Statewide Course Numbering System

Directory of Courses by Prefixes

Course directory

We are Proud

We are Accomplished

"Everything and everyone at Chipola is great. Staff goes above and beyond for students."

2016 Graduating Student Survey

"My experience throughout the EMT program was amazing! All of the instructors are very professional and knowledgeable."

2015 Graduating Student Survey

"Everyone was very helpful. I was afraid to return to college as an adult learner, but everyone at Chipola made the transition easier."

2013 Graduating Student Survey

"The community college program has been a tremendous asset to the citizens of Florida. Many students would not have been able to achieve a college education without it. This is probably more true at Chipola than anywhere else."

Amos McMullian, CEO, Flowers Baking Co. and Outstanding Alumnus

We are Famous

We are Chipola

Statewide Course Numbering System

Directory of Courses by Prefixes

Course Descriptions
Florida’s Statewide Course Numbering System

Courses in this catalog are identified by prefixes and numbers that were assigned by Florida’s Statewide Course Numbering System (SCNS). This numbering system is used by all public postsecondary institutions in Florida and by 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 SCNS 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 SCNS. The listing of prefixes and associated courses 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 Exceptions to the General Rule for Equivalency.

For example, a freshman composition skills course is offered by 84 different public and non-public postsecondary institutions. Each institution uses “ENC 1101” 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 that has the same prefix and course number but 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 a Florida College System institution 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 the semester-term system. 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 subcategory 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 non-public postsecondary educational institutions to be academically equivalent to courses offered at the receiving institution, including equivalency of faculty credentials, regardless of the public or non-public control of the previous institution. The Department of Education shall ensure that credits to be accepted by a receiving institution are generated in courses for which the faculty possess credentials that are comparable to those required by the accrediting association of the receiving institution. The award of credit may be limited to courses that are entered in the statewide course numbering system. Credits awarded pursuant to this subsection shall satisfy institutional requirements on the same basis as credits awarded to native students.

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Level Code</th>
<th>Century Digit</th>
<th>Decade Digit</th>
<th>Unit Digit</th>
<th>Lab Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>No laboratory component in this course</td>
</tr>
<tr>
<td>English Composition</td>
<td>Lower (Freshman)</td>
<td>Level at this Institution</td>
<td>Freshman Composition Skills</td>
<td>Freshman Composition Skills I</td>
<td></td>
</tr>
</tbody>
</table>
Exceptions to the General Rule for Equivalency

Since the initial implementation of the SCNS, specific disciplines or types of courses have been excepted from the guarantee of transfer for equivalent courses. These include courses that must be evaluated individually or courses in which the student must be evaluated for mastery of skill and technique. The following courses are exceptions to the general rule for course equivalencies and may not transfer. Transferability is at the discretion of the receiving institution.

A. Courses not offered by the receiving institution.
B. For courses at non-regionally accredited institutions, courses offered prior to the established transfer date of the course in question.
C. Courses in the _900-999 series are not automatically transferable, and must be evaluated individually. These include such courses as Special Topics, Internships, Apprenticeships, Practica, Study Abroad, Theses, and Dissertations.
D. Applied academics for adult education courses.
E. Graduate courses.
F. Internships, apprenticeships, practica, clinical experiences, and study abroad courses with numbers other than those ranging from 900-999.
G. Applied courses in the performing arts (Art, Dance, Interior Design, Music, and Theatre) and skills courses in Criminal Justice (academy certificate courses) are not guaranteed as transferable. These courses need evidence of achievement (e.g., portfolio, audition, interview, etc.).

Courses at Non-regionally Accredited Institutions

The SCNS makes available on its home page (http://scns.fldoe.org) a report entitled “Courses at Non-regionally Accredited Institutions” that contains a comprehensive listing of all non-public institution courses in the SCNS inventory, as well as course transfer level and transfer effective date. This report is updated monthly.

Questions about the SCNS and appeals regarding course credit transfer decisions should be directed to (Insert the name of the Statewide Course Numbering System Institution Contact at your institution here) in the (The office where your Institution Contact is located) or to 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 SCNS office at (850) 245-0427 or at http://scns.fldoe.org.

Transferability Code

Courses are designated throughout this section according to their transferability to the State University System.

<table>
<thead>
<tr>
<th>Course Prefixes</th>
<th>Discipline</th>
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</thead>
<tbody>
<tr>
<td>A — College transfer course which counts toward the Baccalaureate and/or the Associate in Arts degree and transfer to the SUS.</td>
<td></td>
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<tr>
<td>O — Occupational course which counts only toward the Associate in Science degree and will not transfer or apply toward the Associate in Arts degree.</td>
<td></td>
</tr>
<tr>
<td>P — Preparatory course which will not count toward a degree or will not transfer or apply toward the Associate in Arts Degree.</td>
<td></td>
</tr>
<tr>
<td>V — Applied Technology/vocational course which will not count toward a degree or transfer.</td>
<td></td>
</tr>
<tr>
<td>MUE, MUL, MUN, MUS, MUT, MV_—</td>
<td></td>
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<tr>
<td>Nursing</td>
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<tr>
<td>Physical Education</td>
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<tr>
<td>Physical Science</td>
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<tr>
<td>Physics</td>
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<tr>
<td>Political Science</td>
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<tr>
<td>Psychology</td>
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<tr>
<td>Religion</td>
<td></td>
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<tr>
<td>Science Education</td>
<td></td>
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<tr>
<td>Social Work/Sociology</td>
<td></td>
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<tr>
<td>Spanish</td>
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<tr>
<td>Speech</td>
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<tr>
<td>Student Development</td>
<td></td>
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<tr>
<td>Theater</td>
<td></td>
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<tr>
<td>Welding</td>
<td></td>
</tr>
</tbody>
</table>

Directory of Courses by Prefixes

To determine a prefix see the Directory of Courses by Prefixes listed by major disciplines.

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Course Prefixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>ACG, TAX</td>
</tr>
<tr>
<td>Agribusiness</td>
<td>AEB</td>
</tr>
<tr>
<td>Art</td>
<td>ARH, ART</td>
</tr>
<tr>
<td>Astronomy</td>
<td>AST</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>BCH, BSC, MCB, PCB</td>
</tr>
<tr>
<td>Business</td>
<td>BUL, ENT, FIN, GEB, ISM, MAN, MAR, QMB</td>
</tr>
<tr>
<td>Chemistry</td>
<td>CHM</td>
</tr>
<tr>
<td>Child Care</td>
<td>CHD</td>
</tr>
<tr>
<td>Computing</td>
<td>CGS, CIS, COP, CTS, GIS</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>CCJ, CJB, CJC, CJD, CJF, CJI, CJK, CJT</td>
</tr>
<tr>
<td>Economics</td>
<td>ECO</td>
</tr>
<tr>
<td>Education</td>
<td>EDE, EDF, EDG, EEX, EME, MAE, RED, SCE, SSE, TSL</td>
</tr>
<tr>
<td>Emergency Medical Services</td>
<td>EMS</td>
</tr>
<tr>
<td>Engineering</td>
<td>BNF, EET, EGN, ETD, ETI, ETM, ETS, GIS, SUR</td>
</tr>
<tr>
<td>English</td>
<td>AML, ENC, ENL, LAE, REA</td>
</tr>
<tr>
<td>English, Language/Literature</td>
<td>LIT</td>
</tr>
<tr>
<td>Fire Science</td>
<td>FFP</td>
</tr>
<tr>
<td>French</td>
<td>FRE</td>
</tr>
<tr>
<td>Geography</td>
<td>GEA</td>
</tr>
<tr>
<td>Health</td>
<td>HSC</td>
</tr>
<tr>
<td>History</td>
<td>AMH, ASH, HIS, WOH</td>
</tr>
<tr>
<td>Home Economics</td>
<td>HUN</td>
</tr>
<tr>
<td>Honors</td>
<td>IDH</td>
</tr>
<tr>
<td>Human Development</td>
<td>DEP</td>
</tr>
<tr>
<td>Humanities</td>
<td>HUM</td>
</tr>
<tr>
<td>Journalism</td>
<td>MMC</td>
</tr>
<tr>
<td>Language Arts and English Ed</td>
<td>LAE</td>
</tr>
<tr>
<td>Leisure</td>
<td>LEI</td>
</tr>
<tr>
<td>Linguistics</td>
<td>LIN</td>
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<tr>
<td>Math Education</td>
<td>MAE</td>
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<tr>
<td>Mathematics</td>
<td>MAC, MAE, MAP, MAS, MAT,</td>
</tr>
<tr>
<td>MGF, MHF, MTB, MTG, STA</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>MUE, MUL, MUN, MUS, MUT, MV_</td>
</tr>
<tr>
<td>Nursing</td>
<td>NSP, NUR</td>
</tr>
<tr>
<td>Physical Education</td>
<td>HLP, PEL, PEM, PEN, PEO, PEQ, PET, SPM</td>
</tr>
<tr>
<td>Physical Science</td>
<td>ESC, EVR, PSC</td>
</tr>
<tr>
<td>Physics</td>
<td>PHY</td>
</tr>
<tr>
<td>Political Science</td>
<td>CPR, INR, POS</td>
</tr>
<tr>
<td>Psychology</td>
<td>CLP, DEP, INP, PPE, PSY</td>
</tr>
<tr>
<td>Religion</td>
<td>REL</td>
</tr>
<tr>
<td>Science Education</td>
<td>SCE</td>
</tr>
<tr>
<td>Social Work/Sociology</td>
<td>SOW, SYG</td>
</tr>
<tr>
<td>Spanish</td>
<td>LAS, SPN, SPT</td>
</tr>
<tr>
<td>Speech</td>
<td>ORI, SPC</td>
</tr>
<tr>
<td>Student Development</td>
<td>SLS</td>
</tr>
<tr>
<td>Theater</td>
<td>THE, TPA, TPP</td>
</tr>
<tr>
<td>Welding</td>
<td>PMT</td>
</tr>
</tbody>
</table>

108 Chipola College Catalog Course Directory
Course Descriptions

ACG 2002. Accounting on the Microcomputer. This course is intended for students desiring a working knowledge of computerized accounting using microcomputer software, such as Quick Books. The five major systems commonly found in computerized accounting environments are covered – general ledger, depreciation, accounts receivable, accounts payable, and payroll. 3 semester hours credit. [A]

ACG2021. Introduction to Financial Accounting. An introductory course in the principles and practices of financial accounting emphasizing the measurement and reporting of income. The basic accounting model, measuring and reporting assets, liabilities and stockholders’ equity, special reports and analyses of accounting information also are covered. Credit will not be granted for both ACG 2021 and ACG 3024. 3 semester hours credit. [A]

ACG 2071. Introduction to Managerial Accounting. This is an introductory course in managerial accounting which emphasizes the use of accounting data with respect to planning operations, controlling activities and the decision making responsibilities of managers. Prerequisites: A grade of “C” or better in ACG 2021 or consent of department. 3 semester hours credit. [A]

ACG 3101. Financial Accounting and Reporting I. This course reviews the basic accounting cycle, financial statement preparation, and the framework of accounting theory. Included in this course is an in-depth study of the accounting for current assets, fixed assets, depreciation, and intangible assets. This course is designed for the accounting major and the general student of business interested in the underlying principles for recording and reporting of financial information for general purpose financial statements. The course presents the theoretical setting for accounting practices and procedures. When alternative positions can be taken on matters of theory and practice, such alternatives and the positions of leading authorities are discussed. In addition to pointing out the conflicts that exist within the traditional structure of accounting, the course strives to provide the student with an analytical basis for making his/her own evaluation of controversial areas. Prerequisite: ACG 2021. 3 semester hours credit. [A]

ACG 3111. Financial Accounting and Reporting II. This is the second in a sequence of two courses: ACG 3101 and ACG 3111. This course presents an in-depth study of financial reporting concepts and generally accepted practice for current liabilities, long-term liabilities, leases, pensions, income taxes, revenue recognition, the statement of cash flows, and stockholders equity and earnings per share. There is emphasis on analyzing financial events and the consequences of financial reporting alternatives. Prerequisite: ACG 3101. 3 semester hours credit. [A]

ACG 3341. Cost Accounting I. This course reviews and reinforces the financial accounting cycle, decision making and the integration of decisions into the organization's structure (including control structure), strategies, and objectives. Applications include issues in decentralized organizations, cost behavior, budgeting, cost estimates, tactical decision making, performance motivation and assessment, and cost-volume-profit analysis. Prerequisite: ACG 2071. 3 semester hours credit. [A]

ACG 3351. Cost Accounting II. This course is a continuation of ACG 3341, where students will learn more about cost accounting principles and managerial accounting practices. This course covers product costing systems, inventory and quality control, capital investment, resource management, generation and use of accounting information in managerial business decision-making. Prerequisite: ACG 3341. 3 semester hours credit. [A]

ACG 4201. Advanced Accounting. This course is an in-depth study of financial reporting concepts and generally accepted practice for business combinations, consolidated enterprises, foreign operations, partnerships, non-profit organizations, and government entities. There is also emphasis on analyzing financial events and the consequences of financial reporting alternatives. Prerequisite: ACG 3111. 3 semester hours credit. [A]

ACG 4401. Accounting Management Information Systems. This course is an introduction to manual and computerized accounting information systems. Transaction cycles, internal controls, and flowcharting are emphasized. Prerequisites: ACG 2071 and CGS 1100. 3 semester hours credit. [A]

ACG 4632. Auditing Theory and Application I. Auditing I concerns external financial auditing, in which independent auditors will come from a CPA firm to audit a client company's financial statements. We will concentrate on the process of gathering and evaluating evidence to determine whether the client’s financial statements are fairly presented in accordance with GAAP. We will also see how audit results are reported to readers of the client’s financial statements. Prerequisite: ACG 3111. 3 semester hours credit. [A]

ACG 4930. Selected Topics in Accounting. This course covers topics of current interest or of special interest to students or instructors. Topics may vary. This course may be repeated for up to 9 semester hours credit. Prerequisite: Permission of department chair. 1-3 semester hours credit. [A]

ACG 4940. Accounting Internship. The accounting internship is designed for business/accounting students who desire to gain real world experience in the accounting field through on-the-job practice. Students work under the direction of an approved industry professional, a faculty advisor, and the internship director. A minimum of 35 hours on the job is required for each semester hour of credit earned. Prerequisite: To be eligible, the student must A) have successfully completed with a grade of C or better a minimum of 30 semester hours of upper level coursework toward a BSBA degree in the Accounting Concentration; B) have successfully completed with a grade of C or better ACG 3101, ACG 3341, ACG 3351; C) an interview with the course instructor or coordinator of the program; D) an internship application; and E) approval from the dean of the department. 1-6 semester hours credit. No more than six (6) credit hours may be earned for this course. [A]

AEB 2104. Economics of Agriculture. This course is an introduction to agricultural economics. Economic principles as applied to farm production, marketing, demand and finance, farm prices and income. Prerequisites: ECO 2103 and ECO 2203. 3 semester hours credit. [A]

AER 0014V. Automotive Service Assistant. This course prepares the student to perform a vehicle inspection and all basic vehicle service and maintenance procedures. This course also instructs on automotive industry operations, A.S.E. certification programs, service manual interpretation, and tire and wheel maintenance. Components include lecture/discussion, written assignments, and hands-on experience. 270 clock hours. [V]
AER 0110V. Engine Repair Technician. Prepares the student to test, diagnose, and repair four, six and eight-cylinder engines. Components include lecture/discussion both online and face-to-face, written and online assignments, online testing and hands-on experience. 150 clock hours. [V]

AER 0172V. Automotive Heating And Air Conditioning Technician. This course prepares the student to diagnose, service, and repair automotive heating and air conditioning systems. Automatic temperature control systems are introduced, and refrigerant recovery procedures are taught. Components include lecture/discussion, online testing and assignments, written assignments, and hands-on experience. 150 clock hours. [V]

AER 0257V. Automatic Transmission And Transaxle Technician. Prepares the student to test, diagnose and repair automatic transaxles and electronic transmissions. Theory of operation, testing and diagnosis is stressed. Components include lecture/discussion, written assignments, and hands-on experience. 150 clock hours. [V]

AER 0274V. Manual Drivetrain And Axle Technician. This course prepares the student to diagnose and repair manual transaxles, clutches, transmissions, differentials, driveline components, hydraulic systems, and four-wheel transfer cases. Components include lecture/discussion, written assignments, and hands-on experience. 150 clock hours. [V]

AER 0360V. Automotive Electrical/Electronic System Technician. Prepares the student to test, diagnose, and repair starting, charging, lighting, and associated electrical systems. Electrical measurement and circuit tracing are stressed, along with an introduction to the operation of basic components associated with electrical and electronic systems. Components include lecture/discussion, written assignments, and hands-on experience. 300 clock hours. [V]

AER 0418V. Automotive Brake System Technician. This course prepares the student to diagnose, service, and repair late model disc and drum braking systems and controls, including anti-lock braking systems. Components include lecture/discussion, online testing and assessment, written assignments, and hands-on experience. 150 clock hours. [V]

AER 0453V. Automobile Suspension And Steering Technician. This course prepares the student to diagnose and repair steering and suspension systems, including electronic suspensions, and four-wheel steering systems. The most common wheel alignment techniques are taught. Components include lecture/discussion, written assignments, and hands-on experience. 150 clock hours. [V]

AER 0503V. Automotive Engine Performance Technician. This course prepares the student to test, diagnose, and repair electronic ignition and emissions control systems. Prepares the student to test, diagnose and repair electronic fuel injection systems utilizing industry standard tools. Five-gas theory and oscilloscope diagnosis are introduced. Components include lecture/discussion, written assignments, and hands-on experience. 300 clock hours. [V]

AER 0936V. Special Topics in Automotive Service Technology. This is a special course centering around current topics or special interests to meet the needs of the community. Various clock hours. [V]

AGG 2004. Introduction to Agricultural Science. This course has been designed to create awareness, provide introductory experiences, and develop an understanding of all areas of Agricultural Sciences, Agribusiness, Animal Science, Entomology, and Structural Pest Control Horticulture and Landscape Design, Agronomy, Food Science, and Agricultural Education. 1 semester hour credit. [A]

AMH 2010. American History to 1865. A general survey of the development of the United States from the period of discovery and exploration through the Civil War. 3 semester hours credit. [A]

AMH 2020. American History Since 1865. A survey course on the development of the United States from the Reconstruction period to the present. AMH 2010 is not a prerequisite, but is recommended. 3 semester hours credit. [A]

AMH 2091. African-American History I. An introductory course designed to acquaint students with, and stimulate interest in, the culture and history of the African-American. Emphasis is on the origins, struggles, fears, aspirations, and achievements of African-Americans. No prerequisite, but either AMH 2010-2020 or SYG 1000-1010 is recommended. This course has been designated as an international/diversity course. 3 semester hours credit. [A]

AMH 2093. African-American History II. African-American History II is an introductory course designed to acquaint students with, and stimulate interest in the culture and history of African-Americans from the Reconstruction period to the present. Emphases are on the struggles, fears, aspirations and achievements of the people. No prerequisite, but either AMH 2010-2020 or SYG 1000-1010 is recommended. This course has been designated as an international/diversity course. 3 semester hours credit. [A]

AER 0418V. Automatic Brake System Technician. This course prepares the student to diagnose, service, and repair late model disc and drum braking systems and controls, including anti-lock braking systems. Components include lecture/discussion, online testing and assessment, written assignments, and hands-on experience. 150 clock hours. [V]

AER 0453V. Automobile Suspension And Steering Technician. This course prepares the student to diagnose and repair steering and suspension systems, including electronic suspensions, and four-wheel steering systems. The most common wheel alignment techniques are taught. Components include lecture/discussion, written assignments, and hands-on experience. 150 clock hours. [V]

AER 0503V. Automotive Engine Performance Technician. This course prepares the student to test, diagnose, and repair electronic ignition and emissions control systems. Prepares the student to test, diagnose and repair electronic fuel injection systems utilizing industry standard tools. Five-gas theory and oscilloscope diagnosis are introduced. Components include lecture/discussion, written assignments, and hands-on experience. 300 clock hours. [V]

AER 0936V. Special Topics in Automotive Service Technology. This is a special course centering around current topics or special interests to meet the needs of the community. Various clock hours. [V]

AGG 2004. Introduction to Agricultural Science. This course has been designed to create awareness, provide introductory experiences, and develop an understanding of all areas of Agricultural Sciences, Agribusiness, Animal Science, Entomology, and Structural Pest Control Horticulture and Landscape Design, Agronomy, Food Science, and Agricultural Education. 1 semester hour credit. [A]

AMH 2010. American History to 1865. A general survey of the development of the United States from the period of discovery and exploration through the Civil War. 3 semester hours credit. [A]

AMH 2020. American History Since 1865. A survey course on the development of the United States from the Reconstruction period to the present. AMH 2010 is not a prerequisite, but is recommended. 3 semester hours credit. [A]
ART 2501C. Color and Pictorial Composition II. Advanced study of the problems of pictorial composition, with greater emphasis upon individual creativity and invention. Prerequisite: ART 2500C. Six hours studio per week. 3 semester hours credit. [A]

ART 2701C. Introduction to Sculpture. A beginning course designed to introduce the student to the materials and methods of creating sculpture. Primary media include clay, plaster, wood, and cement. Six hours lecture and laboratory per week. 3 semester hours credit. [A]

ASH 1044. Middle Eastern History and Civilization. This course is an introductory course on a history of the Middle East. It traces the historical and cultural influences that have contributed to the development of the unique region known as the Middle East. It examines the impact of Judaism, Christianity, and Islam in this history, while placing the primary emphasis on understanding the cultural and historical background of the major problems facing the Middle East today. This course has been designated as an international/diversity course. 3 semester hours credit. [A]

AST 1002. General Astronomy. A course designed to aid the student in understanding the relationship between the earth and the universe. The natural structure and theories of the solar system are presented as a background to a discussion of our galaxy and universe. Topics discussed include the earth, the solar system, historical astronomy, constellations, space exploration, theories of the origin of the universe, and the construction of a telescope. 3 semester hours credit. [A]

ART 2701C. Introduction to Sculpture. A beginning course designed to introduce the student to the materials and methods of creating sculpture. Primary media include clay, plaster, wood, and cement. Six hours lecture and laboratory per week. 3 semester hours credit. [A]

AST 1002. General Astronomy. A course designed to aid the student in understanding the relationship between the earth and the universe. The natural structure and theories of the solar system are presented as a background to a discussion of our galaxy and universe. Topics discussed include the earth, the solar system, historical astronomy, constellations, space exploration, theories of the origin of the universe, and the construction of a telescope. 3 semester hours credit. [A]

BSC 1005. Introduction to Biological Sciences. This is a basic general education course to give the student an understanding of the major biological concepts of anatomy, reproduction, development, genetics, ecology and evolution in plant, animal and human life. This course cannot be used to satisfy degree requirements for students who already have credit in BSC 2010 and/or BSC 2011. Prerequisite: Passing scores on the reading portion of the PERT or other state approved entrance exam, or a grade of “C” or higher in REA 0019. 3 semester hours credit. [A]

BSC 2010. Integrated Principles of Biology I. An introductory study of the mechanisms directing the development and maintenance of life on Earth. Particular attention is given to cell biology, metabolism, reproduction, genetics, biotechnology, and evolution as the major unifying forces in the study of life through the ages. Prerequisite: One full credit in high school biology, or a grade of C or higher in BSC 1005. Recommended: One full credit of high school chemistry, or a grade of “C” or higher in CHM 1030 or CHM 1045. 3 semester hours credit. [A]

BSC 2010L. Integrated Principles of Biology I Lab. A laboratory course intended to be taken concurrently with BSC 2010. Laboratory experiences correlate with the lecture topics in the structure and function of plants and animals and ecology. Activities include dissection of the fetal pig, non-seed and seed plants, and may include field trips. Corequisite: BSC 2011. Two hours laboratory per week. 1 semester hours credit. [A]

BSC 2011. Integrated Principles of Biology II. An introductory study of structure and function at the cellular and organismal level; modern concepts of physiology with emphasis on man; and principles of ecology. Prerequisite: One full credit in high school biology, or a grade of Cor higher in BSC 1005, or consent of department. 3 semester hours credit. [A]

BSC 2011L. Integrated Principles of Biology II Lab. A laboratory course intended to be taken concurrently with BSC 2011. Laboratory experiences correlate with the lecture topics in the structure and function of plants and animals and ecology. Activities include dissection of the fetal pig, non-seed and seed plants, and may include field trips. Corequisite: BSC 2011. Two hours laboratory per week. 1 semester hours credit. [A]

BSC 2085. Anatomy & Physiology I. This course focuses on the study of the anatomical and physiological functions of the human body. The scope of the course includes basic organization and structure with histology, integumentary system, skeletal system, muscular system, and nervous system. Prerequisite: Successful completion of one year of high school biology or a grade of “C” or higher in BSC 1005. 3 semester hours credit. [A]

BSC 2085L. Anatomy & Physiology I Lab. A laboratory course that acquaints the student with selected biological principles including cell biology, metabolism, genetics, physiology and evolution. Corequisite: BSC 2010. Two hours laboratory per week. 1 semester hours credit. [A]

BSC 2086. Anatomy and Physiology II. This course provides an introduction to the study of the functions of the human body. The scope of the course includes specialty senses, endocrine, circulatory, respiratory, digestive, urinary, and reproductive systems; and metabolic regulation. Prerequisite: A grade of “C” or better in BSC 2085 and BSC2085L, or a grade of “C” or better in both BSC 2010 and BSC 2011, or consent of department. 3 semester hours credit. [A]

BSC 2086L. Anatomy and Physiology II Lab. A laboratory course that follows the scope of topics in BSC 2086 with dissection and experiments. Two hours of laboratory per week. Corequisite or prerequisite: BSC 2085. 1 semester hour credit. [A]
BUL 4310. Advanced Legal Environment of Business. This course is an introduction to the legal setting in which businesses operate. Legal topics include the nature of law and the legal process, administrative law, business and the constitution, statutory and common law, business ethics, regulatory law, and agency/unemployment law. 3 semester hours credit. [A]

BUL 4330. Law for Accountancy. Students study the basic concepts of law as applied to the accounting profession, including contracts, agency, partnerships and corporations, property, wills and trusts, securities regulation, consumer protection, and antitrust. Students will review the Accountancy Law portion of the CPA exam. Prerequisite: BUL 4310. 3 semester hours credit. [A]

CCJ 1010. Introduction to Criminal Justice. A study of the history, philosophy, ethics, development, and objectives of the criminal justice systems. The organization and administration of local state, and federal criminal justice agencies are emphasized. Professional career opportunities are surveyed. 3 semester hours credit. [A]

CCJ 1020. Introduction to Criminal Justice. A study of the history, philosophy, ethics, development, and objectives of the criminal justice systems. The organization and administration of local state, and federal criminal justice agencies are emphasized. Professional career opportunities are surveyed. 3 semester hours credit. [A]

CCJ 2933. Special Topics-Seminars-Criminology. Each student in this course chooses a critical issue in the contemporary law enforcement system to analyze. This analysis provides ideas for improvement which are then shared and critiqued in class. 3 semester hours credit. [A]

CCJ 2933. Special Topics-Corrections. This course is designed to allow students to participate in a supervised study or research participation in a specific science-related area in Biology. Students must have instructor approval of the topic before enrolling in the course. This course is only open to students who are enrolled in the science education program or who are trying to meet teacher certificate requirements. Prerequisites: BSC 2010/11 with the corresponding laboratories. 1-3 semester hours credit. [A]

BSC 4101. History of Biology. This course is an introduction and overview of the historical development of biological theories, principles, and methods. This course is intended for students who plan to teach biological science. This course surveys the history of the natural sciences beginning with the natural philosophers of ancient Greece and continuing through the Middle Ages, Renaissance and into the Modern Era. The course will include discussion of original literature about the scientific process, including the social and philosophical implications of that process. Prerequisite: Completion of a two semester science sequence (CHM 1045/46, BSC 2010/11, or BSC 2085/86), or consent of the department. 3 semester hours credit. [A]

CCJ 1010. Introduction to Criminal Justice. A study of the history, philosophy, ethics, development, and objectives of the criminal justice systems. The organization and administration of local state, and federal criminal justice agencies are emphasized. Professional career opportunities are surveyed. 3 semester hours credit. [A]

CCJ 1020. Introduction to Criminal Justice. A study of the history, philosophy, ethics, development, and objectives of the criminal justice systems. The organization and administration of local state, and federal criminal justice agencies are emphasized. Professional career opportunities are surveyed. 3 semester hours credit. [A]

CCJ 1020. Introduction to Criminal Justice. A study of the history, philosophy, ethics, development, and objectives of the criminal justice systems. The organization and administration of local state, and federal criminal justice agencies are emphasized. Professional career opportunities are surveyed. 3 semester hours credit. [A]

CET 2280C. Data Acquisition. This course focuses on the development of data acquisition systems, dataflow programming, data-logging, instrument control, and measurement applications. LabVIEW software will be used to acquire, process, display, and store real-world data. Programming a user interface, optimizing reuse of existing code, and common program design patterns will also be covered. Hardware labs will be used to assist in the design, implementation, testing, and deploying of a project. This course prepares the student to take the NI CLAD certification exam. Prerequisite: EET 1084C. 3 semester credit hours. (6 contact hours). [A]

CGS 1100. Microcomputer Applications for Business and Economics. This course provides a survey of current microcomputer applications software, including general terminology, features and operating procedures for specific tasks. The student will acquire operational skills for using microcomputers in support of business and personal tasks. Prerequisite: A grade of “C” or better in CGS 1060 or CIS 1000 or an acceptable score on the CGS 1100 Screening Exam, or consent of department. 3 semester hours credit. [A]

CGS 1500. Word Processing. This is an in-depth course in word processing software and functions. Topics include creating, editing, and formatting documents; report creation including outline, table of contents, footnote/endnote, and index; merging documents; form letters and mail merge; and creating tables, charts, forms, newsletters and Web pages. Prerequisites: CGS 1060 or consent of department. 3 semester hours credit. [A]

CGS 1525. Introduction to Presentation Software. This course gives the student an introduction to the use of presentation software on microcomputers. This course covers the process of planning a presentation, presentation design principles, and the use of software to create effective
CHD 1220. Child Growth & Development I. This course is a study of the growth and development of the child from conception through age five, including the physical, social, emotional and mental development of the young child, influence of environment and principles and theories of development. 3 semester hours credit. [A]

CHD 1430. Observing and Recording Child Behavior. This course is designed to increase objectivity and proficiency in observing, recording, and interpreting children's behavior in addition to increasing awareness of normative patterns of behavior of children from birth through 5 years of age. Includes observation of infants, toddlers, and a case study of a child from this age group. 3 semester hours credit. [A]

CHD 1941. Early Childhood Internship. This course provides on-the-job training toward the Child Development Associate Credential, Occupational Certificate, and Associate in Science Degree. The student will be assigned a qualified supervisor appointed by the respective agency for which he or she works. The student must comply with the Florida Child Care Professional Credential requirements for internship. Enrollment will be approved after the completion of two of the following: CHD 1220, CHD 1430 or CHD 2432. 3 semester hours credit. [A]

CHD 2322. Programs for Young Children. This course is a study of the principles and practices of programs for young children. It includes current research in early childhood education, role of the teacher, and selection and use of equipment and materials for groups of young children. Prerequisites: CHD 1220 or consent of the department. 3 semester hours credit. [A]

CHD 2432. Curriculum for Young Children. This course is a study of the techniques of using language arts, science, art, social studies, math, and physical activities with young children with emphasis on interdisciplinary learning. 3 semester hours credit. [A]

CHD 2800. Child Care/Education Administrative Overview. This course is designed to meet the educational requirements for the Foundation Level Child Care and Education Administrator Credential as defined by the State of Florida. The curriculum provides for administrative skills in the areas of personnel selection and management, ethics, finances, legal issues and early childhood education. 3 semester hours credit. [A]

CHM 1030. General, Organic and Biochemistry for Health and Related Science I. This course consists of selected topics, specifically designed for a health-related major, with practical application of the chemical concepts of matter, atoms, measurement, bonding, reactions, pH, etc. The organic and biochemistry portion will introduce carbon chemistry and biomolecules and their roles and functions in living organisms. Three hours lecture per week. Prerequisite: Eligibility for MAC 1105. 3 semester hours credit. [A]

CHM 1045. General Chemistry I. The courses CHM 1045-1046 are designed to fulfill requirements in general chemistry for the first year in science, premedical, and engineering curricula. Includes units and measurements, chemical calculations, thermochemistry, gases, liquids, solids, atomic structure, and bonding. Prerequisite: CHM 1030 (with a grade of C or better) or one credit in high school chemistry and eligibility for MAC 1140 or a more advanced course, or consent of department. CHM 1045L should be taken concurrently. 3 semester hours credit. [A]

CHM 1045L. General Chemistry Laboratory I. An introduction to experimental techniques in chemistry, designed to demonstrate basic chemical principles. Prerequisite or corequisite: CHM 1045. Three hours laboratory per week. 1 semester hour credit. [A]

CHM 1046. General Chemistry II. This course is a continuation of CHM 1045, which includes solutions, equilibrium, kinetics, acids and bases, redox reactions, electrochemistry, and nuclear chemistry. Prerequisite: A grade of C or better in CHM 1045; CHM 1046L should be taken concurrently. 3 semester hours credit. [A]

CHM 1046L. General Chemistry Laboratory II. This course is a continuation of experimental techniques in chemistry designed to demonstrate basic chemical principles. Prerequisite or corequisite: CHM 1046. Three hours laboratory per week. 1 semester hour credit. [A]

CHM 2210. Organic Chemistry I. This course is an introduction to the nomenclature, structure, and reactions of organic compounds. Prerequisite: CHM 1046 or equivalent with a grade of C or better. Corequisite: CHM 2210L. 4 semester hours credit. [A]

CHM 2210L. Organic Lab I. An organic laboratory to be taken concurrently with CHM 2210. Three hours laboratory per week. 1 semester hour credit. [A]

CHM 2211. Organic Chemistry II. This course is a continuation on the nomenclature, structure, and reactions of organic compounds. Prerequisite: CHM 2210 Corequisite: CHM 2211L. 3 semester hours credit. [A]

CHM 2211L. Organic Lab II. An organic laboratory to be taken concurrently with CHM 2211. Three hours laboratory per week. 1 semester hour credit. [A]

CHM 4905. Supervised Research in Chemistry. This course is designed to allow students to participate in a supervised study or research participation in a specific science-related area in Chemistry. Students must have instructor approval of the topic before enrolling in the course. This course is only open to students who are enrolled in the science education program or who are trying to meet teacher certificate requirements. Prerequisites: CHM 1045/1046 with the corresponding laboratories. 1-3 semester hours credit. [A]

CIS 1000. Introduction to Computing Systems. This introductory course includes the terminology, procedures, and equipment used in computing systems and in developing software applications. It includes such topics as internal operations of a microprocessor, current memory and storage technologies, data representation, binary arithmetic, character codes, systems development cycle, software design and development, and careers in computing. Prerequisites: Eligible to enroll in MAC 1105 or higher mathematics course or consent of department. 3 semester hours. [A]
CIS 1352. Introduction to Server and Network Security. This course is an introduction to the principles and practices of network and system penetration testing and techniques to defend against attacks that exploit system vulnerabilities. CIS 1352 prepares students for the EC-Council Certified Ethical Hacking industry certification. This course includes both lecture and structured lab experiences. Prerequisite: CTS 1120 or equivalent certifications or consent of department. 3 semester hours credit. [A]

CIS 1941. Internship in Computer Science. Students will receive supervised, practical work experience in an appropriate business, industry, government agency, or institution which relates to the Computer Science/Information Technology field of study. A minimum of 35 clock hours on the job is required for each semester hour of credit earned. Prerequisites: The student must have completed a minimum of 15 semester hours of technical coursework toward an AA or AS degree in Computer Science, Information Systems, Information Technology, or Network Systems Technology or a related field and be recommended by the appropriate course instructor or advisor for the program. A written application may be required. 1-3 semester hours credit. May be repeated for a maximum of 3 semester hours credit. [A]

CIS 2381. Introduction to Digital Forensics. This course will provide an introduction to the field of digital forensics. The student will learn how to obtain and analyze digital information for possible use as evidence in civil, criminal, or administrative cases. Topics include applications of hardware and software to digital forensics, computer forensics law, volume and file system analysis, digital forensic investigations, and digital forensics in the laboratory. Hands-on exercise guide discussions and reinforce the subject matter. Prerequisite: CIS 1352 or consent of department. 3 semester hours credit. [A]

CIS 2930-2931. Topics in Computer Science. This course is a seminar covering a topic of current interest in computer science for computer science majors. Prerequisite: CIS 1000 or consent of department. 1-2 semester hours credit. [A]

CJB 1150. Correctional Law. This course is practical law for correctional personnel. Study includes law regulating the use of force, civil rights of prisoners, constitutional law, legal service, disciplinary procedures, parole, and current case law. 3 semester hours credit. [A]

CJB 1301. Career Choices in Criminal Justice. A course designed for Criminal Justice majors declaring a realistic career choice and life goals management through the development of self evaluation, career awareness and career decision-making skills. Students will explore the various criminal justice opportunities and set a goal. 3 semester hours credit. [A]

CJB 1711. Introduction to Crime Scene Technology. This course is an introductory course in crime scene investigation techniques. Emphasis is placed upon recording the crime scene, collecting the preserving physical evidence, and the examination of evidence. Employment of those techniques available to the crime scene investigator also will be demonstrated. 3 semester hours credit. [A]

CJB 1721. Advanced Crime Scene Technology. This course covers advanced principles, theories and applications in crime scene technology. Specialized collection procedures of weapons, traffic crash evidence, arson, gunshot residue, bold spatter, and recovery of buried bodies and surface skeletons are also included. Data analysis, reporting and plan of action development are emphasized. Prerequisite CJB 1711. 3 semester hours credit. [A]

CJB 1930. Special Topics - Law Enforcement. Each student in this course chooses a critical issue in the contemporary law enforcement system to analyze. This analysis provides ideas for improvement which are then shared and critiqued in class. 3 semester hours credit. [A]

CJB 2301. Career Choices in Criminal Justice. A course designed for criminal justice majors to help plan a realistic career choice and life goals through the development of self evaluation, career awareness and career decision making skills. Students will explore the various criminal justice opportunities and set a goal. 1 semester hour credit. [A]

CJB 2482. Police Community Relations. 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. 3 semester hours credit. [A]

CJB 2703. Crime Scene Safety. This course covers potential health and safety hazards one will encounter at a crime scene. The course will also introduce the proper protective techniques to minimize risk to self and others. Emergency procedures and state and federal regulations are included. 3 semester hours credit. [A]

CJB 2713. Introduction to Forensic Science. This course exposes the student to the capabilities and functions of a full-service crime laboratory. Also covered is evidence selection and submission to crime lab in accordance with established standards and legal requirements including chain of custody. 3 semester hours credit. [A]

CJC 1000. Introductions to Corrections. An examination of the total correctional processes from law enforcement through the administration of justice, probation, prisons, and correctional institutions, and parole history and philosophy, career oriented. 3 semester hours credit. [A]

CJC 2162. Probation, Pardons, and Parole. A course which examines the use of probation, parole, and pardons as alternatives to incarceration. Prerequisite: CCJ 1020. 3 semester hours credit. [A]

CJD 0161V. Managing and Communicating. This course is designed to identify managing and communicating skills for officer safety when dealing with offenders who have mental illness, substance abuse and co-occurring disorders. Obtaining such skills may increase the safety and security of a well-run facility. 40 clock hours. [V]

CJD 0164V. Inmate Manipulation. This course is designed to instruct corrections officers in the physical and verbal strategies dealing with inmate manipulation in a professional manner. 40 clock hours. [V]

CJD 0250V. Interviews and Interrogations. An advanced course designed to cover the techniques, methods, principles, and issues of interviews and interrogations. 40 clock hours. [V]

CJD 0310V. Line Supervision. A course designed to provide students with the knowledge and skills needed to function effectively as supervisors. Major topic areas include interpersonal communications, principles of organization and management, human relations, planning and development, policy formulation and budgeting. 80 clock hours. [V]

CJD 0320V. Middle Management. A course designed for the law enforcement or correctional officer in a management or supervisory position. The course strengthens basic skills and develops leadership skills which are necessary for successful performance in the criminal justice field. 40 clock hours. [V]

CJD 0331V. Planning the Effective Use of Financial Resources. This course was designed to acquaint the criminal justice officer with general financial concepts and terms, financial systems, budgets, and the effective uses of financial information within a criminal justice agency. An eight-hour practicum has been provided in this course to allow the students to actually develop and justify a working budget. 40 clock hours. [V]

CJD 0332V. Building and Maintaining a Sound Behavior Climate. A course designed to acquaint the criminal justice officer with behavioral concepts, management techniques, motivational techniques, and the role of communication in criminal justice administration. 40 clock hours. [V]

CJD 0468V. Youthful Offender Program. A course designed to provide the officer with increased knowledge and experience related to youthful offenders. General concepts, staff-inmate relationships, treatment of discipline strategies and youthful offender supervisory skills will be presented. FDLE - CJSTC Advanced Course. For Criminal Justice Personnel Only. 40 clock hours. [V]
CJD 0470V. Emergency Preparedness. A course designed to introduce correctional officers to the concept and key components of emergency situations; effective leadership to prevent such occurrences; and internal factors both inside and outside correctional institutions which affect emergency situations. FDLE - CJSTC Advanced Course. For Criminal Justice Personnel Only. 40 clock hours. [V]

CJD 0471V. Discipline and Special Confinement Techniques. A course designed to aid the correctional officer in effectively and properly performing the task requirements inherent in a confinement environment. The student will perform many of these tasks in practical exercises to demonstrate proficiency. FDLE - CJSTC Advanced Course. For Criminal Justice Personnel Only. 40 clock hours. [V]

CJD 0476V. Fire Fighting. A course designed to provide officers with first-stage fire fighting capabilities and thereby reduce the dangers of death and injury in correctional settings. Emphasis will be placed on rescue techniques, the use of breathing equipment, evacuation of prisoners. FDLE - CJSTC Advanced Course. For Criminal Justice Personnel Only. 40 clock hours. [V]

CJD 0602V. Narcotic Identification and Investigation. A course which follows the curricula developed by the U.S. Drug Enforcement Administration for teaching criminal justice officers essential concepts and techniques in the area of drug and drug-related crimes. FDLE - CJSTC Advanced Course. For Criminal Justice Personnel Only. 40 clock hours. [V]

CJD 0603V. Sex Crimes Investigation. A course providing an overview of sex crimes investigation for the patrol officer and investigator with limited experience in this field. Provides an understanding of the problematic, legal, investigative and evidentiary aspects of sex crimes. FDLE - CJSTC Advanced Course. For Criminal Justice Personnel Only. 40 clock hours. [V]

CJD 0604V. Injury and Death Investigations. A course giving the patrol officer and investigator with limited experience in injury and death investigation a general insight into investigative, legal and evidentiary compounds. FDLE - CJSTC Advanced Course. For Criminal Justice Personnel Only. 40 clock hours. [V]

CJD 0626V. Hostage Negotiations. This course is designed to qualify in-service law enforcement and correctional officers and support personnel in the area of hostage negotiations; to include: introduction to the problem, types of hostage situations, formulation of policy, hostage negotiations principles, communications principles, intelligence gathering, abnormal behavior and participant performance exercise. FDLE - CJSTC Advanced Course. For Criminal Justice Personnel Only. 40 clock hours. [V]

CJD 0632V. Field Training Officer. A course designed to introduce the criminal justice student to all aspects of field training and evaluation programs to include adult learning and instruction, evaluation, role responsibilities and characteristics of the Field Training Officer (FTO), communications techniques, counseling techniques, legal and ethical issues and human motivation. FDLE - CJSTC Advanced Course. For Criminal Justice Personnel Only. 40 clock hours. [V]

CJD 0647V. Organized Crime. Designed for the patrol officer and investigator, this course covers specific techniques of recognition, classification and effective investigation of organized crime. This course is intended for the patrol officer and investigator. 40 clock hours. [V]

CJD 0663V. Writing and Reviewing Reports. A course providing a focused review and practice of the basic elements necessary for effective writing in any situation or any type of report. FDLE - CJSTC Advanced Course. For Criminal Justice Personnel Only. 40 clock hours. [V]

CJD 0677V. Drug Abuse Awareness and Education. A course providing the informed criminal justice officer with the methodologies necessary to educate members of the community. This is achieved through various modes of presentation on current and critical issues relevant to drug abuse. FDLE - CJSTC Advanced Course. For Criminal Justice Personnel Only. 40 clock hours. [V]

CJD 0681V. Case Preparation and Court Presentation. A study of the fundamentals of criminal case preparation and court presentation for the law enforcement and/or correctional officer, to include case files, pretrial discovery, depositions, plea bargaining, court testimony, moot court, post adjudication responsibilities, case studies and a practical exercise. FDLE - CJSTC Advanced Course. For Criminal Justice Personnel Only. 40 clock hours. [V]

CJD 0691V. Stress Awareness and Resolution. A course designed to enhance the law enforcement, correctional and correctional probation officer's ability to deal with stressful situations that are inherent in the criminal justice profession. A general awareness of the causes and types of stress and techniques for managing stress should lead to more effective job performance. This course emphasizes application of stress management techniques related to all areas of the officer's life. FDLE-CJSTC Advanced Course. For Criminal Justice Personnel only. 40 clock hours. [V]

CJD 0693V. Crisis Intervention. A course providing the law enforcement and correctional officer with the training needed to recognize and handle common crises. FDLE - CJSTC Advanced Course. For Criminal Justice Personnel Only. 40 clock hours. [V]

CJD 0697V. Domestic Intervention. This course is designed to provide the officer with an awareness of domestic intervention symptoms and techniques, including information and case studies on specific domestic and social problems. 40 clock hours. [V]

CJE 0308V. Developing & Maintaining a Sound Organization. A course designed to acquaint the criminal justice officer with the general concepts and principles of organization and organizational structures. 40 clock hours. [V]

CJE 0404V. Human and Community Relations. This course is designed to help officers understand their own feelings in efforts to create the ability to effectively deal with the feelings of others. Law enforcement image and functions as well as conflict-causing barriers which exist between police and the community will be explored. 40 clock hours. [V]

CJE 0543V. Radar Speed Measurement. This course is designed for the Law Enforcement officer in a patrol officer’s position to improve the effectiveness of speed enforcement through the proper use of police traffic “RADAR” speed measurement. 40 clock hours. [V]

CJE 1000. Introduction to Law Enforcement. This course will present and analyze how police operate in America. This course will explain the mystique and misunderstanding surrounding police work and the hostility, controversy and resentment the profession generates. We will discover who police are and who they are not, what they can and cannot do and finally why their exact role in society remains so unclear. 3 semester hours credit. [A]

CJE 1202. Crime and Delinquency. This course will provide the student with the opportunity to explore crime theories, crime causation, crime in the modern world, and future trends of criminology and delinquency. In addition, the student will examine theory versus reality throughout the course. 3 semester hours credit. [A]
**CJE 2500. Police Operations.** A discussion of police problems and responsibilities, including the distribution of personnel and materials, supervision of forces, operating procedures, communications and records, highway safety and traffic control, disasters and disturbances, and the relationship between the police and the public. 3 semester hours credit. [A]

**CJE 2600. Criminal Investigation.** A course to provide education theory in the fundamentals of investigation and the techniques of collection, preservation and transportation of evidence. 3 semester hours credit. [A]

**CJJ 1002. Juvenile Delinquency.** A history of the juvenile court system in the United States is reviewed. Delinquency and the family are analyzed. Delinquency control, including the police, courts, legislation and support agencies are discussed. 3 semester hours credit. [A]

**CJK 0001V. Introduction to Law Enforcement.** This course is a component of the Law Enforcement Florida CMS Basic Recruit Academy. It is designed to introduce the student to law enforcement, the process for becoming a certified law enforcement officer, and the requirements of the academy program. This course is open only to students admitted to the Law Enforcement Florida CMS Basic Recruit Academy. 10 clock hours. [V]

**CJK 0002V. Legal.** This course is a component of the Law Enforcement Florida CMS Basic Recruit Academy. It is designed to introduce the student to the criminal justice system, the chain-of-command system in law enforcement, constitutional law, Florida statutes, and the police code of ethics. This course includes classroom instruction and scenario-based training exercises. This course is open only to students admitted to the Law Enforcement Florida CMS Basic Recruit Academy. 62 clock hours. [V]

**CJK 0013V. Interactions in a Diverse Community.** This course is a component of the Law Enforcement Florida CMS Basic Recruit Academy. It is designed to enhance student awareness and understanding of human diversity issues and to teach students skills to enable them to effectively interact with people of diverse backgrounds. This course includes classroom instruction and scenario-based training exercises. This course is open only to students admitted to the Law Enforcement Florida CMS Basic Recruit Academy. 40 clock hours. [V]

**CJK 0014V. Interviewing and Report Writing.** This course is a component of the Law Enforcement Florida CMS Basic Recruit Academy. It is designed to help the student learn vital English Composition including interviewing, note taking, statement taking, and report writing. It also helps the student to develop survival skills, stress management skills, and problem solving skills utilizing the secure model. This course includes classroom instruction and scenario-based training exercises. This course is open only to students admitted to the Law Enforcement Florida CMS Basic Recruit Academy. 56 clock hours. [V]

**CJK 0020V. CMS Law Enforcement Vehicle Operations.** This course is a component of the Law Enforcement Florida CMS Basic Recruit Academy. This course is designed to prepare prospective police officers to apply vehicle operations knowledge, principles and techniques to the police driving environment. This course includes classroom instruction and practical application on the driving range. 48 clock hours. [V]

**CJK 0031V. Criminal Justice Firearms.** This course is a component of the Law Enforcement Florida CMS Basic Recruit Academy. This course is designed to give the student basic skills and knowledge needed to safely operate a firearm, and shoot a handgun, and shotgun and/or rifle with a prescribed degree of accuracy. This course includes classroom instruction and firing range practice/qualification. This course is open only to students admitted to the Law Enforcement Florida CMS Basic Recruit Academy or Correctional Officer Basic Recruit Academy. 80 clock hours. [V]

**CJK 0051V. CMS Criminal Justice Defensive Tactics.** This course is a component of the Law Enforcement Florida CMS and Correctional Officer Basic Recruit Academies. It is designed to prepare prospective officers to control subjects and defend themselves using appropriate defensive tactics in accordance with Florida State statute, the United States Constitution, and case law. This course includes classroom instruction and practical physical exercises and demonstrations. This course is open only to students admitted to the Law Enforcement Florida CMS Basic Recruit Academy or Correctional Officer Basic Recruit Academy. 80 clock hours. [V]

**CJK 0064V. Fundamentals of Patrol.** This course is a component of the Law Enforcement Florida CMS and Correctional Officer Basic Recruit Academies. It is designed to enable students to understand community-oriented policing and how it is implemented as a problem solving model, identify the secure problem solving model its application in real life situations; understand officer safety issues, identify and avoid fatal errors, identify and manage stress, maintain mental and physical fitness; respond to a call, approach a suspect, make an arrest, transport a prisoner and process the prisoner at a detention facility; and understand how to direct traffic, how to enforce traffic citations, identify how to respond to alarms and conduct a building search, and search, inventory and impound vehicles. This course is open only to students admitted to Law Enforcement Florida CMS Basic Recruit Academy. 35 clock hours. [V]

**CJK 0065V. Calls for Service.** This course is a component of the Law Enforcement Florida CMS Basic Recruit Academy. It is designed to enable students to respond to calls for service, disturbances, people in distress and court orders. This course is open only to students admitted to the Law Enforcement Florida CMS Basic Recruit Academy. 36 clock hours. [V]

**CJK 0077V. Criminal Investigations.** This course is a component of the Law Enforcement Florida CMS Basic Recruit Academy. It is designed to prepare the student to respond appropriately to a crime against a person or property victim, witness, and suspect; conduct a preliminary investigation on crimes against persons and crimes against property offenses; conduct a follow-up investigation to establish a suspect's identity and/or ascertain facts of the case; and, give testimony in different types of court proceedings. It includes classroom instruction and practical exercises. This course is open only to students admitted to the Law Enforcement Florida CMS Basic Recruit Academy. 50 clock hours. [V]

**CJK 0078V. Crime Scene To Courtroom.** This course is a component of the Law Enforcement Florida CMS Basic Recruit Academy. It is designed to prepare the student to respond to a crime scene, protect and survey a crime scene, process a crime scene, dust for latent prints, and document a crime.
scene by sketching. This course includes classroom instruction and scenario-based training exercises. This course is open only to students admitted to the Law Enforcement Florida CMS Basic Recruit Academy. 35 clock hours. [V]

**CJ 0084V. DUI Traffic Stops.** This course is a component of the Law Enforcement Florida CMS Basic Recruit Academy. It introduces the student to the basic rules for conducting safe and effective DUI stops, including identifying a driver under the influence of alcohol or drugs, conducting field sobriety tests, and completing a DUI investigation. It includes classroom instruction and practical proficiency exercises. This course is open only to students admitted to the Law Enforcement Florida CMS Basic Recruit Academy. 24 clock hours. [V]

**CJ 0087V. Traffic Stops.** This course is a component of the Law Enforcement Florida CMS Basic Recruit Academy. It introduces the student to the basic rules for conducting safe and effective traffic stops, including ethical consideration, safety considerations, citation and warning procedures, and dealing with abandoned vehicles. It includes classroom instruction and practical proficiency exercises. This course is open only to students admitted to the Law Enforcement Florida CMS Basic Recruit Academy. 30 clock hours. [V]

**CJ 0088V. Traffic Crash Investigations.** This course is a component of the Law Enforcement Florida CMS Basic Recruit Academy. It introduces the student to traffic crash investigations, laws pertaining to traffic crashes and procedures for responding to a traffic crash. It includes classroom instruction and practical exercises. This course is open only to students admitted to the Law Enforcement Florida CMS Basic Recruit Academy. 32 clock hours. [V]

**CJ 0092V. Critical Incidents.** This course is a component of the Law Enforcement Florida CMS Basic Recruit Academy. It is designed to enable students to identify the crowd control procedures to safely and effectively disperse or control a large group of people; understand local emergency response plans; respond to a bomb threat, assesses the scene, search and evacuate a building or suspected bomb site, identify weapons of mass destruction and proper responses to a WMD incident. This course is open only to students admitted to the Law Enforcement Florida CMS Basic Recruit Academy. 44 clock hours. [V]

**CJ 0096V. Criminal Justice Officer Physical Fitness Training/Law Enforcement.** This course is a component of the Law Enforcement Florida CMS and Correctional Officer Basic Recruit Academies. It is designed to encourage students to improve their overall physical fitness, improve their scores on the final fitness evaluation, and adopt a foundation for lifelong fitness. This course is open only to students admitted to the Law Enforcement Florida CMS Basic Recruit Academy or Correctional Officer Basic Recruit Academy. 60 clock hours. [V]

**CJ 0200V. Overview of Corrections.** This course provides the student with an overview of the correctional officer training program and the requirements for becoming a certified officer. It provides a legal foundation from which students may begin to function as correctional officers. It gives instruction on basic criminal justice values, ethics, and ways to demonstrate professionalism when interacting with others. Students will learn about the command structure within the criminal justice agency, acquire a working knowledge of federal and state laws, and how to apply them to specific incidents. 14 clock hours. [V]

**CJ 0205V. Law Enforcement Cross-Over to Correctional: Responding to Incidents and Emergencies.** This course studies a diversity of incidents and emergencies encountered in a correctional setting including: medical, escapes, riots, hostages, natural disasters, and crime scenes. A combination of practical exercises is included to enhance tactics, safety, and survival skills. Objectives include those established by the criminal justice standards and training commission. 12 clock hours. [V]

**CJ 0212V. Cross-Over Corrections to Law Enforcement - High Liability.** This course is designed for the corrections officer(s) to cross over to law enforcement which focuses on high liability areas, prepares prospective officer(s) to apply basic first aid knowledge and techniques to emergencies. The officer will learn firearm safety procedures; use of deadly force; basic procedures for handguns; learn common types of ammunition and attain proficiency in marksmanship using certain designated firearms. 8 clock hours. [V]

**CJ 0293V. Overview of Law Enforcement.** This course is a component of the Law Enforcement Florida CMS and Correctional Officer Basic Recruit Academies. It is designed to teach prospective officers to understand law enforcement legal concepts, criminal law, civil law and juvenile law. This course is open only to students admitted to the Correctional Officer Cross-Over Training To Florida Law Enforcement Academy. 64 clock hours. [V]

**CJ 0295V. Correctional Cross-Over to Law Enforcement Officer Wellness.** This course is part of the Correctional Officer Cross-Over Training to Florida CMS Law Enforcement Basic Recruit Training Program and address the basic elements of nutrition, weight control, stress management, and other applicable topics. 35 clock hours. [V]

**CJ 0296V. Reporting Procedures.** This course is a component of the Law Enforcement Florida CMS and Correctional Officer Basic Recruit Academies. It is designed to teach prospective officers the proper skills necessary for interviewing a person and completing a written report. This course is open only to students admitted to the Correctional Officer Cross-Over Training to Florida Law Enforcement Academy. 32 clock hours. [V]

**CJ 0297V. Interactions in Crisis Situations.** This course is a component of the Law Enforcement Florida CMS and Correctional Officer Basic Recruit Academies. It is designed to teach prospective officers to identify, interact and understand communicating in a crisis situation, communicating in a diverse society, and identifying high risk groups. This course is open only to students admitted to the Correctional Officer Cross-Over Training to Florida Law Enforcement Academy. 10 clock hours. [V]

**CJ 0300V. Introduction to Corrections.** This is a basic course in which the overview of the correctional officer training program, basic criminal justice values and ethics, ways to demonstrate professionalism when interacting with others, the command structure, state and federal laws, and agency policy and procedures are studied. Objectives are addressed as specified by the criminal justice standards and training commission. 32 clock hours. [V]

**CJ 0305V. CJSTC Communications.** This is a basic course in which practical communication skills that will assist the new correctional officer in managing and supervising inmates, giving directions, answering questions, and interacting with others in a professional and safe manner are studied. Interpersonal communications, telecommunications, interviewing, note taking, and report writing are also studied. Objectives are addressed as specified by the criminal justice standards and training commission. 40 clock hours. [V]

**CJ 0310V. Officer Safety.** This is a basic course in which the knowledge and understanding of the facilities policies and procedures as well as being prepared to respond appropriately to minimize safety and security concerns are studied. Objectives are addressed as specified by the criminal justice standards and training commission. 16 clock hours. [V]

**CJ 0315V. Facility and Equipment.** This is a basic course in which the use of standard equipment used including weapons, hazardous materials, and sensitive supplies are studied. The safe and efficient operation of this equipment to provide a safe environment for all staff and inmates is also studied. Objectives are addressed as specified by the criminal justice standards and training commission. 8 clock hours. [V]

**CJ 0320V. Intake and Release.** This is a basic course in which the intake and release procedures of inmates are studied. Fingerprinting, photographing and classification of inmates are also studied. Objectives are addressed as specified by the criminal justice standards and training commission. 18 clock hours. [V]
CJK 0325V. Supervising in a Correctional Facility. This is a basic course in which the care, custody, and control of inmates is studied. The development of good observation skills, practicing officer safety guidelines, and following agency policy and procedures to ensure the safe operation of the facility are also studied. Objectives are addressed as specified by the criminal justice standards and training commission. 40 clock hours. [V]

CJK 0330V. Supervising Special Populations. This is a basic course in which the supervision of special population inmates is studied. The ability of the officer to categorize, approach, and redirect these inmates to ensure officer safety and effective communication is also studied. Objectives are addressed as specified by the criminal justice standards and training commission. 20 clock hours. [V]

CJK 0335V. Responding to Incidents and Emergencies. This is a basic course in which the officer learns to apply knowledge, training, and reasonable judgment to assure the safety and security of all persons at the facility during an emergency. The officers ability to recognize signs that an incident could develop into an emergency and how to appropriately respond to different types of emergencies is also discussed. Objectives are addressed as specified by the criminal justice standards and training commission. 30 clock hours. [V]

CJK 0340V. Officer Wellness and Physical Abilities. This is a basic course in which physical fitness and wellness is studied. The student will also be required to be physically evaluated using the physical fitness standards. Objectives are addressed as specified by the criminal justice standards and training commission. 30 clock hours. [V]

CJK 0354V. Law Enforcement Cross-Over to Correctional Officer Wellness. This course is part of the Law Enforcement Officer Cross-Over training to Correctional Basic Recruit Training program and provides instruction to effectively supervise and maintain the care, custody and control of special population inmates. 12 clock hours. [V]

CJK 0392V. Cross-Over Handgun Transition Course. This course provides training and transitions a student from the use of a semiautomatic handgun to a revolver, or vice versa. Students must demonstrate proficiency for both handgun daytime and handgun nighttime using the course of fire specified in this course. 24 clock hours. [V]

CJK 0393V. Cross-Over Program Updates. This course is designed for instructors to deliver expanded or updated instruction on curriculum topics contained in this cross-over program. 8 clock hours. [V]

CJK 0422V. Dart Firing Stun Gun. This course is a component of the Law Enforcement Florida CMS and Correctional Officer Basic Recruit Academies. It is designed to encourage students to improve their overall physical fitness, improve their score on the final fitness evaluation, and adopt a foundation for lifelong fitness. This course is open only to students admitted to the Law Enforcement Florida CMS Basic Recruit Academy or Correctional Officer Basic Recruit Academy. 60 clock hours. [V]

CJK 0460V. School Resource Officer. A course designed to acquaint the criminal justice officer with the general concepts and principles of organization and organizational structures. 40 clock hours. [V]

CJK 0470V. Criminal Law for Advanced Training. A course in the theory, purpose and history of criminal law. General criminal procedures, including arrest and trial, appeal, punishment and release, search and seizure and the rights and duties of law officers. 40 clock hours. [V]

CJL 1500. The Court System. This course examines the history, traditions, and philosophy of the American Court System. Emphasis is on the roles of the prosecutor, judge, defense attorney, jurors, offenders and the public. This course focuses on the general themes of law on the books, law in action, and law in controversy. 3 semester hours credit. [A]

CJL 2062. Constitutional Law for Criminal Justice. A study of the federal and the various state constitutions. An in-depth analysis of those constitutional amendments having a bearing on contemporary criminal justice issues. 3 semester hours credit. [A]

CJL 2100. Criminal Law. A course in the theory, purpose and history of criminal law. General criminal procedures, including arrest and trial, appeal, punishment and release, search and seizure and the rights and duties of law officers. 3 semester hours credit. [A]

CJL 2130. Criminal Evidence. An analysis of courtroom procedures, presentation of evidence and judicial decisions. Rules of evidence and the roles of judge, prosecutor, defense and jury will be discussed. 3 semester hours credit. [A]

CJT 0800V. Computer Applications in Criminal Justice. This course will provide criminal justice officers, with limited computer and technology experience, information regarding the benefits of computers and technology when managing the operations within the Criminal Justice System. 40 clock hours. [V]

CLP 2140. Abnormal Psychology. A course which concentrates on the description, causes and treatment of behavioral disorders as seen from the viewpoint of the major theoretical models of abnormal behavior. Prerequisite: PSY 2012. 3 semester hours credit. [A]

COP 1700. Introduction to Database Management. This course covers the development and management of databases, including database design and normalization, SQL, and regular maintenance tasks required of database administrators, such as replication, backup and restore, contingency planning, and disaster recovery. The operation of a database management system is explored using hands-on exercises. Prerequisite: CGS 1100 or CIS 1000 or consent of department. 3 semester hours credit. [A]

COP 1822. Introduction to Web Authoring and Design. This course covers the procedures involved in designing and creating Web pages and Web sites. The class includes hands-on laboratory assignments using current Web development software and/or current Web languages. Prerequisite: CGS 1060 or consent of department. 3 semester hours credit. [A]

COP 2000. Introduction to Computer Programming. This class is a beginning course in computer programming, with an emphasis on the problem-solving process, problem analysis, design decisions, and creative algorithm-development. Topics will include organization and structure of computer programs; interface design techniques; algorithm design and development; a survey of programming paradigms; syntax and semantics of specific statements in one or more representative computer languages. Prerequisite: Must be eligible to enroll in MAC 1105 or higher mathematics course. The prerequisite may be waived by consent of department for students with previous appropriate coursework or work experience. Contact the course instructor for details. 3 semester hours credit. [A]

COP 2224. C++ Programming. This course is a survey of the C++ programming language, with special attention to language features that support an object-oriented approach to programming. Topics include a review of basic programming control structures, input/output operations, and mathematical and logical operations; data types and basic data structures including arrays, records, files, classes, and pointers; functions; parameters; language extensibility using libraries. Prerequisite: COP 2000. The prerequisite may be waived by consent of department for students with previous appropriate coursework or work experience. Contact the course instructor for details. 3 semester hours credit. [A]

COP 2535. Introduction to Data Structures and Algorithms. This is the third course in computer programming. Topics will include standard data structures, such as lists, queues, stacks, trees, graphs; associated algorithms; and an introduction to algorithm analysis techniques. A comparison of pointer-based implementations and array-based implementations will be made. Prerequisite: COP 2224. Prerequisite may be waived by consent of department for students with previous appropriate coursework or work experience. Contact the course instructor for details. 3 semester hours credit. [A]
COP 2800. Java Programming. This course provides an introduction to the Java programming language. Topics include basic operations, controls, data, objects, graphics, applets, method abstraction, class abstraction, and event handling. Prerequisite: COP 2000 or consent of department. 3 semester hours credit. [A]

COP 2900. Applied Programming Specialty. This is a course in using a particular programming language to create programs to solve a particular problem. Students write a contract for the particular programming activities to be completed during the course. Prerequisite: 6 semester hours credit in courses with COP prefix or consent of department. 1-3 semester hours credit. [A]

COS 0080V. Cosmetology I. This course introduces basic cosmetology concepts. Topics include preparation, care and treatment of the hair, safety and sanitation, bacteriology, diseases and disorders; hygiene, product knowledge and other related topics. Upon completion, students should be able to safely and competently apply Cosmetology concepts and practical skills in the salon setting. Competency is achieved in basic manual facials, hair sculpting, scalp treatments and hair re-conditioning, hair lightening and hair color, shampoos, hairstyling, chemical permanent waving and chemical hair relaxing, manicuring and pedicuring. 450 clock hours. [V]

COS 0081V. Cosmetology II. This course introduces new cosmetology concepts and builds upon the previous concepts learned in COS 0080V Cosmetology I. Topics include: The study of the skin, the study of nails, Hair Coloring, Chemical Texturizing, Chemistry, Anatomy and Physiology and Florida Law. Upon completion, students should be able to safely and competently apply Cosmetology concepts and practical skills in the salon setting. Students will begin to sharpen their technical skills and increase their speed and proficiency through continued practice of basic manual facials, hair sculpting, scalp treatments and hair re-conditioning, hair lightening and hair color, shampoos, hairstyling chemical permanent waving and chemical hair relaxing, manicuring and pedicuring services. 450 clock hours. [V]

COS 0082V. Cosmetology III. This course introduces new cosmetology concepts and builds upon the previous concepts learned in COS 0081V Cosmetology II. Topics include: Wigs and Hair Additions, Salon Business and Electricity. Upon completion, students should be able to safely and competently apply cosmetology concepts and practical skills in the salon setting. Students will begin to sharpen their technical skills and increase their speed and proficiency through continued practice of basic manual facials, hair sculpting, scalp treatments and hair re-conditioning, hair lightening and hair color, shampoos, hairstyling chemical permanent waving and chemical hair relaxing, manicuring and pedicuring services. 300 clock hours. [V]

COS 0087V. Career Preparation and Regulations Review. This course provides instruction in laws, rules and regulations related to the practice of cosmetology and salon ownership. Students become familiar with employability skills and study state board of cosmetology requirements. Focus is preparing the individual with the opportunity to receive review of skills and techniques of cosmetology along with laboratory practices, information, related technology and correct terminology necessary to successfully become employed in the field of cosmetology. 300 clock hours. [V]

COS 0927V. Special Topics in Cosmetology. This is a special course centering on current topics or special interests to meet the needs of the community. Various clock hours. [V]

CPO 2002. Introduction to Comparative Government. This course addresses government institutions and current political parties throughout the world, as well as theories that explain similarities and differences among countries. Topics include electoral systems, parliamentary systems, political frameworks, democratization of political culture, political leaders and performance, ideologies and economic and social policy. The examples are from Western democracies, the third world, and current or former communist countries. 3 semester hours credit. [A]

CTS 1110. Microcomputer Operating Systems. This course gives students a survey of operating systems for microcomputers, including basic operating system functions such as disk and file management, customizing system configuration, and optimizing system performance. This course prepares students for a CompTIA A+ Operating Systems industry certification. This course includes both lecture and structured lab experiences. Corequisite: CTS 1131 or consent of department. 3 semester hours credit. [A]

CTS 1111. Introduction to Linux. This course is an introduction to the Linux network operating system. Topics include installation and configuration of client, GUI and command line interface, file management, system utilities, remote connectivity, and scripting. Hands-on laboratory exercises are included. This course includes both lecture and structured lab experiences. Prerequisite: CTS 1650 and CTS 1390 or equivalent certifications or consent of department. 2 semester hours credit. [A]

CTS 1120. Introduction to Network Security. This course covers an introduction to network security, concepts, terminology and a basic understanding of available network security methods and programs. Topics include legal issues and policies, managing risks, identifying types of attacks, information security best practices, E-Commerce needs and intrusion detection platform-specific implementations. This course prepares students for CompTIA Security+ or Microsoft Security Fundaments (MTA) industry certification. This course includes both lecture and structured lab experiences. Prerequisite: Acceptable college-ready placement score in reading or successful completion of appropriate college-prep reading course(s). CTS 1110 and CTS 1131 or equivalent certifications or consent of department. 3 semester hours credit. [A]

CTS 1131. Introduction to Microcomputer Maintenance and Repair. This course introduces computer hardware components and system software needed to set up, install, configure, upgrade, and maintain a microcomputer system. This course prepares students for a CompTIA A+ Hardware industry certification. This course includes both lecture and structured lab experiences. Corequisite: CTS 1110 or consent of department. 3 semester hours credit. [A]

CTS 1155. IT User Support. This course covers the technical, business, and interpersonal skills needed by information technology support personnel in an IT user support setting. 3 semester hours credit. [A]

CTS 1163. Microsoft Desktop Systems Configuration. This course provides students with the knowledge and skills necessary to install, configure, customize and troubleshoot Microsoft Windows client software. This course prepares students for a Microsoft Windows Desktop industry certification. This course includes both lecture and structured lab experiences. Prerequisite: Acceptable college-ready placement score in reading or successful completion of appropriate college-prep reading course(s). CTS 1110 or equivalent certification or consent of department. 3 semester hours credit. [A]
CTS 1390. Introduction to LAN and Server Management. This course introduces the student to the skills needed to install and configure servers using Microsoft Windows Server software. It prepares students for the first exam leading to the Microsoft MCSA Server industry certification. Prerequisite: Acceptable college-ready placement score in reading or successful completion of appropriate college-prep reading course. CTS 1110 or equivalent certification or consent of department. Corequisite: CTS 1650 or consent of department. 3 semester hours credit. [A]

CTS 1650. Introduction to Networking and Communications. The purpose of this course is to prepare a student to learn and apply the basics of computer networking using common network devices. The course covers the OSI model and industry standards network topologies, IP addressing including subnet masks, and basic network design. This course prepares students for the following industry certifications: CompTIA Network+ and Microsoft Network Fundamentals (MTA). This course includes both lecture and structured lab experiences. Prerequisite: Acceptable college-ready placement score in reading or successful completion of appropriate college-prep reading course(s). CTS 1131 or equivalent certifications or consent of department. Corequisite: CTS 1390 or consent of department. 3 semester hours credit. [A]

CTS 1651. CISCO Router Technology. This course is designed to prepare a student to apply and understand the basics of networking hardware. The course covers the beginning router configurations and troubleshooting; routed and routing protocols; WAN connectivity, VLANs, and VPNs; and an introduction to LAN switching. This course prepares students for the CISCO Certified Entry Network Technician (CCENT) industry certification. This course includes both lecture and structured lab experiences. Prerequisite: CTS 1650 or equivalent certification or consent of department. 3 semester hours credit. [A]

CTS 2127. Advanced Network Security. This course is a study of advanced information system security concepts, including those of the ten network security domains. By the completion of this course, you will be able to design access controls, assess and manage risks, and manage operational and physical security to support organizational missions. Students will study hardware and software reliability and security using currently available technology. Emphasis will be placed on security analysis of the system, physical threats to systems, virus protection, systems recovery, and encryption. Prerequisite: CIS 1352 or consent of department. 3 semester hours credit. [A]

CTS 2142. Project Management. This course provides an introduction to the project management body of knowledge, as specified by CompTIA Project+. This course discusses the processes, methods, techniques and tools that organizations use to manage information systems projects. The course covers a systematic methodology for initiating, planning, executing, controlling, and closing projects. Prerequisite: Acceptable college-ready placement score in reading or successful completion of appropriate college-prep reading course. 3 semester hours credit. [A]

CTS 2156. Desktop Support. In this course, students learn how to install, configure, troubleshoot and administer the desktop operating system within a network and internet environment. Topics may include operating system installation, device configuration, security and access control, network connectivity, system performance, and optimization. Prerequisite: CTS 1155 or consent of department. 3 semester hours credit. [A]

CTS 2391. Windows Server Administration. This course introduces the student to the skills needed to manage and maintain servers and administer network services using Microsoft Windows Server software. It prepares students for the second exam leading to the Microsoft MCSA Server industry certification. Prerequisites: CTS 1650 and CTS 1390 or equivalent certifications, or consent of department. 3 semester hours credit. [A]

CTS 2392. Advanced Windows Server Administration. This course introduces the student to the skills needed to configure and administer advanced network services using Microsoft Windows Server software. It prepares students for the second exam leading to the Microsoft MCSA Server industry certification. Prerequisites: CTS 1650 and CTS 1390 or equivalent certifications, or consent of department. 3 semester hours credit. [A]

CTS 2652. CISCO Advanced Router Technology. This course is designed to prepare a student to apply and understand the advanced principles and applications of networking hardware. The course covers the advanced router configurations; LAN switching; network management; and advanced design. This is the third of a four-part series designed to prepare students for the CISCO Certified Networking Associate Exam. This course prepares students for a CISCO Certified Network Associate (CCNA) industry certification. This course includes both lecture and structured lab experiences. Prerequisite: CTS 1651. 3 semester hours credit. [A]

CTS 2653. CISCO Wide Arc Network Routing. This course is designed to prepare a student to apply and understand the advanced principles, applications, and implementation of networking hardware. The course covers the advanced network design projects and advanced network management projects. This is the fourth of a four-part series designed to prepare students for the CISCO Certified Networking Associate Design Exam. This course prepares students for a CISCO Certified Network Associate (CCNA) industry certification. This course includes both lecture and structured lab experiences. Prerequisite: CTS 2652. 3 semester hours credit. [A]

CTS 2655. Cisco Certified Network Associate Exam. This course provides a student the opportunity to review for the designated industry IT certification exam. In order for a student to receive a passing grade, it is required that they attempt an industry certification test per the course prep review. Prerequisite: Completion of at least one CTS course with a “C” or better or consent of the department. 1-3 semester hours credit. Maybe repeated up to a maximum of 3 semester hours credit total. [A]

DEP 2004. Human Growth and Development. A course in which biophysical, cognitive and psychosocial development throughout the life span (from conception to death) will be considered, as well as problems specific to each stage. This course is required for pre-nursing students. The course carries division elective credit only. Prerequisite: PSY 2012. Completion of DEP 2102 is strongly recommended as preparation for this course. 3 semester hours credit. [A]

DEP 2102. Child Psychology. A course with application to an objective study of the preadolescent child. Preadolescent physical, psychological, and social development are studied. Special problems of child training in the family and of social adjustment at school are discussed. Prerequisite: PSY 2012. 3 semester hours credit. [A]

ECO 2013. Macroeconomics. An introduction to economics and the economy; national income, employment, and fiscal policy; money, banking, and monetary policy; problems and controversies in macroeconomics. 3 semester hours credit. [A]

ECO 2023. Microeconomics. Microeconomic theories of product and resource markets, government and current economic problems, international economics and the world economy. 3 semester hours credit. [A]

EDE 4943. Student Teaching Seminar in Elementary Education. This course is designed to provide students with instructional strategies, planning techniques, evaluation procedures and class management skills. Prerequisites: all program requirements completed. Corequisite: EDE 4945 or EDG 4940 and RED 4854. 3 semester hours credit. [A]
EDG 4945. Student Teaching in Elementary Education. This course requires a teacher candidate to demonstrate pre-professional competencies during a 15-week, full-time internship in a public school approved by the department. Contact hours: a minimum of 35 hours per week for 15 weeks. Prerequisites: Completion of all program requirements. Corequisite: EDE 4943 or EDG 4936 and RED 4854. 8 semester hours credit. [A]

EDF 1005. Introduction to the Teaching Profession. This is a survey course including historical, sociological, and philosophical foundations of education, governance and finance of education, educational policies, legal, moral and ethical issues and the profession of teaching. Students will be provided information on the Florida Educator Accomplished Practices, State-adopted Standards, and the Professional Educator Competencies. The students will complete a minimum of 30 hours of field-based experience with children and youth in schools or similar settings. 3 semester hours credit. [A]

EDF 2085. Introduction to Diversity for Educators. Designed for the prospective educator, this course provides the opportunity to explore issues of diversity, including an understanding of the influence of exceptionalities, culture, family, gender sexual orientation, socioeconomic status, religion, language of origin, ethnicity, and age upon the educational experience. Students will explore personal attitudes towards diversity and exceptionalities. Students will be provided with information on the Florida Educator Accomplished Practices, State-adopted Standards, and the Professional Educator Competencies. 3 semester hours credit. [A]

EDF 3214. Human Development and Learning. This course is designed to cover myriad learning theories as they apply to student development, learning styles, learning ability as well as disabilities. Students will be afforded the opportunity to explore varying ideologies relative to intelligence and intellectual assessment. Students will link these theories to behaviors observed in the classroom. Prerequisite: PSY 2012 or consent of the department. 3 semester hours credit. [A]

EDF 4430. Measurement & Evaluation in the Classroom. This course involves the study of principles of traditional and alternative assessment strategies. It helps the student obtain skills relevant to the development and use of classroom assessments. Students must attain a basic understanding of the principles of measurement, formative and summative assessment strategies, test construction, performance assessments; and reading and interpreting data from state achievement tests. The course will help students understand the content measured by state tests and use the data to improve student achievement. Prerequisite: STA 2023. 3 semester hours credit. [A]

EDG 2316. Introduction to Teaching Math and Science. This course is a study of specific math and science content skills required for K-12 teachers by the FLDOE competencies and skills and national/state/district content standards. Content skills include confident and creative problem-solving; constructing sound mathematical and scientific arguments; applying math and science to everyday life; integrating cutting-edge technologies; and speaking and writing about math and science. Students develop an understanding of the K-12 learning environment effective for mathematics and science teaching. It is required that students complete a series of test prep sessions for the General Knowledge certification exam. 3 semester hours credit. [A]

EDG 2370. Introduction to Teaching Reading and Language Arts. This course is a study of specific reading and language arts content skills required for K-12 teachers by the FLDOE competencies and skills and national/state/district content standards. Content skills include knowledge of language structure, vocabulary application, and standard English conventions, and formal college-level writing; knowledge of key ideas and details, craft and structure, integration of information and ideas, all based on text selection. Major areas of study include the reading process as one of the integrated language arts, literature and materials used in teaching assessment, teaching strategies, and current issues in reading instruction. Completion of a series of test prep sessions for the General Knowledge certification exam is required. 3 semester hours credit. [A]

EDG 3343. Instructional Strategies. This course provides an overview of instructional models and strategies. Emphasis is placed on principles of state standards, instructional methods, lesson planning, and instruction. Students will develop knowledge of instructional models and lesson plan construction for effective implementation including the diverse student populations. 3 semesters hours credit. [A]

EDG 4410. Classroom Management & Communication. This course covers basic skills and knowledge for creating a learning environment that encourages positive social interaction and effective communication among members of the learning community. The course emphasizes ethics, attitudes, language patterns, values, and behaviors, and includes methods and strategies for consulting with other school professionals and parents. Additionally, students will be required to arrange visits totaling at least 10 hours to area schools to observe various classroom management strategies in action. 3 semester hours credit. [A]

EDG 4936. Senior Seminar. EDG 4936 is a capstone experience taken concurrently with the final internship. Trends and issues within the field of education are examined from the perspective of the internship experience. A minimum grade of C is required. Corequisite: Internship. 1-3 semester hours credit. [A]

EDG 4940. Internships/Practica/Clinical Practice. EDG 4940 is an internship course designed for teacher education majors as a culminating field experience to their program of study. This is a 15 week, supervised teaching experience in a public or private school. Students are not allowed to enroll in other courses while completing the internship. Current background check (fingerprinting) acceptable to the district in which the field experience will take place is required for this course. This course will receive a grade of pass/fail. Students who fail must retake the course. Prerequisites: Completion of all program coursework and passing scores on all Florida Teacher Certification Exams; Corequisites: Student Teaching Seminar. 9 semester hours credit. [A]

EET 1084C. Introduction to Electronics. This course provides the foundation for electronic circuits and measurements. Students will study principles of electricity, magnetism, and basic laws of electronics. Course topics will include fundamentals of DC circuits, AC circuits, semiconductors, and digital circuits. The course will integrate the conceptual measurements with the various electronic measuring instruments and their usage in weekly laboratory exercises. This course is one of six courses required for national MSSC-CPT certification. 3 semester credit hours. (5 contact hours). [A]

EEX 3012. Introduction to Exceptional Student Education. This course is designed to define common characteristics of students with exceptionalities and assist the teacher to implement differentiated teaching strategies, accommodations, and modifications in the classroom. Course topics are placed in the historic and legal contexts of disability advocacy, including the current Response to Intervention initiatives. 1-3 semester hours credit. [A]
EEX 3264. Curriculum & Instructional Strategies for Students w/ Disabilities (K-5). This course focuses on specialized methods and instructional strategies necessary for special educators to meet the needs of students with disabilities in K-5. Emphasis will be placed on the development, selection, and utilization of appropriate curriculum and instructional approaches which correspond to the capabilities and styles of various learners. Students will identify and review the state-adopted standards and elementary general education curriculum for grades K – 5; and how it applies to students with special needs, as well as, how it aligns with Florida Access Points. 15 hours of field placement is required. 3 semester hours credit. [A]

EEX 3294. Differentiated Instruction for the Inclusive. This course focuses on preparing preservice teachers for the inclusive classroom setting. Emphasis will be placed on differentiating instruction to effectively meet the academic needs of students in the inclusive classroom. This course requires a field placement. 3 semester hours credit. [A]

EEX 3604. Behavior Management for Exceptional Students. This course is designed to prepare exceptional student education teachers for the management of exceptional students in the Special Education K-12 classroom. The emphasis of this course will focus on behavior management, functional behavior assessments and behavior intervention plans, conflict resolution, social skills training, positive behavioral supports, and consultation for inclusive settings. 3 semester hours credit. [A]

EEX 3830. Special Education Practicum. Observation and participation field experience in a Special Education setting in K-5 classrooms. Weekly seminars with the course instructor will be held for informative and evaluative purposes. Corequisite: EEX 3264. 1 semester hour credit. [A]

EEX 3831. Special Education Practicum II. Observation and participation field experience in a Special Education 6-12 classroom setting. Weekly seminars with the course instructor will be held for informative and evaluative purposes. Corequisite: EEX 4265. 1 semester hour credit. [A]

EEX 4221. Assessment of Exceptional Students. This course is designed to provide teacher candidates with the knowledge of legal requirements and ethical principles of the evaluation process, the opportunity to analyze and interpret the results of formal and informal assessments, research and identify alternate assessment options in exceptional education, and utilize assessment results for instructional planning. 3 semester hours credit. [A]

EEX 4265. Curriculum & Instructional Strategies for Students w/ Disabilities (Grades 6-12). This course focuses on specialized methods and instructional strategies necessary for special educators to meet the needs of students with disabilities in grades 6-12. Emphasis will be placed on the development, selection, and utilization of appropriate curriculum and instructional approaches for students in grades 6-12 which correspond to the capabilities and styles of diverse learners. Teacher candidates will identify general education curriculum including State-Adopted Standards and Access Points for students in grades 6-12. 3 semester hours credit. [A]

EEX 4933. Seminar in Exceptional Student Education. This course is designed to provide students with instructional strategies, planning techniques, evaluation procedures, and class management skills. Prerequisites: all program requirements complete. Corequisites: EEX 4945 or EDG 4940 and RED 4854. 1 semester hour credit. [A]

EEX 4945. Student Teaching in Exceptional Student Education. This course requires a teacher candidate to demonstrate pre-professional competencies during a 15 week, full-time internship in a public school approved by the department. Contact hours: a minimum of 35 hours per week for 15 weeks. Prerequisites: Completion of all program requirements. Corequisite: EEX 4933 or EDG 4936 and RED 4854. 9 semester hours credit. [A]

EGN 1002. Introduction to Engineering. This course is an introductory course to the engineering and technology professions with emphasis on the spectrum of knowledge, work opportunities, and careers. The student is introduced to engineering work habits, responsibilities, communications, problem solving techniques, and technical calculations. The various engineering specialties will be presented. Presentations will be made by working professionals in the local engineering and technical community. The student will complete a series of exercises and projects. Prerequisite: Eligibility for MAC 1105, College Algebra, and a basic understanding of Windows / Microsoft Office. 3 semester hours credit. [A]

EGN 1108. Engineering Graphics. This course provides instruction in the concepts and graphic language used in engineering drawing and technical environments. It will cover the basics of drawing including line techniques, using scales, lettering, sketching, sectioning, and dimensions. The material will include various methods and techniques of orthographic and multi-view projections related to all types of engineering projects. The student will complete a series of exercises and drawings. 3 semester hours credit. [A]

EME 2040. Introduction to Technology for Educators. Application of instructional design principles for use of technology to enhance the quality of teaching and learning in the classroom. The course includes hands-on experience with educational media, emerging technologies, and hardware, software, and peripherals for the personal computer as well as data-driven decision-making processes. Identification of appropriate software for classroom applications, classroom procedures for integrating technologies with emphasis on legal and ethical use, and effective instructional strategies for teachers and students in regard to research, analysis, and demonstration of technology. Students will be provided an overview of the Florida Educator Accomplished Practices, state adopted standards, the Professional Educator Competencies, and the National Educational Technology Standards. 3 semester hours credit. [A]

EME 3410. Integrating Technology in the Classroom. This course is designed for pre-service and practicing middle school teachers. It includes the use of innovative computer software and graphing calculators for students to experience learning with technology at the middle and secondary school levels. The use and integration of software, electronic spreadsheets, data analysis, and instructional software will be studied from a problem solving perspective. Students will also create or use programs on a graphing calculator. This course addresses specific state adopted standards, subject matter competencies, and pedagogy pertinent to the discipline and is required for certification. A programmable graphing calculator will be required for this course. Prerequisite: EME 2040 or consent of the department. 3 semester hours credit. [A]

EMS 1158C. Emergency Medical Technician. A basic course designed to provide the student with the knowledge and basic skills necessary to provide effective emergency care of the sick and injured. Theoretical instruction, lab and selected clinical experiences are provided. The goal of the EMS Department is to prepare competent entry-level Emergency Medical Technicians in the cognitive (knowledge), psycho motor (skills), and affective (behavior) learning domains. 12 semester hours credit. [O]

EMS2620.ParamedicIOMATIC.Comprehensive overview of knowledge, skills, assessments, treatments, and accumulated experiences attained in EMS1158 and while functioning as a licensed EMT. Paramedic I introduces advanced life support knowledge, skills, assessments, treatments, and experiences. All EMT knowledge, skills, assessments, and treatments will be reassessed during this course. The course includes sections related to fundamentals, airway management and ventilation, pharmacology, and advanced patient assessment, anatomy and physiology, and medical emergencies. Topics to be covered include but are not limited to: airway management and intravenous therapy, pharmacology, anatomy and physiology, cardiology, pulmonology, neurology, endocrinology, immunology, gastroenterology, urology, toxicology, hematology, behavioral, and infectious disease. Lab and clinical experiences included. Prerequisite: State of Florida EMT -B License, Basic Life Support for Healthcare Provider certification, Minimum Reading Score on ACT (19), CPT (83), or PERT (106) no more than two years old or eligibility for ENC1101. The goal of the EMS Department is “to prepare competent entry-level Emergency Medical Technician-Paramedics in the cognitive (knowledge), psycho motor (skills), and affective (behavior) learning domains”. 15 semester hours credit. [O]
EMS 2621. Paramedic II. Paramedic II is a continuation of advanced life support knowledge, skills, assessments, treatments, and experiences attained in Paramedic I with emphasis on special patient considerations, traumatic injuries, operations, and specialized instruction and advanced labs. Topics to be covered include but are not limited to: obstetrics, pediatrics, challenged patients, traumatic injuries, and EMS operations. Lab, clinical, and field experiences included. Prerequisites: Successfully completed EMS 2620. The goal of the EMS Department is to prepare competent entry-level Emergency Medical Technician-Paramedics in the cognitive (knowledge), psycho motor (skills), and affective (behavior) learning domains. 15 semester hours. [O]

EMS 2622. Paramedic III. The Capstone phase of the Paramedic program. This course builds upon the advanced life support knowledge, skills, assessments, treatments, and experiences attained in EMS2620 and EMS2621 with additional advanced level training and certifications. This course prepares the student for state licensure, national certification, and employment as a competent entry-level Paramedic. Lab, clinical, field experience, and Team Leader field internship included. Prerequisite: EMS 2621. The goal of the EMS Department is to prepare competent entry-level Emergency Medical Technician-Paramedics in the cognitive (knowledge), psycho motor (skills), and affective (behavior) learning domains. 12 semester hours credit. [O]

ENC 1114. Survey of English Literature I. This course is a study of representative works of William Shakespeare and their relationship to the Renaissance and the Elizabethan period. Topics may also include an exploration of Shakespeare's dramatic career, conventions of the early stage, and methods of teaching Shakespeare in a middle or secondary classroom. 3 semester hours credit. [A]

ENC 1101. English Composition I. This course in English composition is designed to prepare a student to write successfully throughout the four-year college career. Theme assignments deal with narrative, descriptive, expository, and argumentative writing. A documented essay is required. ENC 1101 fulfills 6,000 words of the Gordon Rule writing requirement. Prerequisite: Acceptable placement scores in writing or (a grade of “C” or higher in ENC 0022 or ENC 0056) and reading (or a grade of “C” or higher in REA 0019 or REA 0056). A grade of “C” or higher must be earned to enroll in ENC 1102 or to use this course as part of the general education requirement in English. 3 semester hours credit. [A]

ENC 1102. English Composition II. This course in English composition is the second half of the sequence begun with ENC 1101. This second semester is concerned primarily with themes about literature, based on reading of short stories, plays, and poetry. Brief oral presentations are required. ENC 1102 fulfills 6,000 words of the Gordon Rule writing requirement. Prerequisite: A grade of “C” or higher in ENC 1101. A grade of “C” or higher must be earned to advance to a higher level English or other Gordon Rule course or to use this course as part of the general education requirement in English. 3 semester hours credit. [A]

ENC 1133. Research Writing. This course is designed to increase proficiency in effective methods of library research and in writing the documented essay. ENC 1133 fulfills 2,000 words of the Gordon Rule writing requirement. Prerequisite: Grades of “C” or higher in ENC 1101-1102. 1 semester hour credit. [A]

ENC 1153. Writing for Technical Students. This course prepares students to communicate information in the workplace. It will prepare the student to compose and organize all types of reports, prepare technical documents, and write various types of letters using various computer applications. Good sentence structure and mechanics will be emphasized. This course is for certificate or specified A.S. degree programs. It does not fulfill the Gordon Rule requirement. Prerequisite: CGS 1060. 3 semester hours credit. [A]

ENC 2210. Technical Writing. This course is designed to prepare technicians, professionals, and administrators to communicate information concerning specialized skills. It will prepare the student to compose and organize all types of reports, prepare technical documents, and write various types of letters. ENC 2210 fulfills 6,000 words of the Gordon Rule writing requirement. Prerequisite: Grades of “C” or higher in ENC 1101-1102. 3 semester hours credit. [A]

ENC 2905. Communications Through Tutoring. The course is a survey of English composition and literary philosophy from the Old English through the Neoclassical period. ENC 2905 fulfills 6,000 words of the Gordon Rule writing requirement. Prerequisite: Grades of “C” or higher in ENC 1101-1102. 3 semester hours credit. [A]

ENC 3311. Advanced Expository Writing. This course is designed to teach the techniques for writing prose, excluding fiction, in which student essays are extensively criticized, edited, and discussed with the instructor. 3 semester hours credit. [A]

ENL 202. Survey of English Literature I. This course is a survey of English literature and literary philosophies of the Old English through the Neoclassical periods. ENL 202 fulfills 6,000 words of the Gordon Rule writing requirement. Prerequisite: Grades of “C” or higher in ENC 1101-1102. 3 semester hours credit. [A]

ENL 2022. Survey of English Literature II. This course is a survey of English literature and literary philosophies from the Romantic period to the present. ENL 2022 fulfills 6,000 words of the Gordon Rule writing requirement. Prerequisite: Grades of “C” or higher in ENC 1101-1102. 3 semester hours credit. [A]

ENL 4333. Shakespeare. This course is a study of representative works of William Shakespeare and their relationship to the Renaissance and the Elizabethan period. Topics may also include an exploration of Shakespeare’s dramatic career, conventions of the early stage, and methods of teaching Shakespeare in a middle or secondary classroom. 3 semester hours credit. [A]

ENT 2112. Entrepreneurship and Business Plans. This course provides real world knowledge involving entrepreneurial experiences. Students will identify entrepreneurial career paths and identify challenges and solutions in the entrepreneurial workplace. Also the students will be responsible for completing a business plan and will present this plan to a panel. 3 semester hours credit. [A]

ESC 1000. Introduction to Earth Science. A general education course involving an introductory study of geology, oceanography, and meteorology. Demonstrations and practical applications are emphasized. Cannot be taken to satisfy the general education requirement if GLY 1010 has already been taken. 3 semester hours credit. [A]

ETC 1320. Introduction to Auto CAD. This course will provide basic instruction in the various commands, methods, and techniques of Computer Aided Drafting (CAD) systems using Auto CAD. Start up procedures, menu/icon software operations and the basic draw, modify, dimension and plot commands will be emphasized. Students will complete a series of review exercises and drawings. Prerequisite: Eligibility for MAC 1105, College Algebra. (A basic understanding of Windows and use of the mouse is helpful.) 3 semester hours credit. [A]

ETC 2521. Hydraulics and Hydrology. The course introduces the basic theory, engineering, and design technology related to hydrology and drainage areas, storm water runoff, and stream flow analysis. The student is also introduced to the basic theory and engineering design of the hydraulic flow in pipes and in open channel systems. Design concepts, techniques, and illustrations of hydrology and hydraulics are covered. Prerequisite: MAC 1114. 3 semester hours credit. [A]
**ETD 1842. 3D Visualization with Auto CAD.** This course is an introduction to the creation of 3-dimensional industrial modeling and presentations. This course will use the software 3ds Max Design 2013 to create various forms of industrial models such as mechanical parts, architectural structures and topographic landscapes. The primary functions relating to the preliminary areas including modeling methods, application of materials, lighting techniques, cameras controls animation techniques and will be addressed. Topics will include a description of the software interface, and an understanding of the workflow to create a presentation of a product. Discussions and projects will be developed in line with the features used to create geometry, modify geometry, import geometry, create surface shaders, create illumination schemes, These projects will then be used to create full color still image renderings and computer generated animations. Development motion paths and render single images as well animated sequences. 3 semester hours credit. [A]

**ETD 2340. Auto CAD Level II.** To create advanced level technical drawings and prepare industrial type 3D models using AutoCAD software. Intermediate and advanced commands will be covered and drawings will be produced from all areas of engineering; mechanical, architectural, civil, and more including 3-dimensional modeling and renderings. Students will complete a series of technical drawings and drawings. Recommended corequisite ETD 1320 or instructor permission. 3 semester hours credit. [A]

**ETD 2551. CAD Civil.** This course will provide instruction in the various commands, methods, and techniques of computer aided drafting systems for civil engineering especially using Auto CAD and the Civil 3D software modules. Software operations will be stressed and the student will complete a series of exercises, drawings, and projects. Prerequisite: ETD 1320 or instructor permission. 3 semester hours credit. [A]

**ETD 2554. CAD Surveying.** This course will provide instruction in the various commands, methods, and techniques of computer aided drafting systems for surveying especially using AutoCAD and the Civil 3D software. Operations will be stressed and the student will complete a series of exercise, drawings, and projects in the classroom and in the field. Prerequisites: ETC 1320, Intro to Auto CAD. 3 semester hours credit. [A]

**ETD 2568. CAD Landscape.** This course will provide instruction in the various commands, methods, and techniques of computer aided drafting systems for landscape design especially using AutoCAD and the LANDCAD/Eaglepoint Landscape software modules. Software operations will be stressed and the student will complete a series of exercises, drawings, and projects. Prerequisites: ETC 1320, Intro to Auto CAD. 3 semester hours credit. [A]

**ETI 1110. Introduction to Quality Assurance.** This course introduces the student to the tools and techniques utilized to measure, maintain, and continuously improve quality to ensure that products and processes meet the quality standards required in the advanced manufacturing environment. This course is one of six courses required for national MSSC-CPT certification. 3 semester credit hours. [A]

**ETI 1420. Manufacturing Process and Materials.** This course provides an overview of the manufacturing processes utilized in advanced manufacturing facilities as well as the materials most likely to be encountered. Students will be exposed to manufacturing machines, automated systems, operating systems, and maintenance. Manpower, skill sets, tools, procurement, production timing, productivity, raw materials, schematics, and engineering documentation will be discussed. This course is one of six courses required for national MSSC-CPT certification. 3 semester credit hours. [A]

**ETI 1701. Industrial Safety.** This course covers the knowledge and skills needed to create and maintain a safe and productive work environment as defined by OSHA regulations that are applicable to advanced manufacturing facilities. Handling and disposal of hazardous materials, MSDS, NIOSH, EPA, and other regulatory agencies will also be emphasized. This course is one of six courses required for national MSSC-CPT certification. 3 semester credit hours. [A]

**ETI 2622. Concepts of Lean Manufacturing and Six Sigma.** This course provides the student with an introduction to the fundamentals of lean, based on the concepts in the Toyota production system model of business function operating systems. A comprehensive overview of the lean and six sigma methodologies including the Define, Measure, Analyze, Improve, and Control (DMAIC) process improvement paradigm will be presented. Prerequisite: ETI 1110. 3 semester credit hours. [A]

**ETM 1010C. Mechanical Measurement and Instrumentation.** This course provides the foundation for both mechanical and electronic measurement techniques encountered in the advanced manufacturing environment. The course will integrate the conceptual measurements with the various mechanical and electronic measuring instruments and their usage. Hand tools, power tools, inspection equipment, measurements, mechanical drives, and rigging will be covered on the mechanical side. The electrical side will cover industrial electrical wiring and instrumentation, including digital sensors, optical and magnetic switches, pressure, temperature, and piezoelectric sensors. This course is one of six courses required for national MSSC-CPT certification. 3 semester hours credit. (5 contact hours). [A]

**ETM 2315C. Hydraulics and Pneumatics.** This course treats principles of fluid and airflow, the basic components of hydraulic and pneumatic systems and how they are combined and function in instrumentation. Experience will include demonstration and setting up various hydraulic and pneumatic circuits and now they respond to pressure, heat, flow and restriction. This course is one of four courses that lead to a Pneumatics, Hydraulics and Motors state certification. Prerequisite: ETM 1010C. 3 semester credit hours. (6 contact hours). [A]

**ETS 1511C. Motors and Controls.** This course provides a theory of operation of direct current (DC) and alternating current (AC) motors. Motor components, forces, Nema ratings, and nameplate information are identified and defined. Inverter and pulse width moderator drives will be explained as well as AC to DC rectifiers and signal regeneration for 3-phase systems. A laboratory for AB Powerflux Menu Navigation will be included. This course is one of four courses that lead to a Pneumatics, Hydraulics and Motors state certification. Prerequisite: EET 1084C. 3 semester credit hours. (6 contact hours). [A]

**ETS 1542C. Introduction to Programmable Logic Controllers.** This course covers fundamental ladder logic, programmable controller theory and application techniques, and design and troubleshooting of PLC-based (Programmable Logic Controller) systems in classroom presentations, lab construction and redesign, simulation trainers, and multi-modal software learning labs. Basic instruction sets are presented and reinforced by computer-based training simulations. Hands-on replications of PLC functions are created in the lab with Rockwell/Allen Bradley and comparable PLC components. This course is one of four courses that lead to a Pneumatics, Hydraulics and Motors state certification. 3 semester hours credit. [A]

**ETS 2535C. Process Control & Automation.** This course serves as a capstone for the advanced manufacturing program. Concentration will be on integration of sensors and control systems for level, flow, temperature, pressure, and other applications. Human Machine Interfaces and methods of control theory including PID will be a central focus. This course is one of four courses that lead to a Pneumatics, Hydraulics and Motors state certification. Prerequisite: ETS 2542C. 3 semester credit hours. (6 contact hours). [A]

**EVR 1001. Introduction to Environmental Science.** This course of study provides the student with an overview of current environmental concerns and the management of these concerns. Emphasis is on the application of biological, physical, and chemical methods to the understanding of solutions to environmental problems. The student will gain insight into the natural interactions among living things and physical aspects of the environment. To include field experience. 3 semester hours credit. [A]
FFP 0010V. Fire Fighter I. This course introduces the student to the skills and techniques used in fire fighting. Classroom instruction includes a variety of fire related topics. Practical exercises and scenarios are included to enhance classroom instruction and skill development. Prerequisite: FFP 0142V. 206 clock hours. [V]

FFP 0020V. Fire Fighter II. This is a continuation course after Firefighter I and prepares the student for employment as a Florida Certified Firefighter. This course builds upon the skills and knowledge attained in Firefighter I and prepares students for mastery of the basic competencies required. 192 clock hours. [V]

FFP 0142V. Medical First Responder. This course introduces the student to the skills and techniques used for first responder to medical emergencies. Classroom instruction includes a variety of medical related topics encountered by firefighters. Practical exercises and scenarios are included to enhance classroom instruction and skill development. 40 clock hours. [V]

FFP 1140. Medical First Responder. This course introduces the student to the skills and techniques used for first responder to medical emergencies. Classroom instruction includes a variety of medical related topics encountered by firefighters. Practical exercises and scenarios are included to enhance classroom instruction and skill development. 40 clock hours. [V]

FFP 1505. Fire Prevention. A course on structure and organization of fire prevention, organizations, conducting inspections, interpreting and applying code regulations. A study of procedures and techniques of fire prevention, including surveying and mapping, recognition and elimination of fire hazards and fire risk analysis as applied to municipal and industrial communities, industries, and institutions. The legal basis for fire protection in effect throughout Florida and the application of state, county and municipal legislation as well as other sources of authoritative guidance will be studied. 3 semester hours credit. [O]

FFP 1510. Principles of Fire Codes and Standards. A study including the recognition and categorization of fire hazards. It emphasizes methods of developing effective fire prevention programs for large and small communities, industries, and institutions. The legal basis for fire protection in effect throughout Florida and the application of state, county and municipal legislation as well as other sources of authoritative guidance will be studied. 3 semester hours credit. [O]

FFP 1540. Private Fire Protection Systems I. A study of fixed and portable systems for detecting, reporting and extinguishing fires. Comparison is made between the value of detection and the value of automatic extinguishing systems. Study is made of the factors which influence the choice of one of several systems for a given occupancy and the value of each type system. Restoration after use and routine maintenance are stressed. 3 semester hours credit. [O]

FFP 1793. Fire and Life Safety Educator I. This course is designed to provide the public educator with the knowledge and the skills needed 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 presentation skills and learn how to formulate public education programs. This course meets state and national certification criteria for Fire and Life Safety Education, Level I. 3 semester hours credit. [O]

FFP 1810. Fire Fighting Tactics and Strategy I. A study of multiple company operations, logistics, strategy, use of mutual aid forces, and conflagration control. Intended for high-ranking officers who may be in command of major fires and other emergencies involving close coordination and maximum use of large amounts of manpower and equipment. Typical tactical situations and case histories will be given. 3 semester hours credit. [O]

FFP 2111. Fire Chemistry. This course is a study for the physical and chemical properties of matter, with a particular emphasis on hazardous materials, hydrocarbons, oxidation-reduction chemistry, and residuals of pyrolysis. 3 semester hours credit. [O]

FFP 2120. Building Construction for the Fire Service. This course is a study of what building codes in relation to fire protection. Standards to eliminate fire problems prior to construction are emphasized. The relationship between the building inspection and fire protection agencies, plus fire extinguishing techniques in all types of building construction, are discussed. 3 semester hours credit. [O]

FFP 2521. Construction Document and Plans Review. A course using code standard and inspection techniques learned previously, to review building plans to find errors and omissions, make corrections according to code, and identify where each item is located in the code. 3 semester hours credit. [O]

FFP 2610. Fire Investigation: Origin and Cause. A study emphasizing the investigation of fires for determination of the source of ignition and first fuel, point of origin, direction and rate of spread and whether the cause was accidental or illegal. Florida arson laws are studied along with procedures for ensuring the admissibility of any evidence found at the scene of the fires, including methods of questioning the witnesses, interviewing, interrogation, and case preparation, with stress on recognition of cause and evidence. 3 semester hours credit. [O]

FFP 2700. Fire Department Administration. A study of administrative, managerial and supervisory principles as they apply to the fire service. This course is intended for those seeking to participate in upper level organizational activity such as budgeting, cost controls, goal setting, manpower acquisition and distribution, and for those seeking to supervise fire company personnel with emphasis upon leadership traits, training, planning, and company officer responsibilities. 3 semester hours credit. [O]

FFP 2706. Public Information Officer. This course is a study of what public relations is and how a fire department can utilize positive public relations to benefit the organization and the public. The student will demonstrate techniques to bridge public relations with the community. This course describes the functions of a public information officer along with the responsibilities the position holds. 3 semester hours credit. [O]
FFP 2770. Ethical and Legal Issues for Fire Service. This course is a study of the entire spectrum of legal issues facing today's fire service leaders. Topics include: Labor relations, human rights and diversity; conflicts of interest and frameworks for ethical decision making. 3 semester hours credit. [O]

FFP 2811. Fire Fighting Tactics and Strategy II. A study of action plans, command and control, safety, building dynamics, sprinkler operations, fire company operations, and various types of fires. An advanced study intended for higher ranking officers, using state or locally provided scenarios. 3 semester hours credit. [O]

FIN 3400. Financial Management of the Firm. This course is a study of financial decision making in the corporate form of enterprise, through an analysis of the sources and uses of funds. Emphasis is placed on working capital management; capital budgeting techniques; short and long term analysis of the sources and uses of funds. Emphasis is placed on working financial decision making in the corporate form of enterprise, through an 126 Chipola College Catalog Course Directory

FRE 2220. Intermediate French I. This course covers the essentials of French, with emphasis on oral expression. It is open to students who enter college without any or with only one year of high school French. This course has been designated as an international/diversity course. Prerequisite: Eligibility to take ENC 1101 or consent of department. 4 semester hours credit. [A]

FRE 1121. Elementary French II. This course is a continuation of FRE 1120, with emphasis on oral and written expression. This course has been designated as an international/diversity course. Prerequisite: FRE 1120 or consent of department. 4 semester hours credit. [A]

FRE 2220. Intermediate French I. The courses 2220-2221 include the reading of selections from modern prose authors, a review of grammatical principles, and further study of composition and conversation. This course has been designated as an international/diversity course. Prerequisite: FRE 1121 or two years of high school French. 4 semester hours credit. [A]

FRE 2221. Intermediate French II. This course is a continuation of FRE 2220. This course has been designated as an international/diversity course. Prerequisite: FRE 2220. 4 semester hours credit. [A]

FSS 1002C. Introduction to Hospitality. This course will expose the student to the many different opportunities industry wide, the challenges they may face, trends impacting the industry, future industry issues, guides for educational and professional development. 3 semester hours credit. [O]

FSS 1063C. Food Specialty Baking I. This course will provide the student with a basic knowledge of the fundamentals related to baking science. Students will be exposed to baking terminology, equipment operation, ingredients, weights and measures, formulas and storage. 3 semester hours credit. [O]

FSS 1105. Food Purchasing. This course is an introduction to the selection and procurement system of food and non-food items utilized in the food service industry. 3 semester hours credit. [O]

FSS 1202C. Basic Food Preparation. This course will provide the student with a basic knowledge of fundamental cooking skills as related to cooking methods, use of kitchen equipment, hand tools and small wares, recipe reading and conversion, weight and measures, basic food costing theories and product identification and usage. 3 semester hours credit. [O]

FSS 1248C. Food Specialty Garde Manger. This course will provide the student with a basic knowledge of fundamental cooking skills as related to Garde Manger, specifically: cold food preparation, hors d’oeuvres, canapés, charcuterie, curing, smoking, preservation methods, sorbets, granites, ice creams, display platters and buffet set up. 3 semester hours credit. [O]

FSS 2065L. Food Specialties IV: Pastry Specialties. This course will provide the student with a basic knowledge of fundamentals related to baking science. Students will be exposed to baking terminology, equipment operation, ingredients, weights and measures, formulas and storage. 3 semester hours credit. [O]

FSS 2224C. Advanced Food Preparation. This course will provide the student with a thorough knowledge of fundamental cooking skills as related to meat cookery including beef, pork, veal and game as well as poultry and fowl, seafood including fin-fish and shellfish, and breakfast cookery. 3 semester hours credit. [O]

FSS 2240C. Food Specialties: World Cuisine. This course will provide the student with a basic knowledge of fundamental cooking skills as related to cuisines throughout the world. Emphasis will be placed on product identification and use for different regions of the world along with relation to cuisine and local customs. 3 semester hours credit. [O]

FSS 2380. Culinary Management Practicum I. This course will review and support previously learned skills as well as introduce new ones. Emphasis will be placed on quality food preparation in an operational food service facility. Students will be expected to operate efficiently and effectively in all kitchen stations. 2 semester hours credit. [O]

FSS 2381. Culinary Management Practicum II. This course will review and support previously learned skills as well as introduce new ones. Emphasis will be placed on management principals in both the front and back of the house environments. Students will gain valuable management experience by hands on management in an operational food service facility. 2 semester hours credit. [O]

FSS 2382L. Practical Exam. This course will serve as a capstone course integrating all competencies attained. Students will be encouraged to elaborate on previously learned theories to produced food items on a more “up-scale” basis with attention focused on menu planning, cooking techniques, plate presentation, dish originality, costs and marketing. 2 semester hours credit. [O]

GEA 2001. World Geography I. A study of the relationship between human activities and natural environment. A regional-cultural approach is used and effort is made to correlate the course content with the other social sciences. Credit will be granted without taking GEA 2002, but the sequence is recommended. This course has been designated as an international/diversity course. 3 semester hours credit. [A]

GEA 2002. World Geography II. The second half of the course sequence GEA 2001-2002. GEA 2001 is not a prerequisite, but the sequence is recommended. This course has been designated as an international/diversity course. 3 semester hours credit. [A]
GEB 1011. Introduction to Business. This course is a survey course designed to acquaint the student with the terminology, organization, and function of the American business system. Topics covered include business in a global environment, starting and growing your business, management, marketing, managing technology and information, managing financial resources, business law and risk management. 3 semester hours credit. [A]

GEB 1941. Internship in Business. Students will receive supervised, practical work experience in an appropriate business, industry, government agency, or institution which relates to a Business-related field of study. A minimum of 35 clock hours on the job is required for each semester hour of credit earned. Prerequisites: The student must have completed a minimum of 15 semester hours of technical coursework toward an AA or AS degree in Accounting, Business Administration, Economics, Management or a related field and be recommended by the appropriate course instructor or advisor for the program. A written application may be required. 1-3 semester hours credit. May be repeated for a maximum of 3 semester hours credit. [A]

GEB 2214. Business Communications. This course develops effective oral and written English Composition in a business environment. It includes written correspondence, interviewing, public relations and business presentations. Prerequisite: ENC 1101. 3 semester hours credit. [A]

GEB 3356. Introduction to International Business. This course is designed as an overview of the principal aspects of conducting international business. Domestic and international business characteristics are compared, and international political and legal environments are studied. Topics include: International trade theory, foreign exchange, export and import strategies, negotiations and diplomacy, and human resource management in the global marketplace. Prerequisite: MAN 3025. 3 semester hours credit. [A]

GEB 4213. Advanced Business Communications. This course emphasizes the basics of business writing while reviewing the various kinds of written business correspondence. Students are expected to integrate business decision making and analytical thinking skills into the content. Students must be able to determine solutions to problem-based exercises. Prerequisite: Must be taken graduating semester or permission of Dean. 3 semester hours credit. [A]

GEB 4434. Ethical Issues for Business Leaders. This course uses a case study approach to focus on the significant ethical and legal issues facing today’s business leaders. The theoretical and philosophical background will be presented along with current real-life examples of ethics in the workplace. Pre- or Corequisite: BUL 4310. 3 semester hours credit. [A]

GEB 4930. Selected Topics in Business. This course covers topics of current interest or of special interest to students or instructors. Topics may vary. This course may be repeated for up to 9 semester hours credit. Prerequisite: permission of department chair. 1-3 semester hours credit. [A]

GEB 4940. Business Internship. The business internship is designed for business students who have successfully completed a level of credit earned. 1 - 3 semester hours credit; no more than three (3) semester hours credit earned in this course. Prerequisite: To be eligible, the student must A) have successfully completed with a grade of C or better a minimum of 30 semester hours of coursework toward a BSBA degree in Management, B) an interview with the course instructor or coordinator of the program, C) an internship application, and D) approval from the dean of the department. [A]

GIS 1040. Introduction to Geographic Information Systems. This course introduces students to the uses of Geographic Information Systems (GIS). The objective of the course is to provide hands-on instruction in spatial data exploration, map creation, data editing, and analysis. This is an entry level course. No prior knowledge of GIS is necessary. Topics will include the application of GIS to various fields, the use of different tools to explore and modify spatial data, and the analysis of spatial data to answer real-world questions. Prerequisite: CGS 1060 or consent of department. 3 semester hours credit. [A]

GIS 1060. Introduction to GIS with ArcGIS. This course teaches how to implement Geographic Information Systems (GIS) by utilizing ESRI’s (Environmental Systems Research Institute) current ArcGIS software. Curriculum focuses on GIS software and procedures by viewing, analyzing, and producing maps based on various geospatial data including location area information. 3 semester hours credit. [A]

GIS 2041. Introduction to GIS and GPS Applications. This course teaches the basic concepts of Geographic Information Systems (GIS) and introduces Global Positioning Systems (GPS), related software program orientation, field data collection, and basic procedures in the techniques of these applications. Practical experience in local projects related to agriculture, civil engineering, and government operations will be highlighted. The student will complete a series of tutorials, exercises, and projects. Prerequisite: GIS 1060. 3 semester hours credit. [A].

GIS 2047. Applications of Geographic Information Systems. This course builds upon the fundamental knowledge of GIS that was gained through the prerequisite course. Students will learn how to implement geographic concepts in GIS systems. Students will delve more deeply into data representation, manipulation and presentation. Prerequisite: GIS 1040 or consent of department. 3 semester hours credit. [A]

GIS 2939. Geographic Information Systems. Certification Project Preparation. This course provides an opportunity for the student to review or prepare for a designated industry certification. This course may be repeated if necessary. In this course, students will use the principles learned in GIS 1040 and GIS 2047 to prepare the certification project. Prerequisites: GIS 2047 and CGS 1525, or consent of department. 1-3 semester hours credit. [A]

HCP 0122V. Nursing Assistant. This course is designed to provide theoretical and clinical experiences necessary for students to acquire the entry-level competencies required of a Certified Nursing Assistant. Course outlines with specified experiences will be used to accomplish these objectives. These include: formal classroom lectures, group discussions, written and oral assignments individualized instruction, audio-visual aids, simulated labs, and clinical assignments. Observation and communication skills will be emphasized. NOTE: Completion of this course does not guarantee certification as a Certified Nursing Assistant. Course completion qualifies completer to sit for the State Certification Test for Nursing Assistants. Upon notification by state of passage, the completer will received certification as a nursing assistant. 120 clock hours. [V]
HFT 1210C. Food Service Supervision. This course introduces the student to the importance of human resources functions in an organization and the responsibilities of management. The course will offer management techniques that will aid students in solving the problems that they are likely to encounter in the workplace. 3 semester hours credit. [O]

HFT 1860. Beverage Management. This course will provide the student with a working knowledge of beverage management for the food service industry. Students will develop an understanding of beer, wine, and liquor production methods along with inventory control and basic bartending skills. 3 semester hours credit. [O]

HFT 2264C. Banquet and Convention Management. This course will familiarize the students with the necessary theories to perform both on and off-site events. Emphasis will be placed on banquet and à la carte style service, specialty foods, beverage service, and legal issues. 3 semester hours credit. [O]

HFT 2840C. Dining Room Operations. This course covers the types of dining room and beverage service techniques found in the hospitality industry. Lab Fee. 3 semester hours credit. [O]

HIS 1930-1931-2932-2933. Current Affairs. A study of events of the world today, based on coverage in current periodicals, radio and television. Emphasis is placed on the development of informal judgments about public affairs by the student. Open to all students for a maximum of four semesters. A student may pursue only one Current Affairs course during a given semester unless special consent is given by the department. 1 semester hour credit. [A]

HIS 2955. Studies Abroad in Civilization. A course consisting of seminars and travel. Pretravel seminars establish a foundation for critically examining the various interest points in relation to significant historical, philosophical, and cultural events and sights of the trip. Opportunities are given to apply general knowledge and individual interests to various points of interest in designated countries and cities. Prerequisite: Consent of the college. 3 semester hours credit. [A]

HLP 1081. Concepts of Life Fitness. A basic course designed to acquaint students with the principles, concepts and values of physical fitness, proper nutrition, and stress management; and the dangers attached to negative lifestyle behaviors. Students will learn to evaluate their fitness, nutrition and stress levels, identify their areas of interest, and design personal exercise prescriptions. Students will participate in a number of health and fitness assessments and will be instructed on the proper use of strength and cardiovascular training equipment. 3 semester hours credit. [A]

HSC 1100. Personal and Community Health Problems. A course designed to prepare the student for solving personal and community health problems through an understanding of health rules and habits. Emphasis is given to understanding and implementing the principles of maintaining and improving individual and community health for effective daily living. 3 semester hours credit. [A]

HSC 1531. Medical Terminology. This course is designed to provide a basis for understanding and utilizing basic principles of medical word building. The course is designed to prepare students to analyze words structurally, to spell and pronounce medical terms accurately and to understand certain word elements related to anatomy, physiology and selected disease processes. 3 semester hours credit. [A]

HSC 2400. Standard First Aid. The course provides knowledge about what to do in case of a medical emergency before a medical team arrives. Students will learn principles of care and protection based on life saving measures in the treatment of traumatic injuries, epidemic diseases, spread of disease and injury to others. Also included are preventing hazardous or crippling complications of injuries, alleviating suffering by comforting the victim, and preventing emotional complications. 3 semester hours credit. [A]

HUM 1020. Introduction to Humanities with Writing I. This course increases the student’s understanding and appreciation of western culture through the study of art, literature, music, and philosophy. HUM 1020 is a survey of our ancient, medieval and renaissance cultural heritages. This course fulfills 6,000 words of the Gordon Rule writing requirement. Prerequisite: Grades of “C” or higher in ENC 1101-1102. 3 semester hours credit [A]

HUM 2020. Introduction to Humanities with Writing II. This course increases the student’s understanding and appreciation of western culture through the study of art, literature, music, and philosophy. HUM 2020 is a survey of our baroque, revolutionary and modern cultural heritages. This course fulfills 6,000 words of the Gordon Rule writing requirement. Prerequisite: Grades of “C” or higher in ENC 1101-1102. 3 semester hours credit. [A]

HUM 2740. European Study in the Humanities. This course consists of seminars and travel. Pre-travel seminars establish a foundation for critically examining art, architecture, literature and music in relation to significant historical, philosophical and religious currents in European culture. Prerequisite: Consent of the college. 3 semester hours credit. [A]

HUN 1201. Elements of Nutrition. A basic course which discusses the social and natural environmental factors which influence personal nutrition. Major topics included are digestion, absorption and metabolism of carbohydrates, fats and protein; the known functions of the major vitamins and minerals; and nutritional needs throughout the life cycle. 3 semester hours credit. [A]

IDH 1931-1932-2931-2932. Honors Seminar. The honors seminar is a forum for students enrolled in the honors program. Books, research and leadership issues will be discussed in a seminar setting. Corequisite: Enrollment in one honors course. 1 semester hour credit. [A]

INP 2390. Introduction to Industrial Psychology. This course is designed to help students understand human relations, getting along with other people, and succeeding in the world of work. 3 semester hours credit. [A]

INR 2002. Introduction to International Relations. This course introduces students to the basic concepts and theories in the field of international relations. A fundamental goal of this course is to afford students the opportunity to develop their analytical and critical thinking skills along with examining the political and military relations among states. The lectures will also focus upon international political economy and global welfare politics. 3 semester hours credit. [A]
LAE 3464. Introduction to Adolescent Literature. This course includes a survey of types of books appealing to adolescents, with emphasis on selection and use in English classes. It includes topics such as mythology and classical literature, selected world masterpieces, recent literature, science fiction, problems of censorship. The development and implementation of methods, materials, content, organization for teaching reading, writing, listening, and speaking in the middle school (5-9) is also included. This course requires a minimum grade of "C." Current background check (fingerprinting) acceptable to the district in which the field experience will take place is required for this course. Ten (10) hours practicum is required for course completion. 3 semester hours credit. [A]

LAE 3940. Teaching Middle School English Practicum. This course is designed for students who are majoring in English education and who will be obtaining teacher certification in grades 6 – 12. This practicum accompanies LAE 3323 and provides students with opportunities to present their interactive curriculum projects to middle school students in local area school districts. Students spend a minimum of 30 school-based hours in the middle school classroom. Project presentations will be coordinated with in-service middle school teachers and their curriculum schedules and needs. This course addresses specific state-adopted standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification. Corequisite: LAE 3323. 1 semester hour credit. [A]

LAE 4335. Teaching Methods in Secondary English. This course is designed for students who are majoring in secondary English education and is offered concurrently with the practicum in teaching secondary English. This course addresses the required instructional methods, techniques, strategies, resources, and assessment considerations for effective teaching of secondary English, including pedagogy of reading, writing, speaking, listening, viewing, and media literacy. This course addresses specific state adopted standards, subject matter competencies and pedagogy pertinent to the discipline and required for certification. Corequisite: LAE 4941. 3 semester hours credit. [A]

LAE 4941. Teaching Methods in Secondary English Practicum. This course is designed for students who are majoring in English education and who will be obtaining teacher certification in grades 6-12. This practicum accompanies LAE 4335 and provides students with opportunities to present their interactive curriculum projects to high school students in local school districts. Students spend a minimum of 30 school-based hours in the secondary school classroom. Project presentations will be coordinated with in-service secondary school teachers and their curriculum schedule and needs. This course addresses specific state-adopted standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification. Corequisite: LAE 4941. 1 semester hour credit. [A]

LAE 4943. Seminar in English Education. This course is designed to provide students with instructional strategies, planning techniques, evaluation procedures and classroom management skills. Prerequisite: All program requirements completed. Corequisite: LAE 4945. 3 semester hours credit. [A]

LAE 4945. Student Teaching in English. This course requires a teacher candidate to demonstrate pre-professional competencies during a 15 week, full-time internship in a public school approved by the department. Contact hours: a minimum of 35 hours per week for 15 weeks. This course is designed to provide students with multiple opportunities to practice the 6 Florida Eduator Accomplished Practices including effective planning, instruction, management, and assessment techniques in real-world middle or high school classroom settings under the supervision of a certified teacher. This course is also designed to provide opportunities for focused self-reflection, peer observation and evaluation, and applied classroom-based interpretive research focusing on effective English teaching practices. Prerequisite: All program requirements completed. Corequisite: LAE 4943 or EDG 4946. 9 semester hours credit. [A]
LAS 1950. Latin American Travel Study. This travel study course introduces students to the language and culture of the Spanish-speaking countries of Central and South America, the Caribbean or Mexico. Students will be placed with host families in the destination country, attend classes taught by local native-speaking instructors, and participate in a variety of formal and informal cultural exchanges with local people. In order to increase oral proficiency in Spanish, all courses are conducted in Spanish. No prior Spanish coursework is required, however, since students will be placed at a proficiency level appropriate to their skills. The course will meet for one hour weekly prior to the travel component and once more during the final week of classes, at which time students will submit a written journal detailing their learning experiences. Students will select a topic related to the history, economics, politics, or culture of the host country and give a class presentation of their topic, supported with the use of technology. This course may be taken concurrently with SPN 1120, SPN 1121, SPN 2220 or SPN 2221 while studying intensively in Latin America. Students who have not had a Spanish course at Chipola must have the consent of the professor. This course has been designated as an international/diversity course. 3 semester hours credit. [A]

LEI 1000. Introduction to Leisure Services. An exploratory course designed to serve those students curious about or committed to leisure services as a major. This course considers historical and philosophical foundations and interpretations of the meaning of leisure as well as a practical examination of status and current issues. 3 semester hours credit. [A]

LIN 3010. Introduction to Linguistics. This course is designed to explore the various forms of language, including phonetics, phonology, morphology, and semantics. Other topics will be covered: the history of language, language acquisition, sociolinguistics, neurolinguistics, language diversity, and dialects. There is also an emphasis on enabling the students to evaluate speech, to understand phonetic, physiological, and psychological factors involved in speech. A study of the phonetic alphabet is included. Prerequisites: Successful completion of ENC 1101 and ENC 1102, admission to the English education program. 3 semester hours credit. [A]

LIT 3930. Special Topics in Literature. Focused study of a specific topic or issues in literature of current interest or of special interest to students or instructors. Topics may vary. May be repeated for up to 9 semester hours of credit. Prerequisite: Two of the following: AML 2010, AML 2020, ENL 2012, ENL 2022. 1-3 semester hours credit. [A]

LIT 4044. Readings in Dramatic Literature. This course consists of two components. The first component, “Performance Analysis,” examines the evolution of several facets of theatre, including acting, direction, playwriting, the physical stage, performance conditions and dramatic literature. The “Performance Analysis” component emphasizes the collaborative, eclectic nature of theatre and provides students with a sophisticated understanding of how live performances have evolved to meet the demands of each society through the ages. The second component, “Textual Analysis,” includes a survey of play scripts which represent important contributions from various genres of western theatre from the Greeks through contemporary drama. 3 semester hours credit. [A]

MAC 1105. College Algebra. This course is primarily a conceptual study of functions and graphs, their applications, and of systems of equations and inequalities. Linear, quadratic, rational, absolute value, radical, exponential and logarithmic functions will be investigated. A graphing calculator is required for this course. Prerequisites: Successful completion of the equivalent of one year of high school Algebra I and one year of high school Algebra II and an acceptable score on a state approved mathematics placement test, or a “C” or higher in MAT 1033, or a grade of “C” or higher in the high school equivalent course for MAT 1033 (Math for College Readiness) within the past two years and an acceptable score on a state approved mathematics placement test. A “C” grade or higher must be earned in this course to satisfy part of the general education requirements in mathematics and to advance to a higher mathematics course. 3 semester hours credit. [A]

MAC 1114. Plane Trigonometry. This course deals with the solution of triangles, trigonometric relations, and functions of an angle, logarithms, and complex numbers. Prerequisite: Successful completion of the equivalent of one year of High School Algebra I and one year of High School Algebra II and an acceptable score on a mathematics placement test or a “C” grade or higher in MAC 1105 or consent of the department. MAC 1140 may be taken concurrently with MAC 1114. A “C” grade or higher must be earned in this course to satisfy part of the general education requirements in mathematics and to advance to a higher mathematics course. 3 semester hours credit. [A]

MAC 1140. Precalculus Algebra. Topics for this course include review of algebraic techniques or operations, radicals, exponents, complex numbers, absolute value, linear and quadratic equations and inequalities, exponential and logarithmic functions, simultaneous equations and inequalities, roots of polynomials, matrices, determinants, applications, mathematical proof techniques, mathematical induction, binomial theorem, sequences and series. Prerequisite: Successful completion of the equivalent of one year of High School Algebra I and one year of High School Algebra II and an acceptable score on a mathematics placement test or a “C” grade or higher in MAC 1105 or consent of the department. MAC 1140 may be taken concurrently with MAC 1140. A “C” grade or higher must be earned to advance to a higher level mathematics course or to satisfy part of the general education requirements in mathematics. 3 semester hours credit. [A]

MAC 1311. Calculus and Analytic Geometry I. This is a course including analytic geometry of the line and circle, limits, continuity, derivatives and integrals of the algebraic and transcendental functions, applications of integrals to finding area and volume, exponential growth and decay, Riemann sums and the Riemann integral, trapezoidal and Simpson’s Rule. Prerequisites: A “C” or higher in MAC 1114 and MAC 1140 or consent of the department. A “C” grade or higher must be earned to advance to a higher level mathematics course or to satisfy part of the general education requirements in mathematics. 4 semester hours credit. [A]

MAC 2233. Calculus for Non-Science Majors. This is a brief calculus course designed primarily for business administration majors and other non-science majors. This course includes: limits, basic techniques of differentiation and integration, word problems with applications to business and economics. A graphing calculator is required. Prerequisite: A “C” grade or higher in MAC 1105 or department consent. A “C” grade or higher must be earned to satisfy part of the general education requirements in mathematics or to advance to a higher mathematics course. 3 semester hours credit. [A]

MAC 2312. Calculus and Analytic Geometry II. This is a course which includes techniques of integration, applications of the integral, polar coordinates, sequences and series, Taylor Series, conic sections, vectors,
lines, and planes, and vector-valued functions. Prerequisite: A “C” grade or higher in MAC 1311. A “C” grade or higher must be earned to advance to a higher level mathematics course or to satisfy part of the general education requirements in mathematics. 4 semester hours credit. [A]

MAC 2313. Calculus with Analytic Geometry III. This course includes the study of lines, planes and surfaces in space, functions of several variables, limits and continuity, partial derivatives of functions of several variables, extrema of functions of two variables, iterated integrals using polar, cylindrical and spherical coordinates, differentiation, integration and applications of vector-valued functions and vector fields: calculations of line integrals and flux integrals, the use of Green’s Theorem, Divergence theorem and Stoke’s Theorem. Prerequisite: A “C” grade or higher in MAC 2312. A “C” grade or higher must be earned to advance to a higher level mathematics course or to satisfy part of the general education requirements in mathematics. 4 semester hours credit. [A]

MAE 3320. Teaching Methods in Middle School Mathematics. This course is designed for students who are majoring in mathematics education and who will be obtaining teacher certification in grades 5 – 9 or 6-12. In this course students learn principles of effective curriculum design and assessment and apply these principles by designing and developing interactive mathematics curriculum projects for middle school students. This course is offered concurrently with MAE 3940, a one credit hour practicum in which students present their projects in middle school classroom environments. This course addresses specific state-adopted standards, subject matter competencies and pedagogy pertinent to the discipline and required for certification. 10 Hours of Teaching are Required. Corequisite: MAE 3940 or Consent of the Education Department. 3 semesters hours credit. [A]

MAE 3651. Learning Mathematics with Technology. This course is designed for pre-service and practicing middle and high school math teachers. It includes the use of innovative computer software and graphing calculators for students to experience learning mathematics with technology at the middle and secondary school levels. The use and integration of dynamic geometry software, computer algebra, electronic spreadsheets, data analysis, and instructional software will be studied from a problem-solving perspective. Students will also create programs on a graphing calculator. This course addresses specific state-adopted standards, subject matter competencies, and pedagogy pertinent to the discipline and is required for certification. A programmable graphing calculator will be required for this course. Prerequisite: EME 2040. 2 semester hours credit. [A]

MAE 3816. Elements of Geometry. This course presents the axioms, basic concepts, proofs and constructions of Euclidean geometry involving line segments, angles, triangles, polygons, circles, parallel lines and similarity. Constructions are made using both compass and straightedge and interactive geometry software. The course also presents basic concepts of non-Euclidean geometries including hyperbolic and spherical. Prerequisite: MAC 1311. 3 semester hours credit. [A]

MAE 3940. Teaching Middle School Mathematics Practicum. This course is designed for students who are majoring in mathematics education and who will be obtaining teacher certification in grades 5 – 9 or 6 – 12. This practicum accompanies MAE 3320 and provides students with opportunities to present their interactive curriculum projects to middle school students in local area school districts. Students spend a minimum of 30 school-based hours in the middle school classroom. Project presentations will include interactive curriculum projects to middle school students in local area school districts. Students spend a minimum of 30 school-based hours in the middle school classroom. Project presentations will be coordinated with in-service middle school teachers and their curriculum schedules and needs. This course addresses specific state-adopted standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification. Corequisite: MAE 3320. 1 semester hour credit. [A]

MAE 4310. Teaching Elementary School Math. Theory and methods for teaching mathematics in the elementary school, contemporary approaches to teaching concepts, number systems, numeration systems, computational algorithms, problem solving, informal geometry, measurement and other math related topics. This course requires a minimum grade “C”. Current background check (fingerprinting) acceptable to the district in which the field experience will take place is required for this course. Ten (10) hours practicum are required for course completion. 3 semester hours credit. [A]

MAE 4330. Teaching Methods in Secondary School Mathematics. This course is designed for students who are majoring in mathematics education and is offered concurrently with the practicum in teaching secondary mathematics. It addresses the required instructional methods, techniques, strategies, resources, and assessment considerations for effective teaching of secondary mathematics including the pedagogy of early algebra, geometry, trigonometry and calculus using problem solving, cooperative learning and appropriate technology. This course addresses specific state-adopted standards, subject matter competencies and pedagogy pertinent to the discipline and required for certification. 10 Hours of Teaching are Required. Corequisite: MAE 4941 or Consent of the Education Department. 3 semester hours credit. [A]

MAE 4815. Elements of Algebra. This course offers an investigative approach to number theory in which students develop their capacity to formulate conjectures and explore their ideas and inquiries through the use of a computer algebra system. Conjectures are developed based in part on computer-generated data and formal proofs are then presented. There is an emphasis in understanding the nature of integer numbers, congruence classes, and their operations and applications. Prerequisites: MAC 1311. 3 semester hours credit. [A]

MAE 4941. Teaching Secondary School Mathematics Practicum. This course is designed for students who are majoring in mathematics education and who will be obtaining teacher certification in grades 5-9 or 6-12. This practicum accompanies MAE 4330 and provides students with opportunities to present their interactive curriculum projects to secondary school students in local area school districts. Students spend a minimum of 30 school-based hours in the secondary school classroom. Project presentations will be coordinated with in-service secondary school teachers and their curriculum schedules and needs. This course addresses specific state-adopted standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification. Corequisite: MAE 4330 or Consent of the Education Department. 1 semester hour credit. [A]

MAE 4943. Seminar in Mathematics Education (with Internship). This course is designed to provide students with instructional strategies, planning techniques, evaluation procedures and class management skills. Prerequisites: all program requirements complete. Corequisite: MAE 4945 or EDG 4940. 3 semester hours credit. [A]
**MAN 3504. Operational Decision Making.** This course focuses on operational decision making management techniques to improve the processes and productivity in organizations. Topics of discussion will include quality and outcomes, efficiency, forecasting, work flow processes, inventory control, design of goods and services, waiting lines, and critical path. Students will manage a project from beginning to end, including how to identify needs, and define, assign, and track items. Prerequisites: MAN 3025 and STA 2023 or STA 2122. 3 semester hours credit. [A]

**MAN 3240. Organizational Behavior.** This course is a study of individual and group behavior in organizations. Students will develop an understanding of how organizations can be managed more effectively. Course content includes motivation, group dynamics, conflict resolution, goal setting and rewards, job design, work stress, power/politics, and organizational change and development. Prerequisite: MAN 3025 or consent of the Dean. 3 semester hours credit. [A]

**MAN 3301. Human Resource Management.** This course is a study of the functions of human resource management including recruitment, selection, benefits and compensation, performance evaluation, development of employees, and formulation of human resource procedures. The strategic role of human resources and current issues will be discussed. Prerequisite: MAN 3025. 3 semester hours credit. [A]

**MAN 3504. Operational Decision Making.** This course focuses on operational decision making management techniques to improve the processes and productivity in organizations. Topics of discussion will include quality and outcomes, efficiency, forecasting, work flow processes, inventory control, design of goods and services, waiting lines, and critical path. Students will manage a project from beginning to end, including how to identify needs, and define, assign, and track items. Prerequisites: MAN 3025 and STA 2023 or STA 2122. 3 semester hours credit. [A]

**MAN 4120. Leadership Challenges and Supervision.** This course includes discussion and application of leadership theories as well as skill formation to develop leadership abilities. Team building skills are emphasized to enhance leadership effectiveness. Students learn the importance of visioning in their organizations. Prerequisite: MAN 3025. 3 semester hours credit. [A]

**MAN 4162. Customer Relations for Managers.** This course examines relationship building for all customers of an organization. The impact of culture and diversity on business relationships, successful negotiation strategies, and promotion of the organization through media relations are discussed. The ideas and practices this course focuses on include: understanding and identifying customer's wants and needs, customer orientation, product or service differentiation and value-creating processes to attract, satisfy and retain customers through relationship management. Prerequisite: MAN 3025 and MAR 3023. 3 semester hours credit. [A]

**MAN 4520. Total Quality Management.** This course examines the significance of quality as a primary competitive strategy for tomorrow's successful business organizations. Students will be exposed to the critical issues of total quality management through reading, case studies, class discussion, etc. Prerequisite: MAN 3504. 3 semester hours credit [A]

**MAN 4720. Strategic Management.** This course is designed to integrate prior business courses through study and discussion of real organizational situations, including ethical and global issues, the influence of the external environment and the effect of demographic diversity on organizations. Prerequisites: ACG 3101 or ACG 3341, FIN 3400, MAN 3025 and MAR 3023. 3 semester hours credit. [A]

**MAP 2302. Differential Equations.** This course is an introductory course in ordinary differential equations. Topics covered are linear first-order equations and their applications; methods for solving nonlinear differential equations, second order equations, Wronskians, power series solutions, methods of undetermined coefficients, Laplace transforms; and Fourier series solutions. This course will also include additional topics in linear algebra that include determinates, matrices, eigenvectors and eigenvalues. Prerequisite: MAC 2313. 3 semester hours credit. [A]

**MAR 2011. Introduction to Marketing.** Using a unique blend of lectures, videos, case studies, class projects, readings, research, and student presentations, this course will emphasize the necessity of marketing in today's business environment. Particular emphasis will be placed on marketing research, selection of a target market, development of an appropriate marketing mix, and promotion and advertising of goods and services. 3 semester hours credit. [A]

**MAR 3023. Basic Marketing Concepts.** This course provides an overview of the comprehensive field of marketing. The concepts, terminology, methodology, and structures explored in this course will provide a basis on which to build further expertise in the student's particular field of study. Specific competencies developed in other disciplines are drawn together in this course as students critically analyze and view the comprehensive field of marketing. 3 semester hours credit. [A]

**MAS 3105. Applied Linear Algebra.** This course provides a thorough treatment of linear algebra using a matrix-oriented approach. Major topics include: matrices, systems of linear equations, linear transformations, determinants, eigenvectors and eigenvalues, vector spaces and subspaces, inner product spaces, and orthogonality. Prerequisite: MAC 2312. 4 semester hours credit. [A]

**MAS 4203. Number Theory.** This course offers an investigative approach to number theory in which students develop their capacity to formulate conjectures and explore their ideas and inquiries through the use of a computer algebra system. Conjectures are developed based in part on
computer-generated data and formal proofs are then constructed. There is an emphasis on gaining an understanding of the nature of mathematical thinking and learning. Prerequisite: MAC 2312. 3 semester hours credit. [A]

**MAS 4301. Introduction to Abstract Algebra.** This course introduces the basic concepts of abstract algebra, including the topics of mappings, relations, number systems, groups, rings, fields, and integral domains. There is an emphasis on the use of sets as a basis for defining and working with groups, rings, fields, and integral domains. Pre- or Corequisites: MAS 4203 or MAS 3105. 3 credit semester hours credit. [A]

**MAT 0022. Developmental Mathematics-Combined.** This is a developmental course designed for the student who has little or no secondary school background in algebra and needs preparation for MAT 1033, Intermediate Algebra. Topics included: order of operations including parenthesis and exponents; operations on polynomial, rational and radical expressions; factoring; solve linear, literal and quadratic equations; graph linear equations. This course content is presented in the traditional lecture format and includes both in-class practice and out-of-class computer-assisted homework assignments. Students with placement test scores of 18 or lower on the ACT or 113 or lower on the PERT are required to take MAT 0022. A grade of "C" or higher must be earned in the course to advance to the next higher mathematics course which is MAT 1033. This course does not meet general education requirements in mathematics. 4 semester hours non-college credit. [P]

**MAT 0056. Developmental Mathematics Modular.** This course is designed for students whose PERT placement test scores fall slightly below the minimum score required for entry into college-level math courses, but whose diagnostic test scores indicate mastery of multiple course competencies. This course consists of student-centered computer-based interactive instruction using professionally developed mathematics instructional software, along with instructor assistance as needed. The content is presented in an individualized modular format with a focus on the competencies listed below that are identified through a diagnostic tool as needing review on an individual basis: Graphing linear equations, solving linear equations, simplifying expressions, polynomial operations, simplifying radical expressions, factoring polynomials, solving quadratic equations, applying order of operations, solving literal equations, and solving linear inequalities. Prerequisite: An appropriate score on the PERT placement test, along with an appropriate score on the PERT diagnostic test or equivalent, or consent of the department. A grade of "C" or higher must be earned in the course to advance to the next higher mathematics course which is MAT 1033. This course does not meet general education requirements in mathematics. 2 semester hours non-college credit. [P]

**MAT 1033. Intermediate Algebra.** Topics in this course include: linear and quadratic equations, linear inequalities, systems of linear equations and inequalities in two variables, exponents, factoring, rational expressions and equations, radicals, complex numbers, introduction to functions, and applications. Prerequisites: A score of 114 – 122 on the PERT placement exam, OR an acceptable score on ACT or SAT with successful completion of the equivalent of one year of Algebra I, OR a "C" or higher in MAT 0022 or MAT 0056, OR a "C" or higher in the high school course Math for College Success within the past two years, or consent of the department. This is not a Gordon Rule course and does not satisfy part of the general education requirements in mathematics. A "C" grade or higher must be made in this course to advance to a higher level mathematics course. 3 semester hours elective credit. [A]

**MAT 2905. Mathematics Through Tutoring.** The goals of this course are: refinement or acquisition of mathematics skills and connections between mathematics topics needed for successfully tutoring in an academic setting; acquisition of general methods of tutoring as well as specific tutoring techniques needed for specific courses. Teacher-tutor seminars, teacher-tutor conferences, and formal instruction will supplant the extensive tutoring experiences. Prerequisite: Consent of the department. The number of hours of credit varies from 1 to 3 hours depending upon the number of hours tutoring. [A]

**MAT 4905. Supervised Research in Mathematics.** This course is designed to cover special topics not obtainable in the regular course offerings. Prerequisites: MAC 2313 and instructor's approval. 1 - 3 semester hour credits. May be repeated for credit. Maximum of 12 semester hours credit. [A]

**MCB 2010. Microbiology.** This course includes the fundamentals of microbiology which include: structure, nutrition, growth, genetics, control mechanisms; and an introduction to immunology, virology, and bacterial pathogens. Prerequisite: A grade of "C" or higher in one of the following: BSC 2085 and lab, BSC 2010 and lab, BSC 2111 and lab, or CHM 1045 and lab, or consent of the department. Corequisite: MCB 2010L. 3 semester hours credit. [A]

**MCB2010L. Microbiology Lab.** An introduction to experimental techniques in microbiology. The exercises include cultivation and various staining techniques, isolation, identification, biochemical activities, antibiotic sensitivity test and basic immunology. Two hours of laboratory per week. Corequisite or Prerequisite: MCB 2010. 1 semester hour credit. [A]

**MGF 1106. Mathematics for Liberal Arts I.** This course is designed to enable students to meet part of the general education requirement in mathematics and receive instruction in a broad range of skills beyond algebra. Topics include: sets, logic, counting principles, the metric system, geometry, probability, statistics, permutations and combinations. Prerequisites: Successful completion of the equivalent of one year of high school Algebra I and one year of high school Algebra II and an acceptable score on a state approved mathematics placement test, or a "C" or higher in MAT 1033, or a grade of "C" or higher in the high school equivalent course for MAT 1033 (Math for College Readiness) within the past two years and an acceptable score on a state approved mathematics placement test. A "C" grade or higher must be earned in this course to satisfy part of the general education requirements in mathematics and to advance to a higher level mathematics course. 3 semester hours credit. [A]

**MGF 1107. Mathematics for Liberal Arts II.** This course is intended for students who will major in areas that do not require further mathematics. It will also enable students to meet part of the general education requirement in mathematics and receive instruction in a broad range of skills beyond algebra. Topics include: systems of numeration, number theory and the real number system, mathematical systems, exponential functions, consumer mathematics, graph theory, modular arithmetic, selected topics from history of mathematics, and voting and apportionment. Prerequisites: Successful completion of the equivalent of one year of high school Algebra I and one year of high school Algebra II and an acceptable score on a state approved mathematics placement test, or a "C" or higher in MAT 1033, or a grade of "C" or higher in the high school equivalent course for MAT 1033 (Math for College Readiness) within the past two years and an acceptable score on a state approved mathematics placement test. A "C" grade or higher must be earned in this course to satisfy part of the general education requirements in mathematics. 3 semester hours credit. [A]

**MHF 4404. History of Mathematics.** This course is designed as a capstone course for those students who are majoring in secondary mathematics education. This course consists of readings in the history and philosophy of mathematics and in current issues involving mathematics and society. Contributions from mathematicians such as Archimedes, Descartes, Fermat Newton, Leibnitz, Euler and Gauss are discussed. Emphasis is given to how mathematics relates across disciplines as well as mathematical connections within the discipline; fundamental ideas of high school mathematics are examined from an advanced standpoint. This is a writing-intensive course in which each student develops a portfolio of course accomplishments. This course addresses specific state-adopted standards, subject matter competencies, and pedagogy pertinent to the discipline and is required for certification. Corequisites: MAE 4330 and MAE 4941. 3 semester hours credit. [A]
MMC 1000. Survey of Mass Communication. A survey of the technology, methods, and functions of mass communications media: newspapers, magazines, books, radio, television, and film—with emphasis on evaluation of the impact of mass media on society. 3 semester hours credit. [A]

MTG 3212. Modern Geometries. This course is designed for in-service, middle and high school teachers and for students who are majoring in secondary mathematics. It presents the axioms, basic concepts, proofs and constructions of Euclidean geometry involving line segments, angles, triangles, polygons, circles, parallel lines and similarity. Constructions are made using both compass and straight edge and interactive geometry software. The course also presents basic concepts of non-Euclidean geometries, emphasis is on using technology to make conjectures and discoveries concerning geometrical relationships and then constructing proofs to verify the relationships. Each student will develop an electronic portfolio of course projects and accomplishments incorporating appropriate Florida Educator Accomplished Practices. This course addresses state-adopted standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification. Prerequisite: MAC 2312. 3 semester hours credit. [A]

MUE 1290. Music Skills. A study of the fundamentals of music needed by the elementary teacher as preparation for the public school music course. Recommended for all elementary education majors except those who have had extensive musical training. Not open for credit to music or music education majors. 3 semester hours credit. [A]

MUT 1001. Fundamentals of Music. An introduction to the elements of music, including study of clefs, staff, key signatures, notation, meter, rhythm, chords, scales, and sight-singing exercises. The emphasis is on developing music reading skills. This course is a prerequisite for MUT 1111. 3 semester hours credit. [A]

MUT 1111. Music Theory I. A study of the fundamentals of music, including clefs, accidentals, enharmonics, and scales. Students will study chordal construction, figured bass, Roman numerals, pop chord symbols, cadences and non-chord tones. Included are written assignments and class drills. Prerequisite: MUT 1001 or consent of department. 3 semester hours credit. [A]

MUT 1112. Music Theory II. An intense study of diatonic chord progressions and voice leading, including seventh chords and non-chord tones. Included are written assignments and class drills. Prerequisite: MUT 1111. 3 semester hours credit. [A]

MUT 1211. Keyboard Harmony I. A course designed to closely parallel the musical development encountered in MUT 1111. Some of the topics to be covered include a study of basic chord settings, figured bass and melody harmonization. Improvisation is encountered in each of the specific class assignments. Must be scheduled concurrently with MUT 1111 or with consent of department. 1 semester hour credit each course. [A]

MUT 1213. Keyboard Harmony II. A continuation of skills development at the piano keyboard to include more advanced patterns, playing four-part harmonizations at sight, cadence patterns in all major keys and student improvisation. 1 semester hour credit. [A]

MUT 2116. Music Theory III. A study of modulations and chromatic chords will be followed by variation techniques and binary and ternary forms. Written assignments and class drills will involve original composition in 18th-19th Century small scale, characteristic piano styles. Prerequisite: MUT 1112 or consent of department. 3 semester hours credit. [A]

MUT 2111. Music Theory IV. A study of large scale forms, fugue and late Romantic and Twentieth Century harmonic practices. Written assignments and class drills required. Prerequisite: MUT 2116. 3 semester hours credit. [A]

MV- (B,K,P,S,V,W) 1011-1016. Applied Music Prep. A course of private instruction for students preparing for the freshman level of performance. Credit earned in the MV-(B,K,P,S,V,W) 1011-1016 series will not apply toward the requirement of the principal instrument. May be repeated up to a maximum of 4 times for credit. 2 semester hours credit per course. Course may be repeated for a maximum credit of 8 semester hours credit. [P]
Applied Music. A course in applied music instruction is offered in voice, piano, and band instruments for non-music majors. Private instruction for the music major is offered in his or her secondary and primary instrument or voice. The level of skills development will be ascertained at the end of each course by jury examination. Credit will depend upon successful completion of course requirements, and each student will be required to participate in at least three recitals per semester or session. Private instruction in the secondary instrument or voice consists of one half hour lesson per week, with 1 semester hour credit per semester. Credit will be granted four times for each course. Catalog numbers and descriptive titles are as follows. [A]

Private instruction for non-music majors requires that they also be enrolled in at least one other course on campus. This does not apply to dual enrollment or early admissions students. May be repeated up to a maximum of 4 times for credit.

MVB 1211-2221. App. Music - Trumpet
MVB 1212-2222. App. Music - French Horn
MVB 1213-2223. App. Music - Trombone
MVB 1214-2224. App. Music - Bar. Horn
MVB 1215-2225. App. Music - Tuba
MVK 1211-2221. App. Music - Piano
MVK 1212-2222. App. Music - Organ
MVP 1211-2221. App. Music - Percussion
MVS 1211-2221. App. Music - Violin
MVS 1216-2226. App. Music Guitar
MVV 1211-2221. App. Music - Voice
MWV 1211-2221. App. Music - Flute
MWV 1212-2222. App. Music - Oboe
MWV 1213-2223. App. Music - Clarinet
MWV 1214-2224. App. Music - Bassoon
MWV 1215-2225. App. Music - Saxophone

Private instruction in the primary instrument or voice consists of two one-half hour lessons per week with 2 semester hours credit per semester. Catalog numbers and descriptive titles are as follows. May be repeated up to a maximum of 4 times for credit. [A]

MVB 1311-2321-1411. App. Music - Trumpet
MVB 1312-2322. App. Music - French Horn
MVB 1313-2323-1413. App. Music - Trombone
MVB 1314-2324. App. Music - Bar. Horn
MVB 1315-2325. App. Music - Tuba
MVK 1311-2321-1411. App. Music - Piano
MVK 1312-2322. App. Music - Organ
MVP 1311-2321-1411. App. Music - Percussion
MVS 1311-2321. App. Music - Violin
MVS 1316-2326. App. Music - Guitar
MVV 1311-2321-1411. Applied Music - Voice
MWV 1311-2321. App. Music - Flute
MWV 1312-2322. App. Music - Oboe
MWV 1313-2323. App. Music - Clarinet
MWV 1314-2324. App. Music - Bassoon
MWV 1315-2325. App. Music - Saxophone

MVK 1111. Class Piano. A course designed for students who desire general keyboard proficiency. Primary emphasis is on development of music reading and playing for personal satisfaction. 1 semester hour credit. Course may be repeated for maximum credit of 2 semester hours credit. [A]

MVK 2121. Class Piano II. A continuation of MVK 1111, designed for the non-piano major. Emphasis on coordination, major and minor scales and pieces, and increasingly difficult rhythms. Prerequisite: MVK 1111 or consent of department. Credit will be granted twice for each course. 1 semester hour credit. Course may be repeated for maximum credit of 2 semester hours credit. [A]

MVS 1116. Class Guitar. A performance course in guitar for the beginning student. Instruction will include simple chords, rhythms, and a variety of accompaniment styles. Two class meetings per week. 1 semester hour credit. Course may be repeated for maximum credit of 2 semester hours credit. [A]

MVS 2126. Advanced Class Guitar. A continuation of MVS 1116 for the more advanced guitar student that will prepare the student to master the guitar as solo and/or ensemble performers. Prerequisite MVS 1116 or consent of department. 1 semester hour credit. Course may be repeated for maximum credit of 2 semester hours credit. [A]

MVV 1111. Class Voice. A course in the fundamentals of voice production, elementary level, designed for the non-voice major. 1 semester hour credit. Course may be repeated for maximum credit of 2 semester hours credit. [A]

NSP 3185. Multicultural Practice. This course is a comparative analytical approach to the study of communication, current problems, issues, health care beliefs, values, and practices of different systems and cultural norms as they affect health care practices. Additionally, the student will focus upon institutional health care practices which conflict with ethnic or cultural communication related to standards and values systems. 3 semester hours credit. [A]

NUR 1020C. Fundamentals in Nursing. This course is designed to provide students with a basic understanding of certain key concepts and principles fundamental to the practice of nursing. Emphasis on the wellness-illness continuum will lay the foundation for future study. The student is introduced to the nursing process as a systematic method of problem solving in which effective communication and interpersonal relationships are central components. Basic needs relative to hygiene, activity, rest and sleep, comfort, safety, nutrition, and fluid and electrolytes, urinary and bowel elimination, and oxygenation are necessary to meet the needs of the moderately ill, hospitalized patient. The content includes socio-economic, ethno-cultural, spiritual needs, community health concepts, nutrition, Smoking Cessation and HIV/AIDS education. Instruction includes the development of critical thinking skills. The student will be introduced to medication administration. The clinical application of drugs is also emphasized to insure rational and optimal patient care. Serious attention is given to the skills that are essential to safe nursing practice. Supervised practice and planned hospital experience will provide the student opportunities to assist patients to an optimal level of wellness. Theoretical instruction and clinical experience in geriatric nursing are incorporated throughout the course. This course will also present HIPPA regulations and the implications related to the provision of healthcare. Prerequisites: SLS 1101, MAC 1105, BSC 2085C/L, ENC 1101. All courses without the NUR prefix may be taken prior to entering the program. NUR courses must be taken in the semester that they are scheduled per the academic advising guide and admission schedule. Microbiology with Lab must be completed by the end of the semester listed on the academic advising guide. Humanities must be completed by the end of the semester listed on the academic advising guide. Students may not progress to the following semester unless all courses in the present semester have been completed with a "C" or higher. ½ didactic hour per credit and 1 clinical hour per credit each week. Corequisites: NUR 1020L, NUR 1141, NUR 1280C/L, PSY 2012, BSC 2086 C/L. 7 semester hours credit. [A]
NUR 1020L. Fundamentals in Nursing Lab. This lab course is designed to provide students with a basic understanding of certain key concepts and principles fundamental to the practice of nursing, along with the ethical and legal responsibilities of the nurse as a health care provider. Emphasis on the wellness-illness continuum will lay the foundation for future study. The student is introduced to the nursing process as a systematic method of problem solving in which effective communication and interpersonal relationships are central components. Basic needs relative to hygiene; activity; rest and sleep; comfort; safety; nutrition; and fluid and electrolytes; urinary and bowel elimination; and oxygenation are necessary to meet the needs of the moderately ill, hospitalized patient. The content includes consideration of growth and development, socio-economic, ethnocultural, spiritual needs, community health concepts; nutrition, professional role and function, health counseling, current issues in nursing, end of life care, HIV, and domestic violence. Instruction includes the development of critical thinking skills. The student will be introduced to drug standards and legislation, the major classification of drugs and the general actions of selected drugs. The clinical application of drugs is also emphasized to rational and optimal patient care. Serious attention is given to the mathematical knowledge and skills, which are essential to safe nursing practice. Supervised practice and planned hospital experience will provide the student opportunities to assist patients to an optimal level of wellness. Theoretical instruction and clinical experience in geriatric nursing are incorporated throughout the course. Corequisite: NUR 1020C. [A]

NUR 1141. Pharmacology I. This course introduces the study of drugs, drug standards and legislation, and is designed to provide the nursing students with a basic background of drug classifications, actions, dosages, and side effects. This course includes basic drugs and reviews the mathematical computations that are necessary for safe administration in the clinical setting. Drug therapy will be integrated throughout the curriculum. Students will demonstrate safe techniques of medication administration in the skills laboratory prior to administering medications in the clinical area. Prerequisites: BSC 2085C/L, ENC 1101, MAC 1105, SLS 1101. All courses without the NUR prefix may be taken prior to entering the program. NUR courses must be taken in the semester that they are scheduled per the academic advising guide and admission schedule. Microbiology with Lab must be completed by the end of the semester listed on the academic advising guide. Humanities must be completed by the end of the semester listed on the academic advising guide. Students may not progress to the following semester unless all courses in the present semester have been completed with a “C” or higher. ½ didactic hour per credit and 1 clinical hour per credit each week. Corequisites: NUR 1280L, NUR 1020C/L, NUR 1141, BSC 2086C/L, PSY 2012. 1 semester hour credit. [A]

NUR 1211C. Adult Nursing I. This course covers utilization of the nursing process with applications to the adult experiencing alterations in the health state. Content addressed during this introductory medical surgical course is designed to provide students with the opportunity to acquire the knowledge and skills to provide safe and effective care for patients from different and diverse backgrounds with a variety of medical conditions. Clinical, observation, and simulation experience is geared towards beginning principles learned during this course, as well as previous information learned from other nursing courses. Prerequisites: NUR 1020C/L, NUR 1280C/L, NUR 1141, BSC 2086C/L, PSY 2012. All courses without the NUR prefix may be taken prior to entering the program. NUR courses must be taken in the semester that they are scheduled per the academic advising guide and admission schedule. Microbiology with Lab must be completed by the end of the semester listed on the academic advising guide. Students may not progress to the following semester unless all courses in the present semester have been completed with a grade of “C” or higher. ½ didactic hour per credit and 1 clinical hour per credit each week. 8 semester hours credit. [A]

NUR 1211L. Adult Nursing I Lab. This introductory lab course is designed to provide students with the opportunity to acquire the knowledge and skills to provide safe and effective care for clients with simple medical and/or surgical problems. This course builds upon foundation material from previous courses. The nursing process provides a framework for the students to utilize critical thinking skills to promote or restore the health of clients within a holistic framework. Clinical experience is provided in acute care settings. Observational time may be scheduled to enhance learning experiences. Corequisite: NUR 1211C. [A]

NUR 1280C. Geriatrics. This unit of study is designed to help the student understand the health related needs that result from the normal aging process. The focus is on factors that promote a healthy aging process. Discussions will include the demographics and characteristics of the aging population. Special concerns on the elderly such as ageism, safety falls, age-related impairments, and environments of care will be discussed. End of Life Care is included in the course content. Prerequisites: BSC 2085C/L, ENC 1101, MAC 1105, SLS 1101. All courses without the NUR prefix may be taken prior to entering the program. NUR courses must be taken in the semester that they are scheduled per the academic advising guide and admission schedule. Microbiology with Lab must be completed by the end of the semester listed on the academic advising guide. Humanities must be completed by the end of the semester listed on the academic advising guide. Students may not progress to the following semester unless all courses in the present semester have been completed with a “C” or higher. ½ didactic hour per credit and 1 clinical hour per credit each week. Corequisites: NUR 1280L, NUR 1020C/L, NUR 1141, BSC 2086C/L, PSY 2012. 1 semester hour credit. [A]
following semester unless all courses in the present semester have been completed with a "C" or higher. 2 semester hours credit. [A]

**NUR 2243C. Adult Nursing II.** This course is designed to provide information to assist the student in acquiring the knowledge and skills to provide safe and effective care for clients with advanced medical and/or surgical problems. This course builds upon material previously presented in Adult Nursing I. The nursing process will be a guide for the student to utilize critical thinking skills to promote or restore the health of clients within a holistic framework. Clinical experience is provided in acute care setting and/or specialty care areas. Observational time may be scheduled to enhance learning experiences. Prerequisites: NUR 2440C/L, NUR 2142, Humanities; Corequisite: NUR 2243L, NUR 2950. All courses without the NUR prefix may be taken prior to entering the program. NUR courses must be taken in the semester that they are scheduled per the academic advising guide and admission schedule. Microbiology with Lab must be completed by the end of the semester listed on the academic advising guide. Humanities must be completed by the end of the semester listed on the academic advising guide. Students may not progress to the following semester unless all courses in the present semester have been completed with a "C" or higher. ½ didactic hour per credit and 1 clinical hour per credit each week. 11 semester hours credit. [A]

**NUR 2243L. Adult Nursing II Lab.** This advanced lab course is designed to provide students with the opportunity to acquire the knowledge and skills to provide safe and effective care for clients with complicated/critical medical and/or surgical problems. This course builds upon Adult I Nursing material from previous courses. The nursing process provides a framework for the students to utilize critical thinking skills to promote or restore the health of clients within a holistic framework. Clinical experience is provided in acute care settings. Observational time may be scheduled to enhance learning experiences. Corequisite: NUR 2243C. [A]

**NUR 2440C. Maternal Child Nursing.** This course is designed to present the nursing student with knowledge and skills related to care of a client from conception through childhood and adolescence. The course will present an introduction of high risk factors in these areas. The nursing process provides a framework for planning care for clients on the wellness-illness continuum with inclusion of human growth and development, culture diversity, pharmacology, and administration of medications, nutrition, legal aspects of practice, interpersonal relationships, and current issues in nursing. Concepts related to pre, intra, and postoperative cares are discussed. Clinical experiences are provided in both clinic and acute care settings. Specific exercises in management principles are provided in the clinical setting. Prerequisites/Corequisites: NUR211C/L, NUR2522C/L, MCBD 2010C/L, DEP 2004. All courses without the NUR prefix may be taken prior to entering the program. NUR courses must be taken in the semester that they are scheduled per the academic advising guide and admission schedule. Microbiology with Lab must be completed by the end of the semester listed on the academic advising guide. Humanities must be completed by the end of the semester listed on the academic advising guide. Students may not progress to the following semester unless all courses in the present semester have been completed with a "C" or higher. ½ didactic hour per credit and 1 clinical hour per credit each week. 8 semester hours credit. [A]

**NUR 2440L. Maternal Child Nursing Lab.** This course is designed to present the nursing student with the knowledge and skills related to maternal child nursing concepts. The nursing process is utilized in caring for the client from conception, labor and delivery and through postpartum. The care of high-risk obstetric and pediatric client on the wellness-illness continuum includes the human growth and development, culture diversity, community health concepts, pharmacology, administration of medications, nutrition, legal aspects of practice, interpersonal relationships, health teaching and counseling, and current issues in nursing. Clinical experience is provided in both clinic and acute care setting. Observational time may be scheduled to enhance learning experiences. Corequisite: NUR 2440C [A]

**NUR 2522C. Mental Health.** This course provides the student with the opportunity to acquire knowledge and skills needed to care for patients with maladaptive coping disorders. Therapeutic nurse/patient interaction skills are stressed. Clinical experiences are selected to help students increase their understanding of the interdisciplinary health team and the nurse's role as a member of the team. Clinical practice is provided in a psychiatric setting. Prerequisites: NUR1020 C/L, NUR1280 C/L, NUR1141, BSC 2086 C/L, PSY2012. All courses without the NUR prefix may be taken prior to entering the program. NUR courses must be taken in the semester that they are scheduled per the academic advising guide and admission schedule. Microbiology with Lab must be completed by the end of the semester listed on the academic advising guide. Humanities must be completed by the end of the semester listed on the academic advising guide. Students may not progress to the following semester unless all courses in the present semester have been completed with a grade of "C" or higher. ½ didactic hour per credit and 1 clinical hour per credit each week. 3 semester hours credit. [A]

**NUR 2522L. Mental Health Lab.** This course provides the student with the opportunity to acquire knowledge and skills needed to care for patients with maladaptive coping disorders. Therapeutic nurse/patient interaction skills are stressed. Clinical experiences are selected to help students increase their understanding of the interdisciplinary health team and the nurse's role as a member of the team. Clinical practice is provided in a psychiatric setting. Corequisite: NUR 2522C. [A]

**NUR 2950. Capstone.** This course is designed to assist the student in the transition from the role of student nurse to that of graduate nurse enabling effective practice at entry level. It is also designed to assist the graduate nurse to anticipate the challenges of a rapidly changing work environment. Information will be provided to give the student nurse an overall view of the nursing profession. Included in the information will be such issues as dealing effectively with legal, ethical, political and on-the-job issues as well as social and economic factors that impact the nursing profession. Topics involving the role of professional organizations and licensure requirements will be covered as well. Tools for developing leadership-management roles, delegating appropriately, and thinking critically and creatively will be presented. Plans to enhance workplace communication, time management and self-care/tactics are among other career advancement tools provided. Information related to effective resume writing, interview tips, compilation of professional portfolio and employee benefits is also provided. Prerequisites: NUR 2440C/L, NUR 2142, Humanities. All courses without the NUR prefix may be taken prior to entering the program. NUR courses must be taken in the semester that they are scheduled per the academic advising guide and admission schedule. Microbiology with Lab must be completed by the end of the semester listed on the academic advising guide. Humanities must be completed by the end of the semester listed on the academic advising guide. Students may not progress to the following semester unless all courses in the present semester have been completed with a "C" or higher. Corequisite NUR2243C/L. 2 semester hours credit. [A]
NUR 2960. Nursing Review I. This is a review course to assist the student in retaining nursing skills attained during the nursing program. The roles of the nurse as provider of care, communicator, teacher, manager, and member of the profession are reviewed. Prerequisites: Students must have successfully completed all courses required for Senior standing in the Associate Degree Nursing program but failed to achieve the benchmark level score on the HESI Exit Exam after three consecutive attempts (E1-E3). Students must also be eligible for readmission into the nursing program. 2 semester hours credit. [A]

NUR 3065. Health Assessment. This course provides knowledge and skills for therapeutic communication with clients and client evaluation using health assessment techniques. 3 semester hours credit. [A]

NUR 3165. Research Process for Professional Nursing. This introductory course will assist students in conceptualizing both the basic research process and the importance of research to nursing, and will enable students to understand and use published healthcare research. 3 semester hours credit. [A]

NUR 3805. Role and Scope. This course provides a theoretical basis of professional nursing practice for RN to BSN students. It includes an exploration of issues and theories related to professional nursing practice to facilitate the transition from the registered nurses basic educational program to the baccalaureate level of practice. Students will be introduced to concepts for the delivery of care to clients and client systems within culturally, racially, and ethnically diverse communities. 3 semester hours credit. [A]

NUR 3826. Legal and Ethical Issues in Nursing Practice. This course is an introduction to contemporary ethical and legal issues encountered by health care providers in a wide array of settings. It will identify legal and ethical principles that contribute to the professional growth of the nurse and the profession of nursing. 3 semester hours credit. [A]

NUR 4080. Nursing Concepts I. This course will provide registered nurses, who are returning to school to earn a Baccalaureate degree, an opportunity to advance professional practice concepts. As designed, the course engages the student intellectually in an ongoing professional dialogue and journey with peers, colleagues, and instructors that serves to broaden the student's professional development and builds on pre-existing knowledge and experiences. The course curriculum is written for adult learners with the characteristics of self-direction, prior experience, applicability to practice, and motivation to meet the challenge to expand their knowledge base and to utilize advanced critical thinking skills. Corequisite: NUR 4080L. 3 semester hours credit. [A]

NUR 4107. Nursing and the Healthcare System. This course is an introduction to current healthcare delivery systems on local, regional, national, and global levels. Concepts of managed care, case management, reimbursement, legal/ethical risk management, quality outcomes, diversity and complexity of population at risk, and conservation of resources are emphasized. 3 semester hours credit. [A]

NUR 4636. Community Nursing. This course focuses on the role of the professional nurse as she relates to community and public health nursing, disaster preparedness, and epidemiology. The course examines nursing care designed to prevent and/or reduce risk of disease and injury, and promote health and wellness to diverse populations across the age spectrum. Consideration is given to evidenced based research for the development of critical thinking using the nursing process. 3 semester hours credit. [A]

NUR 4827. Nursing Leadership & Management. This course focuses on concepts, principles, and theories of leadership, role development, and administration. Skills required by the professional nurse leader including delegation of responsibilities, networking, facilitation of groups, conflict resolution, case management, collaboration, budgeting, cost effectiveness and resource allocation, managing quality and performance, and teaching are emphasized. 3 semester hours credit. [A]

NUR 4955. Nursing Practicum. This capstone course must be taken in the last semester and will highlight all the professional endeavors of the student's past and present academic and work achievements. Students will complete a practicum experience through the selection of a community agency of interest with a focus on a select patient population. Current ethical, legal and health care issues will be addressed that are pertinent to the practicing professional and will be summarized as the student formulates guidelines to deal with selected issues. Political action, community service and professional image will be promoted as activities that contribute to the professional growth of the nurse and the profession of nursing. 3 semester hours credit. [A]

ORI 2000. Oral Interpretation. This course is designed to develop the ability to analyze the meaning of specific works in major literary genres and deliver oral interpretations of these works. 3 semester hours credit. [A]

PCB 4043C and PCB 4043L. Ecology with Lab. This course is an introduction to living systems at the population and community/ecosystem levels. It includes energy flow and nutrient cycling in ecosystems; community organization, development and classification; population structure and dynamics. Labs include field work, lab analysis and use of interactive software. This course addresses specific state-adopted standards, subject matter competencies and pedagogy pertinent to the discipline and required for teacher certification. Prerequisites: BSC 2010/2010L, BSC 2011/2011L, and CHM 1046/1046L. 4 semester hours credit. [A]

PEL 1111. Bowling I. This course is a coeducational course that includes a brief history of the sport followed by instruction and practice in fundamental techniques. Two hours laboratory per week. 1 semester hour credit. [A]

PEL 1112. Bowling II. This course is a continuation of PEL 1111. Two hours laboratory per week. Prerequisite: PEL 1111 or consent of department. 1 semester hour credit. [A]

PEL 1121. Golf. This course is a coeducational course that includes a brief history of the sport, followed by instruction and practice in the fundamental techniques. Two hours laboratory per week. 1 semester hour credit. [A]

PEL 1214. Advanced Softball. This course is a high intensity, drill oriented program designed to increase skill ability and endurance levels of individuals interested in softball. The continuous development of physical skills is of major importance in this course and it is strongly recommended that students participate in an exercise program outside of class hours. Medical approval may be required before participating in this course. This course may be repeated up to a total of 4 semester hours credit. 1 semester hour credit. [A]
PEO 1219. Advanced Baseball. This course is a high intensity, drill oriented program designed to increase skill ability and endurance levels of individuals interested in baseball. The continuous development of physical skills is of major importance in this course and it is strongly recommended that students participate in an exercise program outside of class hours. Medical approval may be required before participating in this course. This course may be repeated up to a total of 4 semester hours credit. 1 semester hour credit. [A]

PEO 1341. Tennis. This course is a coeducational course that includes a brief history of the sport, followed by instruction and practice in the fundamental techniques. Two hours laboratory per week. 1 semester hour credit. [A]

PEL 1624. Advanced Basketball. This course is a high intensity, drill oriented program designed to increase skill ability and endurance levels of individuals interested in basketball. The continuous development of physical skills is of major importance in this course and it is strongly recommended that students participate in an exercise program outside of class hours. Medical approval may be required before participating in this course. This course may be repeated up to a total of 4 semester hours credit. 1 semester hour credit. [A]

PEL 2211. Theories of Softball. This course teaches individuals to coach softball. Coaching techniques, strategies, and procedures are emphasized. Three hours of laboratory experience each week are included in the course work. 2 semester hours credit. [A]

PEM 1102. Exercise and Conditioning. This course involves instruction in physical conditioning methods and their effects. Content varies based on student interest, and may include aerobic exercise, calisthenics, bench stepping, circuit training, interval training, or weight training. 1 semester hour credit. [A]

PEM 1131. Weight Training. This course includes instruction regarding values, techniques, and methods of weight training as a means of developing strength as one aspect of fitness. Focus on applying principles and techniques in a well-organized weight training program which will lead to increased muscular strength and endurance. 1 semester hour credit. [A]

PEM 1146. Jogging. A coeducational course with planned programs in jogging to meet the individual needs of the participant. Two hours laboratory per week. 1 semester hour credit. [A]

PEN 1114. Lifeguard Training. This course assists the student in developing the skills necessary to recognize a person in a distress or drowning situation and to effectively rescue that person. American Red Cross Lifeguard Certification is offered with this course. A qualifying swimming test is administered during the first class meeting. 1 semester hour credit. [A]

PEO 1011. Team Sports. Principles, methods, and techniques of teaching a variety of team sports, including organization and management, instruction of skills and concepts, motivation, and evaluation will be addressed. 3 semester hours credit. [A]

PEO 2003. Sports Officiating. Lecture and discussion of rules along with practice in techniques of officiating various sports through laboratory experience. Students must be available for off-campus officiating after school hours. Three hours lecture-laboratory per week. 2 semester hours credit. [A]

PEO 2004. Theory and Practice of Coaching a Specific Sport. This course is designed to provide knowledge of the rules, teaching progressions, and strategies for competition. This course includes acceptable behavior and ethics for coaches. The course will be offered for the following specific sports: baseball/softball, basketball, football, golf, soccer, swimming, tennis, track and field/cross country, volleyball, and wrestling. 3 Semester credits. [A]

PEO 2216. Theory and Practice of Baseball. Lecture and discussion of all phases of baseball techniques, strategy and coaching procedures with some laboratory experience. Three hours laboratory per week. 2 semester hours credit. [A]

PEO 2624. Theory and Practice of Basketball. A lecture and discussion of all phases of basketball coaching techniques including styles of offense and defense and methods of teaching these skills. Three hours lecture-laboratory per week. 2 semester hours credit. [A]

PEQ 2105C. Management of Aquatic Programs. This course is designed to give Recreation Technology majors a foundation in management of aquatic programs. This course will include, but is not limited to, water aerobics, water safety, pool operations, and aquatic scheduling. 3 semester hours credit. [A]

PEQ 2115. Water Safety Instruction. This course includes lectures and practice in all phases of water safety instruction. Upon successful completion of this course, the student will be certified as an American Red Cross Water Safety Instructor. 1 semester hour credit. [A]

PET 1000. Introduction to Physical Education. This course surveys the principles, history and ethics of quality physical education programs. Topics include current issues and trends and career development in physical education. 3 semester hours credit. [A]

PET 2210. Sport Psychology. This course develops an understanding of the mental aspects of sport performance and learning mental skills that can be used to enhance sport performance. 3 semester hours credit. [A]

PET 2622. Care and Prevention. This is an introductory course in the care and prevention of athletic injuries. It is designed to teach the beginning student athletic trainer standard simplified methods of injury treatment. This course can also serve as a refresher course and reference guide. 3 semester hours credit. [A]

PET 2760. Theory and Methods of Coaching Sports. This course includes the study of theories and methods of coaching for optimum sports performances, including sport psychology, philosophy of coaching, the learning of motor skills, and styles of leadership behavior. The course provides basic information about the profession and assists athletic coaches at various levels of experience to achieve the fundamental competencies related to preparation for coaching, and to expand their knowledge of the basic concepts of athletic coaching. 3 semester hours credit. [A]

PET 2824. Analysis of Team Sports. This course is designed for potential physical education teachers, coaches, and sports administrators. An emphasis is placed on the development and understanding of popular team sports played both recreationally and interscholastically. 3 semester hours credit. [A]

PHY 1053C. General Physics I. The first course in a two-semester sequence intended primarily for students majoring in biology, pre-medicine, pre-dentistry, pre-pharmacy, pre-optometry, pre-agriculture, pre-forestry, or medical technology. Includes the study of forces, linear motion, circular motion, energy, hydrostatics, heat, thermal expansion and thermodynamics, with laboratory applications of these topics. Corequisite or prerequisite: MAC 1114 or one year of high school trigonometry with grade of C or better. Three hours lecture and two hours laboratory per week. 4 semester hours credit. [A]

PHY 1054C. General Physics II. A continuation of PHY 1053. Topics covered are static electricity, magnetism, direct current circuits, alternating current circuits, sound, light, and nuclear physics, with laboratory applications of these topics. Prerequisite: MAC 1114 or consent of department and PHY 1053C. Three hours lecture and two hours laboratory per week. 4 semester hours credit. [A]

PHY 2048C. General Physics I with Calculus. The first course in a two-semester sequence intended primarily for students majoring in physics, mathematics, chemistry or engineering. Course includes the study of forces, statics, linear motion, circular motion, momentum, energy, gravity, relativity, oscillatory motion, ideal gases, thermal properties of matter and thermodynamics, with laboratory applications of these topics. Corequisite or prerequisite: MAC 2312. Four hours lecture and two hour laboratory per week. 5 semester hours credit. [A]
PHY 2049C. General Physics II with Calculus. A continuation of PHY 2048. Topics covered are electrostatics, direct current circuits, alternating current circuits, magnetism, electromagnetic waves, sound, light, atomic physics, and nuclear physics, with laboratory applications of these topics. Prerequisite or Corequisite: MAC 2313. Prerequisite: PHY 2048C. Four hours lecture and two hours laboratory per week. 5 semester hours credit. [A]

PHY 4905. Supervised Research in Physics. This course is designed to allow students to participate in a supervised study or research participation in a specific science-related area in Physics. Students must have instructor approval of the topic before enrolling in the course. This course is only open to students who are enrolled in the science education program or who are trying to meet teacher certificate requirements. Prerequisites: PHY 1053/1054 with the corresponding laboratories. 1-3 semester hours credit. [A]

PMT 0075V. Advanced Welder 1. This course prepares the student for entry into the welding industry. Students explore career opportunities and requirements of a professional welder. Content emphasizes advanced skills key to the success of working in the welding industry. Intermediate and advanced shielded metal arc welding (SMAW) B-class welder, pipe fitting fabrication techniques are covered. Prerequisite: Students must successfully complete welding technology or demonstrate mastery of the outcomes in that program prior to enrollment. 600 clock hours. [O]

PMT 0076V. Advanced Welder 2. This course prepares advanced welders for entry into emerging welding industries. Students explore career opportunities and requirements of a professional welder. Content emphasizes advance skills key to the success of working in the welding industry. Students study emerging technologies directly related to geographically relevant welding needs of business and industry. 150 clock hours. [O]

PMT 0101V. Welding Symbols & Blueprints. This course introduces the student to weld symbol interpretation in accordance with American Welding Society (AWS) standards. Welding details with symbols layout provide a systematic approach to blueprint reading. Fundamentals of drawing elements, scales, layouts, and title blocks are included. 90 clock hours. [O]

PMT 0104V. Fundamentals of Metallurgy. This course provides principles of metallurgy. Emphasis is placed on metallurgical terms for metal structures common to the science of materials. Understanding the distinctions among metallic properties of strength, hardness, and ductility provides insight for managing desirable material properties. Differences between ferrous and nonferrous metals are covered in simple definitions, diagrams, and charts highlighting standard industry terms and practices related to metal. 90 clock hours. [O]

PMT 0111V. Oxygen/Fuel Gas Process. This course provides a basic orientation for shop and construction site safety. Instruction includes oxyacetylene welding and cutting processes, safety and proper handling of compressed gas cylinders, fluent equipment set-up, operation, and storage. Emphasis is placed on proper adjustment of welding and cutting flames and material preparation. Use of Personal Protective Equipment (PPE) and basics of shop safety are introduced. 60 clock hours. [O]

PMT 0121V. Shielded Metal Arc Welding Principles. This course addresses principles related to Shielded Metal Arc Welding (SMAW) including SMAW power supplies, electrode holders, equipment set-up, joint configuration, layout, electrode selection, electrode manipulation, arc control, finished bead characteristics, and safety. 90 clock hours. [O]

PMT 0131V. Gas Tungsten Arc Welding Principles. This course provides students with the fundamentals of Gas Tungsten Arc Welding (GTAW). Emphasis is placed on power sources, controls, polarity settings, and high frequency usage concepts. Lectures focus on GTAW torch components, setup, and safety. 90 clock hours. [O]

PMT 0134V. Gas Metal Arc Welding. This course introduces terminology and procedures related to Gas Tungsten Arc Welding (GMAW, MIG), including power source configurations, hardware, equipment, set-up, and consumable gum components. Students are presented with practical applications related to shielding gas flow, weld bead characteristics, and weld bead geometry needed for certifications in fillet and groove weld fabrication. 90 clock hours. [O]

PMT 0137V. Gas Tungsten Arc Welding Lab 1. This course provides students with technical and practical skills needed to perform Gas Tungsten Arc Welding (GTAW) processes on ferrous and nonferrous base materials. Fundamentals of GTAW safety are addressed. 90 clock hours. [O]

PMT 0138V. Gas Tungsten Arc Welding Lab 2. This course provides students with advanced instruction in a lab setting for Gas Tungsten Arc Welding (GTAW) practical skills needed to obtain certifications on ferrous and nonferrous base materials. Emphasis is placed on developing consistency in weld bead geometry and weld bead placement, along with proper set-up and finishing of GTAW welds. 90 clock hours. [O]

PMT 0143V. Flux Cored Arc Welding. This course covers the practical application of setting up, inspecting, and making minor repairs to flux core arc welding equipment and accessories, operating FCAW equipment, making fillet and groove welds all positions, on plain carbon steel. The student will practice skills relating to personal safety in accordance with regulating authorities, environmental practices, workplace communication and employability skills. 90 clock hours. [O]

PMT 0153V. Plasma Arc Skills. This course introduces the student to the process of plasma arc cutting. The students develop techniques of applying plasma arc cutting skills to nonferrous metals. 30 clock hours. [O]

PMT 0164V. Welding Fabrication Fundamentals. This course introduces general drawing fundamentals, drawing construction, sketching, and drawing view placement, along with fabrication techniques, fabrication set-up, fixtures, jigs, and templates. Fabrication fundamentals, including tack and fit-up technique, using squares, plumb-bobs, levels, rulers, and machine elements, are also introduced. 30 clock hours. [O]

PMT 0750V. Fundamentals of Metallurgy Lab. This course covers basic material identification, file hardness testing, and comparisons of hardness scales. Demonstrations are given utilizing a Rockwell tester for material hardness, along with tests for heat affected zone (HAZ) hazards due to welding processes. Experiments in heat treatment operations and comparison with tensile strength elongation and hardness are conducted. 30 clock hours. [O]

PMT 0751V. Shielded Metal Arc Welding Lab 1. This course introduces the student to basic arc manipulation, running beads, and cleaning the weld. Applications relating to starts/stops, bead geometry, and bead
QMB 4200. Quantitative Methods for Business Decisions. This course deals with business decision making. Effective decision making is vital to every basic function of a business firm and to its overall success. Business decision making is viewed as a process which involves the identification and formulation of a business problem, development of alternatives for solving the problem, and selection of the best alternative and specific course of action. Prerequisite: MAN 3504. 3 semester hours credit. [A]

PMT 0752V. Shielded Metal Arc Welding Lab 2. This course addresses principles related to Shielded Metal Arc Welding (SMAW) including SMAW power supplies, electrode holders, equipment set-up, joint configuration, layout, electrode selection, electrode manipulation, arc control, finished bead characteristics, and safety. 90 clock hours. [O]

PMT 0936V. Special Topics in Welding Technology. This is a special course centering around current topics or special interests to meet the needs of the community. Various hours. [O]

POS 2041. American Federal Government. A study of our Federal Government, designed to give the student an understanding of its organization, principles and the way it works. The relationship of the individual to government is emphasized. POS 2112 is recommended for subsequent study. 3 semester hours credit. [A]

POS 2112. State and Local Government. A study of the organization, the functions, and the operations of state and local governments in the United States. Particular attention is given to state, county, and city government in Florida. This course is designed to be as practical as possible and includes actual participation of county and city officials. POS 2041 is not a prerequisite, but is recommended. 3 semester hours credit. [A]

PPE 2001. Psychology of Personality. This course will provide students with a review and critical evaluation of the major personality theories within the field of psychology. This course is a 3 semester hours credit course that provides division elective credit only. [A]

PSC 1121L. Physical Science Laboratory. A laboratory course designed to provide hands-on laboratory experiences which will supplement topics covered in PSC 1121. These exercises will emphasize lab safety, use of the metric system, accuracy in measurement and experiments dealing with motion, electricity and chemistry. Corequisite: PSC 1121. 1 semester hour credit. [A]

PSY 2012. General Psychology. A course designed to give the student an adequate foundation in the field of psychology, to provide an understanding of human behavior and to enable the student to adapt himself to his physical and social environment. This is the prerequisite course for all advanced courses in psychology. It is recommended that this course be pursued only after completion of one semester of college study. A grade of “C” or higher is required to enter the ASDN program at Chipola. 3 semester hours credit. [A]

REA 0019. Developmental Reading-Combined. This course is designed to improve general study skills: reading comprehension, listening, note-taking, and question-answering. Prerequisite: placement scores on ACT 0-18; PERT 84-105; SAT 260-430. Non-exempt students must make a grade of “C” or higher in this course before advancing to ENC 1101. 2 semester hours non-college credit. [P]

REA 0056. Developmental Reading-Modularized. This course is designed to improve general study skills: reading comprehension, listening, note-taking, and question-answering using a modularized computer program. Prerequisite: placement scores on ACT 0-18; PERT 84-105; SAT 260-430. Non-exempt students must make a grade of “C” or higher in this course before advancing to ENC 1101. 2 semester hours non-college credit. [P]

RED 3009. Early & Emergent Literacy. This course familiarizes students with early literacy development and conditions promoting total literacy from birth through lower elementary grades. All aspects of literacy are explored: reading, writing, listening, and speaking. 10 hours of practicum and practice teaching are required; restricted to grades K-2 only. 3 semester hours credit. [A]

RED 3311. Teaching Reading in the Intermediate Grades. Materials and methods for teaching reading to intermediate grades and related study skills; emphasis on teaching mastery of decoding skills, fluency, comprehension, vocabulary, conducting guided reading activities, utilizing a wide variety of reading materials in the classroom and relating basic reading skills to content area instruction. Includes 10 hours observation, participation, and teaching in school settings. 3 semester hours credit. [A]

RED 3360. Teaching Reading in Middle/Secondary Schools. This course is designed to develop middle and secondary teacher candidates understanding of literacy, teaching and learning content subjects. The major emphasis of this course is placed on current theories, the basic components of the reading and writing processes. Through the course content and activities, teachers will become more effective in their abilities to increase student performance in content subject areas by understanding and utilizing research-based strategies and materials, as well as to gain an understanding of the variety and purpose of literacy assessments. Upon successful completion of this course, the teacher will have gained a greater understanding of the issues and theories related to the literacy development of all students including students of diverse cultural, socio-economic and linguistic backgrounds. Students will also complete 10 hours observation in a middle or secondary school. Includes 10 hours observation in a middle or secondary school. 3 semester hours credit. [A]
SCE 2905. Science Through Tutoring. The goals of this course are: refinement or acquisition of science skills and connections between science topics needed for successful tutoring in an academic setting; acquisition of general methods of tutoring as well as specific tutoring techniques needed for specific courses. Teacher-tutor seminars, teacher-tutor conferences, and formal instruction will supplement the extensive tutoring experiences. Prerequisite: Consent of the department. The number of hours of credit varies from 1 to 3 hours depending upon the number of hours tutoring. [A]

SCE 3320. Teaching Middle School Science. This course is designed for students who are majoring in science education and who will be obtaining teacher certification in grades 5-9 or 6-12. In this course, students learn principles of effective curriculum design and assessment and apply these principles by designing and developing interactive science curriculum projects for middle school students. This course is offered concurrently with SCE 3940, a one-credit-hour practicum in which students present their projects in middle school classroom environments. This course addresses specific state-adopted standards, subject matter competencies and pedagogy pertinent to the discipline and required for certification. 10 hours of teaching are required. Corequisite: SCE 3940. 3 semester hours credit. [A]

SCE 3940. Teaching Middle School Science Practicum. This course is designed for students who are majoring in science education and who will be obtaining teacher certification in grades 5-9 or 6-12. This practicum accompanies SCE 3320 and provides students with opportunities to present interactive curriculum projects to middle school students in local area school districts. Students spend a minimum of 30 school-based hours in the middle school classrooms. Project presentations will be coordinated with in-service middle school teachers and their curriculum schedules and needs. This course addresses specific state-adopted standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification. Corequisite: SCE 3320. 1 semester hour credit. [A]

SCE 4310. Teaching Science in Elementary School. This course presents materials and methodology related to teaching the concepts and processes of science to elementary children. The pre-service teacher who completes this course will be prepared to teach the concepts and processes of science. This course requires a minimum grade of "C". Current background check (fingerprinting) acceptable to the District in which the field experience will take place. 10 hours of teaching are required. Corequisite: EEX 4945, EDE 4945, or EDG 4940 and EDG 4936 30 hours of observations/practice in local school classroom is included. 3 semester hours credit. [A]

SCE 4312. Integration of Assessment into Classroom Reading. This course introduces formal and informal methods and materials used to identify reading strengths and weaknesses of students. Emphasis is placed on integrating assessments into the curriculum to strengthen instructional strategies and student success. The student will increase and apply knowledge and skills in the uniform core curriculum relevant to this content area. 10 hours of participation and teaching required. Prerequisites: RED 3009, RED 3311 or RED 3360. 3 semester hours credit. [A]

SCE 4519. Diagnostic and Instructional Interventions in Reading. Formal and informal methods (standardized norm-referenced, criterion-referenced, performance assessment) and materials used to identify reading strengths and needs of students. Case studies will be completed to demonstrate ability to diagnose and correct reading difficulties. Topics include assessments that address all elements of reading (comprehension, word recognition, phonemic awareness, phonics, fluency, vocabulary and concept development, etc.). Major emphasis on reading problems diagnosis, assessments administration, evaluation of results, and planning instruction/interventions to correct or remediate. 10 hours of participation and teaching required. Prerequisite: RED 3009, RED 3311 or RED 3360. 3 semester hours credit. [A]

SCE 4854. Reading Practicum. Classroom application of knowledge of reading development to reading instruction with sufficient evidence of increased student reading proficiency for struggling students, including students with disabilities and students from diverse populations. Current background check (fingerprinting) acceptable to the district in which the field experience will take place. Prerequisites: RED 3009, RED 3311 or RED 3360, RED 4312, RED 4519. Corequisite: EEX 4945, EDE 4945, or EDG 4940 and EDG 4936 30 hours of observations/practice in local school classroom is included. 3 semester hours credit. [A]
in the secondary school classroom. Project presentations will be coordinated with in-service secondary school teachers and their curriculum schedules and needs. This course addresses specific state-adopted standards, subject matter competencies, and pedagogy pertinent to the discipline and required for certification. Corequisite: SCE 4330. 1 semester hour credit. [A]

**SCE 4943. Seminar in Science Education.** This course is designed to provide students with instructional strategies, planning techniques, evaluation procedures and class management skills. Prerequisites: All other program requirements complete. Corequisite: SCE 4945 or EDG 4940. 3 semester hours credit. [A]

**SCE 4945. Student Teaching in Science.** This course requires a teacher candidate to demonstrate pre-professional competencies during a 15 week, full-time internship in a public school approved by the department. Contact hours: a minimum of 35 hours per week for 15 weeks. Prerequisites: Completion of all program requirements. Corequisite: SCE 4943 or EDG 4936. 10 semesters hours credit. [A]

**SLS 1101. Orientation.** This course provides the entering student with information necessary for successful adjustment to college life, work and activities. Attention is given to study habits, vocational choice and the development of a well-rounded philosophy of life. This course is mandatory for students who have completed fewer than 12 semester hours and for all high school graduates who were dually enrolled. 1 semester hour credit. [A]

**SLS 1261-1262, 2263-2264. SGA Leadership Development I, II, III, IV.** A course designed for student leaders to participate in the SGA organization and development of the student activities program. The course includes the dynamics of student organizational behavior, personal and group goal setting, conflict resolution, and development of leadership skills. Required for all Student Government Association Officers. 1 semester hour credit each course. [A]

**SLS 1265-1266, 2267-2268. Ambassador Leadership Development I, II, III, IV.** A course designed for student leaders to participate in the Student Ambassador program. The course includes the dynamics of student organizational behavior, personal and group goal setting, conflict resolution, and development of leadership skills. Required for all Student Ambassadors. 1 semester hour credit each course. [A]

**SLS 1401. Career and Life Planning.** A course designed for both freshman and sophomore students (especially undeclared majors) to help them plan realistic career and life goals through the development of self evaluation, career awareness and career decision-making skills. Skills are developed in a series of exercises which simulate thinking about and planning for the future, much of which is done in small groups. The current job market is explored through the use of the Career Laboratory. 2 semester hours credit. [A]

**SLS 1501. College Success Skills.** A course designed for first semester freshmen students. It serves as an introduction to Chipola College and assists the beginning student in coping with the people and programs available to help them get the most out of their college experience. Lab portion of the class is tailored to meet the individual needs of the student. 2 semester hours credit. [A]

**SOW 2020. Introduction to Social Work.** This course is a survey of the Social Worker profession from its historical roots to the present. Emphasis is placed upon introducing students to the field, practice standards, issues in social welfare, and the social work process and practice settings. Specific emphasis will be placed upon the role of social workers in enhancing the human condition. Students will be afforded the opportunity to learn about the role that professional social workers play in attaining equality of opportunities and social justice. Emphasis will also be placed upon the empowerment of humans to attain societal goals. Core societal problems such as incomes inequality, racism, sexism and inequality of opportunity will also be addressed. Students will also be exposed to generalist practice modalities that are designed to effect positive change in the individual and society. 3 semester hours credit. [A]

**SPC 2017. Speech Communication for Educators.** This course is designed to help future teachers become more effective communicators, particularly through the medium of public speaking, with emphasis on the demands specific to the education profession. Also, the demands of conveying such information to public or private school students will be emphasized. Open to Chipola College School of Teacher Education applicants only. Prerequisites: ENC 1101 and ENC 1102 with grades of “C” or higher. 2 semester hours credit. [A]

**SPC 2050. Principles of Speech.** This course is an intensive study of the speech process, designed primarily for English, speech, elementary education and special education majors. Emphasis is on enabling the students to evaluate their own speech; to understand phonetic, physiological, and psychological factors involved in speech; and to establish procedures to follow for personal speech improvement. A study of the International Phonetic Alphabet is included. 3 semester hours credit. [A]

**SPC 2608. Effective Public Speaking.** This course covers the preparation and presentation of speeches for business, social and professional occasions. Speech principles and problems will be dealt with in regard to the development and use of the speaking voice. Prerequisite: ENC 1101 or instructor’s approval. 3 semester hours credit. [A]

**SPM 2000. Introduction to Sports Management.** This course will provide students a foundation in the field of Sport Management. It is an introductory course designed to generate interest and develop an understanding of the sport industry. Students will have the opportunity to meet and interact with various sport management professionals in the local community. 3 semester hours credit. [A]

**SPN 1000. Basic Spanish Conversation.** This one-semester course is designed for those who wish to acquire some knowledge of Spanish through the use of conversation, not for those who wish to meet university curriculum requirements in foreign language. A brief introduction to the history, geography and culture of Spanish-speaking countries is included. 3 semester hours credit. [O]

**SPN 1120. Elementary Spanish I.** This course covers the essentials of Spanish, with emphasis on oral expression. Open to all students who enter college without any high school Spanish. This course has been designated as an international/diversity course. Prerequisite: Passing scores on the Reading and Writing Section of ACT or Passing scores on the Reading and Writing Section of PERT, or a Grade of C or higher in ENC 1101, or consent of the Department. 4 semester hours credit. [A]

**SPN 1121. Elementary Spanish II.** This course is a continuation of SPN 1120 with emphasis on both oral and written expression. This course has been designated as an international/diversity course. Prerequisite: SPN 1120 or consent of department. 4 semester hours credit. [A]
SPN 1170. Spanish Travel Study. This study travel course introduces the student to the Spanish language and the culture of a Spanish-speaking country. It provides opportunities to attain meaningful, relevant, hands-on learning experiences while living in a Spanish-speaking country. All classes are conducted entirely in Spanish to increase oral proficiency. Learning opportunities will include special lectures by Spanish guest speakers, seminars, and travel to sites of historic or cultural significance. This course has been designated as an international/diversity course. SPN 1170 is a corequisite for students taking SPN 1121, SPN 2220 or SPN 2221 while studying intensively in Spain. The appropriate prerequisites will apply. Students who wish to take SPN 1170 must have the consent of the instructor. Course may be repeated. 3 semester hours credit. [A]

SPN 2220. Intermediate Spanish I. This course includes the reading of selections from modern prose authors, a review of grammatical principles, and further study of composition and conversation. This course has been designated as an international/diversity course. Prerequisite: SPN 1121 or consent of department. 4 semester hours credit. [A]

SPN 2221. Intermediate Spanish II. This course is a continuation of the courses 2220-2221. This course has been designated as an international/diversity course. Prerequisite: SPN 2220. 4 semester hours credit. [A]

SPT 2521. Hispanic Cinema. This course is a study of the films, related philosophic foundations and directors of the cinema of Latin America and Spain. This course will be taught in English. Approximately 14 full-length feature films will be viewed in the original Spanish (one in Portuguese) with English subtitles. Students will write essays examining various themes in the films and discussed in class. This course has been designated as an international/diversity course. SPT 2521 fulfills 6,000 words of the Gordon Rule writing requirement. Prerequisites: Grades of "C" or higher in ENC 1101-1102. 3 semester hours credit [A]

SSE 3113. Methods for Teaching Elementary School Social Studies. This course explores instructional methods and materials for teaching a contemporary program in Social Studies in the elementary school. It includes citizenship education and multicultural understandings; current trends and models for teaching Social Studies. 3 semester hours credit. [A]

STA 2023. Introduction to Statistics. This course includes an introduction to various statistical applications for business, medical/nursing, education, psychology, natural science, and social science majors. The course introduces descriptive and inferential statistics through such topics as measures of central tendency and dispersion, discrete and continuous probability distributions, sample designs and sampling distributions, statistical estimation, correlation, regression, Chi-Square analysis, hypothesis testing, T-Test, ANOVA, and analysis of various statistical concepts. Prerequisite: A grade of "C" or higher in any mathematics course with an MAC prefix, or consent of the department. Credit will not be granted to students who have previously received credit for STA 2122. A "C" grade or higher must be earned to advance to a higher-level mathematics course or to satisfy part of the general education requirements in mathematics. 3 semester hours credit. [A]

SUR 1101. Introduction to Surveying. This course covers the principles of measurements of distances, elevations, and angles. It also includes error theory in measurement and calculations, traverse calculations, and the basic principles of surveying and mapmaking. The use of various surveying equipment such as levels, EDM, transits, and GPS will be examined. Prerequisite: Eligibility for MAC 1105. 3 semester hours credit. [A]

SUR 2400. Legal Aspects of Surveying. This course is a study of the legal principles of boundary location and professionalism, history of boundary surveys, sectional surveys, system, property transfer, evidence and procedure for boundary location, water boundaries, minimum technical standards, and Chapter 177 and 42 (Florida Statutes). Prerequisite: SUR 1101 or department approval. 1 semester hour credit. [A]

SYG 1000. Introductory Sociology. A general study of institutional development, social determinants, social process, and cultural growth. The aim of the course is to help the student understand how our present society evolved, how it functions, and how it is developing. Considerable time is devoted to the study of the social problems of today and to the application of the sociological principles involved. The course is designed to serve as an introduction to other courses in the field. 3 semester hours credit. [A]

SYG 1010. Contemporary Sociology. This course is intended to provide the student with an insight into some of the major social issues and problems confronting American society. The course will have the flexibility to shift the focus on issues and problem areas as they move in and out of the social arena. It will provide students with a multi-cultural, unisex course capable of dealing with any social problem subject area deemed appropriate for study. This course has been designated as an international/diversity course. 3 semester hours credit. [A]
THE 2304. Script Analysis. This course is a study of the play, from page to stage, with emphasis on critical analysis of structure, genre, theme, style, character, language, dramatic event, and point of view of the actor, director, designers, and audience. An introduction to theatre research methods. THE 2304 fulfills 6,000 words of the Gordon Rule writing requirement. Prerequisite: Grades of “C” or higher in ENC 1101-1102. 3 semester hours credit. [A]

THE 2721. Children’s Theatre. A course for participation in the organization, construction, rehearsal, and performance of a show for children. Credit for this course will be received only by members of the ensemble who have been selected by audition. 3 semester hours credit. [A]

THE 2925-2926-2927. Rehearsal/Performance Lab. A course for advanced participation in theatrical productions. Credit may be received for acting, choreography, dancing, singing, or stage management in plays or musicals. Prerequisite: Courses should be taken in sequence. 2 semester hours credit each course. [A]

TPA 1201. Introduction to Theatre Production. This course will introduce students to practices of technical production areas: scenic construction, lighting, audio, properties, and running crews. Students will become familiar with the glossary of technical technology, backstage etiquette, and career opportunities in technical theatre. In addition to lecture, there will be production hours outside of class. 3 semester hours credit. [A]

TPA 1210. Stagecraft I. This course is an introduction to the principles of stagecraft. It includes practical application utilizing tools, terminology, and scenic materials. In addition to lecture, there will be production hours outside of class. 3 semester hours credit. [A]

TPA 1211. Stagecraft II. This course focuses on advanced scenic carpentry techniques and an introduction to technical production management. In addition to lecture, there will be production hours outside of class. 3 semester hours credit. [A]

TPA 1220. Introduction to Stage Lighting. This course is an introduction to stage lighting fundamentals. Students will be introduced to principles of electricity, stage lighting instrumentation, control, and color theory. This course will also touch on the lighting design process. In addition to lecture, there will be production hours outside of class. 3 semester hours credit. [A]

TPA 1274. Stage Properties. This course focuses on the collection and production of stage properties. Students will be introduced to the history, style, and ornamentation of scenic and hand properties. In addition to lecture, there will be production hours outside of class. 3 semester hours credit. [A]

TPA 1290. Technical Theatre Lab. A course for participation in the technical facets of a theatre production. Credit may be received for work in the areas of lighting, set construction, costuming, publicity, and makeup. 1 semester hour credit. [A]

TPA 1291-1292. Technical Theatre Lab. A course for participation in the technical facets of a theatre production. Credit may be received for work in the areas of lighting, set construction, costuming, publicity, and makeup. Prerequisite: TPA 1290. 1 semester hour credit each course. [A]

TPA 1340. Drafting for Theatre. This course is an introduction to the principles and techniques of drafting for the theatre. Students will acquire skills in hand drafting as well as Computer Assisted Drafting (CAD). 3 semester hours credit. [A]

TPA 2000. Introduction to Theatrical Design. This course is an introduction to the design process as it relates to the theatre. It includes study in design principles, script analysis, and stylistic considerations. Students will learn basic skills culminating in conceptualizing and developing a design project. 3 semester hours credit. [A]

TPA 2212. Introduction to Stage Audio. This course is an introduction to audio productions and reinforcement for the stage. Students will learn how to use and maintain audio equipment; record and edit sound effects; and mixing live sound. Emphasis will be placed on digital audio techniques and equipment. In addition to lecture, there will be production hours outside of class. 3 semester hours credit. [A]

TPA 2293. Technical Theatre Lab. A course for participation in the technical facets of a theatre production. Credit may be received for work in the areas of lighting, set construction, costuming, publicity, and makeup. 1 semester hour credit. [A]

TPA 2294. Technical Theatre Lab. A course for advanced participation in the technical facets of a theatre production. Credit may be received for significant, independent projects in technical theatre. Prerequisite: TPA 1291; courses should be taken in sequence. 2 semester hours credit. [A]

TPA 2295. Technical Theatre Lab. A course for advanced participation in the technical facets of a theatre production. Credit may be received for significant, independent projects in technical theatre. Prerequisite: Consent of department. 3 semester hours credit. [A]

TPA 2600. Stage Management. This course is an introduction to stage management practices addressing all aspects of the production process from preproduction meeting to post production. In addition to lecture, there will be production hours outside of class. 3 semester hours credit. [A]

TPP 1100. Stage Acting. An introduction to the requirements of acting in plays. The focus will be placed equally upon script analysis and upon developing the technical skills necessary to perform comfortably on a stage. There will be regular lectures and discussions, as well as performance assignments on pantomime, improvisation and acting technique. The final grade will not be based upon talent. 3 semester hours credit. [A]

TPP 2210. Touring Theatre. A course for participation in the organization, construction, rehearsal, and performance of a touring production. Credit for this course will be received only by members of the ensemble who have been selected by audition. 3 semester hours credit. [A]

TSL 3520. Language and Cultural Understanding. The course is designed to provide students with information and skills concerning the education of students who have limited English proficiency (LEP). The course addresses recognizing the need for training in order to work with LEP students and focuses on cross cultural understanding and methods of teaching speakers of other languages. It also focuses on working with the families of the LEP students. This course has been designated as an International/Diversity Course. Ten hours of field experience are required for course completion. 3 semester hours credit. [A]

TSL 4081. TESOL Issues & Practices. This course is designed to integrate the theories and principles of the teaching of English to speakers of other languages and applying them to classroom instruction. ESOL methodology and curriculum will be emphasized as they relate to current best practice in ESOL instruction. The student will increase and apply knowledge and skills in the uniform core curriculum relevant to this content area. Ten hours of field experience are required for course completion. This course has been designated as an International/Diversity Course. Prerequisite: TSL 3520. 3 semester hours credit. [A]

VPI 0100V-0111V. Vocational Preparatory: Reading. These courses are designed for students needing improvement in literal reading comprehension skills prior to entering a vocational program. Following diagnostic assessment, an individualized instructional prescription is developed. A post-test is administered upon completion of the prescription. The second course is designed for students with diplomas and scores above 9.0 on the Test of Adult Basic Education. The courses are graded Satisfactory or Unsatisfactory. Fees are dependent upon the number of hours needed to complete the course. [V]
VPI 0200V-0211V. Vocational Preparatory: Math. These courses are designed for students who need to improve their basic math skills before entering a vocational program. Following the diagnostic assessment, an individualized instructional prescription is developed. A post-test is administered at the completion of the prescription. The second course is designed for students with diplomas and scores above 9.0 on the Test of Adult Basic Education. The courses are graded Satisfactory or Unsatisfactory. Fees are dependent upon the number of hours needed to complete the course. [V]

VPI 0300V-0311V. Vocational Preparatory: Language. These courses are designed for students who need improvement in basic English skills prior to entering a vocational program. Following diagnostic assessment, an individualized instructional prescription is developed. A post-test is administered at the completion of the prescription. The second course is designed for students with diplomas and scores above 9.0 on the Test of Adult Basic Education. The courses are graded Satisfactory or Unsatisfactory. Fees are dependent upon the number of hours needed to complete the course. [V]

WOH 2012. World History I. This course is a comprehensive global perspective of world history. It is the study of all geographical areas and civilizations. It identifies and explores the links among civilizations that produce a multicentered world history while paying particular attention to unique identities and contributions. It examines briefly the various political and economic systems, religions, philosophies and renowned leaders of the world civilizations and societies. The perspective is multicultural and multifaceted to effect a more integrated understanding of global development. This course spans the origins of civilizations through the Enlightenment. This course has been designated as an international/diversity course. 3 semester hours credit. [A]

WOH 2022. World History II. This course is a comprehensive global perspective of world history. It is the study of all geographical areas and civilizations. It identifies and explores the links among civilizations that produce a multicentered world history while paying particular attention to their identities and unique contributions. It examines briefly the various political and economic systems, religions, philosophies and renowned leaders of the world civilizations and societies. The perspective is multicultural and multifaceted to effect a more integrated understanding of global development. This course spans the eras from the Enlightenment to the present. This course has been designated as an international/diversity course. 3 semester hours credit. [A]