit hours are not automatically transferable. Transfer credit is the prerogative of the receiving institution.
Lec Hrs=48 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUS2940 MUSIC TECHNOLOGY CO-OP WORK EXPERIENCE
A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by student and employer.
Pre or Corequisite: MUS1500C MUS25700 MUS2544C Lec Hrs=0 Lab Hrs=48 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUT1001 FUNDAMENTALS OF MUSIC
A study of basic music fundamentals for the non-music major or the beginning music major whose background in music has been minimal.
Lec Hrs=48 Lab Hrs=48 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUT1111 MUSIC THEORY I
A course on music theory and related keyboard skills. Emphasis on diatonic materials.
Pre or Corequisite: MUT1131 Pre or Corequisite: MUT1131 Lec Hrs=48 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUT1112 MUSIC THEORY II
A continuation of MUT1111.
Pre or Corequisite: MUT1131 Pre or Corequisite: MUT1131 Lec Hrs=48 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUT1241 EAR TRAINING AND SIGHT SINGING I
A course in the development of sight singing and ear training.
Pre or Corequisite: MUT1131 Pre or Corequisite: MUT1131 Lec Hrs=32 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUT1242 EAR TRAINING AND SIGHT SINGING II
A continuation of MUT1241.
Pre or Corequisite: MUT1131 Pre or Corequisite: MUT1131 Lec Hrs=32 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUT2116 MUSIC THEORY III
Continuation of MUT2112. Concentration on chromatic materials, musical forms, and 20th century techniques.
Pre or Corequisite: MUT1132 Pre or Corequisite: MUT1132 Lec Hrs=48 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUT2201 MUSIC TECHNOLOGY IV
Continuation of MUT2112.
Pre or Corequisite: MUT2201 Lec Hrs=48 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUT2246 EAR TRAINING AND SINGING III
A continuation of MUT2242.
Pre or Corequisite: MUT2246 Pre or Corequisite: MUT2246 Lec Hrs=48 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUT2247 EAR TRAINING AND SINGING IV
Continuation of MUT2246.
Pre or Corequisite: MUT2247 Pre or Corequisite: MUT2247 Lec Hrs=48 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00

MUT2641 JAZZ THEORY AND IMPROVISATION I
A study of the materials and structure of jazz melody and its development of improvisational skills.
Pre or Corequisite: MUT1111 Pre or Corequisite: MUT1111 Lec Hrs=48 Lab Hrs=32 Clin Hrs=0 Oth Hrs=0 Fees=0.00
### MUSIC \[ \text{MV} \]

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
<th>Clinic Hours</th>
<th>Other Hours</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>MVB121</td>
<td>FRENCH HORN</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td>MVB122</td>
<td>TROMBONE</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td>MVB124</td>
<td>BARITONE HORN</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td>MVB125</td>
<td>TUBA</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td>MVB131</td>
<td>PRINCIPAL TRUMPET I</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td>MVB232</td>
<td>PRINCIPAL BARITONE HORN II</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td>MVJ101</td>
<td>PRE-PRINCIPAL JAZZ VOICE</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>16</td>
<td>0.00</td>
</tr>
<tr>
<td>MVJ103</td>
<td>PRE-PRINCIPAL JAZZ GUITAR</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>16</td>
<td>0.00</td>
</tr>
<tr>
<td>MVJ104</td>
<td>PRE-PRINCIPAL ELECTRIC BASS</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>16</td>
<td>0.00</td>
</tr>
<tr>
<td>MVJ109</td>
<td>PRE-PRINCIPAL JAZZ PERCUSSION</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>16</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Notes:**
- Corequisite: Any music course (MUx) other than Music Appreciation.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
- Corequisite: MVK1211 or MVK2221.
MVJ1200 JAZZ PIANO / SECONDARY  
One half-hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1211 JAZZ VOICE SECONDARY  
One half-hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
 Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1212 ELECTRIC BASS SECONDARY  
One hour lesson weekly and two hours of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1219 JAZZ PERCUSION  
One half-hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1310 PRINCIPAL JAZZ PIANO I  
Applied instruction in jazz piano for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1311 PRINCIPAL JAZZ VOICE I  
Applied instruction in jazz voice for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1312 JAZZ GUITAR I  
Applied instruction in jazz guitar for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1313 PRINCIPAL ELECTRIC BASS I  
Applied instruction in electric bass for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1314 JAZZ PIANO  
One half-hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1315 JAZZ VOICE  
One half-hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1316 ELECTRIC BASS  
One half-hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1317 JAZZ PIANO II  
One half-hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1318 JAZZ VOICE II  
One half-hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1319 JAZZ INSTRUMENTAL PIANO I  
Applied instruction in jazz piano for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1320 JAZZ INSTRUMENTAL GUITAR I  
Applied instruction in jazz guitar for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1321 JAZZ INSTRUMENTAL BASS I  
Applied instruction in jazz bass for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1322 JAZZ INSTRUMENTAL PERCUSSION I  
Applied instruction in jazz percussion for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1323 JAZZ INSTRUMENTAL PERCUSSION II  
Applied instruction in jazz percussion for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1324 JAZZ INSTRUMENTAL ELECTRIC BASS II  
Applied instruction in electric bass for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.

MVJ1325 JAZZ INSTRUMENTAL ORGAN I  
Applied instruction in organ for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation. 
Corequisite: Any music course (MUx) other than Music Appreciation.
Lec Hrs=0 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=100.00

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV12101 PRINCIPAL VIOLIN
College preparatory applied instruction in violin for the music principal. One hour lesson per week and two hours practice daily.
Prerequisite: audition. Corequisite: Any (MUx) course other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.

MV11616 GUITAR CLASS
Class instruction in beginning classical guitar techniques.
Corequisite: Any music course (MUx) other than Music Appreciation.
Corequisite: MVK1211 or MVK2221.
MVW1013 PRE-PRINCIPAL CLARINET
College preparatory applied instruction in clarinet for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: audition. Corequisite: Any (MUx) course other than Music Appreciation. Co-requisite: MVK1211 or MVK2221.
Corequisite: MVK1211
Lec Hrs=0 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW1014 PRE-PRINCIPAL BASSOON
College preparatory applied instruction in bassoon for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: audition. Corequisite: Any (MUx) course other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Corequisite: MVK1211
Lec Hrs=0 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW1015 PRE-PRINCIPAL SAXOPHONE
College preparatory applied instruction in saxophone for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: audition. Corequisite: Any (MUx) course other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Corequisite: MVK1211
Lec Hrs=0 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW1012 OBOE
One half hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Corequisite: MVK1211
Lec Hrs=0 Lab Hrs=8 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW1213 CLARINET
One half hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Lec Hrs=0 Lab Hrs=8 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW1214 BASSOON
One half hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Lec Hrs=0 Lab Hrs=8 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW1215 SAXOPHONE
One half hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Lec Hrs=0 Lab Hrs=8 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW1311 PRE-PRINCIPAL FLUTE I
Applied instruction in flute for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition.
Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211.
Lec Hrs=0 Lab Hrs=8 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW1312 PRE-PRINCIPAL OBOE I
Applied instruction in oboe for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Lec Hrs=0 Lab Hrs=8 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW1313 PRE-PRINCIPAL CLARINET II
Applied instruction in clarinet for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211.
Lec Hrs=0 Lab Hrs=8 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW1314 PRE-PRINCIPAL BASSOON II
Applied instruction in bassoon for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Corequisite: MVK1211
Lec Hrs=0 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW1315 PRE-PRINCIPAL SAXOPHONE II
Applied instruction in saxophone for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Corequisite: MVK1211
Lec Hrs=0 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW1221 FLUTE
One half hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Lec Hrs=0 Lab Hrs=8 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW2222 OBOE
One half hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Lec Hrs=0 Lab Hrs=8 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW2223 CLARINET
One half hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Lec Hrs=0 Lab Hrs=8 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW2224 BASSOON
One half hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Lec Hrs=0 Lab Hrs=8 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW2225 SAXOPHONE
One half hour lesson weekly and one hour of practice daily. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Lec Hrs=0 Lab Hrs=8 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW2321 PRE-PRINCIPAL FLUTE II
Applied instruction in flute for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Corequisite: MVK1211
Lec Hrs=0 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW2322 PRE-PRINCIPAL OBOE II
Applied instruction in oboe for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Corequisite: MVK1211
Lec Hrs=0 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW2323 PRE-PRINCIPAL CLARINET II
Applied instruction in clarinet for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Corequisite: MVK1211
Lec Hrs=0 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW2324 PRE-PRINCIPAL BASSOON II
Applied instruction in bassoon for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Corequisite: MVK1211
Lec Hrs=0 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

MVW2325 PRE-PRINCIPAL SAXOPHONE II
Applied instruction in saxophone for the music principal. One hour lesson per week and two hours of practice daily. Prerequisite: Audition. Corequisite: Any music course (MUx) other than Music Appreciation. Corequisite: MVK1211 or MVK2221.
Lec Hrs=0 Lab Hrs=16 Clin Hrs=0 Oth Hrs=0 Fees=$0.00

NMT102 INTRODUCTION TO NUCLEAR MEDICINE TECHNOLOGY
(3)
This course is designed to introduce the student to the field of nuclear medicine. Upon completion of this course, the student will have knowledge of radioisotope physics, radiobiology, and the health physics aspects of radiation safety and the role of the nuclear medicine technologist. Prereq: NMT100L, NMT1430.
Corequisite: NMT102
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Oth Hrs=0 Fees=$0.00
NUR1210 NURSING PROCESS I (2)
The first in a series of theoretical courses for the beginning nursing student. This course builds on the theoretical concepts covered in Nursing Process I, and focuses on the utilization of the nursing process in care of patients with alterations of ingestion, digestion, metabolism, and elimination throughout the life cycle. The major focus will be the development of care necessary to control intake and output. Consideration is given to the multiple factors which complicate the normal physiological or psychological process of the childbearing period. Prerequisite: NUR1220

NUR1210L NURSING PROCESS I LAB CLINICAL (2)
A clinical course for the beginning nursing student. Initially skills are learned in simulation lab and then the student is introduced to direct patient care in an inpatient setting. The emphasis is on care of the adult experiencing medical/surgical situations. This course is practical application and reinforcement of the theoretical concepts covered in Nursing Process I. Prerequisite: NUR1210

NUR1220 HEALTH ALTERATIONS I (3)
Health Alterations I is a course designed to provide the student with knowledge of alterations of ingestion, digestion, metabolism, and elimination throughout the life cycle. The major focus will be the development of care necessary to control intake and output. Consideration is given to the multiple factors which complicate the normal physiological or psychological process of the childbearing period. Prerequisite: NUR1220

NUR1220L HEALTH ALTERATIONS I LAB CLINICAL (2)
Health Alterations I Lab is a course designed to provide the student with the opportunity to utilize the nursing process in the care of patients with alterations of ingestion, digestion, metabolism, and elimination throughout the life cycle. The student will be expected to correlate theoretical knowledge and scientific principles with medical/surgical situations, observations, experiences, written assignments and performance exams may be included in this course. Prerequisite: NUR1220

NUR1310 PEDIATRIC NURSING (3)
This pediatric course is designed to provide an understanding of growth and development through the stages of childhood and the application of the nursing process to these stages. Prerequisite: NUR1220

NUR1310L PEDIATRIC NURSING LAB CLINICAL (2)
This is a theoretical course for the beginning nursing student. This course builds on the theoretical concepts covered in Nursing Process I, and focuses on the utilization of the nursing process in care of patients with alterations of ingestion, digestion, metabolism, and elimination throughout the life cycle. The major focus will be the development of care necessary to control intake and output. Consideration is given to the multiple factors which complicate the normal physiological or psychological process of the childbearing period. Prerequisite: NUR1220

NUR1421 HEALTH CARE OF WOMEN (3)
Health Care of Women is a course designed to provide the student with the knowledge of the reproductive system and health care needs of women throughout the life cycle. The major focus is directed to the childbearing portion of the life cycle. The student is expected to utilize the nursing process in providing nursing care to the maternity patient, her family, and the fetus/newborn during antepartum, intrapartal and postpartum periods. Consideration is given to the multiple factors which complicate the normal physiological or psychological process of the childbearing period. Prerequisite: NUR1220

NUR1421L HEALTH CARE OF WOMEN CLINICAL LAB (1)
This theoretical course for the LPN provides the student with a definition and understanding of psychiatric nursing practice. The nursing process is utilized to present pathological conditions. Therapeutic modalities are included. Prerequisite: NUR1220

NUR1520 NURSING CARE OF THE PSYCHIATRIC PATIENT I (3)
This clinical course provides the student with a definition and understanding of psychiatric nursing practice. The nursing process is utilized to present pathological conditions. Therapeutic modalities are included. Prerequisite: NUR1220

NUR1520L NURSING CARE OF THE PSYCHIATRIC PATIENT CLINICAL (2)
This clinical course provides the student with a definition and understanding of psychiatric nursing practice. The nursing process is utilized to present pathological conditions. Therapeutic modalities are included. Prerequisite: NUR1220

NUR1501 TRANSITION NURSING I (1)
This course is for the LPN student with an understanding of growth and development through the stages of childhood and the application of the nursing process to these stages. Prerequisite: NUR1220

NUR1501L TRANSITION NURSING CLINICAL LAB (1)
This course is for the LPN student with an understanding of growth and development through the stages of childhood and the application of the nursing process to these stages. Prerequisite: NUR1220

NUR2000 HEALTH CARE OF WOMEN CLINICAL LAB (2)
Health Care of Women is a course designed to provide the student with the knowledge of the reproductive system and health care needs of women throughout the life cycle. The major focus is directed to the childbearing portion of the life cycle. The student is expected to utilize the nursing process in providing nursing care to the maternity patient, her family, and the fetus/newborn during antepartum, intrapartal and postpartum periods. Consideration is given to the multiple factors which complicate the normal physiological or psychological process of the childbearing period. Prerequisite: NUR1220

NUR3110L PEDIATRIC NURSING LAB CLINICAL (2)
This theoretical course for the beginning nursing student. This course builds on the theoretical concepts covered in Nursing Process I, and focuses on the utilization of the nursing process in care of patients with alterations of ingestion, digestion, metabolism, and elimination throughout the life cycle. The major focus will be the development of care necessary to control intake and output. Consideration is given to the multiple factors which complicate the normal physiological or psychological process of the childbearing period. Prerequisite: NUR1220

NUR3401 TRANSITION PEDIATRIC NURSING CLINIC LAB (1)
This course provides the student with an understanding of growth and development through the stages of childhood and the application of the nursing process to these stages. Prerequisite: NUR1220

NUR3401L TRANSITION PEDIATRIC NURSING CLINICAL LAB (1)
This course provides the student with an understanding of growth and development through the stages of childhood and the application of the nursing process to these stages. Prerequisite: NUR1220

NUR8100 GENERAL AND SUBJECT EXAMINATIONS TO VERIFY KNOWLEDGE AND COMPETENCY (0)
This course is designed to provide the student with knowledge of alterations of ingestion, digestion, metabolism, and elimination throughout the life cycle. The major focus will be the development of care necessary to control intake and output. Consideration is given to the multiple factors which complicate the normal physiological or psychological process of the childbearing period. Prerequisite: NUR1220

NUR1310L PEDIATRIC NURSING LAB CLINICAL (2)
This is a theoretical course for the beginning nursing student. This course builds on the theoretical concepts covered in Nursing Process I, and focuses on the utilization of the nursing process in care of patients with alterations of ingestion, digestion, metabolism, and elimination throughout the life cycle. The major focus will be the development of care necessary to control intake and output. Consideration is given to the multiple factors which complicate the normal physiological or psychological process of the childbearing period. Prerequisite: NUR1220

NUR1421L HEALTH CARE OF WOMEN CLINICAL (1)
Health Care of Women is a course designed to provide the student with the knowledge of the reproductive system and health care needs of women throughout the life cycle. The major focus is directed to the childbearing portion of the life cycle. The student is expected to utilize the nursing process in providing nursing care to the maternity patient, her family, and the fetus/newborn during antepartum, intrapartal and postpartum periods. Consideration is given to the multiple factors which complicate the normal physiological or psychological process of the childbearing period. Prerequisite: NUR1220
The student shall be responsible for providing care of a selected group of patients, being aware of legal and ethical rules of care in their care and effecting change as necessary. It will be essential for the student to examine his/her own values and motivations in communication in attempting to problem-solve patient situations. Observational experiences, written assignments, and performance exams may be included in this course.

Pre or Corequisite: HSC149 MTB1370 NUR2000
Lec Hrs: 0  Lab Hrs: 0  Clin Hrs: 122  Oth Hrs: 0  Fees:73.53

NUR2221 HEALTH ALTERNATIVES II (3)
In this course the student will be responsible for applying the nursing process to assigned patients with alterations in mobility, skin integrity, and neuromuscular functioning. Concepts of rehabilitation will be emphasized.

Pre or Corequisite: NUR1310L NUR1421L NUR1520L NUR1520L
Lec Hrs: 0  Lab Hrs: 0  Clin Hrs: 122  Oth Hrs: 0  Fees:0.00

NUR2221I HEALTH ALTERNATIVES II CLINICAL LAB (2)
This course is designed to prepare the student to provide the knowledge necessary to move from the role of a student to that of a graduate nurse. The focus is directed toward the legal, ethical and professional aspects of supporting nursing practice. Nursing recognizes that the legal and ethical arena of care provide the framework for planning, implementing, communicating, and evaluating the outcomes of care for patients with cardiopulmonary dysfunction throughout the life cycle. The focus is the pathophysiology, common medical, diagnostic and treatment modes, nursing assessments and interventions necessary to treat those patients. The students will be responsible for reviewing anatomy and physiology, pharmacology, pediatric and psychiatric principles as they apply to this course.

Pre or Corequisite: NUR2221L
Lec Hrs: 0  Lab Hrs: 0  Clin Hrs: 122  Oth Hrs: 0  Fees:343.53

NUR2222 HEALTH ALTERNATIVES III (3)
This course is designed to prepare the student with the knowledge necessary to implement the nursing process on patients with cardiopulmonary dysfunction throughout the life cycle. The focus is the pathophysiology, common medical, diagnostic and treatment modes, nursing assessments and interventions necessary to treat those patients. The students will be responsible for reviewing anatomy and physiology, pharmacology, pediatric and psychiatric principles as they apply to this course.

Pre or Corequisite: NUR2222L
Lec Hrs: 0  Lab Hrs: 0  Clin Hrs: 122  Oth Hrs: 0  Fees:384.53

NUR2801 TRANSITION NURSING IV (5)
This theoretical course for the LPN covers the following concepts: leadership, team management, legal ethical, and professional aspects of care, problem solving techniques, interviewing techniques and emergency nursing.

Pre or Corequisite: NUR2222L
Lec Hrs: 48  Lab Hrs: 0  Clin Hrs: 0  Oth Hrs: 0  Fees:0.00

NUR2801I TRANSITION NURSING IV CLINICAL LAB (2)
This course for the LPN provides the opportunities to develop leadership skills, team management skills, and legal, ethical responsibilities.

Pre or Corequisite: NUR2222L
Lec Hrs: 0  Lab Hrs: 0  Clin Hrs: 122  Oth Hrs: 0  Fees:0.00

NUR2181 TRENDS, PRACTICES, AND ROLES CLINICAL LAB (2)
This course is designed to provide the knowledge necessary to move from the role of a student to that of a graduate nurse. The focus is directed toward the legal, ethical and professional aspects of supporting nursing practice. Nursing recognizes that the legal and ethical arena of care provide the framework for planning, implementing, communicating, and evaluating the outcomes of care for patients with cardiopulmonary dysfunction throughout the life cycle. The focus is the pathophysiology, common medical, diagnostic and treatment modes, nursing assessments and interventions necessary to treat those patients. The students will be responsible for reviewing anatomy and physiology, pharmacology, pediatric and psychiatric principles as they apply to this course.

Pre or Corequisite: NUR2222L
Lec Hrs: 0  Lab Hrs: 0  Clin Hrs: 122  Oth Hrs: 0  Fees:0.00

NUR3678 ADVANCED HEALTH ASSESSMENT LAB (1)
The Advanced health Care Assessment addresses the totality of the client including the spiritual aspects of health, disease/disability, and the individual client’s perceptions of the health/life status of the client within the context of the client’s socio-cultural values is essential in providing the framework for planning, implementing, communicating, and evaluating the outcomes of care. This course provides the client’s skills, interviewing and interactive techniques needed to obtain and communicate a systematic, culturally appropriate, comprehensive health history and physical examination.

Pre or Corequisite: NUR3609 NUR3678 NUR3805
Lec Hrs: 0  Lab Hrs: 0  Clin Hrs: 122  Oth Hrs: 0  Fees:149.53

NUR3119 NURSING CONCEPTS AND THEORIES (3)
The profession of nursing is the culmination of concepts and theories. Concepts and theories are the body of known knowledge to support nursing practice. Nursing recognizes that socialization into a discipline is guided by theories-use of language, identification of concepts and definition of relationships, structured ideas and facilitated disciplined inquiry as well as predicting outcomes of nursing practice. The Nursing Concepts and Theories course will explore the major constructs, theories, and models that form the foundation of nursing. The course will also investigate the history and evolution of nursing leaders, evolusing concepts, and theories, and their application to nursing practice.

Pre or Corequisite: NUR3069 NUR3678 NUR3805
Lec Hrs: 0  Lab Hrs: 0  Clin Hrs: 122  Oth Hrs: 0  Fees:0.00

NUR3617 NURSE AS A SCHOLAR (3)
Present aspects of scholarship that support the values of the nursing profession committed to both personal and professional advancement. The practice of nursing derives knowledge from a wide array of other fields and disciplines adapting and applying this knowledge from a wide array of other fields and disciplines to the practice of nursing. The focus is directed toward the legal, ethical and professional aspects of supporting nursing practice. Nursing recognizes that the legal and ethical arena of care provide the framework for planning, implementing, communicating, and evaluating the outcomes of care for patients with cardiopulmonary dysfunction throughout the life cycle. The focus is the pathophysiology, common medical, diagnostic and treatment modes, nursing assessments and interventions necessary to treat those patients. The students will be responsible for reviewing anatomy and physiology, pharmacology, pediatric and psychiatric principles as they apply to this course.

Pre or Corequisite: NUR3219
Lec Hrs: 0  Lab Hrs: 0  Clin Hrs: 122  Oth Hrs: 0  Fees:0.00

NUR3416 END OF LIFE PALLIATIVE CARE (3)
This course is designed to recognize death as the last stage of human growth and development. With a focus on the physical, emotional, psychosocial, spiritual, and cultural considerations at the end-of-life, the student will explore ethical and legal issues to enhance their skills and knowledge when working with patients and families at the end-of-life.

Pre or Corequisite: NUR3219
Lec Hrs: 0  Lab Hrs: 0  Clin Hrs: 122  Oth Hrs: 0  Fees:0.00

NUR3509L ADVANCED HEALTH ASSESSMENT (LAB) (5)
This theoretical course for the LPN covers the following concepts: leadership, team management, legal ethical, and professional aspects of care, problem solving techniques, interviewing techniques and emergency nursing.

Pre or Corequisite: NUR2222L
Lec Hrs: 0  Lab Hrs: 0  Clin Hrs: 0  Oth Hrs: 0  Fees:0.00

NUR3509L ADVANCED HEALTH ASSESSMENT LAB (1)
The Advanced health Care Assessment addresses the totality of the client including the spiritual aspects of health, disease/disability, and the individual client’s perceptions of the health/life status of the client within the context of the client’s socio-cultural values is essential in providing the framework for planning, implementing, communicating, and evaluating the outcomes of care. This course provides the client’s skills, interviewing and interactive techniques needed to obtain and communicate a systematic, culturally appropriate, comprehensive health history and physical examination.

Pre or Corequisite: NUR3509L NUR3509L NUR3805
Lec Hrs: 0  Lab Hrs: 0  Clin Hrs: 122  Oth Hrs: 0  Fees:0.00

NUR3678 NURSING CARE OF VULNERABLE POPULATIONS (3)
Caring for the vulnerable is imperative for the compassionate, caring, effective and competent nurse. This course focuses on health issues affecting at-risk and vulnerable populations. It will explore issues of reducing disparities in health care systems and health care delivery. The course emphasizes the interdisciplinary nature of work in health care delivery. Barriers to the navigation and utilization of health care systems are explored as related to the economical, legal, political and cultural aspects of health promotion and health maintenance.

Pre or Corequisite: STA2023
Lec Hrs: 0  Lab Hrs: 0  Clin Hrs: 0  Oth Hrs: 0  Fees:0.00

NUR3509L ADVANCED HEALTH ASSESSMENT (LAB) (5)
This theoretical course for the LPN covers the following concepts: leadership, team management, legal ethical, and professional aspects of care, problem solving techniques, interviewing techniques and emergency nursing.

Pre or Corequisite: NUR2222L
Lec Hrs: 0  Lab Hrs: 0  Clin Hrs: 0  Oth Hrs: 0  Fees:0.00

NUR3509L ADVANCED HEALTH ASSESSMENT LAB (1)
The Advanced health Care Assessment addresses the totality of the client including the spiritual aspects of health, disease/disability, and the individual client’s perceptions of the health/life status of the client within the context of the client’s socio-cultural values is essential in providing the framework for planning, implementing, communicating, and evaluating the outcomes of care. This course provides the client’s skills, interviewing and interactive techniques needed to obtain and communicate a systematic, culturally appropriate, comprehensive health history and physical examination.

Pre or Corequisite: NUR3509L NUR3509L NUR3805
Lec Hrs: 0  Lab Hrs: 0  Clin Hrs: 122  Oth Hrs: 0  Fees:0.00

NUR3678 NURSING CARE OF VULNERABLE POPULATIONS (3)
Caring for the vulnerable is imperative for the compassionate, caring, effective and competent nurse. This course focuses on health issues affecting at-risk and vulnerable populations. It will explore issues of reducing disparities in health care systems and health care delivery. The course emphasizes the interdisciplinary nature of work in health care delivery. Barriers to the navigation and utilization of health care systems are explored as related to the economical, legal, political and cultural aspects of health promotion and health maintenance.

Pre or Corequisite: STA2023
Lec Hrs: 0  Lab Hrs: 0  Clin Hrs: 0  Oth Hrs: 0  Fees:0.00
DYNAMICS AND CONTEMPORARY ISSUES IN AGING

The aging population will affect the skills and services the health workforce needs. The concepts in normal aging, issues related to the client in communities, and health care issues confronted by the elderly. The unique needs of the elderly includes: end-of-life issues, the application of current theories and the needs of elderly, and available and potential health care services are explored.

COMMUNITY HEALTH NURSING

The community based nurse care for clients from many diverse cultures and must be prepared to give quality, effective, and culturally competent health care in a variety of settings and specialties. This course focuses on the role of the nurse in influencing public health issues, emphasizing concepts and theories related to community health nutrition. Community addressing cultural, social, and epidemiological factors relative to health and illness; health promotion and disease prevention across the lifespan and families of diverse populations.

Professional practice of the Registered Nurse

Emphasis will be placed on the use of the manual and automated Lensometer. Fitting of low vision devices and occupational specialty lenses will be discussed.

EYE ANATOMY AND PHYSIOLOGY OF THE EYE

This course reviews the techniques needed in a clinical environment for the collection of patient case history, entrance visual acuity, basic visual skills of ocular motility and accommodation, visual perception, depth perception and binocular fusion. Emphasis is placed on clinical techniques as it relates to the visual system.

PHYSICAL AND GEOMETRIC OPTICS

This course provides a forum for the examination of the concepts in community health nursing focusing on the community as the client and the multiple determinants of health in community health settings. The learner will participate in selected community based clinical activities and various community agencies as an information intermediary, consumer, designer and manager in the process to provide competent care, promote health protection, provide assistance with health planning, and health restoration to a diverse population within the community.

OPTOMETRIC PERSPECTIVES AND GLOBAL TRENDS

This course examines the knowledge and skills of baccalaureate nursing students: perspectives on global health trends and the importance in facilitating the awareness and knowledge of increasing globalized affecting health care and its delivery. The course requirements, clinical considerations and cultural sensitivity into nursing practice has become a greater need as a result of an increasing multicultural, globally oriented world. Information covering the overall socio-political and economical health care environment changes occurring in the 21st century health care system is addressed.

COMMUNITY HEALTH NURSING

In the context of an increasingly diverse, increased globalization affecting health care and stress the interdisciplinary nature of professional practice. This course focuses on the role of the nurse in influencing public health issues, emphasizing concepts and theories related to community health nutrition. Community addressing cultural, social, and epidemiological factors relative to health and illness; health promotion and disease prevention across the lifespan and families of diverse populations.

COMMUNITY HEALTH NURSING

In the context of an increasingly diverse, increased globalization affecting health care and stress the interdisciplinary nature of professional practice. This course focuses on the role of the nurse in influencing public health issues, emphasizing concepts and theories related to community health nutrition. Community addressing cultural, social, and epidemiological factors relative to health and illness; health promotion and disease prevention across the lifespan and families of diverse populations.

COMMUNITY HEALTH NURSING

In the context of an increasingly diverse, increased globalization affecting health care and stress the interdisciplinary nature of professional practice. This course focuses on the role of the nurse in influencing public health issues, emphasizing concepts and theories related to community health nutrition. Community addressing cultural, social, and epidemiological factors relative to health and illness; health promotion and disease prevention across the lifespan and families of diverse populations.

COMMUNITY HEALTH NURSING

In the context of an increasingly diverse, increased globalization affecting health care and stress the interdisciplinary nature of professional practice. This course focuses on the role of the nurse in influencing public health issues, emphasizing concepts and theories related to community health nutrition. Community addressing cultural, social, and epidemiological factors relative to health and illness; health promotion and disease prevention across the lifespan and families of diverse populations.

COMMUNITY HEALTH NURSING

In the context of an increasingly diverse, increased globalization affecting health care and stress the interdisciplinary nature of professional practice. This course focuses on the role of the nurse in influencing public health issues, emphasizing concepts and theories related to community health nutrition. Community addressing cultural, social, and epidemiological factors relative to health and illness; health promotion and disease prevention across the lifespan and families of diverse populations.
OPT 2420L OPTHALMIC DISPENSING LAB
This course provides the opportunity for students to practice ophthalmic dispensing. Measurement and adjusting ophthalmic lenses; frame selection; ophthalmic lenses; occupational bifocals, high index lenses and low vision devices will be emphasized. The process of analyzing patient’s prescription and identifying the patient’s specific visual needs for the proper frame and lens selection is emphasized. Prerequisite: OPT1150 OPT1150L OPT1350 OPT2375 Pre or Corequisite: OPT2420 OPT2800L, Lab Hrs: 80 Lab Hrs: 0 Cln Hrs: 0 Oth Hrs: 0 Fees: 11.00

OPT 2875 OPTHALMIC DISPENSING PRACTICUM I
This laboratory course students will fabricate eyewear for the patients of the Vision Care Clinic using advanced techniques in measurement, fabrication and verification of single vision and multifocal lenses. Advanced techniques in the operation and maintenance of manual and computerized equipment. Prerequisite: OPT2375 OPT2420 OPT2421 OPT2460 OPT2800L, Pre Corequisite: OPT2875 Lab Hrs: 120 Lab Hrs: 0 Cln Hrs: 0 Oth Hrs: 0 Fees: 21.00

OPT 2876 OPTHALMIC DISPENSING PRACTICUM II
This is an externship in an approved retail ophthalmic dispensing establishment involving frame styling, ordering of appropriately designed lenses, adjustment, repair and dispensing of eyewear. The student will gain a working knowledge of administrative management procedures of the practice. Prerequisite: OPT2420 OPT2425 OPT2875 Pre Corequisite: OPT2460 OPT2461 Lab Hrs: 120 Lab Hrs: 0 Cln Hrs: 0 Oth Hrs: 0 Fees: 21.50

OPT 2879 REFRACTOMETRY PRACTICUM
Practicum for OPT2375. Practical procedures used in determining the powers of corrective lenses in relation to a patient’s refractive error. The student will learn to use the Phoropter, retinoscope, and automated refraction instruments in determining the patient’s subjective and objective refraction. Problems associated with the change in refractive powers will be demonstrated. Prerequisite: OPT1110 OPT1110L OPT2130 OPT2140 OPT2375 OPT2879 Pre Corequisite: OPT2130 Lab Hrs: 96 Oth Hrs: 0 Fees: 21.35

ORH 1523 NATIVE UPLAND PLANTS
This course includes the identification of approximately 100 plants and plant groups native or naturalized in the higher ground habitats of South Florida. The application of these plants as in-situ, mitigation or landscape materials in the ecological and esthetic situations of this area will be an additional objective. Most instruction will be done in the field. Prerequisite: OPT1110 OPT1110L OPT1330 OPT2375 Pre Corequisite: OPT2130 Lab Hrs: 96 Oth Hrs: 0 Fees: 21.35

OPT 2461 OPTHALMIC DISPENSING CLINIC II
This is a clinic course which simulates the process of ophthalmic dispensing and finishing procedures. Students will perform advanced skills in the fitting and dispensing of ophthalmic lenses. Students will work under the supervision of a clinical staff in dispensing glasses to patients of the Vision Care Clinic. Practice advanced techniques used to dispense several types of ophthalmic frame materials, multifocal lenses including progressive power and occupational bifocals, high index lenses, and adjusting ophthalmic frame patterns and utilize several systems for surfacing and edges for ophthalmic frames. Prerequisite: OPT2460 OPT2800L, Pre Corequisite: OPT2875, Lab Hrs: 32 Lab Hrs: 0 Cln Hrs: 0 Oth Hrs: 0 Fees: 16.50

OPT 2060 OPHTHALMIC MANAGEMENT POLICY AND PROCEDURES
This course involves the process of analyzing the patient’s subjective and objective refraction. Problems associated with the change in refractive powers will be demonstrated. Prerequisite: OPT1110 OPT1110L OPT2130 OPT2140 OPT2375 Pre Corequisite: OPT2130 Lab Hrs: 96 Oth Hrs: 0 Fees: 21.35

OPT 2090 ORIENTATION TO VISION CARE CLINIC
This course provides an introduction into the Broward College Vision Care Clinic. Students will work in teams to acquire clinical and administrative procedures in patient handling under the close supervision of clinic instructors in the fitting and selecting of patients. Pre or Corequisite: OPT2090 Lab Hrs: 48 Lab Hrs: 0 Cln Hrs: 0 Oth Hrs: 0 Fees: 0.00

OPT 2375 REFRACTOMETRY
This course reviews the theory and terminology used in determining the powers of corrective lenses in relation to a patient’s refractive error. Emphasis is placed on the development of evaluating the Phoropter, retinoscope, and automated refraction instruments. Problems associated with the change in refractive powers will be demonstrated. Prerequisite: OPT1110 OPT1110L OPT2130 Lab Hrs: 32 Lab Hrs: 0 Cln Hrs: 0 Oth Hrs: 0 Fees: 0.00

OPT 2420L EYEWEAR FABRICATION I LAB
This laboratory course students will gain practical experience in ophthalmic surfacing and finishing procedures. Students will fabricate single vision and multifocal lenses: use lensometers and meter clocks; operate project-in-the-lens measuring, select or fabricate frame patterns; utilize several systems for surfacing and edges for ophthalmic frames. Prerequisite: OPT2500 Lab Hrs: 80 Lab Hrs: 0 Cln Hrs: 0 Oth Hrs: 0 Fees: 13.85

OPT 2421L EYEWEAR FABRICATION II LAB
This course provides a review of the practical procedures used to apply technical skills of contact fitting, application and removal procedures, care of soft and hard lenses, verification of contact lens prescription and ‘in-office’ modification of contact lenses. Prerequisite: OPT1150 Corequisite: OPT2421 Pre Corequisite: OPT2500 Lab Hrs: 64 Lab Hrs: 0 Cln Hrs: 0 Oth Hrs: 0 Fees: 0.00

OPT 2424L EYEWEAR FABRICATION II LAB
This course involves the use of contact lens procedures and ‘in-office’ modification of contact lenses. Prerequisite: OPT1150L Lab Hrs: 6 Cln Hrs: 0 Oth Hrs: 0 Fees: 0.00

OPT 2426L EYEWEAR FABRICATION I LAB
In this laboratory course students will gain practical experience in ophthalmic surfacing and finishing procedures. Students will fabricate single vision and multifocal lenses: use lensometers and meter clocks; operate project-in-the-lens measuring, select or fabricate frame patterns; utilize several systems for surfacing and edges for ophthalmic frames. Prerequisite: OPT2460 OPT2800L, Pre Corequisite: OPT2875, Lab Hrs: 16 Lab Hrs: 0 Cln Hrs: 0 Oth Hrs: 0 Fees: 0.00

OPT 2428L EYEWEAR FABRICATION I LAB
In this laboratory course students will gain practical experience in ophthalmic surfacing and finishing procedures. Students will fabricate single vision and multifocal lenses: use lensometers and meter clocks; operate project-in-the-lens measuring, select or fabricate frame patterns; utilize several systems for surfacing and edges for ophthalmic frames. Prerequisite: OPT2460 Lab Hrs: 0 Cln Hrs: 0 Oth Hrs: 0 Fees: 0.00

OPT 2500 CONTACT LENS THEORY
This course involves the use of contact lens instruments to confirm all parameters for replacement lenses. Particular attention is given to the patient who is having problems with contact lenses and the long-term wear due to corneal changes and sensitivity to solutions. Advanced in-service refraction and contact lens fitting procedures will be covered. Prerequisite: OPT2420 OPT2460 OPT2830L, Pre Corequisite: OPT2421 OPT2640 OPT2831L Lab Hrs: 0 Cln Hrs: 80 Oth Hrs: 0 Fees: 23.55

OPT 2830L CONTACT LENS CLINIC I
Assist eye care specialists in the fitting and follow-up care of rigid and soft contact lenses for patients referred from the Vision Care Clinic. Familiarization with pre-refraction, instructions for lens handling, cleaning, care and storage, and basic contact lens pathology. Prerequisite: OPT2375 Lab Hrs: 80 Lab Hrs: 0 Cln Hrs: 120 Oth Hrs: 0 Fees: 23.55

OPT 2831L CONTACT LENS CLINIC II
This course involves the use of contact lens instruments to confirm all parameters for replacement lenses. Particular attention is given to the patient who is having problems with contact lenses and the long-term wear due to corneal changes and sensitivity to solutions. Advanced in-service refraction and contact lens fitting procedures will be covered. Prerequisite: OPT2420 OPT2460 OPT2830L, Pre Corequisite: OPT2421 Lab Hrs: 0 Cln Hrs: 80 Oth Hrs: 0 Fees: 23.55

OPT 2875 OPTHALMIC DISPENSING PRACTICUM I
This course includes the identification of approximately 100 plants and plant groups native or naturalized in the higher ground habitats of South Florida. The application of these plants as in-situ, mitigation or landscape materials in the ecological and esthetic situations of this area will be an additional objective. Most instruction will be done in the field. Prerequisite: ORH1152 ORH1151 ORH1510, ORH1511 ORH1521 ORH1510 L is strongly recommended. Lab Hrs: 32 Lab Hrs: 0 Cln Hrs: 0 Oth Hrs: 0 Fees: 0.00

ORH 1524 NATIVE WETLAND PLANTS
This course is a continuation of HOS1071, Native Upland Plants, and includes the identification of approximately 100 plants and plant groups native or naturalized in fresh and salt water wetlands of South Florida. The application of these plants as in-situ and mitigation species in ecological, landscape and esthetic situations will be done in the field. Prerequisite: Instructor approval Lab Hrs: 32 Lab Hrs: 0 Cln Hrs: 0 Oth Hrs: 0 Fees: 0.00
OST1100C KEYBOARDING & DOCUMENT PROCESSING I
This course offers an introduction to the keyboard with development of the basic techniques, skill development, and simple correspondence and other business keyboarding and document processing. A minimum completion rate of 25 words per minute with a 5-error cutoff on 5-minute timed writing is required. 
Lec Hrs: 0 Lab Hrs:16 Clin Hrs:0 Oth Hrs:0 Fees:12.00

OST1104C BASIC KEYBOARDING
This course offers an introduction to the keyboard with development of fundamental techniques. Minimum completion rate of 25 words per minute with a 5-error cutoff on 5-minute timed writings using touch technique is required. 
Lec Hrs:0 Lab Hrs:12 Clin Hrs:0 Oth Hrs:0 Fees:7.00

OST1101C KEYBOARDING & DOCUMENT PROCESSING II
This keyboarding course includes skill development which includes speed building, and accuracy improvement with an emphasis on refining and creating business correspondence, forms, reports, and tables. Laboratory hours are required in addition to the scheduled course hours. A minimum completion speed of 45 words per minute with 4-error cutoff on 5-minute timed writings are required. 
Prerequisite: OST1100C
Lec Hrs:16 Lab Hrs:32 Clin Hrs:0 Oth Hrs:0 Fees:24.00

OST2527C MEDICAL TERMINOLOGY FOR THE ADMINISTRATIVE
This course is designed to provide the student with an extensive study of medical terminology used in the various areas of the healthcare industry. Emphasis is placed on the building of medical terms from word parts. 
Lec Hrs:12 Lab Hrs:36 Clin Hrs:0 Oth Hrs:0 Fees:28.00

OST1330 BUSINESS ENGLISH
This course provides a refresher course in punctuation and capitalization. 
Lec Hrs:16 Lab Hrs:36 Clin Hrs:0 Oth Hrs:0 Fees:0.00

OST1555 RECORDS MANAGEMENT
Students will act as records managers in a simulated office utilizing computerized and paper management of records from planning, creation, filing, and retrieving to disposals according to ARMA principles. The student will learn and work with the basic legal requirements (such as Privacy Act and Freedom of Information Act) for the release and billing and coding positions in the medical field. In-depth study of the various areas of medical billing/coding, workers’ compensation, reimbursement, and appeal are presented. 
Prerequisite: OST1250C
Lec Hrs:12 Lab Hrs:36 Clin Hrs:0 Oth Hrs:0 Fees:31.00

OST1795 TELECOMMUNICATIONS
A hands-on course utilizing the Internet. Course topics include telecommunications terminology, the use of the world wide web, bulletin boards, attachments, address book works, search engines, history lists, browser programs and customizing the browser, e-mail etiquette, legal issues, and organizing and archiving e-mail are also investigated. 
Lec Hrs:0 Lab Hrs:16 Clin Hrs:0 Oth Hrs:0 Fees:0.00

OST181C DESKTOP PUBLISHING
This course introduces students to desktop publishing. The application of desktop publishing techniques, students will use desktop publishing software. Effective typeface and use of graphics and color in a publication a design and function are also covered. 
Lec Hrs:0 Lab Hrs:16 Clin Hrs:0 Oth Hrs:0 Fees:0.00

OST185I WINDOWS / GRAPHICAL ENVIRONMENT
This course provides an introduction to the Windows Operating System. Students will learn the basic Windows commands including: My Computer, Explorer, Control Panel, Print Manager, File Manager, Paint, customizing the desktop, multitasking, and optimizing Windows. 
Lec Hrs:0 Lab Hrs:16 Clin Hrs:0 Oth Hrs:0 Fees:0.00

OST2053 SUCCESSFUL JOB SEARCH
This course presents a hands-on, interactive study of interview and employability skills and focuses on the keys to career success. 
Lec Hrs:16 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

OST2355 COMMUNICATIONS IN THE WORKFORCE
This course is designed to help students communicate more effectively. Students will practice analyzing, planning, managing, and executing both written and oral presentations. Special emphasis will be placed on all types of business documents to ensure appropriate content and structure. 
Lec Hrs:48 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

OST2471 LEGAL OFFICE TECHNIQUES I
This course provides an introduction to legal terminology, the typing of legal documents and pleadings, and office procedures for law firm employees. 
Lec Hrs:48 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

OST2472 LEGAL OFFICE TECHNIQUES II
A Further study of legal terminology with emphasis on prepared documents and lawyers papers. 
Prerequisite: OST2471
Lec Hrs:48 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

OST2455C MEDICAL BILLING AND CODING I
This course provides advanced skills needed to work in a) the release and billing and coding positions in the medical field. In-depth study of the various areas of medical billing/coding, workers’ compensation, reimbursement, and appeal are presented. 
Prerequisite: OST1250C
Lec Hrs:12 Lab Hrs:36 Clin Hrs:0 Oth Hrs:0 Fees:0.00

OST2456C MEDICAL BILLING AND CODING II
This course provides extended knowledge and skills needed to work in a variety of medical billing and coding positions in the medical field. Topics include medical coding, medical claims, medical billing, accounts receivable, and medical reimbursement. 
Prerequisite: OST2455C
OST2464C MEDICAL OFFICE COMPUTER APPLICATIONS
This course prepares a medical office assistant to work in a health care practice utilizing computerized medical office management software. It provides training for input of new patient entry, posting procedures and payments, insurance billing, appointment scheduling, file maintenance with support files, and generating the daily, end-of-month, and end-of-period reports which are performed in a medical office. 
Lec Hrs:48 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:48.00

OST2501 OFFICE MANAGEMENT
This course is a study of the skills needed by the office professional in the workplace. It includes technology, the global economy, increased diversity, teamwork, and the changing skills and nature of work demanded in the workplace. The efficient handling of office matters, such as scheduling appointments, customer/Client relations, managing office operations, processing mail and correspondence, communication, e-mail etiquette and effectiveness, coordinating meetings/travel, planning and managing an event budget, and career planning and advancement are covered. 
Lec Hrs:48 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

OST2601 TRANSCRIPTION MACHINES
This course emphasizes skill development for accurate transcription of recorded dictation to office standard proficiency levels. Special materials related to each student’s major subject areas of legal and medical are provided. 
Lec Hrs:0 Lab Hrs:48 Clin Hrs:0 Oth Hrs:0 Fees:0.00

OST2621L LEGAL OFFICE TRANSCRIPTION
This course will study legal terminology, operate a transcribing machine efficiently, and proofread accurately. The student will apply the rules of spelling, grammar and punctuation to produce legal documents directly from transcription tapes. 
Lec Hrs:0 Lab Hrs:48 Clin Hrs:0 Oth Hrs:0 Fees:0.00

OST2746C ADVANCED WORD
This course will provide specialized training on advanced word processing concepts and techniques. The major emphasis of this course will be the formatting of characters, paragraphs and documents, managing text flow, graphics, advanced table features, reference tools, mail merge and macros, and customizing Word. The skills developed by students completing this course will help prepare them for the Microsoft Certified Application Specialist (MCAS) exam. 
Prerequisite: Keyboarding speed of 40 words a minute. 
Lec Hrs:16 Lab Hrs:32 Clin Hrs:0 Oth Hrs:0 Fees:19.00

OST2749 CO-OP WORK EXPERIENCE
A course designed to provide training in a student’s area of study through work experience. Students are graded on the basis of learning objectives and employer evaluations. 
Lec Hrs:0 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:144.00

PAD2002 INTRODUCTION TO PUBLIC ADMINISTRATION
This introductory course examines the governmental context of public administration including political values, bureaucratic politics, leadership and intergovernmental relations; organizational theory including decision making and organizational structure; and the administrative process including public personnel administration, budgeting, policy making and governmental regulation. The objective of this course is to provide the student with an overview of public administration with an emphasis on the political context. 
Lec Hrs:48 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

PCB3063 GENETICS
Fundamental properties of inheritance in eukaryotic organisms emphasizing examples in man. Basic concepts are developed for the nature, organization, transmission, expression, recombination, and function of genetic materials, and principles are derived for genetically characterizing populations. Pcb-063 + pcb-0631 + pcb-062. 
Prerequisite: BSC2010 BSC2010L BSC2011
Lec Hrs:48 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

PCB3063L GENETICS LAB
Fundamental properties of inheritance in eukaryotic organisms emphasizing examples in man. Basic concepts are developed for the nature, organization, transmission, expression, recombination, and function of genetic materials, and principles are derived for genetically characterizing populations. 
Prerequisite: PCB3063
Lec Hrs:0 Lab Hrs:52 Clin Hrs:0 Oth Hrs:0 Fees:0.00

PEL104C RECREATION ACTIVITIES
An overview of outdoor and indoor games and activities for various age groups in a recreational setting. 
Lec Hrs:16 Lab Hrs:52 Clin Hrs:0 Oth Hrs:0 Fees:0.00
PEMI116 FUNCTIONAL WELLNESS
Functional Wellness emphasizes the importance of knowledge, attitudes, and practices relating to personal wellness. This course is designed to expose students to a broad range of issues and information relating to the various aspects of personal wellness including physical, emotional, intellectual, spiritual and environmental wellness. 

BEGINNING BASIC SAILING
The basic course includes certain fundamentals and techniques of handling a Sailing Board that are necessary for safe and enjoyable use in this activity.

PEMI117 AQUATIC WELLNESS
Aquatic Wellness emphasizes the importance of knowledge, attitudes, and practices relating to personal wellness. It is a course designed to expose students to a broad range of issues and

PET522 CARE/PREVENTION/ATHLETIC INJURIES
Develops competence, knowledge and skill in the prevention and care of athletic injuries.

PEGY1801C PHOTOSHOP DESIGN
This is a graphic design technique in which students will develop skills in digital imaging. Students will learn through the use of the computer how to create, edit, and manipulate digital images from scanned photographs and artwork. Students will utilize various designing techniques to modify, enhance, and reshape images. Students will also learn special effects, adjust color balance, manage files, and prepare their work for print output and web/electronic presentation. 

PHI100 INTRODUCTION TO PHILOSOPHY
This course is an introduction to the nature of philosophy, major intellectual movements in the history of philosophy, and specific problems in philosophy. The relationship between ethics, society, religion and culture will also be examined.

PHI260 INTRODUCTION TO ETHICS
This course is an introduction to the nature of ethics, ethical thinking, major intellectual movements in the history of ethics, and specific problems in ethics. A study of the basic concepts and principles of morals, values, and judgments that govern human actions, as well as various ethical theories, will be conducted. The relationship between ethics, society, religion, and culture will also be examined.

PHI290 SPECIAL TOPICS: PHILOSOPHY
Course centers around topics of current interest or of special interest to students or instructors. Topics covered vary from semester to semester. Topics will be identified by the PHD290 course title published in the course schedules for each particular course that the course is offered. Special Topics credit hours are not automatically transferable. Transfer credit is the prerogative of the receiving institution.
PHI1010 PHYSICAL PRINCIPLES FOR THE PT ASSISTANT
Course introduces the student to the basic physical principles of physics and how they apply to common specific utilized therapeutic procedures in the field of physical therapy. Topics include but are not limited to body mechanics, anatomy, the physiological effects of heat, cold, sound and electricity to facilitate healing.
Prerequisite: PHI1150 Laboratory sessions for Introduction to Physical Therapy (PHT1200) are designed to allow the students an opportunity to familiarize themselves with the basic fundamentals of patient care. Emphasis is on body mechanics, analysis, positioning procedures, transfers, gait training, and basic patient care as provider. Skills in various medical conditions with emphasis in these areas are completed. Data collection relative to the course content will be practiced. Palpation of surface anatomy and development of various functional impairments with an emphasis on the pathophysiology of disease. Descriptions of how diseases are classified and the natural course/prognosis of these diseases are presented. Implications of disease processes, etiology, signs and symptoms, diagnostic testing, contraindications, precautions and treatment are discussed for each pathology presented in the course.
Lab Hours: 0  Class Hours: 0  Other Hours: 0  Fees: 0.00
PHI1000 INTRODUCTION TO PHYSICAL THERAPY LAB
Lecture Hours: 0  Lab Hours: 48  Class Hours: 0  Other Hours: 0  Fees: 0.00
PHI1020 THERAPEUTIC COMMUNICATION FOR THE PT ASSISTANT
An overview of effective communication skills and concepts regarding successful therapeutic interactions. Discussion of communication and general non-verbal communication requirements, effective listening concepts, and conflict management to determine how to manage clinical situations as they arise. Cultural diversity and self-reflection are discussed. Students are responsible for developing an in-service presentation as a means of enhancing effectiveness of communication.
Prerequisite: PHI1010 Laboratory sessions for Therapeutic Communication for the PT Assistant (PHT1020) are designed to introduce the student to general pathological conditions commonly seen in physical therapy. Topics include but are not limited to: the effects of aging upon disease and in general are discussed for each pathology presented in the course.
Lab Hours: 64  Class Hours: 0  Other Hours: 0  Fees: 0.00
PHI1050 ANATOMY FOR THE PT ASSISTANT
Course introduces the student to the structure and function of the skeletal and muscular systems. Actions, origins, insertions and innervations of muscles are discussed. Surface anatomy is presented with an introduction to basic palpation skills.
Prerequisite: PHI1010 Laboratory sessions for Applied Kinesiology (PHT2120) are designed to provide the student with the skills of analyzing normal and pathological gait, along with normal and abnormal movements of the head, spine, pelvis, UE and LE. Performance of special tests will be practiced. Palpation of surface anatomy and review of anatomical/bony landmarks is discussed. Through completion of lab activities and case studies, the student correlates patient problems to various pathologies with their deficits in function as well as activities and gait. Therapeutic interventional approaches which include progression will be developed to address functional deficits. Orthotic interventions for the spine and extremities are discussed with an emphasis on correcting pathological biomechanics.
Prerequisite: PHI1010 PHT2224 Corequisite: PHI1020 Laboratory sessions for Applied Kinesiology (PHT2120) are designed to provide the student with the skills of analyzing normal and pathological gait, along with normal and abnormal movements of the head, spine, pelvis, UE and LE. Performance of special tests will be practiced. Palpation of surface anatomy and review of anatomical/bony landmarks is discussed. Through completion of lab activities and case studies, the student correlates patient problems to various pathologies with their deficits in function as well as activities and gait. Therapeutic interventional approaches which include progression will be developed to address functional deficits. Orthotic interventions for the spine and extremities are discussed with an emphasis on correcting pathological biomechanics.
Lab Hours: 48  Class Hours: 0  Other Hours: 0  Fees: 0.00
PHI2100 APPLIED KINESIOLOGY (3)
Lecture Hours: 64  Lab Hours: 0  Clinical Hours: 0  Other Hours: 0  Fees: 0.00
PHI2105 PHYSICAL PRINCIPLES FOR THE PT ASSISTANT
Course introduces the student to general pathological conditions commonly seen in the field of physical therapy. Topics include but are not limited to: the effects of aging upon disease and in general are discussed for each pathology presented in the course.
Lab Hours: 0  Class Hours: 0  Other Hours: 0  Fees: 0.00
PHI2106 LABORATORY SESSIONS FOR A P P L I E D  K I N E S I O L O G Y
Lecture Hours: 0  Lab Hours: 32  Clinical Hours: 0  Other Hours: 0  Fees: 0.00
PHI2107 PHYSICAL THERAPY (PHT1200)
Course introduces student to general pathological conditions commonly seen in the field of physical therapy. The effects of aging upon disease and in general are considered.
Lecture Hours: 0  Lab Hours: 48  Class Hours: 0  Other Hours: 0  Fees: 0.00
PHI2108 SURVEY OF NEUROLOGICAL DEFICITS (2)
Course introduces student to general pathological conditions commonly seen in the field of physical therapy. The effects of aging upon disease and in general are considered.
Lecture Hours: 0  Lab Hours: 32  Class Hours: 0  Other Hours: 0  Fees: 0.00
PHI2109 PHYSICAL PRINCIPLES FOR THE PT ASSISTANT
Course introduces the student to the structure and function of the skeletal and muscular systems. Actions, origins, insertions and innervations of muscles are discussed. Surface anatomy is presented with an introduction to basic palpation skills.
Prerequisite: PHI1010 Laboratory sessions for Therapeutic Communication for the PT Assistant (PHT1020) are designed to introduce the student to general pathological conditions commonly seen in physical therapy. Topics include but are not limited to: the effects of aging upon disease and in general are discussed for each pathology presented in the course.
Lab Hours: 64  Class Hours: 0  Other Hours: 0  Fees: 0.00
PHI2110 DISABILITIES AND THERAPEUTIC PROCEDURES I LAB
Laboratory sessions for Anatomy for PTA (PHT1150) are designed to provide the student with an opportunity to identify with the various anatomical complexes. Basic palpation skills are developed. Skills in massage are developed. Practical application of each intervention is emphasized with patient simulation. Anatomical structures enhance the ability to understand a plan of care for a patient. Professional behaviors, at the intermediate level, are assessed. Data collection relative to the course content as well as patient and caregiver education are emphasized. Skill checks as well as competency evaluations are completed. Professional behaviors, at the novice level, are assessed.
Prerequisite: BSC2086 BSC2086L Pre or Corequisite: BCSC2086 BSC2086L Lecture Hours: 32  Lab Hours: 32  Class Hours: 0  Other Hours: 0  Fees: 0.00
PHI2111 DISABILITIES AND THERAPEUTIC PROCEDURES I
Course introduces the student to the theory and practical application of physical therapy modalities. The physiological effects of heat and the indications/contraindications of patient care interventions such as heat, cold, radiant therapy, electrotherapy, etc. will be presented. The contraindication and management are presented. Principles of effective documentation and discharge planning are discussed.
Prerequisite: BSC2086 BSC2086L, PHI1010 Course Corequisite: PHI1010 PHT1210 Lecture Hours: 32  Lab Hours: 32  Class Hours: 0  Other Hours: 0  Fees: 0.00
PHI2112 DISABILITIES AND THERAPEUTIC PROCEDURES II LAB
Laboratory sessions for Therapeutic Communication for the PT Assistant (PHT1020) are designed to develop student skills in the actual performance of the patient care procedures presented. Skills in massage are developed. Practical application of each intervention is emphasized with patient simulation. Anatomical structures enhance the ability to understand a plan of care for a patient. Professional behaviors, at the intermediate level, are assessed. Data collection relative to the course content as well as patient and caregiver education are emphasized. Skill checks as well as competency evaluations are completed. Students are expected to demonstrate competency in carrying out an appropriate therapeutic intervention in the case of lack of treatment, including effective documentation.
Prerequisite: PHI1010 PHT2224 Lecture Hours: 0  Lab Hours: 48  Class Hours: 0  Other Hours: 0  Fees: 0.00
PHI2113 DISABILITIES AND THERAPEUTIC PROCEDURES II
Course introduces student to general pathological conditions commonly seen in the field of physical therapy. Topics include but are not limited to: the effects of aging upon disease and in general are considered.
Lecture Hours: 0  Lab Hours: 48  Class Hours: 0  Other Hours: 0  Fees: 0.00
PHI2114 CLINICAL PRACTICE I
Course introduces student assignment to a local clinical facility. Includes scheduled class meetings to discuss clinical principles, objectives, the self-appraisal process, and overall requirements for this novice-level practice experience. Discussions include professionalism, attitudes, patient rapport, sexual harassment, etc. A journal report of clinical experiences and an article review are required. Weekly online discussion forums facilitate critical thinking, peer review, and managing clinical situations at the novice-level. Students attend a personal conference with the academic coordinator of clinical education to discuss progress and to identify areas of strength/weakness with appropriate target dates and methods of amelioration, if needed. Students receive, complete, and return an article to the coordinator.
Lecture Hours: 0  Lab Hours: 64  Class Hours: 120  Other Hours: 0  Fees: 16.53
PHT2244 - DISABILITIES & THERAPEUTIC PROCEDURES II

Course introduces concepts of therapeutic exercise with regard to patients with disabilities and the theory of and application of specific exercise regimes as presented. Prerequisites: BMD1000, BMD2000. A basic introduction to goniometry and manual muscle testing procedures is presented as it pertains to the development of appropriate exercise interventions.

Prerequisite: PHT1010 PHT1210 Corequisite: PHT1810L PHT2244L.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHY2048 - GENERAL PHYSICS WITH CALCULUS I

A survey of basic topics in the physical and electromagnetic waves, including the study of interference and stationary waves. Placement by Pre/corequisite: PHY2053L.

Prerequisite: MAT1033.

Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHY2053 - GENERAL PHYSICS I

The first course in a two semester sequence outlining mechanics, properties of matter, heat and sound. Prerequisite: MAT1033.

Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHY2053L - GENERAL PHYSICS I LAB

A laboratory course which allows students to able to collect and analyze data in a variety of experiments covering topics covered in its companion course PHY2053. Students will create experiment reports using analysis in algebra.

Pre or Corequisite: PHY2053.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHY2054 - GENERAL PHYSICS II

The second course in a two semester sequence, PHY2053 and PHY2054. This sequence includes laboratory work.

Pre or Corequisite: PHY2053L.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHY2054L - GENERAL PHYSICS II LAB

A laboratory course which allows students to able to collect and analyze data in a variety of experiments covering topics covered in its companion course PHY2054. Students will create experiment reports using analysis in algebra.

Pre or Corequisite: PHY2053L.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHYS1010 - APPLIED PHYSICS LAB

PHYS1010, is a laboratory which allows students to collect and analyze data in a variety of experiments covering topics covered in its companion course PHYS1010. Students will create experiment reports using analysis in algebra.

Pre or Corequisite: PHYS2054.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHYS2048 - GENERAL PHYSICS WITH CALCULUS II

PHYS2048 is part of a comprehensive course in physics outlining the properties of motion and sound using analysis calculus.

Pre or Corequisite: MAC2233 PHYS2049.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHYS2049 - GENERAL PHYSICS WITH CALCULUS II LAB

PHYS2049 is part of a comprehensive course in physics outlining the properties of motion and optics using analysis calculus.

Pre or Corequisite: MAC2233 PHYS2049L.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHYS2049L - GENERAL PHYSICS WITH CALCULUS II LAB

A laboratory course which allows students to collect and analyze data in a variety of experiments covering topics covered in its companion course PHYS2049. Students will create experiment reports using analysis in calculus.

Pre or Corequisite: PHYS2049.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHYS2053 - DISABILITIES & THERAPEUTIC PROCEDURES II LAB

A laboratory course which allows students to collect and analyze data in a variety of experiments covering topics covered in its companion course PHYS2053. Students will create experiment reports using analysis in algebra.

Pre or Corequisite: PHYS2053L.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHYS2054 - DISABILITIES & THERAPEUTIC PROCEDURES II LAB

A laboratory course which allows students to collect and analyze data in a variety of experiments covering topics covered in its companion course PHYS2054. Students will create experiment reports using analysis in algebra.

Pre or Corequisite: PHYS2054L.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

General Physics I

A survey of fundamental concepts in the physical properties of sound and music, including an in-depth study of wave motion, pitch, timbre intensity, and the nature of sound. Placement by Pre/corequisite: MUT1111 or consent of instructor.

Pre or Corequisite: PHYS2044.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHYS2044 - ACOUSTICS

A survey of fundamental concepts in the physical properties of sound and music, including an in-depth study of wave motion, pitch, timbre intensity, and the nature of sound. Placement by Pre/corequisite: MUT1111 or consent of instructor.

Pre or Corequisite: PHYS2044.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHYS1001 - APPLIED PHYSICS

PHYS1001 is an introductory course in general physics outlining topics in mechanics, matter, energy, electricity, and magnetism. The course is intended for students in technical or vocational fields. The student will learn to analyze and solve problems using analysis in algebra and written composition projects.

Pre or Corequisite: MAT1033.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHYS2004 - GENERAL PHYSICS WITH CALCULUS I LAB

PHYS2004 is part of a comprehensive course in physics outlining topics covered in its companion course PHYS2004L. Students will create experiment reports using analysis in calculus.

Pre or Corequisite: MAC2233 PHYS2004.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHYS2004L - GENERAL PHYSICS WITH CALCULUS I LAB

PHYS2004 is part of a comprehensive course in physics outlining topics covered in its companion course PHYS2004. Students will create experiment reports using analysis in calculus.

Pre or Corequisite: PHYS2004.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHYS2004 - GENERAL PHYSICS WITH CALCULUS I

PHYS2004 is part of a comprehensive course in physics outlining topics covered in its companion course PHYS2004L. Students will create experiment reports using analysis in calculus.

Pre or Corequisite: MAC2233 PHYS2004.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.

PHYS2004L - GENERAL PHYSICS WITH CALCULUS I LAB

PHYS2004 is part of a comprehensive course in physics outlining topics covered in its companion course PHYS2004. Students will create experiment reports using analysis in calculus.

Pre or Corequisite: PHYS2004.
Lec Hrs= Lab Hrs= Clin Hrs= Oth Hrs= Fees=.
PLA1610  INTRODUCTION TO LEGAL ASSISTING
This course provides an overview of the training and duties of the legal assistant/paralegal. Also included is a discussion of paralegal terminology, research techniques, and pertinent litigation documents. Program Manager’s approval or Pre or Corequisite: ENC1101 LeC Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

PLA1104  LAW LIBRARY/RESEARCH
This course provides information on how to research using both traditional and computer-assisted methodologies. An in-depth examination of the law library and legal research techniques are emphasized. Program Manager’s approval or Pre or Corequisite: ENC1101 PLA1003 PLA1104 LeC Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

PLA2101  CIVIL LITIGATION
This course covers the basic concepts of Civil Litigation. Discussions involve the liability of the individual in relation to the specific acts committed. Program Manager’s approval or Pre or Corequisite: ENC1101 PLA1003 PLA1104 LeC Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=48.00

PLA1303  CIVIL LITIGATION
This course provides students with a survey of the criminal justice system. Substantive and procedural aspects of criminal law are studied. Course content includes the nature of different crimes, the potential for formal and informal legal processes of the individual; also covered are pre-trial procedures, discovery, plea-bargaining process, and the problems involved in the legal system. Program Manager’s approval or Pre or Corequisite: ENC1101 PLA1003 PLA1104 LeC Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

PLA435  CORPORATIONS
This course provides an in-depth study of Corporate Law. Topics covered include types of corporations, articles of incorporation, bylaws, shareholders: agreements, voting rights, management structure, directors: powers, and voluntary/dissolution. Non-profit corporations and professional associations are also discussed. Program Manager’s approval or Pre or Corequisite: ENC1101 PLA1003 PLA1104 LeC Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

PLA1600  PROBATE PRACTICE
This course prepares legal assistants to work effectively under the supervision of a lawyer in the probate and administration of an estate. The Florida Probate Code, trusts and taxes are studied. Preparation of pleadings is included. Program Manager’s approval or Pre or Corequisite: ENC1101 PLA1003 PLA1104 LeC Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

PLA6100  PROCEDURES FOR REAL ESTATE
This course surveys the basic concepts of Real Property Law. The students study how to handle a real estate transaction from the drafting of a contract to its closing. The nature of property, the consequences of its possession, and the mechanics of the title examination are also studied. Also included is a discussion of paralegal terminology, research techniques, and pertinent litigation documents. Program Manager’s approval or Pre or Corequisite: ENC1101 LeC Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

PLA8000  DOMESTIC RELATIONS
This course surveys domestic relations and the legal relationships associated with marriage, dissolution of marriage, separation agreements, custody, legitimacy, adoption, name changes, support, court research, child support, and property. Program Manager’s approval or Pre or Corequisite: ENC1101 PLA1003 PLA1104 LeC Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

PLA1841  IMMIGRATION LAW
This course provides an in-depth study of Immigration Law. Topics covered include a historical overview of immigration law, types of immigration law practices, agencies involved with immigration law, the drafting of all documents and (formalized). Program Manager’s approval or Pre or Corequisite: ENC1101 LeC Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

PLA2114  LEGAL WRITING AND DRAFTING
This course concentrates on developing skills in the grammar, the format and legal documents. Emphasis is placed on drafting interoffice memoranda. Other documents studied include legal correspondence, briefs, persuasive documents, and contracts. Program Manager’s approval or Pre or Corequisite: ENC1101 LeC Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

PLA466  DEBTS/CREDITOR RELATIONS
This course provides an in-depth study of Debtor/Creditor relations. Topics covered include collection of debts through court processes, post-judgment collection practices, bankruptcy law, and bankruptcy/collection (debtor bankruptcy, collection of debts based upon negotiable instruments, federal consumer collection acts, and foreclosure actions. Program Manager’s approval or Pre or Corequisite: ENC1101 PLA1003 PLA1104 LeC Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

PLA275C  PARALEGAL OFFICE SYSTEMS
This course covers a wide range of knowledge, skills, and procedure in order to enable the paralegal to function effectively in a legal office. Technology, management skills, and general Program Manager’s approval or Pre or Corequisite: ENC1101 PLA1003 PLA1104 LeC Hrs=24 Lab Hrs=24 Cls Hrs=0 Oth Hrs=0 Fees=20.00

PL293B  SELECTED TOPICS IN PARALEGAL STUDIES
This course will explore a selection of topics and trends of special interest in the legal field. Program Manager’s approval or Pre or Corequisite: ENC1101 PLA1003 PLA1104 LeC Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

PL2940  LEGAL ASSISTING PRACTICUM
This course is designed to apply the knowledge and skills developed in the required courses through practical work experience. The student will perform legal work for 40 hours under the supervision of a Program Manager’s approval. Program Manager’s approval or Pre or Corequisite: ENC1101 PLA1003 PLA1104 LeC Hrs=48 Lab Hrs=0 Cls Hrs=0 Fees=144.00

POR1120 BEGINNING PORTUGUESE I
Fundamentals of speaking, understanding, reading and writing. Classroom practice and exercises supplemented by language laboratory sessions designed to develop confidence and proficiency. Students expected to continue with POR1121. Program Manager’s approval or Pre or Corequisite: ENC1101 LeC Hrs=48 Lab Hrs=0 Oth Hrs=0 Fees=15.00

POR1121 BEGINNING PORTUGUESE II
Continuation of POR1120. Further development of the basic skills. Selected readings. Program Manager’s approval or Pre or Corequisite: ENC1101 LeC Hrs=48 Lab Hrs=0 Oth Hrs=0 Fees=15.00

POS041  NATIONAL GOVERNMENT
This course provides a systematic introduction to the political system of the United States of America through the study of: principles, policy outcomes, and responsible institutions involved in the formation and operation of American Government. The course will be organized along four broad fronts: (1) the political founding: (2) political parties and elections: (3) political institutions (e.g., president, Congress, etc.); and (4) policy (e.g., domestic and foreign). Students must earn a minimum grade of C to meet the requirements of the Gordon Rule. Program Manager’s approval or Pre or Corequisite: ENC1101 LeC Hrs=48 Lab Hrs=0 Oth Hrs=0 Fees=0.00

PS2112 STATE & LOCAL GOV'T
This course introduces the student to the principles and institutions of American state and local government, with some emphasis on Florida law. It delves into the structure, functions, and decision-making processes of the 50 states and the more than 85,000 localities (governments) within those states. Students must earn a minimum grade of C to meet the requirements of the Gordon Rule. Program Manager’s approval or Pre or Corequisite: ENC1101 LeC Hrs=48 Lab Hrs=0 Oth Hrs=0 Fees=0.00

PS2012L  GENERAL PSYCHOLOGY LAB
This laboratory course parallels and supplements the instruction given in General Psychology (PSY2012). Illustrated in this course are a variety of experimental and behavioral activities that demonstrate the scientific basis of psychology. Program Manager’s approval or Pre or Corequisite: ENC1101 LeC Hrs=52 Lab Hrs=0 Oth Hrs=0 Fees=0.00

PS2045 ADVANCED GENERAL PSYCHOLOGY
This rationale, methods, and application of the scientific analysis of behavior. Emphasis is placed on the laboratory behavior of behaviors are found and used in the modification of behavior. Program Manager’s approval or Pre or Corequisite: ENC1101 LeC Hrs=48 Lab Hrs=0 Cls Hrs=0 Fees=0.00

PS2012L  GENERAL PSYCHOLOGY LAB
This laboratory course parallels and supplements the instruction given in General Psychology (PSY2012). Illustrated in this course are a variety of experimental and behavioral activities that demonstrate the scientific basis of psychology. Program Manager’s approval or Pre or Corequisite: ENC1101 LeC Hrs=52 Lab Hrs=0 Oth Hrs=0 Fees=0.00

PS2045 ADVANCED GENERAL PSYCHOLOGY
This rationale, methods, and application of the scientific analysis of behavior. Emphasis is placed on the laboratory behavior of behaviors are found and used in the modification of behavior. Program Manager’s approval or Pre or Corequisite: ENC1101 LeC Hrs=48 Lab Hrs=0 Cls Hrs=0 Fees=0.00

PS2012L  GENERAL PSYCHOLOGY LAB
This laboratory course parallels and supplements the instruction given in General Psychology (PSY2012). Illustrated in this course are a variety of experimental and behavioral activities that demonstrate the scientific basis of psychology. Program Manager’s approval or Pre or Corequisite: ENC1101 LeC Hrs=52 Lab Hrs=0 Oth Hrs=0 Fees=0.00

PS2045 ADVANCED GENERAL PSYCHOLOGY
This rationale, methods, and application of the scientific analysis of behavior. Emphasis is placed on the laboratory behavior of behaviors are found and used in the modification of behavior. Program Manager’s approval or Pre or Corequisite: ENC1101 LeC Hrs=48 Lab Hrs=0 Cls Hrs=0 Fees=0.00
RAT1002 INTRODUCTION TO RADIATION THERAPY

A course designed to provide knowledge and hands-on experience with the application of radiation therapy to a detailed study of instrumentation, radiation therapy equipment, patient charting and radiation procedures during the early phases of patient contact. This course will also provide an introduction to radiation safety, treatment tolerance doses of critical structures, treatment planning, basic patient positioning, operation of the equipment and patient accessories.

RAT101C INTRODUCTION TO RADIATION THERAPY CLINICAL

A course designed to provide knowledge and instruction in the application of radiation therapy procedures. A detailed study of instrumentation, radiation therapy equipment, patient charting and radiation procedures during the early phases of patient contact. This course will also provide an introduction to radiation safety, treatment tolerance doses of critical structures, treatment planning, basic patient positioning, operation of the equipment and patient accessories.

RAT102 INTRODUCTION TO RADIATION THERAPY PHYSICS

An introductory study of radiation therapy physics to include mathematical principles & measurement.

RAT104 INTRODUCTION TO RADIATION THERAPY CLINICAL

Familiarization with the equipment utilized in the treatment of patients begins along with assisting the therapist in clinical environment, simulation area, patient care, nursing areas and the control room. Demonstrations of the historic and current applications of radiation treatment will be covered. The roles and responsibilities of the radiation therapist will be discussed. In addition, treatment prescription, techniques and delivery will be covered.

RAT204 INTRODUCTION TO RADIATION THERAPY PHYSICS

A study of the fundamentals of clinical radiation oncology stressing the following: radiobiology, radiobiology, histopathology, symptoms, diagnosis, staging, prognosis, treatment setup and guidelines, and the therapeutic aim of malignant conditions. Program admission required.

RAT205 INTRODUCTION TO RADIATION THERAPY II

A study of the fundamentals of clinical radiation oncology stressing the following: radiobiology, radiobiology, histopathology, symptoms, diagnosis, staging, prognosis, treatment setup and guidelines, and the therapeutic aim of malignant conditions. Program admission required.

RAT206 INTRODUCTION TO RADIATION THERAPY I

A study of the fundamentals of clinical radiation oncology stressing the following: radiobiology, radiobiology, histopathology, symptoms, diagnosis, staging, prognosis, treatment setup and guidelines, and the therapeutic aim of malignant conditions. Program admission required.

RAT207 INTRODUCTION TO RADIATION THERAPY II

A study of the fundamentals of clinical radiation oncology stressing the following: radiobiology, radiobiology, histopathology, symptoms, diagnosis, staging, prognosis, treatment setup and guidelines, and the therapeutic aim of malignant conditions. Program admission required.

RAT208 INTRODUCTION TO RADIATION THERAPY PHYSICS

A study of the fundamentals of clinical radiation oncology stressing the following: radiobiology, radiobiology, histopathology, symptoms, diagnosis, staging, prognosis, treatment setup and guidelines, and the therapeutic aim of malignant conditions. Program admission required.

RAT209 INTRODUCTION TO RADIATION THERAPY PHYSICS

A study of the fundamentals of clinical radiation oncology stressing the following: radiobiology, radiobiology, histopathology, symptoms, diagnosis, staging, prognosis, treatment setup and guidelines, and the therapeutic aim of malignant conditions. Program admission required.

RAT210 INTRODUCTION TO RADIATION THERAPY PHYSICS

A study of the fundamentals of clinical radiation oncology stressing the following: radiobiology, radiobiology, histopathology, symptoms, diagnosis, staging, prognosis, treatment setup and guidelines, and the therapeutic aim of malignant conditions. Program admission required.

RAT211 INTRODUCTION TO RADIATION THERAPY PHYSICS

A study of the fundamentals of clinical radiation oncology stressing the following: radiobiology, radiobiology, histopathology, symptoms, diagnosis, staging, prognosis, treatment setup and guidelines, and the therapeutic aim of malignant conditions. Program admission required.
and basic calculations required of an entry 
technical understanding of treatment planning 
terminal competency skills. The student will 
by the level of competency demonstrated by 
the most advanced clinical education as evidenced 
for state of Florida Salesperson - License Exams. 

Prerequisite: EDVF280 EDVS342 REED3352 
Pre or Corequisite: EEAX483 TLS481 
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 OtHrs=0 Fees:5.90 

REEL104 FLORIDA REAL ESTATE COMMISSION 1 
(4) 
The Real Estate Commission Course 1. It provides 
an introduction to the basic principles and 
theyaceous land value, the legal and 
real estate law affecting 

Prerequisite: EDVF280 EDVS342 REED3352 
Pre or Corequisite: EEAX483 TLS481 
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 OtHrs=0 Fees:5.90 

REL1210 OLD TESTAMENT HISTORY 
(3) 
Reading the English Bible in various 
and examining selected source material, with 
emphasis on its cultural importance today. 
Prerequisite: College-level reading skills. 
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 OtHrs=0 Fees:0.00 

REL1240 NEW TESTAMENT HISTORY 
(3) 
A study of the social, historical, cultural, and 
religions of the New Testament as well as 
of the Christian Faith during the First 
A.D. and into the Second Century A.D. 
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 OtHrs=0 Fees:0.00 

REL2000 INTRODUCTION TO THE STUDY OF 
RELIGION 
(3) 
An introduction to the study of religion as an 
academic discipline. The focus of this course 
is religion, not religions; an attempt is made 
to acquaint students with problems and 
issues ever present in the understanding of 
religious phenomena. Upon successful 
completion of this course, students should 
be able to recognize, describe, and appreciate 
the complex phenomena of religion. 
A student must earn a grade of «C» or higher to meet the 
requirements of the Gordon rule. 
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 OtHrs=0 Fees:0.00 

REL2350 WORLD RELIGIONS 
(3) 
This course is a descriptive examination of the 
world’s most important religious traditions. 
College-level reading skills are recommended. 
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 OtHrs=0 Fees:0.00 

REL2530 SPECIAL TOPICS: RELIGION 
(3) 
This course centers around topics of current 
interest or of special interest to students or 
instructors. Topics or focus may vary 
from semester to semester. 
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 OtHrs=0 Fees:0.00
This course reviews all of the equipment normally used for respiratory therapy with the exception of imaging media and the primary factors of radiographic technique, the properties and characteristics of imaging media and the primary factors of radiographic quality.

Prerequisite: RET1600 RTE1011 RTE1015 RTE1903 RET1904

Pre or Corequisite: RET1418 RT1514 RT1515 RT1613 RT1814 Lab Hrs:32 Lab Hrs:32 Clin Hrs:0 Clin Hrs:0 Fees:0.00

RET1418 IMAGING I (2) A study of the production and properties of X-radiation, primary exposure factors as they relate to diagnostic radiology, the properties and characteristics of imaging media and the primary factors of radiographic quality.

Prerequisite: RTE1000 RTE1111 RTE1511 RTE1903 RET1904

Pre or Corequisite: RTE1418 RTE1513 RTE1515 RTE1613 RTE1814 Lab Hrs:32 Lab Hrs:32 Clin Hrs:0 Clin Hrs:0 Fees:21.00

RET1418 IMAGING I LAB Practical applications of theory taught in RET1418. Students perform laboratory experiments to demonstrate concepts taught in lecture.

Prerequisite: RET1000 RTE1111 RTE1511 RTE1515 RTE1903 RET1904

Pre or Corequisite: RTE1418 RTE1513 RTE1515 RTE1613 RTE1814 Lab Hrs:32 Lab Hrs:32 Clin Hrs:0 Clin Hrs:0 Fees:21.00

RET1833L RESPIRATORY THERAPY CLINIC II This course provides an in-depth discussion of the anatomy and physiology of the cardiopulmonary system. Included is a review of the physiology of respiration, ventilation, pulmonary function, control, internal and external respiration and gas exchange.

Pre or Corequisite: CVT2120 RET1264 RET1264L RET1832L Lab Hrs:48 Lab Hrs:48 Clin Hrs:0 Clin Hrs:0 Fees:0.00

RET1834L RESPIRATORY THERAPY CLINIC III This is a culmination of activities in Clinic III. The student's responsibility will increase as his clinical skills become more sophisticated. By the end of this term the student will assume all of the responsibilities required of critical care therapists with patients requiring ventilatory, hemodynamic monitoring, and transport support. Special fee is charged.

Pre or Corequisite: RET2144 RET2854 Lab Hrs:32 Lab Hrs:32 Clin Hrs:0 Clin Hrs:0 Fees:27.00

RET2144 CARDIOPULMONARY DIAGNOSTICS AND TECHNIQUES This course is designed to prepare the student to become a competent member of the resuscitation team to assess cardiac function via EKG's and hemodynamic monitoring, and to prepare the student for advanced cardiac life support training.

Prerequisite: CVT2100 RET1485 RET1832L Pre or Corequisite: RET2144 Lab Hrs:32 Lab Hrs:32 Clin Hrs:0 Clin Hrs:0 Fees:0.00

RET2145 PEDIATRIC AND NEONATAL RESPIRATORY CARE This course emphasizes neonatal and pediatric diseases, their etiology and treatment. It encompasses the newest equipment and latest techniques used in monitoring and maintaining respiratory care for infants and pediatric patients.

Pre or Corequisite: RET1535L RET2148 Lab Hrs:24 Lab Hrs:24 Clin Hrs:0 Clin Hrs:0 Fees:0.00

RET2154 SELECTED TOPICS IN RESPIRATORY CARE This course will present information on recent changes in technology and therapeutic modalities used in Respiratory Care. The student will participate in literature review activities to enable them to remain knowledgeable of ongoing changes in the profession after they become Respiratory Care practitioners.

Prerequisite: RET1355L RET2144 RET2145L RET2148 Corequisite: RET1714 RET2285L Pre or Corequisite: RET2148 Lab Hrs:16 Lab Hrs:16 Clin Hrs:0 Clin Hrs:0 Fees:0.00

RET2155 INTRODUCTION TO RADIOLOGIC TECHNOLOGY The organization and operation of a radiology department; radiologic topics include: x-ray equipment operation, historical aspects of radiology, department organizational structure, safety; radiation protection, imaging media and receptors, image processing techniques, basic exposure factors, and accreditation and professional development.

Pre or Corequisite: RET1111 RTE1085 RET1903 RET1904 Lab Hrs:48 Lab Hrs:48 Clin Hrs:0 Clin Hrs:0 Fees:0.00
A study of radiographic procedures of the chest, abdomen, gastrointestinal tract, and urinary system. Students will study the radiographic positions/projections for each body part and its associated anatomy. Prerequisite: RTE2130 RTE2533L RTE2534L RTE2535L
Pre or Corequisite: RTE2285 RTE2457L RTE2534 RTE2535L
Le c H r s = 0    L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 0 . 0 0

RTE2130 PHARMACOLOGY & VENIPUNCTURE FOR RADIOGRAPHY LAB
A study of pharmacology & venipuncture related to the administration of drugs & contrast media for radiographic examinations. Topics include pharmacology principles, parenteral contrast media, drug administration, & venipuncture technique. Prerequisite: RTE2385 RTE2457 RTE2457L RTE2533L RTE2534
Pre or Corequisite: RTE2285 RTE2457L RTE2533L RTE2534 RTE2535L
Le c H r s = 1 6   L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 0 . 0 0

RTE2385 RADIATION BIOLOGY AND PROTECTION IMAGING I
A study of the biological effects associated with exposure to ionizing radiation and the accepted radiation protection principles and practices. Topics will include radiation sources, radiation/ matter, energy, mechanics, magnetism, matter, energy, mechanics, magnetism, material, matter, energy, mechanics, magnetism, material, matter, energy, mechanics, magnetism, material, and health physics. Prerequisite: RTE2385 RTE2457 RTE2457L RTE2533L RTE2534
Pre or Corequisite: RTE2285 RTE2457L RTE2533L RTE2534 RTE2535L
Le c H r s = 1 6   L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 0 . 0 0

RTE2457 IMAGING I LAB
Practical application of theory taught in RTE2457 class. Students practice experiments to demonstrate factors affecting radiographic quality. Prerequisite: RTE2385 RTE2457L RTE2533L RTE2534
Pre or Corequisite: RTE2285 RTE2457L RTE2533L RTE2534 RTE2535L
Le c H r s = 1 6   L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 2 5 . 0 0

RTE2533 RADIOPHYSICAL PROCEDURES I
A study of radiographic procedures to include computed tomography (CT), surgical radiography, arthrography, myelography, holography, myelography, sialography, sialography, angiography, radiographic, bone densitometry, angiography, & interventionalexaminations, magnetic resonance imaging (MRI), mammography, nuclear medicine, & radiation therapy. Students will study the radiographic positions/projections for each body part and its associated anatomy. Prerequisite: RTE2385 RTE2457L RTE2534
Pre or Corequisite: RTE2285 RTE2457L RTE2534 RTE2535L
Le c H r s = 0    L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 0 . 0 0

RTE2535 RADIOPHYSICAL PROCEDURES II
A study of radiographic procedures to include computed tomography (CT), surgical radiography, arthrography, myelography, photofluorography, mammography, bone densitometry, angiography & interventionalexaminations, magnetic resonance imaging (MRI), mammography, nuclear medicine, & radiation therapy. Students will study the radiographic positions/projections for each body part and its associated anatomy. Prerequisite: RTE2385 RTE2457L RTE2534
Pre or Corequisite: RTE2285 RTE2457L RTE2534 RTE2535L
Le c H r s = 0    L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 0 . 0 0

RTE2575 INTRODUCTION TO MAGNETIC RESONANCE IMAGING
A study of the clinical applications and principles of Magnetic Resonance Imaging. Basic: MR physics, instrumentation, safety, and important aspects of the MR exam are among the topics covered to introduce the student to the MR Imaging environment. Prerequisite: Graduation from a two year allied health program. Pre or Corequisite: RTE2575 RTE2457L RTE2534
Le c H r s = 0    L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 1 2 . 0 0

RTE2623 RADIOGRAPHIC EQUIPMENT & QUALITY ASSURANCE
A study of the clinical basis of operation of radiographic equipment. Equipment includes x-ray components, x-ray tubes, image tubes, intensifiers, TV monitors and video recorders, serial imaging, generators, image subtraction techniques, digital equipment, non-film imaging equipment, accessory equipment, x-ray production and interaction processes. Quality Assurance and CT equipment. Prerequisite: RTE2385 RTE2457L RTE2533L RTE2534
Pre or Corequisite: RTE2130 RTE2130L RTE2782 RTE2884
Le c H r s = 0    L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 0 . 0 0

RTE2782 RADIOGRAPHIC PATHOLOGY
An introduction to the study of human disease and the radiographic appearance of specific diseases. Topics will include: Pathogenesis, disease classification systems, and the study of specific diseases. Prerequisites: RTE2385 RTE2457L RTE2533L RTE2534
Pre or Corequisite: RTE2782 RTE2457L RTE2533L RTE2534
Le c H r s = 0    L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 0 . 0 0

RTE2834 CLINICAL EDUCATION IV
Provides the student with continuing clinical experience for practical application of concepts & skills taught in lecture & laboratory. Clinical rotations include the main department, portable x-ray equipment, accessory equipment, x-ray transportation & clerical functions, image administration of drugs & contrast media for radiographic examinations. Prerequisite: RTE2385 RTE2457L RTE2533L RTE2534
Pre or Corequisite: RTE2285 RTE2457L RTE2533L RTE2534 RTE2535L
Le c H r s = 0    L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 0 . 0 0

RTE2457 IMAGING II LAB
Practical application of theory taught in RTE2457 class. Students practice experiments to demonstrate factors affecting radiographic quality. Prerequisite: RTE2385 RTE2457L RTE2533L RTE2534
Pre or Corequisite: RTE2285 RTE2457L RTE2533L RTE2534 RTE2535L
Le c H r s = 0    L a b H r s = 0    C l n H r s = 0    O t h H r s = 0     F e e s = 2 5 . 0 0
RTHE2844 CLINICAL EDUCATION V
Provides the student with continuing clinical experience for practical application of concepts & skills taught in the program. Clinical rotations include the main department, portables, the emergency room, the lab, and other ancillary imaging areas. Students will perform, assist with, and observe NMR scans procedures, nuclear medicine scans, radiation therapy, and procedures previously learned. Pre or Corequisite: RTE2845, RTE2846, RTE2847, RTE2848, RTE2849
Lec Hrs=0 Lab Hrs=0 Clin Hrs=0 Ot Hrs=14 Fees=.00

RTHE2854 CLINICAL EDUCATION VI
Provides the student with terminal clinical experience for practical application of concepts & skills taught in the program. Clinical rotations include the main department, portables, the emergency room, the lab, and other ancillary imaging areas. Students will perform all radiographic exams previously learned to include the chest & bony thorax, abdomen, upper & lower extremities, spine, cranium, contrast media studies, & surgical procedures previously learned. Pre or Corequisite: RTE2850, RTE2851, RTE2852, RTE2853, RTE2854
Lec Hrs=0 Lab Hrs=0 Clin Hrs=0 Ot Hrs=14 Fees=.00

RTV2192 BROADCAST WRITING
Designed to give students an opportunity to learn the style of presentation for different types of media/ broadcast scripts. The course will emphasize practical broadcast writing skills, radio and television copy techniques and forms of commercial copy, as well as learning the special rules and styles of writing. The course will focus on the presentation of materials over the air. Instructor’s approval or
Pre or Corequisite: ENC1102
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Ot Hrs=0 Fees=.00

RTV221C TELEVISION PRODUCTION I
In this course the student will acquire understanding of the theory and practice of television program production. Students will study with emphasis on studio production. There is a requirement of two television programs with the instructor. Completion of RTV2200 recommended prior to taking this course.
Lec Hrs=48 Lab Hrs=32 Clin Hrs=0 Ot Hrs=0 Fees=.00

RTV2409 CO-OP WORK EXP
A course designed to provide training in a student field of study through work experience. Students are granted credit with documentation of learning acquired as reported by students and employer. Instructor: Co-op department approval. The course will assign specific course prefixes related to their academic major prior to registration. Students must contact the Co-operative Education Office to obtain registration approval.
Lec Hrs=0 Lab Hrs=0 Clin Hrs=0 Ot Hrs=14 Fees=.00

RUS1210 BEGINNING RUSSIAN I
Fundamentals: RUSS2200C, RUSS2201C, RUSS2202C, RUSS2203C, RUSS2204C
Prerequisite: RUSS1110
Lec Hrs=6 Lab Hrs=0 Clin Hrs=0 Ot Hrs=6 Fees=.50

RUS1211 BEGINNING RUSSIAN II
Continuation of RUS1210. Further development of the basic skills. Selected readings.
Pre or Corequisite: RUSS1110
Lec Hrs=6 Lab Hrs=0 Clin Hrs=0 Ot Hrs=6 Fees=.50

SCE3590 INTEGRATIVE TEACHING METHODS IN MIDDLE GRADES
This inquiry-based course involves active participation and reflection of the learning process. It will promote the growth and development of equitable middle school science constructs. The pre-service educator will apply knowledge previously acquired in individual content science courses and communicate them by designing an integrated and lab-based curriculum unit. Students will be required to spend 2 non-credit hours per week for a mandatory curriculum unit. Students will be required to spend 2 non-credit hours per week for a mandatory curriculum unit. Course completion will require planning and execution of those plans.
Pre or Corequisite: CHM1045, MAC1105, PHY1001, PHY1001L
Lec Hrs=12 Lab Hrs=0 Clin Hrs=0 Ot Hrs=15 Fees=.95

SCE4350 METHODS AND STRATEGIES OF TEACHING BIOLOGY
This course is designed to introduce teachers to topics and strategies that have been proven to be effective for teaching biology. This course will include topics in appropriate instructional techniques and selection of appropriate resources for diverse classroom activities. Students will learn principles of effective curriculum design and assessment and will apply these principles by designing and developing interactive biology projects for secondary school students including real world applications.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Ot Hrs=15 Fees=.95

SCE4945 INTERACTIVE PROJECTS THAT PROMOTE LEARNING IN
This inquiry-based course involves active participation and reflection of the learning process that will promote the growth and development of equitable middle and high school science constructs. The pre-service educator will apply knowledge previously acquired in individual content science courses and communicate them by designing an integrated and lab-based curriculum unit. Course completion will require planning and execution of those plans.
Pre or Corequisite: CHM2032, CMH1045L, PCB1806, PC1845, SCE4530
Lec Hrs=12 Lab Hrs=0 Clin Hrs=0 Ot Hrs=6 Fees=.95

SLS1001 STRATEGIES FOR SUCCESS
This course is tailored for First Time in College students and provides opportunities to learn about Broward College higher education; acquire and practice learning strategies; explore personal learning styles; identify career options; develop life-long skills for responsible citizenship.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Ot Hrs=0 Fees=.00

SLS1053 FOUNDATION COURSE
This course is tailored for First Time in College students and provides opportunities to learn about professional behaviors that lead to academic and career success in the workplace such as developing self-discipline, leading self-managed teams, and creating effective teams composed of individuals with different working styles.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Ot Hrs=0 Fees=.00

SLS1261 LEADERSHIP
The purpose of this course is to provide effective leadership skills for student leaders to help them develop an ethical, value grounded leadership style for future educational, organizational and community leadership roles.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Ot Hrs=0 Fees=.00

SLS1272 TEAM SELF-MANAGEMENT AND CAREER EXPLORATION
This course provides an introduction to Team Self-Management (TSM) theory and practice of team self-management and its application in workplace settings. It will develop one’s purpose and intentions and one’s behaviors, and develops the self-management skills to successfully attain one’s goals. The course provides an introduction to career exploration and planning.
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Ot Hrs=0 Fees=.00

SLS1501 CAREER PLANNING WORKSHOP
This course is only for the career decision making process. The student will learn the skills necessary for career decision making as it applies to choosing a major and future career (including values, interests, abilities, goals, strengths, etc.).
Lec Hrs=48 Lab Hrs=0 Clin Hrs=0 Ot Hrs=0 Fees=.00

SLS1601 COLLEGE SUCCESS SKILLS
This course is designed to help fresh men students. It serves as an introduction to Broward College and assists students in coping with challenges of college life, clarifying their goals, learning strategies and skills that will help them succeed in college and life.
Lec Hrs=16 Lab Hrs=0 Clin Hrs=0 Ot Hrs=0 Fees=.00

384 College Catalog Broward College www.broward.edu College Catalog 385
SON1201 SONOGRAPHIC OB GYN I
An introduction to the cross-sectional anatomy of the female reproductive system with and without an existing pregnancy. The sonographic recognition of the normal throughout all terms of pregnancy is presented.

Lec Hrs:32 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON1212 SONOGRAPHIC OB GYN II
The detection of anomalies, pathology, deviation from normal and the planes which must be sonographically imaged for accurate diagnosis is stressed.

Lec Hrs:32 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON1141 SMALL PARTS SONOGRAPHY
A general introduction to the areas of cardiac, eye, thyroid, prostate, scrotum, breast and other superficial structures.

Lec Hrs:32 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON1780 SONOGRAPHY OF THE CIRCULATORY SYSTEM
An introduction to the hemodynamics of the circulatory systems and the sonographic imaging and Doppler assessment of the cardiac and vascular structures.

Lec Hrs:32 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON2112 MEDICAL SONOGRAPHIC PHYSICS I
A study of the principles of diagnostic ultrasound and the ultrasonic wave propagation. Biomedical fundamentals and basic laws of physics are discussed.

Lec Hrs:32 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON2111 MEDICAL SONOGRAPHIC PHYSICS II
A continuation of the study of the properties of diagnostic ultrasound stressing the operation of diagnostic equipment, the display systems, the biological and physical aspects of ultrasound and current developments in ultrasound examination.

Lec Hrs:32 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON2112 MEDICAL SONOGRAPHY I
A study of the principles of diagnostic ultrasound and the ultrasonic wave propagation. A practical approach to sonographic examination.

Lec Hrs:32 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON2113 MEDICAL SONOGRAPHY II
A continuation of the study of the properties of diagnostic ultrasound stressing the operation of diagnostic equipment, the display systems, the biological and physical aspects of ultrasound and current developments in ultrasound examination.

Lec Hrs:32 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON2114 PRACTICAL ASPECTS OF SONOGRAPHY I
A study of the principles of diagnostic ultrasound and practice. The emphasis is on a practical approach to sonographic examination. Stressing the operation of diagnostic ultrasound equipment and routine images obtained.

Lec Hrs:32 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:17.00

SON2121 PRACTICAL ASPECTS OF SONOGRAPHY II
Offering more advanced principles of diagnostic ultrasound, adding knowledge of pathological considerations. Further presenting the practical aspects of scanning techniques, film critique, film identification and patient care and handling as related to sonographic examination. Stressing the correlation of all pathological areas, congenital and acquired pathological conditions, as well as sonographic scanning techniques.

Lec Hrs:32 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:17.00

SON2184 CLINIC A
Clinical education requiring application of the knowledge learned. Problem based learning and personal interaction are stressed along with technical abilities. As the student progresses he or she will be performing examinations with less and less supervision.

Lec Hrs:0 Lab Hrs:0 Clin Hrs:256 Oth Hrs:0 Fees:57.33

SON2184 CLINIC B
A continuation of the learning by doing process where more responsibility in the form of decision making regarding anatomical areas and resultant imaging is assumed by the student being supervised.

24 Hr. clinical per week. Term II.

Lec Hrs:0 Lab Hrs:0 Clin Hrs:256 Oth Hrs:0 Fees:57.33

SON2184 CLINIC C
This clinical course is designed to provide students the opportunity to make judgmental decisions regarding clinical aspects, to interact in a professional manner with those with whom he/she comes in contact with, and to generally progress to the point where, after successful testing, he/she may be accepted as a competent sonographer for general sonographic examinations.

Lec Hrs:0 Lab Hrs:0 Clin Hrs:384 Oth Hrs:0 Fees:57.33

SON2013L FUNDAMENTALS OF SONOGRAPHY LAB II
This course incorporates ultrasound scanning techniques using ultrasound equipment to practice the principles and protocols to the performance of adequate diagnostic sonographic imaging and Doppler procedures in a supervised setting.

Lec Hrs:32 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SLS271 TEAM SELF MANAGEMENT WITH SOCIAL JUSTICE TOPICS
(3)
This course provides students with the theory and practice of team self management. The course includes leading and working on a self-managing team, and developing project management skills.

Lec Hrs:48 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SLS275 STUDENT LEADERSHIP DEVELOPMENT
(3)
The purpose of this course is to provide effective leadership skills for student leaders to help them develop an ethical, value grounded leadership style for their role as peer mentors and advocates.

Lec Hrs:16 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:17.00

SON0035L FUNDAMENTALS OF SONOGRAPHY LAB I
This course incorporates basic approaches and practical aspects of scanning techniques, ultrasound scanning techniques using ultrasound equipment to practice the principles and protocols to the performance of adequate diagnostic sonographic imaging and Doppler procedures in a supervised setting.

Lec Hrs:48 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON1100 PRINCIPLES AND PROTOCOLS OF SONOGRAPHIC IMAGING
(5)
An introduction to the basic approaches to sonographic scanning and scanning protocols for the abdomen and pelvis. Prerequisite: Program Administration.

Lec or Corequisite: SON1170
Lec Hrs:48 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON1100L PRINCIPLES AND PROTOCOLS OF SONOGRAPHIC IMAGING
(2)
An introduction to the basic approaches to sonographic scanning and scanning protocols for the abdomen and pelvis. Prerequisite: Program Administration.

Pre or Corequisite: SON1100L
Lec Hrs:48 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON1111 ABDOMINAL SONOGRAPHY I
An introduction to the cross-sectional anatomy of the abdominal area stressing deviations from the norm and the studies to be scanned. A diagnostically acceptable study.

Lec Hrs:32 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON1112 ABDOMINAL SONOGRAPHY II
An in-depth presentation of sonographic of the abdominal area stressing deviations from the norm and the studies to be scanned. A diagnostically acceptable study.

Lec Hrs:32 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON1170 CORESONOGRAPHY
Corequisite: SON1112
Lec Hrs:32 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON2081 SEMINAR IN SONOGRAPHY
(1)
A discussion and presentation seminar course on interpersonal skill development, employment techniques, and career development. The course also provides a comprehensive curriculum review of all aspects of Sonography and presents details on applying for licensure as students prepare for the transition to the workplace.

Lec Hrs:0 Lab Hrs:16 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON2161 NEONATAL NEUROSONOLOGY
An introduction to the sonographic imaging of the neonatal and infant brain. Emphasis is placed on normal brain anatomy, congenital and acquired pathological conditions, as well as sonographic scanning techniques.

Lec Hrs:32 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON2171 VASCULAR SONOGRAPHY
(5)
A general introduction to basic approaches to the principles and protocols of scanning techniques for arterial vascular structures and Doppler spectral analysis of normal and pathological patterns are also studied. Students must be an American Registry for Diagnostic Medical Sonography (ARDMS) Registered Sonographer. Special Fee Charged.

Lec Hrs:48 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:5.00

SON2175 VASCULAR SONOGRAPHY II
Arterial anatomy below the neck and head, and it’s hemodynamic functions, both normal and abnormal, are stressed, along with sonographic imaging techniques for arterial vascular structures, non-imaging testing modalities, and Doppler analysis of normal and abnormal flow patterns. Prerequisite: SON2171

Lec Hrs:48 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:5.00

SON2176 VASCULAR SONOGRAPHY III
Venous and arterial anatomy and hemodynamic functions of the circulatory system of the neck and head, both normal and abnormal, are stressed, along with sonographic imaging techniques for vascular structures and Doppler analysis of normal and abnormal flow patterns. An understanding of the process of test results and interpretation of test results will be covered.

Lec Hrs:48 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:5.00

SON2400 INTRODUCTION TO ECHOCARDIOGRAPHY
(2)
Anatomy of the heart and the procedures used in screening are introduced stressing recognition of the normal versus abnormal. Prerequisite: Program Admission or Permission by Program Manager.

Pre or Corequisite: SON2400
Lec Hrs:48 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00

SON2834 SEMINAR II
(2)
Supervision.

Lec Hrs:48 Lab Hrs:0 Clin Hrs:0 Oth Hrs:0 Fees:0.00
SPN2401 INTRODUCTION TO ECHOCARDIOGRAPHY LAB
(1)
Laboratory sessions for Introduction to Echocardiography Lab (SON 2401L) are designed to provide opportunities for the students to practice basic skills of sonographic scanning techniques of normal and abnormal structures including real-time and Doppler scanning techniques. Performance of special tests will be practiced on a computer simulator. This course incorporates basic ultrasound scanning techniques using ultrasound equipment to practice the principles and procedures of normal and abnormal structures;
Prerequisite: SON1141
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

SPN2401L ECHOCARDIOGRAPHY II LAB
(1)
An in-depth presentation of the intricacies of diagnostic ultrasound as it applies to the heart and the chest stressing its capabilities and its limitations;
Corequisite: SON2844
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

SPN2401L ECHOCARDIOGRAPHY II LAB
(1)
Laboratory sessions for Echocardiography II Lab (SON 2401L) are designed to provide opportunities for the students to practice advanced skills of sonographic scanning techniques of normal and abnormal structures. Contact structures including real-time and Doppler scanning techniques. Performance of special tests will be practiced on a computer simulator. This course incorporates advanced ultrasound scanning techniques using ultrasound equipment to practice the principles and procedures of entry-level cardiac diagnostic sonographic imaging and Doppler procedures in a supervised setting;
Prerequisite: SON2401L
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

SPN284 CLINIC II
(3)
A course designed to give additional clinical competencies to those gained in the specialties mastered in the first year. Emphasis on specialization of echocardiography with clinical application of classroom material presented. To continue to make judgment decisions regarding the technical aspects of diagnostic sonographic exams;
Prerequisite: SON1141 SON2844
Pre co Corequisite: SON2400
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.73

SPN284 CLINIC II
(3)
Application of all the materials presented requiring the student to interact in a professional manner, making decisions regarding the technical aspects, and to generally progress to the point where he/she may be accepted as a competent sonographer. Further mastering of all skills gained, emphasizing echocardiography and cardiovascular examination techniques.
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

SPC201 INTRODUCTION TO SPEECH COMMUNICATIONS
(3)
This course is designed to provide students with the fundamentals of speech communication including speaking and listening. Topics include: interpersonal, group, and public speaking in various cultural contexts.
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

SPC311 ARGUMENTATION AND DEBATE
(3)
The student will complete this course, should achieve proficiency in the principles of argumentation including analysis, evidence, inference, and refutation as they pertain to the debate situation in democratic society.
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

SPC102 SOCIAL PSYCHOLOGY
(3)
This course provides scientifically based constructs used in understanding social phenomena and their relation to the individual. Identification of the social and psychological variables that give humans uniqueness and provide a basis to stressed. Topics considered include human nature, psychological development, sex role identification, love, affiliation, aging, image management, attitudes, opinion manipulation, morality, leadership, group dynamics, attribution and construction theory;
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

SOW204 SOCIAL SERVICE FIELD EXPERIENCE I
(3)
A survey and orientation to organization, and the roles of the social service provider. Contact with and participation in social service agencies to make students aware of community resources is a goal of this experience. Participants will identify the performance of entry-level cardiac diagnostic sonographic imaging and Doppler procedures in a supervised setting.
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

SOW204 SOCIAL SERVICE FIELD EXPERIENCE I
(3)
A survey and orientation to organization, and the roles of the social service provider. Contact with and participation in social service agencies to make students aware of community resources is a goal of this experience. Participants will identify the performance of entry-level cardiac diagnostic sonographic imaging and Doppler procedures in a supervised setting.
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

SOW284 LABORATORY FOR ECHOCARDIOGRAPHY
(1)
Laboratory for Echocardiography (SON 2401L) are designed to provide opportunities for the students to practice basic skills of sonographic scanning techniques of normal and abnormal structures including real-time and Doppler scanning techniques. Performance of special tests will be practiced on a computer simulator. This course incorporates basic ultrasound scanning techniques using ultrasound equipment to practice the principles and procedures of normal and abnormal structures;
Prerequisite: SON1141
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

SPP2300 INTRODUCTION TO INTERPERSONAL COMMUNICATION
(3)
Upon completion of this course, the student should demonstrate an understanding of the basic concepts of interpersonal communication with emphasis on perception, self-awareness, empathy, communication, small group communication, and conflict resolution.
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

SPN1000 ELEMENTARY SPANISH CONVERSATION
(3)
A custom made course for those residents in the community who require a cursory knowledge of Spanish to help them communicate with Spanish speaking people. One hour language laboratory weekly. Special fee charged.
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 15.00

SPN1120 BEGINNING SPANISH I
(4)
Prerequisite: SPN1120 or SPN1121. Students are encouraged to continue upper division courses.
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 15.00

SPN1121 BEGINNING SPANISH II
(4)
Prerequisite: SPN1120 or SPN1121. Students are encouraged to continue upper division courses.
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 15.00

SPN1121 BEGINNING SPANISH II
(4)
Prerequisite: SPN1120 or SPN1121. Students are encouraged to continue upper division courses.
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 15.00

SPN1170 SPANISH STUDY TRAVEL
(5)
A course designed for students who wish to combine the study of Spanish with subsequent travel to a Spanish speaking region.
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

SPN2200 INTERMEDIATE SPANISH II
(4)
Emphasis on composition, reading comprehension and conversation. A more in depth review of the history, geography, literature, and current issues of Spain and Spanish America. Students will acquire a greater knowledge of these diverse two cultures and gain more fluency in oral and written Spanish. This course completes the intermediate level. Students are encouraged to study abroad.
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

SPN2220 INTERMEDIATE SPANISH III
(4)
Continuation of SPN211. Polishing of skills in speaking, listening comprehension, reading, writing and appreciation of culture and an introduction of new grammatical and idiomatic material. Classroom practice and exercises supplemented by theoretical and multimedia activities designed to develop and enhance communicative competence and cultural sensitivity. Compositions and readings in Hispanic prose and culture. Students are encouraged to study abroad.
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 15.00

SPN2410 INTERMEDIATE SPANISH CONVERSATION
(3)
Course may be taken in conjunction with SPN2220 or SPN2201 but cannot replace either one of these courses as a college parallel requirement. The purpose of this course is to permit that student who wishes to increase his comprehension and speaking facility in Spanish to be in a class where the emphasis is totally on the oral approach and where a greater variety of topics will be discussed at a faster pace than the required SPN 2210 course would allow. Special Fee Charged.
Prerequisite: SPN120 SPN1121
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 15.00

SPN2450 BEGINNING SPANISH FOR SPANISH SPEAKERS
(4)
This course is designed for Spanish Speakers who have an oral understanding of the language but whose knowledge of written and/or formal Spanish is incomplete. Class is conducted in Spanish with emphasis on improvement in spelling, grammar, vocabulary, reading, writing, and oral skills. Emphasis will be placed on the correction of typical errors created by the influence of the English language. Every unit will cover important cultural aspects of the Hispanic world.
Prerequisite: To be a heritage or native speaker of Spanish. Special Fee charged.
Lec Hrs: 0 Lab Hrs: 16 Cli Hrs: 0 Oth Hrs: 0 Fees: 15.00

SPN3550 STUDY ABROAD: ADVANCED COMPOSITION AND CONVERSATION
(3)
For students wishing to attain greater proficiency in spoken and written Spanish. Conversation and composition based on readings and a variety of contemporary topics. This course is used only in BCC Study Abroad Programs.
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

www.broward.edu  College Catalog  389

An in-depth presentation of the intricacies of diagnostic ultrasound as it applies to the heart and the chest stressing its capabilities and its limitations.
Corequisite: SON2844
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

A course designed to give additional clinical competencies to those gained in the specialties mastered in the first year. Emphasis on specialization of echocardiography with clinical application of classroom material presented. To continue to make judgment decisions regarding the technical aspects of diagnostic sonographic exams.
Prerequisite: SON1141 SON2844
Pre co Corequisite: SON2400
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.73

A course designed to provide students with the fundamentals of speech communication including speaking and listening. Topics include: interpersonal, group, and public speaking in various cultural contexts.
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

A course designed to provide students with the fundamentals of speech communication including speaking and listening. Topics include: interpersonal, group, and public speaking in various cultural contexts.
Lec Hrs: 0 Lab Hrs: 0 Cli Hrs: 0 Oth Hrs: 0 Fees: 0.00

A course designed to give additional clinical competencies to those gained in the specialties mastered in the first year. Emphasis on specialization of echocardiography with clinical application of classroom material presented. To continue to make judgment decisions regarding the technical aspects, and to generally progress to the point where he/she may be accepted as a competent sonographer. Further mastering of all skills gained, emphasizing echocardiography and cardiovascular examination techniques.
SYG2322 JUVENILE DELINQUENCY
A study of juvenile and delinquent behavior and its development which focuses on the social context of offending males and patterns of delinquent activity and its causations.

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

SYG2533 INTRODUCTION TO CRIMINOLOGY
A study of crime and criminal behavior, and its cause and performance of social regulation on society, with an emphasis given to criminal theory, and the sociological implications of criminal behavior.

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

SYG2484 SOCIOLOGY OF SEXUALITY
The Sociology of Human Sexuality is a general review of the scientific principles related to the study of human sexuality. Topics include the cultural context of sexuality; theoretical perspectives of sexuality, research methods, gender/sexuality roles, sexual orientation, sexual coercion, sexual anatomy, sexual arousal, pregnancy, STDs, love and human intimacy, and human senescence. Completion of the life course.

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

SYG2421 MARRIAGE AND FAMILIES: INTERCULTURAL COMPARISON
A study of the institution of the family utilizing historical and sub-cultural comparisons to understand the background evolution and current familiar structures of the world.

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

SYG2421 SOCIAL INSTITUTIONS
A study of the structures for social living, the social and cultural differences that exist, and the social impact on society from primitive equipment to the modern computer system.

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

SYG2511 CHILDREN’S THEATRE PRODUCTION
Participation in the rehearsed and production of the Children’s Theatre Program, which continues during the entire term.

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

SYG2512 CHILDREN’S THEATRE TECHNICAL
Participation in the technical aspects of the Children’s Theatre Program.

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

THE250 SURVEY OF DRAMATIC LITERATURE
A study of dramatic literature from the time of the early Greek dramatists to recent dramatists in light of the historic, socio-political milieu of the era that promulgates the particular genre.

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TAPA229 INTRODUCTION TO STAGE LIGHTING
An introduction to the techniques, practices, and equipment of practical lighting technology and design and introduction to the tools and concepts used by the lighting technician from primitive equipment to the modern computer system.

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TAPA228 MAKEUP FOR STAGE AND TELEVISION
The theoretical and practical application of all types of straight and character makeup for the stage and television.

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 Oth Hrs=0 Fees=0.00
Upon successful completion of this course, students will be able to analyze and create a dramatic character on stage in a theatrical production of the college. For each production, students will learn to understand the genre of the play and adopt appropriate acting styles and techniques. They will learn how to uncover clues in the script which will reveal character objectives and tactics. Additionally, students will create characters through analysis, improvisation, and the development of psychophysical actions grounded in the given circumstances of the play. This information will guide the student actor to make distinct choices regarding the physical and vocal qualities of each character being portrayed.

Prerequisites: TPP2101

TPP2101 ACTING I

Study and development of acting skills concentrating on the student’s ability to believe and exist in imaginary circumstances as if they were real, and to transform these beliefs clearly and artfully to an audience.

Lec Hrs=32 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TPP2111 ACTING II

Building on the foundations established in Acting I, Acting II focuses on a close examination of the dramatic text in order to understand the character development and scene work. Students will analyze and perform two scenes during the term. Adapting texts is also gained with the development of monologue and analyzing and performing two longer speeches.

Prerequisites: TPP2110

Lec Hrs=32 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TPP2190 REHEARSAL AND PERFORMANCE I

Participation in the audition, rehearsal and performance process of a theatrical stage production.

Corequisites: TPP2192L

Lec Hrs=12 Lab Hrs=12 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TPP2260 PERFORMANCE IN FILM

Introduction to the various approaches to acting on film and television. A number of genres will be examined including film acting, commercial acting, and various styles of television acting. Students will also study the evolving styles of film acting throughout the history of the medium.

Prerequisites: TPP2210

Lec Hrs=32 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TPP2300C DIRECTING

An academic study and practical application of the art and craft of directing. This information will guide the student actor to make distinct choices regarding the physical and vocal qualities of each character being portrayed.

Lec Hrs=32 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TPP2500C MOVEMENT FOR THE ACTOR

An academic study and practical application of body movement techniques for the actor. Students will learn the elements of movement vocal and physical effort training and free themselves from any personal movement habits.

Lec Hrs=32 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TPP5531 STAGE COMBAT

Armory application, combat techniques for the stage.

Lec Hrs=32 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TPP7070C INTRO TO VOICE

An academic study and practical application of the efficient and effective use of the speaking voice, focusing on the special demands of acting for the stage. Following a thorough introduction to the International Phonetic Alphabet students learn the techniques and principles of good voice and articulation of general American speech. The theories and principles of voice will be applied in written assignments, oral performances before the class, and through vocal exercises done in class, the learning resources language laboratory, and at home.

Lec Hrs=32 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TPP270C VOICE AND ARTICULATION II

Application of techniques studied in Intro to Voice, with emphasis on the study of vocal posture and pronunciation, as they learn to apply different styles of acting and adjustment of vocal posture to achieve a neutral American Dialect. Learned skills will then be utilized to master their popular regional dialects. The theories and principles of the course will be applied in written assignments, oral performances before the class, and through vocal exercises done in class, the learning resources laboratory, and at home.

Lec Hrs=32 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TRA1100 INTRODUCTION TO TRANSPORTATION & LOGISTICS

This course deals with the role of logistics in the economy and the organization. Topics explored are customer service, logistics information systems, inventory management, material management and supply chain management. The objective is to explore the full scope of the transportation plant and its services as a necessary preparation to efficient use of the transportation system.

Lec Hrs=48 Lab Hrs=48 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TRA1154 SUPPLY CHAIN MANAGEMENT

This course presents an integrated approach to the management of activities involved in moving goods and services from a source to consumers. The course will focus on what employees and managers must do to ensure an effective supply chain exists in their organization. Students will learn about SCM functions, warehousing and inventory, e-commerce, information flow and customer service.

Prerequisites: TPP2210

Lec Hrs=32 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TRA1156 OPERATIONS MANAGEMENT FOR TRANSPORTATION & LOGISTICS

This course covers the skills necessary for a supervisory role in logistics. It includes rules and regulations involved in managing different types of operations and general managerial functions and skills. Topics include the design and management of production systems, productivity, capacity planning, location, layout, resource management, just-in-time systems, materials requirements planning and project management.

Prerequisites: TPP2100

Lec Hrs=48 Lab Hrs=48 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TRA2131 PURCHASING FOR LOGISTICS MANAGERS

This course presents current and thorough coverage in the critical area of purchasing for logistics managers. Students gain insight and knowledge into the strategies, processes, and practices of purchasing, including demands placed on purchasing managers, the ethical, contractual and legal issues faced by purchasing professionals, and the impact of purchasing and supply chain management on the competitive success and profitability of the organization.

Prerequisites: TPP2110

Lec Hrs=48 Lab Hrs=48 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TRA2593 SEMINAR IN GLOBAL TRADE & LOGISTICS

This course focuses on current and emerging issues in global trade and logistics. Its format and topic will vary, but will include a full day or half day seminar conducted by one or more industry experts who will address specific global trade and logistic topics such as, but not limited to: Functions comprising logistics; How logistics affects customer service, corporate performance and competitive advantage; Key logistics processes of supply chain management; Effective strategies for logistics managers; Key differences between domestic and international logistics; Developing strategies to effectively manage logistics; Recognizing the role played by logistics intermediaries that facilitate global trade.

Lec Hrs=16 Lab Hrs=16 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TRA1155 SUPPLY CHAIN MANAGEMENT II

This course is an overview of logistics functions within a firm and in the context of integrated virtual systems. Topics include customer service, information flow and supply chain management; Key differences between domestic and international logistics; Key differences between domestic and international logistics; Developing strategies to effectively manage logistics; Recognizing the role played by logistics intermediaries that facilitate global trade.

Lec Hrs=32 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=0.00

TRA2596 SEMINAR/SPECIAL TOPICS

This course focuses on current and emerging issues in supply chain management. Its format and topic will vary, but will include a full day or half day seminar conducted by one or more industry experts who will address specific global trade and logistics topics such as, but not limited to: Functions comprising logistics; How logistics affects customer service, logistics information systems, inventory management, material management, warehousing, purchasing and inventory, e-commerce, global trade, order processing, physical distribution, transportation, import/export compliance, and other specific global trade and logistics management issues. Specific requirements will vary based on topic assignments.

Lec Hrs=32 Lab Hrs=32 Cls Hrs=0 Oth Hrs=0 Fees=0.00
This course provides management and analytical concepts/tools for the management of operations and the decision-making process within the scope of the supply chain. Recently, operations strategy has provided companies with a competitive advantage in supply chain and transportation. Decision-making regarding operational issues is one of the most common tasks within organizations. This course will enable the student to perform the quantitative analysis necessary and understand the management issues in order to make good operational decisions within the supply chain. 

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 OtHrs=0 Fees=0.00

TSL4081 ESOL ISSUES AND STRATEGIES II

This course is designed to build on the foundation course in TESOL for students in integrated content-service teacher education programs. The goal of this course is to link the theory and practice for effective teaching of ESOL students. The course will use primarily methods, curriculum and assessment of ESOL students in the areas of language development, and content areas. Effective strategies regarding reading instruction for ELL students will be emphasized. 

Pre or Corequisite: EDF3105 EDF3205 EDF4105 EDF4205 EEX3011 TSL3081

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 OtHrs=5 Fees=9.50

TRA4720 GLOBAL OPERATIONS MANAGEMENT

This course focuses on global operations capabilities as a strategic enabler of increased profits and effectiveness for goods-producing and service-providing organizations. In this age of fast global commerce and intense competition, business must pay close attention to how goods and services are sourced, designed, created, and delivered to customers. 

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 OtHrs=0 Fees=0.00

TRA4721 GLOBAL LOGISTICS IMPORT & EXPORT

This course encompasses logistics activities of multinational firms, international transportation systems, global sourcing, customer service, facility location, inventory management, customs issues, export-import activities, and the role of governments. 

Pre or Corequisite: BUL4264 TRA3155

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 OtHrs=0 Fees=0.00

TRA4910 DIRECTED INDEPENDENT RESEARCH IN SUPPLY

This course is intended to help students acquire skills in applying research principles and obtaining practice in rigorous data collection and reporting. 

Pre or Corequisite: BUL3130 MAN3162 MAN3240 TRA3155 TRA3936 TRA4720

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 OtHrs=0 Fees=0.00

TRA4945 SUPPLY CHAIN MANAGEMENT OPTION 1 INTERNSHIP

This course is a practical application in a clinical setting of knowledge acquired in the classroom. 

Pre or Corequisite: BUS3130 MAN3162 MAN3240 TRA3155 TRA3936 TRA4720

Lec Hrs=0 Lab Hrs=0 Cls Hrs=0 OtHrs=96 Fees=0.00

TSL3980 ESOL ISSUES AND STRATEGIES I

This course is designed to introduce the underlying issues, theories and practices of the teaching of ESOL (English for Speakers of Other Languages). The goal of this course is to develop the foundations of knowledge necessary to prepare educational professionals to understand the concepts upon which second language acquisition and instruction are based. Course

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 OtHrs=10 Fees=9.50

ZOO4713 COMPARATIVE VERTEBRATE MORPHOLOGY AND PHYSIOLOGY

The course is the accompanying laboratory course to PCB4273. The 3 hours of laboratory per week complements the lecture topics which include evolutionary relationships among the vertebrate groups, and a comparison of major physiological systems: nerve, muscle, respiration, circulation, osmoregulation, excretion, temperature regulation and energy metabolism. 

Pre or Corequisite: ZOO4713

Lec Hrs=0 Lab Hrs=48 Cls Hrs=0 OtHrs=0 Fees=42.00

ZOO4713L COMPARATIVE VERTEBRATE ANATOMY & PHYSIOLOGY

The course is the accompanying laboratory course to PCB4273. The 3 hours of laboratory per week complements the lecture topics which include evolutionary relationships among the vertebrate groups, and a comparison of major physiological systems: nerve, muscle, respiration, circulation, osmoregulation, excretion, temperature regulation and energy metabolism. 

Pre or Corequisite: ZOO4713

Lec Hrs=0 Lab Hrs=48 Cls Hrs=0 OtHrs=0 Fees=0.00

ZOO2010 GENERAL ZOOLOGY

Basic course pertaining to the development, anatomy, physiology, genetics, ecology and evolutionary relationships of the animal kingdom. Upon successful completion of this course, the students will be able to comprehend the basic zoological principles and processes of phylogeny, physiology, genetics and ecology. 

Pre or Corequisite: ZOO2010L

Lec Hrs=48 Lab Hrs=0 Cls Hrs=0 OtHrs=0 Fees=0.00