Comprehensive Course Guide: Lee County

See your high school’s Career & College Advisor for more information:

Lara Abels, Southern Lee High School
Patrick Kelly, Lee County High School

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Program Eligibility:
- high school junior or senior
- weighted high school GPA of 3.0 or higher (may be waived upon principal recommendation)

Accounting

Course Delivery: Seated/Online
Location: Sanford Main Campus/High School Distance Learning Lab
Program Length: Year-Long Preferred
Grade(s): 11, 12

Credentials Earned:

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<tbody>
<tr>
<td>ACC 120</td>
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<td>BUS 125</td>
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<tr>
<td></td>
<td>CIS 110</td>
<td>MKT 120*</td>
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</tbody>
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*must be dually-enrolled in Business Administration pathway and take MKT 120

Recommended Course Order:

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>ACC 129 Individual Income Taxes</td>
<td>ACC 130 Business Income Taxes</td>
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<tr>
<td>BUS 125 Personal Finance</td>
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ACA 122 College Transfer Success
College Credit: 1 semester hour
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

ACC 120 Principles of Financial Accounting
College Credit: 4 semester hours
This course introduces business decision-making using accounting information systems. Emphasis is placed on analyzing, summarizing, reporting, and interpreting financial information. Upon completion, students should be able to prepare financial statements, understand the role of financial information in decision-making, and address ethical considerations. This course has been approved for transfer under the CAA and ICAA a premajor and/or elective course requirement.
ACC 121  Principles of Managerial Accounting
Prerequisite: ACC 120
College Credit: 4 semester hours
This course includes a greater emphasis on managerial and cost accounting skills. Emphasis is placed on managerial accounting concepts for external and internal analysis, reporting, and decision making. Upon completion, students should be able to analyze and interpret transactions relating to managerial concepts including product-costing systems. This course has been approved for transfer under the CAA and ICAA a pre-major and/or elective course requirement.

ACC 122  Principles of Financial Accounting II
Prerequisite: ACC 120
College Credit: 3 semester hours
This course provides additional instruction in the financial accounting concepts and procedures introduced in ACC 120. Emphasis is placed on the analysis of specific balance sheet accounts, with in-depth instruction of the accounting principles applied to these accounts. Upon completion, students should be able to analyze data, prepare journal entries, and prepare reports in compliance with generally accepted accounting principles.

ACC 129  Individual Income Taxes
College Credit: 3 semester hours
This course introduces the relevant laws governing individual income taxation. Topics include tax law, electronic research and methodologies, and the use of technology for preparation of individual tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various individual tax forms.

ACC 130  Business Income Taxes
Local Prerequisite: ACC 120
College Credit: 3 semester hours
This course introduces the relevant laws governing business and fiduciary income taxes. Topics include tax law relating to business organizations, electronic research and methodologies, and the use of technology for the preparation of business tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various business tax forms.

ACC 140  Payroll Accounting
Local Prerequisite: ACC 115 or ACC 120
College Credit: 2 semester hours
This course covers federal and state laws pertaining to wages, payroll taxes, payroll tax forms, and journal and general ledger transactions. Emphasis is placed on computing wages; calculating social security, income, and unemployment taxes; preparing appropriate payroll tax forms; and journalizing/posting transactions. Upon completion, students should be able to analyze data, make appropriate computations, complete forms, and prepare accounting entries using appropriate technology.

ACC 150  Accounting Software Applications
Local Prerequisite: ACC 115 or ACC 120
College Credit: 2 semester hours
This course introduces microcomputer applications related to accounting systems. Topics include general ledger, accounts receivable, accounts payable, inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting package to solve accounting problems.
ART 111  Art Appreciation
College Credit: 3 semester hours
This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

BUS 110  Introduction to Business
College Credit: 3 semester hours
This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

BUS 115  Business Law I
College Credit: 3 semester hours
This course introduces the ethics and legal framework of business. Emphasis is placed on contracts, negotiable instruments, Uniform Commercial Code, and the working of the court systems. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

BUS 125  Personal Finance
College Credit: 3 semester hours
This course provides a study of individual and family financial decisions. Emphasis is placed on building useful skills in buying, managing finances, increasing resources, and coping with current economic conditions. Upon completion, students should be able to develop a personal financial plan. Students can receive high school CTE state articulated credit for Personal Finance if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.

CIS 110  Introduction to Computers
Credit Hours: 3 semester hours
This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics (Quantitative).

COM 231  Public Speaking
College Credit: 3 semester hours
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.
ECO 251 Principles of Microeconomics
College Credit: 3 semester hours
This course introduces economic analysis of individual, business, and industry in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives.
Automotive Restoration

Course Delivery: Seated
Location: Emergency Services Training Center (Sanford)
Program Length: Year-Long; 4th Block
Grade(s): 12
Credential Earned/Recommended Course Order:

<table>
<thead>
<tr>
<th></th>
<th>Automotive Restoration Technology Certificate</th>
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<tr>
<td><strong>Fall</strong></td>
<td><strong>Spring</strong></td>
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<tr>
<td>AUB 111 Painting and Refinishing I</td>
<td>AUB 112 Painting and Refinishing II</td>
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**ACA 122  College Transfer Success**
College Credit: 1 semester hour
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

**ARS 112  Auto Restoration Research**
College Credit: 3 semester hours
This course covers identification and collection of information needed to restore classic automobiles. Emphasis is placed on using books, numbers, emblems, titles, bills of sale, and other documents as resources. Upon completion, students should be able to use reference materials in the area of auto restoration to restore classic vehicles.

**ARS 113  Automobile Upholstery**
College Credit: 4 semester hours
This course covers automobile upholstery work used in restoration of classic automobiles. Emphasis is placed on removing, repairing, or reconstructing worn/damaged upholstery material in classic automobiles. Upon completion, students should be able to disassemble, repair/reconstruct, or replace the seats, headliners, door panels, and other components in the interior of vehicles.

**ARS 114  Restoration Skills I**
College Credit: 4 semester hours
This course covers mechanical, electrical, and upholstery restoration. Emphasis is placed on engines, transmissions, brakes, starters, generators, distributors, and replacement or fabrication of upholstery. Upon completion, students should be able to restore, rebuild, or replace specific components in a wide range of classic vehicles.

**ARS 117  Automotive Engines**
College Credit: 2 semester hours
This course covers the repair, rebuilding, and troubleshooting of internal combustion engines. Emphasis is placed on use of tools and equipment to measure reconditioning tolerances of the internal combustion engine. Upon completion, students should be able to disassemble, repair and/or replace, and reassemble an internal combustion engine.
ARS 118  Wood and Metal Restoration
College Credit: 3 semester hours
This course introduces various wood materials used in early automobile construction including a general overview of woodworking techniques. Emphasis is placed on wood material, metal behavior, and trim construction. Upon completion, students should be able to perform simple woodworking techniques, attach and remove trim, and be familiar with basic hardware techniques.

ARS 131  Chassis and Drive Trains
College Credit: 3 semester hours
This course introduces principles of operation of automotive drive trains, perimeter/ladder/full-framed vehicles, and related restoration processes. Emphasis is placed on the technology related to restoration of manual and automatic transmissions, transaxles, and final drive components used on vehicles. Upon completion, students should be able to describe, diagnose, and determine needed service and repairs in the vehicle restoration industry.

AUB 111  Painting and Refinishing I
College Credit: 4 semester hours
This course introduces the proper procedures for using automotive refinishing equipment and materials in surface preparation and application. Topics include federal, state, and local regulations, personal safety, refinishing equipment and materials, surface preparation, masking, application techniques, and other related topics. Upon completion, students should be able to identify and use proper equipment and materials in refinishing by following accepted industry standards.

AUB 112  Painting and Refinishing II
Prerequisite: AUB 111
College Credit: 4 semester hours
This course covers advanced painting techniques and technologies with an emphasis on identifying problems encountered by the refinishing technician. Topics include materials application, color matching, correction of refinishing problems, and other related topics. Upon completion, students should be able to perform spot, panel, and overall refinishing repairs and identify and correct refinish problems.

COM 231  Public Speaking
College Credit: 3 semester hours
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

HUM 110  Technology and Society
College Credit: 3 semester hours
This course considers technological change from historical, artistic, and philosophical perspectives and its effect on human needs and concerns. Emphasis is placed on the causes and consequences of technological change. Upon completion, students should be able to critically evaluate the implications of technology.
TRN 110  Intro to Transport Technology  
College Credit: 2 semester hours  
This course covers workplace safety, hazardous materials, environmental regulations, hand tools, service information, basic concepts, vehicle systems, and common transportation industry terminology. Topics include familiarization with major vehicle systems, proper use of various hand and power tools, material safety data sheets, and personal protective equipment. Upon completion, students should be able to demonstrate appropriate safety procedures, identify and use basic shop tools, and describe government regulations regarding transportation repair facilities.

TRN 120  Basic Transportation Electricity  
College Credit: 5 semester hours  
This course covers basic electrical theory, wiring diagrams, test equipment, and diagnosis, repair and replacement of batteries, starters, and alternators. Topics include Ohm's Law, circuit construction, wiring diagrams, circuit testing, and basic troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair basic wiring, battery, starting, charging, and electrical concerns.

TRN 180  Basic Welding for Transportation  
College Credit: 3 semester hours  
This course covers the terms and procedures for welding various metals used in the transportation industry with an emphasis on personal safety and environmental health. Topics include safety and precautionary measures, setup/operation of MIG equipment, metal identification methods, types of welds/joints, techniques, inspection methods, cutting processes and other related issues. Upon completion, students should be able to demonstrate a basic knowledge of welding operations and safety procedures according to industry standard.
Broadcast Production & Technology

Course Delivery: Seated
Location: Sanford Main Campus
Program Length: Year-Long Preferred; 4th Block
Grade(s): 11, 12

Recommended Course Order - Lee - Video/TV Production:

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<th>Fall</th>
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<tr>
<td>BPT 231 Video/TV Production I</td>
<td>BPT 232 Video/TV Production II</td>
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ACA 122    College Transfer Success
College Credit: 1 semester hour
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

BPT 110    Introduction to Broadcasting
College Credit: 3 semester hours
This course introduces the field of broadcasting and other electronic media. Emphasis is placed on the history, development, and current status of radio, television, and related industries. Upon completion, students should be able to demonstrate knowledge of regulations, organizational structure, revenue sources, historical development, and ongoing operation of broadcasting and related industries.

BPT 111    Broadcast Law & Ethics
College Credit: 3 semester hours
This course covers judicial, legislative, and administrative policies pertinent to the ethical and legal operation of broadcast and other electronic media organizations. Emphasis is placed on legal and ethical issues including First Amendment protection, FCC regulations, copyright, and libel laws. Upon completion, students should be able to demonstrate an understanding of the historical significance and modern-day application of important broadcast laws and policies.

BPT 112    Broadcast Writing
College Credit: 4 semester hours
This course introduces proper copy and script writing techniques and formats for radio, television, and other electronic media. Emphasis is placed on creating effective scripts for programs and promotional materials, including commercial and public radio service announcements for a specific target audience. Upon completion, students should be able to understand and write copy and scripts according to standard industry formats.

BPT 113    Broadcast Sales
College Credit: 3 semester hours
This course covers sales principles applicable to radio, television, cable, and other electronic media. Emphasis is placed on prospecting and servicing accounts, developing clients, and preparing sales presentations. Upon completion, students should be able to create a sales presentation based upon standard ratings reports, prospect for new customers, and understand account management.
BPT 121 | Broadcast Speech I  
College Credit: 3 semester hours  
This course covers basic preparation and performance of on-air talents’ speaking quality. Emphasis is placed on developing a pleasant and efficient voice with techniques applied to taped news, features, commercial copy, and announcing. Upon completion, students should be able to show improvement and aptitude in proper articulation, pronunciation, rate of delivery, pitch, breathing techniques, inflection, projection, and phrasing.

BPT 131 | Audio/Radio Production I  
College Credit: 4 semester hours  
This course covers the creation, development, production, and presentation of audio programming elements for broadcast and/or other electronic media applications. Emphasis is placed on the proper operation of professional audio equipment and the study of basic physical behavior and perceptual effects of sound. Upon completion, students should be able to correctly operate audio recording and playback equipment and demonstrate an understanding of the basic components of sound.

BPT 135 | Radio Performance I  
College Credit: 2 semester hours  
This course provides an opportunity to operate the college radio station as an announcer/board operator. Emphasis is placed on operating control-room equipment, logging transmitter readings, EBS tests, reading news, and broadcasting free of interruptions. Upon completion, students should be able to prepare music, public service announcements, and promos for timely broadcast; introduce songs/programs smoothly; and follow FCC rules.

BPT 215 | Broadcast Programming  
College Credit: 3 semester hours  
This course covers programming methods, research, and resources needed to provide programs for radio, television, cable, and satellite target audiences. Topics include market research and analysis; local, network, and public station programming and program sources; and scheduling procedures for electronic media. Upon completion, students should be able to develop a programming format or schedule.

BPT 231 | Video/TV Production I  
College Credit: 4 semester hours  
This course covers the language of film/video, shot composition, set design, lighting, production planning, scripting, editing, and operation of video and television production equipment. Emphasis is placed on mastering the body of knowledge and techniques followed in producing all forms of video and television production. Upon completion, students should be able to produce basic video and television productions in a team environment.

BPT 232 | Video/TV Production II  
Prerequisite: BPT 231  
College Credit: 4 semester hours  
This course covers advanced video and television production. Emphasis is placed on field production, post-production, digital video effects, graphics, and multi-camera productions. Upon completion, students should be able to create productions that optimize the use of studio, field, and post-production equipment.

COM 231 | Public Speaking  
College Credit: 3 semester hours  
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.
SOC 210 Introduction to Sociology
College Credit: 3 semester hours
This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.
Business Administration

Course Delivery: Online/Seated
Location: High School Distance Learning Lab/ Sanford Main Campus
Program Length: Year-Long Preferred
Grade(s): 11, 12
Credentials Earned:

<table>
<thead>
<tr>
<th>Social Media &amp; Marketing Certificate</th>
<th>Entrepreneur Certificate</th>
<th>Manager Trainee Certificate</th>
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<tbody>
<tr>
<td>BUS 110</td>
<td>ACC 120*</td>
<td>BUS 110</td>
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<td>MKT 120</td>
<td>BUS 137</td>
<td>BUS 137</td>
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<td>MKT 220</td>
<td>BUS 280</td>
<td>BUS 151</td>
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<td>MKT 232</td>
<td>CIS 110</td>
<td>BUS 153</td>
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<td>WEB 214</td>
<td>MKT 120</td>
<td>CIS 110</td>
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<td>*must be dual-enrolled in Accounting pathway and take ACC 120</td>
<td>MKT 223</td>
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ACC 115  College Accounting
College Credit: 4 semester hours
This course introduces basic accounting principles for a business. Topics include the complete accounting cycle with end-of-period statements, bank reconciliation, payrolls, and petty cash. Upon completion, students should be able to demonstrate an understanding of accounting principles and apply those skills to a business organization. **Students can receive high school CTE state articulated credit for Accounting I/Accounting II if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.**

BUS 110  Introduction to Business
College Credit: 3 semester hours
This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. This course is also available through +the Virtual Learning Community (VLC).

BUS 115  Business Law I
College Credit: 3 semester hours
This course introduces the ethics and legal framework of business. Emphasis is placed on contracts, negotiable instruments, Uniform Commercial Code, and the working of the court systems. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

BUS 137  Principles of Management
College Credit: 3 semester hours
This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.
BUS 151  People Skills
College Credit: 3 semester hours
This course introduces the basic concepts of identity and communication in the business setting. Topics include self-concept, values, communication styles, feelings and emotions, roles versus relationships, and basic assertiveness, listening, and conflict resolution. Upon completion, students should be able to distinguish between unhealthy, self-destructive, communication patterns and healthy, non-destructive, positive communication patterns.

BUS 153  Human Resources Management
College Credit: 3 semester hours
This course introduces the functions of personnel/human resource management within an organization. Topics include equal opportunity and the legal environment, recruitment and selection, performance appraisal, employee development, compensation planning, and employee relations. Upon completion, students should be able to anticipate and resolve human resource concerns.

BUS 280  REAL Small Business
College Credit: 4 semester hours
This course introduces hands-on techniques and procedures for planning and opening a small business, including the personal qualities needed for entrepreneurship. Emphasis is placed on market research, finance, time management, and day-to-day activities of owning/operating a small business. Upon completion, students should be able to write and implement a viable business plan and seek funding.

CIS 110  Introduction to Computers
Credit Hours: 3 semester hours
This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics (Quantitative).

COM 231  Public Speaking
College Credit: 3 semester hours
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

ECO 251  Survey of Economics
College Credit: 3 semester hours
This course introduces economic analysis of individual, business, and industry in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives.

MKT 120  Principles of Marketing
College Credit: 3 semester hours
This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision-making. Students can receive high school CTE state articulated credit for Marketing if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.
**MKT 220**  **Advertising & Sales Promotion**  
College Credit: 3 semester hours  
This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and sales promotion as a marketing tool, and means of testing effectiveness. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application.

**MKT 223**  **Customer Service**  
College Credit: 3 semester hours  
This course stresses the importance of customer relations in the business world. Emphasis is placed on learning how to respond to complex customer requirements and to efficiently handle stressful situations. Upon completion, students should be able to demonstrate the ability to handle customer relations.

**MKT 232**  **Social Media Marketing**  
College Credit: 4 semester hours  
This course is designed to build students’ social media marketing skills by utilizing projects that give students hands on experience implementing social media marketing strategies. Topics include integrating different social media technologies into a marketing plan, creating social media marketing campaigns, and applying appropriate social media tools. Upon completion, students should be able to use social media technologies to create and improve marketing efforts for businesses.

**WEB 214**  **Social Media**  
College Credit: 3 semester hours  
This course introduces students to social media for organizations. Topics include social media, marketing strategy, brand presence, blogging, social media analytics and technical writing. Upon completion, students should be able to utilize popular social media platforms as part of a marketing strategy, and work with social media analytics tools.
Computer Aided Drafting

Course Delivery: Seated
Location: Sanford Main Campus
Program Length: Year-Long Preferred; 1st, 2nd, & 3rd Blocks
Grade(s): 12th
Credential Earned/Recommended Course Order:

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<thead>
<tr>
<th>Computer Aided Drafting Technology Certificate</th>
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<tbody>
<tr>
<td><strong>Fall</strong></td>
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<tr>
<td>BRP 111 Print Reading</td>
</tr>
<tr>
<td>DFT 111 Technical Drafting I</td>
</tr>
<tr>
<td>DFT 151 CAD I</td>
</tr>
</tbody>
</table>

ACA 122 College Transfer Success
College Credit: 1 semester hour
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions.
This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

BPR 111 Blueprint Reading
College Credit: 2 semester hours
This course introduces the basic principles of print reading. Topics include line types, orthographic projections, dimensioning methods, and notes. Upon completion, students should be able to interpret basic prints and visualize the features of a part or system. Students can receive high school CTE state articulated credit for Metals Manufacturing Technology I and Metals Manufacturing Technology II if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment (BPR 111 and MAC 111 and MAC 151).

BPR 121 Blueprint Reading: Mechanical
Prerequisite: BPR 111 or MAC 131
College Credit: 2 semester hours
This course covers the interpretation of intermediate blueprints. Topics include tolerancing, auxiliary views, sectional views, and assembly drawings. Upon completion, students should be able to read and interpret a mechanical working drawing.

CIS 110 Introduction to Computers
College Credit: 3 semester hours
This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics (Quantitative).
DDF 211    Design Process I
College Credit: 4 semester hours
This course emphasizes design processes for finished products. Topics include data collection from manuals and handbooks, efficient use of materials, design sketching, specifications, and vendor selection. Upon completion, students should be able to research and plan the design process for a finished product.

DFT 111    Technical Drafting I
College Credit: 2 semester hours
This course introduces basic drafting skills, equipment, and applications. Topics include sketching, measurements, lettering, dimensioning, geometric construction, orthographic projections and pictorials drawings, sections, and auxiliary views. Upon completion, students should be able to understand and apply basic drawing principles and practices. Students can receive high school CTE state articulated credit for Drafting I if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.

DFT 151    CAD I
Local Prerequisite: DFT 111 or Instructor Approval
College Credit: 3 semester hours
This course introduces CAD software as a drawing tool. Topics include drawing, editing, file management, and plotting. Upon completion, students should be able to produce and plot a CAD drawing. Students can receive high school CTE state articulated credit for Drafting I and Drafting II - Engineering if he/she received final grades of B or higher and a 93 or higher on the standardized CTE post-assessments.

DFT 152    CAD II
Local Prerequisite: DFT 151
College Credit: 3 semester hours
This course introduces extended CAD applications. Emphasis is placed upon intermediate applications of CAD skills. Upon completion, students should be able to use extended CAD applications to generate and manage drawings.

DFT 153    CAD III
Local Prerequisite: DFT 152
College Credit: 3 semester hours
This course introduces advanced CAD applications. Emphasis is placed upon advanced applications of CAD skills. Upon completion, students should be able to use advanced CAD applications to generate and manage data.

DFT 154    Introduction to Solid Modeling
Local Prerequisite: DFT 151
College Credit: 3 semester hours
This course is an introduction to basic three-dimensional solid modeling and design software. Topics include basic design, creation, editing, rendering, and analysis of solid models and creation of multi view drawings. Upon completion, students should be able to use design techniques to create, edit, render, and generate a multi view drawing.

DFT 211    Gears, Cams, & Pulleys
Prerequisites: Take one set: (1) DFT 111 and MAT 121; (2) DFT 111 and MAT 171
College Credit: 2 semester hours
This course introduces the principles of motion transfer. Topics include gears, cams, pulleys, and drive components. Upon completion, students should be able to solve problems and produce drawings dealing with ratios.
DFT 254      Intermed Solid Model/Render
Prerequisites: DFT 154
College Credit: 3 semester hours
This course presents a continuation of basic three-dimensional solid modeling and design software. Topics include advanced study of parametric design, creation, editing, rendering and analysis of solid model assemblies, and multiview drawing generation. Upon completion, students should be able to use parametric design techniques to create and analyze the engineering design properties of a model assembly.

ENG 110      Freshman Composition
Prerequisites: ENG 090 and RED 080 or appropriate test scores
College Credit: 3 semester hours
This course is designed to develop informative and business writing skills. Emphasis is placed on logical organization of writing, including effective introductions and conclusions, precise use of grammar, and appropriate selection and use of sources. Upon completion, students should be able to produce clear, concise, well-organized short papers.

MAT 121      Algebra/Trigonometry I
Prerequisite: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, and DMA 060
College Credit: 3 semester hours
This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include the properties of plane and solid geometry, area and volume, and basic proportion applications; simplification, evaluation, and solving of algebraic equations and inequalities and radical functions; complex numbers; right triangle trigonometry; and systems of equations. Upon completion, students will be able to demonstrate the ability to use mathematics and technology for problem-solving, analyzing and communicating results.

MEC 161      Manufacturing Processes I
College Credit: 3 semester hours
This course provides the fundamental principles of value-added processing of materials into usable forms for the customer. Topics include material properties and traditional and nontraditional manufacturing processes. Upon completion, students should be able to specify appropriate manufacturing processing for common engineering materials.

MEC 161A Manufacturing Proc I
College Credit: 1 semester hour
This course is a laboratory for MEC 161. Emphasis is placed on experiences that enhance the materials presented in MEC 161. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in MEC 161.
Cosmetology

Course Delivery: Seated
Location: Sanford Main Campus
Program Length: 3rd & 4th Blocks
Grade(s): 11, 12
Credential Earned:

<table>
<thead>
<tr>
<th>Cosmetology Certificate</th>
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<tbody>
<tr>
<td>COS 111</td>
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<td>COS 112</td>
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<td>COS 115</td>
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<td>COS 116</td>
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<td>COS 223</td>
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Recommended Course Order:

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<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>COS 111A Cosmetology Concepts I</td>
<td>COS 111B Cosmetology Concepts I</td>
</tr>
<tr>
<td>COS 112A Salon I</td>
<td>COS 112B Salon I</td>
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</tbody>
</table>

COS 111  Cosmetology Concepts I
College Credit: 4 semester hours
Corequisite: COS 112
This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting.

COS 112  Salon I
College Credit: 8 semester hours
Corequisite: COS 111
This course introduces basic salon services. Topics include scalp treatments, shampooing, rinsing, hair color, design, haircutting, permanent waving, pressing, relaxing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate salon services.

COS 113  Cosmetology Concepts II
College Credit: 4 semester hours
Corequisite: COS 114
This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.
COS 114  Salon II  
College Credit: 8 semester hours  
Corequisite: COS 113  
This course provides experience in a simulated salon setting. Topics include basic skin care, manicuring, nail application, scalp treatments, shampooing, rinsing, hair color, design, haircutting, chemical restructuring, pressing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

COS 115  Cosmetology Concepts III  
College Credit: 4 semester hours  
Corequisite: COS 116  
This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, salon management, salesmanship, skin care, electricity/light therapy, wigs, thermal hair styling, lash and brow tinting, superfluous hair removal, and other related topics. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

COS 116  Salon III  
College Credit: 4 semester hours  
Corequisite: COS 115  
This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing, hair color, design, haircutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

COS 223  Contemporary Hair Coloring  
College Credit: 2 semester hours  
Prerequisite: COS 111 and COS 112  
This course covers basic color concepts, hair coloring problems, and application techniques. Topics include color theory, terminology, contemporary techniques, product knowledge, and other related topics. Upon completion, students should be able to identify a client's color needs and safely and competently perform color applications and correct problems.
Criminal Justice Technology

**Course Delivery:** Seated or Online  
**Location:** Sanford Main Campus/High School Distance Learning Lab  
**Program Length:** Year-Long Preferred; 4th Block (seated)  
**Grade(s):** 11, 12

**Recommended Course Order:**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>CJC 112 Criminology</td>
<td>CJC 214 Victimology</td>
</tr>
<tr>
<td>CJC 113 Juvenile Justice</td>
<td>CJC 132 Court Procedure &amp; Evidence</td>
</tr>
</tbody>
</table>

**ACA 122 College Transfer Success**  
College Credit: 1 semester hour  
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

**COM 231 Public Speaking**  
College Credit: 3 semester hours  
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**CJC 111 Introduction to Criminal Justice**  
College Credit: 3 semester hours  
This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

**CJC 112 Criminology**  
College Credit: 3 semester hours  
This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.

**CJC 113 Juvenile Justice**  
College Credit: 3 semester hours  
This course covers the juvenile justice system and related juvenile issues. Topics include an overview of the juvenile justice system, treatment and prevention programs, special areas and laws unique to juveniles, and other related topics. Upon completion, students should be able to identify/discuss juvenile court structure/procedures, function and jurisdiction of juvenile agencies, processing/detention of juveniles, and case disposition.
CJC 131  Criminal Law
College Credit: 3 semester hours
This course covers the history/evolution/principles and contemporary applications of criminal law. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, matters of criminal responsibility, and other related topics. Upon completion, students should be able to discuss the sources of law and identify, interpret, and apply the appropriate statutes/elements.

CJC 132  Court Procedure & Evidence
College Credit: 3 semester hours
This course covers judicial structure/process/procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of evidence in court. Topics include consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper judicial procedures, and the admissibility of evidence.

CJC 141  Corrections
College Credit: 3 semester hours
This course covers the history, major philosophies, components, and current practices and problems of the field of corrections. Topics include historical evolution, functions of the various components, alternatives to incarceration, treatment programs, inmate control, and other related topics. Upon completion, students should be able to explain the various components, processes, and functions of the correctional system. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

CJC 212  Ethics & Community Relations
College Credit: 3 semester hours
This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems; social change, values, and norms; cultural diversity; citizen involvement in criminal justice issues; and other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations.

CJC 214  Victimology
College Credit: 3 semester hours
This course introduces the study of victims. Emphasis is placed on roles/characteristics of victims, victim interaction with the criminal justice system and society, current victim assistance programs, and other related topics. Upon completion, students should be able to discuss and identify victims, the uniqueness of victims’ roles, and current victim assistance programs.

CJC 221  Investigative Principles
College Credit: 4 semester hours
This course introduces the theories and fundamentals of the investigative process. Topics include crime scene/incident processing, information gathering techniques, collection/preservation of evidence, preparation of appropriate reports, court presentations, and other related topics. Upon completion, students should be able to identify, explain, and demonstrate the techniques of the investigative process, report preparation, and courtroom presentation.

CJC 231  Constitutional Law
College Credit: 3 semester hours
The course covers the impact of the Constitution of the United States and its amendments on the criminal justice system. Topics include the structure of the Constitution and its amendments, court decisions pertinent to contemporary criminal justice issues, and other related topics. Upon completion, students should be able to identify/discuss the basic structure of the United States Constitution and the rights/procedures as interpreted by the courts.
PSY 150  General Psychology
College Credit: 3 semester hours
This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.
Culinary Arts

Course Delivery: Seated
Location: Sanford Main Campus
Program Length: 1 semester; 1st – 4th Blocks in Lee County
Grade(s): 11, 12
Credential Earned/Recommended Course Order:

<table>
<thead>
<tr>
<th>Culinary Fundamentals Certificate Fall/Spring</th>
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<tbody>
<tr>
<td>CUL 110 Sanitation &amp; Safety</td>
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<tr>
<td>CUL 140 Culinary Skills I</td>
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<td>CUL 140A Culinary Skills I Lab</td>
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<tr>
<td>CUL 170 Garde Manager I</td>
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<tr>
<td>CUL 240 Culinary Skills II</td>
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<tr>
<td>CUL 240A Culinary Skills II Lab</td>
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**CUL 110 Sanitation & Safety**
College Credit: 2 semester hours
This course introduces the basic principles of sanitation and safety relative to the hospitality industry. Topics include personal hygiene, sanitation and safety regulations, use and care of equipment, the principles of food-borne illness, and other related topics. Upon completion, students should be able to demonstrate an understanding of the content necessary for successful completion of a nationally recognized food/safety/sanitation exam. Students can receive high school CTE state articulated credit for Foods II-Enterprise if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.

**CUL 140 Culinary Skills I**
College Credit: 5 semester hours
Corequisite: CUL 110
This course introduces the fundamental concepts, skills and techniques in basic cookery, and moist, dry and combination heat. Emphasis is placed on recipe conversion, measurements, terminology, classical knife cuts, safe food/equipment handling, flavorings/seasonings, stocks/sauces/soups, and related topics. Upon completion, students should be able to exhibit the basic cooking skills used in the foodservice industry.

**CUL 140A Culinary Skills I Lab**
College Credit: 1 semester hour
This course provides laboratory experience for enhancing student skills in the fundamental concepts, skills and techniques in basic cookery, and moist, dry and combination heat. Emphasis is placed on practical experiences including recipe conversion, measurements, terminology, classical knife cuts, safe food/equipment handling, flavorings/seasonings, stocks/sauces/soups, and related topics. Upon completion, students should be able to demonstrate competency in the basic cooking skills used in the foodservice industry.

**CUL 170 Garde Manager I**
College Credit: 3 semester hours
Corequisites: CUL 110
This course introduces basic cold food preparation techniques and pantry production. Topics include salads, sandwiches, appetizers, dressings, basic garnishes, cheeses, cold sauces, and related food items. Upon completion, students should be able to present a cold food display and exhibit an understanding of the cold kitchen and its related terminology.
CUL 240   Culinary Skills II
College Credit: 5 semester hours
Prerequisites: CUL 110 and CUL 140
This course is designed to further students' knowledge of the fundamental concepts, skills, and techniques involved in basic cookery. Emphasis is placed on meat identification/fabrication, butchery and cooking techniques/methods; appropriate vegetable/starch accompaniments; compound sauces; plate presentation; breakfast cookery; and quantity food preparation. Upon completion, students should be able to plan, execute, and successfully serve entrees with complementary side items.

CUL 240A   Culinary Skills II Lab
College Credit: 1 semester hour
This course provides a laboratory experience for furthering students' knowledge of the fundamental concepts, skills, and techniques involved in basic cookery. Emphasis is placed on practical applications of meat identification/fabrication; butchery and cooking techniques/methods; appropriate vegetable/starch accompaniments; compound sauces; plate presentation; breakfast cookery; and food preparation. Upon completion, students should be able to demonstrate a basic proficiency in the preparation of entrees and accompaniments.
Dental Assisting

Course Delivery: Online and/or Seated
Location: High School Distance Learning Lab and/or CCCC Campus
Program Length: Year-Long
Grade(s): 11, 12
Credential Earned/Recommended Courses to Get Started:

<table>
<thead>
<tr>
<th>Sterilization Technology Certification</th>
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<tbody>
<tr>
<td>Fall</td>
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<tr>
<td>ACA 115 Success and Study Skills</td>
</tr>
<tr>
<td>DEN 100 Basic Orofacial Anatomy</td>
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<tr>
<td>DEN 111 Infection/Hazard Control</td>
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**ACA 115 Success and Study Skills**
College Credit: 1 semester hour
This course provides an orientation to the campus resources and academic skills necessary to achieve educational objectives. Emphasis is placed on an exploration of facilities and services, study skills, library skills, self-assessment, wellness, goal-setting, and critical thinking. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals.

**DEN 100 Basic Orofacial Anatomy**
College Credit: 2 semester hours
This course provides a basic introduction to the structures of the head, neck, and oral cavity. Topics include tooth morphology, head and neck anatomy, histology, and embryology. Upon completion, students should be able to demonstrate knowledge of normal structures and development and how they relate to the practice of dental assisting.

**DEN 101 Preclinical Procedures**
College Credit: 7 semester hours
This course provides instruction in procedures for the clinical dental assistant as specified by the North Carolina Dental Practice Act. Emphasis is placed on orientation to the profession, infection control techniques, instruments, related expanded functions, and diagnostic, operative, and specialty procedures. Upon completion, students should be able to demonstrate proficiency in clinical dental assisting procedures.

**DEN 103 Dental Sciences**
College Credit: 2 semester hours
This course is a study of oral pathology, pharmacology, and dental office emergencies. Topics include oral pathological conditions, dental therapeutics, and management of emergency situations. Upon completion, students should be able to recognize abnormal oral conditions, identify classifications, describe actions and effects of commonly prescribed drugs, and respond to medical emergencies.

**DEN 111 Infection/Hazard Control**
College Credit: 3 semester hours
This course introduces the infection and hazard control procedures necessary for the safe practice of dentistry. Topics include microbiology, practical infection control, sterilization and monitoring, chemical disinfectants, aseptic technique, infectious diseases, OSHA standards, and applicable North Carolina laws. Upon completion, students should be able to understand infectious diseases, disease transmission, infection control procedures, biohazard management, OSHA standards, and applicable North Carolina laws.
HSC 110    Orientation to Health Careers
College Credit: 1 semester hour
This course is a survey of health care professions. Topics include professional duties and responsibilities, working environments, and career choices. Upon completion, students should be able to demonstrate an understanding of the health care professions and be prepared to make informed career choices. Students can receive high school CTE state articulated credit for Health Science II if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.

PSY 150    General Psychology
College Credit: 3 semester hours
This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.
Early Childhood Education

Course Delivery: Online/Seated
Location: High School Distance Learning Lab/Sanford Main Campus
Program Length: Year-Long Preferred
Grade(s): 11, 12
Credential Earned:

<table>
<thead>
<tr>
<th>Infant/Toddler Care Certificate</th>
<th>Family, Home, and Early Childcare Certificate</th>
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<tbody>
<tr>
<td>EDU 119</td>
<td>EDU 144</td>
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<tr>
<td>EDU 131</td>
<td>EDU 146</td>
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<tr>
<td>EDU 144</td>
<td>EDU 153</td>
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<tr>
<td>EDU 153</td>
<td>3 Electives: EDU 114, EDU 119, EDU 131, EDU 145, EDU 151, EDU 234, EDU 252, EDU 280</td>
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<tr>
<td>EDU 234</td>
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*College Readiness Benchmarks for Reading and English considered for this program.

Recommended Course Order:

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>EDU 119 Intro to Early Childhood Ed</td>
<td>EDU 153 Health, Safety, and Nutrition</td>
</tr>
<tr>
<td>EDU 131 Children, Family and Community</td>
<td>EDU 234 Infants, Toddlers, and Twos</td>
</tr>
<tr>
<td>EDU 144 Child Development I</td>
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</tbody>
</table>

ACA 122 College Transfer Success
College Credit: 1 semester hour
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

CIS 110 Introduction to Computers
Credit Hours: 3 semester hours
This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics (Quantitative).

COM 231 Public Speaking
College Credit: 3 semester hours
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.
**EDU 119 Introduction to Early Childhood Education**

College Credit: 4 semester hours

This course covers the foundations of the education profession, the diverse educational settings for young children, professionalism and planning developmentally appropriate programs for all children. Topics include historical foundations, program types, career options, professionalism and creating inclusive environments and curriculum responsive to the needs of all children and families. Upon completion, students should be able to design career plans and develop schedules, environments and activity plans appropriate for all children. *Students can receive high school CTE state articulated credit for Early Childhood Education I and II if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.*

**EDU 131 Children, Family, and Community**

College Credit: 3 semester hours

This course covers the development of partnerships between culturally and linguistically diverse families, children, schools and communities. Emphasis is placed on developing skills and identifying benefits for establishing, supporting, and maintaining respectful, collaborative relationships between diverse families, programs/schools, and community agencies/resources. Upon completion, students should be able to explain appropriate relationships between families, educators, and professionals that enhance development and educational experiences of all children.

**EDU 144 Child Development I**

College Credit: 3 semester hours

This course includes the theories of child development, needs, milestones, and factors that influence development, from conception through approximately 36 months. Emphasis is placed on developmental sequences in physical/motor, emotional/social, cognitive, and language domains and the impact of multiple influences on development and learning. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain environmental factors that impact development, and identify strategies for enhancing development.

**EDU 145 Child Development II**

College Credit: 3 semester hours

This course includes the theories of child development, needs, milestones, and factors that influence development, from preschool through middle childhood. Emphasis is placed on developmental sequences in physical/motor, emotional/social, cognitive, and language domains and the impact of multiple influences on development and learning. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain environmental factors that impact development, and identify strategies for enhancing development.

**EDU 146 Child Guidance**

College Credit: 3 semester hours

This course introduces principles and practical techniques including the design of learning environments for providing developmentally appropriate guidance for all children, including those at risk. Emphasis is placed on observation skills, cultural influences, underlying causes of behavior, appropriate expectations, development of self control and the role of communication and guidance. Upon completion, students should be able to demonstrate direct/indirect strategies for preventing problem behaviors, teaching appropriate/acceptable behaviors, negotiation, setting limits and recognizing at risk behaviors.

**EDU 151 Creative Activities**

College Credit: 3 semester hours

This course covers planning, creation and adaptation of developmentally supportive learning environments with attention to curriculum, interactions, teaching practices and learning materials. Emphasis is placed on creating and adapting integrated, meaningful, challenging and engaging developmentally supportive learning experiences in art, music, movement and dramatics for all children. Upon completion, students should be able to create, adapt, implement and evaluate developmentally supportive learning materials, experiences and environments.
EDU 153  Health, Safety, and Nutrition
College Credit: 3 semester hours
This course covers promoting and maintaining the health and well-being of all children. Topics include health and nutritional guidelines, common childhood illnesses, maintaining safe and healthy learning environments, recognition and reporting of abuse and neglect and state regulations. Upon completion, students should be able to demonstrate knowledge of health, safety, and nutritional needs, safe learning environments, and adhere to state regulations.

EDU 221  Students with Exceptionalities
College Credit: 3 semester hours
Prerequisites: EDU 144 and EDU 145
This course introduces children with exceptionalities, their families, support services, inclusive/diverse settings, and educational/family plans based on the foundations of child development. Emphasis is placed on the characteristics of exceptionalities, observation and assessment of children, strategies for adapting the learning environment, and identification of community resources. Upon completion, students should be able to recognize diverse abilities, describe the referral process, and depict collaboration with families/professionals to plan/implement, and promote best practice.

EDU 234  Infant, Toddlers, and Twos
College Credit: 3 semester hours
This course covers the unique needs and rapid changes that occur in the first three years of life and the inter-related factors that influence development. Emphasis is placed on recognizing and supporting developmental milestones through purposeful strategies, responsive care routines and identifying elements of quality, inclusive early care and education. Upon completion, students should be able to demonstrate respectful relationships that provide a foundation for healthy infant/toddler/twos development, plan/select activities/materials, and partner with diverse families.

PSY 150  General Psychology
College Credit: 3 semester hours
This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.
Electronics Engineering Technology

Course Delivery: Seated
Location: Sanford Main Campus
Program Length: Year-Long; 1st & 2nd Blocks
Grade(s): 12
Credential Earned/Recommended Course Order:

<table>
<thead>
<tr>
<th>Fall</th>
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<tbody>
<tr>
<td>EGR 131 Intro to Electronics Technology</td>
<td>ELN 131 Analog Electronics</td>
</tr>
<tr>
<td>ELC 131 Circuit Analysis</td>
<td>CIS 110 Introduction to Computers</td>
</tr>
<tr>
<td>ELC 131A Circuit Analysis I Lab</td>
<td>ACA 122 College Transfer Success</td>
</tr>
<tr>
<td>MAT 121 Algebra/Trigonometry</td>
<td>ENG 111 Expository Writing</td>
</tr>
</tbody>
</table>

*College Readiness Benchmarks considered for this program

ACA 122 College Transfer Success
College Credit: 1 semester hour
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

EGR 131 Introduction To Electronics Technology
College Credit: 2 semester hours
This course introduces the basic skills required for electrical/electronics technicians. Topics include soldering/desoldering, safety practices, test equipment, scientific calculators, AWG wire table, the resistor color code, electronic devices, problem solving, and use of hand tools. Upon completion, students should be able to solder/desolder, operate test equipment, apply problem solving techniques, and use a scientific calculator.

ELC 131 DC/AC Circuit Analysis
College Credit: 5 semester hours
Local Corequisites: MAT 121 or MAT 161
This course introduces DC and AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC and AC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, verify, and analyze DC/AC circuits; and properly use test equipment.

ELC 131A Circuit Analysis I Lab
College Credit: 1 semester hour
Corequisites: ELC 131
This course provides laboratory assignments as applied to fundamental principles of DC/AC electricity. Emphasis is placed on measurements and evaluation of electrical components, devices and circuits. Upon completion, the students will gain hands-on experience by measuring voltage, current, and opposition to current flow utilizing various meters and test equipment.
ELN 131  Semiconductor Applications  
College Credit: 4 semester hours  
*Local Corequisites: ELC 112 or ELC 131*  
This course introduces the characteristics and applications of semiconductor devices and circuits. Emphasis is placed on analysis, selection, biasing, and applications. Upon completion, students should be able to construct, analyze, verify, and troubleshoot analog circuits using appropriate techniques and test equipment.

ELN 132  Linear IC Applications  
College Credit: 4 semester hours  
*Local Prerequisite: ELN 131 or ELC 140*  
This course introduces the characteristics and applications of linear integrated circuits. Topics include op-amp circuits, waveform generators, active filters, IC voltage regulators, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot linear integrated circuits using appropriate techniques and test equipment.

ELN 133  Digital Electronics  
College Credit: 4 semester hours  
This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, medium scale integration (MSI) and large scale integration (LSI) circuits, analog to digital (AD) and digital to analog (DA) conversion, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.

ENG 111  Expository Writing  
*Prerequisite: Must meet college readiness benchmark for English/reading*  
College Credit: 3 semester hours  
This course is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is placed on the writing process including audience analysis, topic selection, thesis support and development, editing, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. This course has been approved for transfer under the CAA and ICAA as a general education course in English Composition.

MAT 121  Algebra/Trigonometry I  
College Credit: 3 semester hours  
*Prerequisite: Must meet college readiness benchmark for mathematics*  
This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include simplification, evaluation, and solving of algebraic and radical functions; complex numbers; right triangle trigonometry; systems of equations; and the use of technology. Upon completion, students should be able to demonstrate an understanding of the use of mathematics and technology to solve problems and analyze and communicate results.

MAT 122  Algebra/Trigonometry II  
College Credit: 3 semester hours  
*Prerequisite (take one): MAT 121, MAT 161, MAT 171, or MAT 175*  
This course extends the concepts covered in MAT 121 to include additional topics in algebra, function analysis, and trigonometry. Topics include exponential and logarithmic functions, translation and scaling of functions, Sine Law, Cosine Law, vectors and statistics. Upon completion, students should be able to demonstrate an understanding of the use of technology to solve problems and to analyze and communicate results.
PHY 131  Physics-Mechanics
College Credit: 4 semester hours
Prerequisite (take one): MAT 121, MAT 161, MAT 171, or MAT 175
This algebra/trigonometry-based course introduces fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem solving methods, graphical analysis, vectors, motion, forces, Newton’s laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

PHY 133  Physics-Sound and Light
College Credit: 4 semester hours
Prerequisite: PHY 131
This algebra/trigonometry-based course is a study of fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem solving methods, graphical analysis, wave motion, sound, light, and modern physics. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.
Health and Fitness Science

Course Delivery: Online and/or Seated  
Location: High School Distance Learning Lab and/or Sanford Main Campus  
Program Length: Year-Long Preferred  
Grade(s): 11, 12  
Credential Earned/Recommended Course Order:

<table>
<thead>
<tr>
<th>Health and Fitness Science Diploma</th>
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<tbody>
<tr>
<td><strong>Fall</strong></td>
</tr>
<tr>
<td>HEA 112 CPR &amp; First Aid</td>
</tr>
<tr>
<td>PSF 110 Exercise Science</td>
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</tbody>
</table>

ACA 115   Success and Study Skills  
College Credit: 1 semester hour  
This course provides an orientation to the campus resources and academic skills necessary to achieve educational objectives. Emphasis is placed on an exploration of facilities and services, study skills, library skills, self-assessment, wellness, goal-setting, and critical thinking. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals.

COM 231   Public Speaking  
College Credit: 3 semester hours  
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

HEA 112 CPR & First Aid  
College Credit: 2 semester hours  
This course introduces the basics of emergency first aid treatment. Topics include rescue breathing, CPR, first aid for choking and bleeding, and other first aid procedures. Upon completion, students should be able to demonstrate skills in providing emergency care for the sick and injured until medical help can be obtained. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective requirement.*

PED 110   Fit & Well for Life  
College Credit: 2 semester hours  
This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective requirement.*

PED 113   Aerobics I  
College Credit: 1 semester hour  
This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective requirement.*

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PED 117 Weight Training I  
College Credit: 1 semester hour  
This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective requirement.*

PSF 110 Exercise Science  
College Credit: 4 semester hours  
This course is a survey of scientific principles, methodologies, and research as applied to exercise and physical adaptations to exercise. Topics include the basic elements of kinesiology, biomechanics, and motor learning. Upon completion, students should be able to identify and describe physiological responses and adaptations to exercise.

PSF 111 Fitness & Exercise Testing I  
College Credit: 4 semester hours  
This course introduces the student to graded exercise testing. Topics include various exercise testing protocols with methods for prescribing exercise programs based on exercise tolerance tests and the use of various equipment and protocols. Upon completion, students should be able to conduct specific exercise tests and the use of various equipment.

PSF 116 Prevention & Care of Exercise Related Injuries  
College Credit: 3 semester hours  
This course provides information about the care and prevention of exercise injuries. Topics include proper procedures, prevention techniques, and on-site care of injuries. Upon completion, students should be able to demonstrate the knowledge and skills necessary to prevent and care for exercise related injuries.

PSF 120 Group Exercise Instruction  
College Credit: 2 semester hours  
*Prerequisites: PSF 110*  
This course introduces the concepts and guidelines of instructing exercise classes. Topics include program designs, working with special populations, and principles of teaching and monitoring physical activity. Upon completion, students should be able to demonstrate basic skills in instructing an exercise class and monitoring workout intensity.

PSF 210 Personal Training  
College Credit: 3 semester hours  
*Prerequisites: PST 110 and PSF 111*  
This course introduces the student to the aspects of personal (one-on-one) training. Topics include training systems, marketing, and program development. Upon completion, students should be able to demonstrate personal training techniques and competencies of same.

PSF 212 Exercise Programming  
College Credit: 3 semester hours  
*Prerequisites: PSF 110*  
This course provides information about organizing, scheduling, and implementation of physical fitness programs. Topics include programming for various age groups, competitive activities and special events, and evaluating programs. Upon completion, students should be able to organize and implement exercise activities in a competent manner.
PSF 218  Lifestyle Changes/Wellness
College Credit: 4 semester hours
This course introduces health risk appraisals and their application to lifestyle changes. Topics include nutrition, weight control, stress management, and the principles of exercise. Upon completion, students should be able to conduct health risk appraisals and apply behavior modification techniques in a fitness setting.
Health Information Technology

**Course Delivery:** Online

**Location:** High School Distance Learning Lab

**Program Length:** Year-Long Preferred

**Grade(s):** 11, 12

**Credential Earned/Recommended Course Order:**

<table>
<thead>
<tr>
<th>Health Information Technology Diploma</th>
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<tbody>
<tr>
<td><strong>Fall</strong></td>
</tr>
<tr>
<td>CIS 110 Introduction to Computers</td>
</tr>
<tr>
<td>HIT 110 Fundamentals of HIM</td>
</tr>
<tr>
<td>MED 121 Medical Terminology I</td>
</tr>
</tbody>
</table>

**ACA 115 Success and Study Skills**

College Credit: 1 semester hour

This course provides an orientation to the campus resources and academic skills necessary to achieve educational objectives. Emphasis is placed on an exploration of facilities and services, study skills, library skills, self-assessment, wellness, goal-setting, and critical thinking. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals.

**CIS 110 Introduction to Computers**

College Credit: 3 semester hours

This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

**COM 231 Public Speaking**

College Credit: 3 semester hours

This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**HIT 110 Fundamentals of HIM**

College Credit: 3 semester hours

This course introduces Health Information Management (HIM) and its role in healthcare delivery systems. Topics include standards, regulations and initiatives; payment and reimbursement systems, healthcare providers and disciplines; and electronic health records (EHRs). Upon completion, students should be able to demonstrate an understanding of health information management and healthcare organizations, professions and trends.
HIT 112  Health Law and Ethics  
College Credit: 3 semester hours  
This course covers legislative and regulatory processes, legal terminology, and professional-related and practice-related ethical issues. Topics include confidentiality; privacy and security policies, procedures and monitoring; release of information policies and procedures; and professional-related and practice-related ethical issues. Upon completion, students should be able to apply policies and procedures for access and disclosure of Protected Health Information and apply and promote ethical standards.

HSC 110  Orientation to Health Careers  
College Credit: 1 semester hour  
This course is a survey of health care professions. Topics include professional duties and responsibilities, working environments, and career choices. Upon completion, students should be able to demonstrate an understanding of the health care professions and be prepared to make informed career choices. Students can receive high school CTE state articulated credit for Health Science II if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.

MED 121  Medical Terminology I  
Credit Hours: 3 semester hours  
This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. Students can receive high school CTE state articulated credit for Health Science I if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.

MED 122  Medical Terminology II  
Credit Hours: 3 semester hours  
Prerequisite: MED 121  
This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. Students can receive high school CTE state articulated credit for Health Science I if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.

PSY 150  General Psychology  
College Credit: 3 semester hours  
This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.
Human Services Technology

Course Delivery: Online/Seated
Location: High School Distance Learning Lab/Sanford Main Campus
Program Length: 1 or 2 years
Grade(s): 11, 12

ACA 122 College Transfer Success
College Credit: 1 semester hour
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

CIS 110 Introduction to Computers
Credit Hours: 3 semester hours
This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics (Quantitative).

COM 120 Introduction to Interpersonal Communication
College Credit: 3 semester hours
This course introduces the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is placed on the communication process, perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication relationships. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

HSE 110 Introduction to Human Services
College Credit: 3 semester hours
This course introduces the human services field, including the history, agencies, roles, and careers. Topics include personal/professional characteristics, diverse populations, community resources, disciplines in the field, systems, ethical standards, and major theoretical and treatment approaches. Upon completion, students should be able to identify the knowledge, skills, and roles of the human services worker.

HSE 112 Group Process I
College Credit: 2 semester hours
This course introduces interpersonal concepts and group dynamics. Emphasis is placed on self-awareness facilitated by experiential learning in small groups with analysis of personal experiences and the behavior of others. Upon completion, students should be able to show competence in identifying and explaining how people are influenced by their interactions in group settings.
HSE 123  Interviewing Techniques
College Credit: 3 semester hours
This course covers the purpose, structure, focus, and techniques employed in effective interviewing. Emphasis is placed on observing, attending, listening, responding, recording, and summarizing of personal histories with instructor supervision. Upon completion, students should be able to perform the basic interviewing skills needed to function in the helping relationship.

HSE 125  Counseling
Credit Hours: 3 semester hours
Prerequisite: PSY 150
This course covers the major approaches to psychotherapy and counseling, including theory, characteristics, and techniques. Emphasis is placed on facilitation of self-exploration, problem solving, decision-making, and personal growth. Upon completion, students should be able to understand various theories of counseling and demonstrate counseling techniques.

HSE 210  Human Services Issues
Credit Hours: 2 semester hours
Local Prerequisite: Successful completion of 12 SHC in the HSE program
This course covers current issues and trends in the field of human services. Emphasis is placed on contemporary topics with relevance to special issues in a multi-faceted field. Upon completion, students should be able to integrate the knowledge, skills, and experiences gained in classroom and clinical experiences with emerging trends in the field.

HSE 225  Crisis Intervention
Credit Hours: 3 semester hours
This course introduces the basic theories and principles of crisis intervention. Emphasis is placed on identifying and demonstrating appropriate and differential techniques for intervening in various crisis situations. Upon completion, students should be able to assess crisis situations and respond appropriately.

PSY 115  Stress Management
Credit Hours: 2 semester hours
This course covers stressors and techniques for stress management. Topics include anger, assertiveness, adaptation to change, conflict, coping skills, identification of stressors, time management, and the physiology of stress and burnout. Upon completion, students should be able to demonstrate an understanding of the effective management of stress.

PSY 150  General Psychology
Credit Hours: 3 semester hours
This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

PSY 241  Developmental Psychology
Credit Hours: 3 semester hours
Prerequisite: PSY 150 This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.
SOC 210  Introduction to Sociology  
Credit Hours: 3 semester hours  
This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

SOC 213  Sociology of the Family  
Credit Hours: 3 semester hours  
This course covers the institution of the family and other intimate relationships. Emphasis is placed on mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

SOC 220  Sociology Problems  
Credit Hours: 3 semester hours  
This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

SOC 232  Social Context of Aging  
Credit Hours: 3 semester hours  
This course provides an overview of the social implications of the aging process. Emphasis is placed on the roles of older adults within families, work and economics, politics, religion, education, and health care. Upon completion, students should be able to identify and analyze changing perceptions, diverse lifestyles, and social and cultural realities of older adults. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.
Industrial Systems/Welding (Caterpillar Apprenticeships)

Course Delivery: Seated
Location: Sanford Main Campus & Innovation Center
Program Length: 2 years
Grade(s): 11, 12

Lee County: Credential Earned (Welding Certificate)/Recommended Course Order (Caterpillar Apprenticeship)

<table>
<thead>
<tr>
<th>Year 1 Fall (1st Block)</th>
<th>Year 1 Spring (1st Block)</th>
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<tbody>
<tr>
<td>WLD 112 Basic Welding Processes</td>
<td>WLD 121A GMAW (MIG) FCAW/Plate</td>
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<tr>
<td>Year 2 Fall (1st &amp; 2nd Blocks)</td>
<td>Year 2 Spring (1st &amp; 2nd Blocks)</td>
</tr>
<tr>
<td>WLD 121B GMAW (MIG) FCAW/Plate</td>
<td>WLD 117 Industrial SMAW</td>
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<tr>
<td>BPR 111 Blueprint Reading</td>
<td>ISC 110 Workplace Safety</td>
</tr>
</tbody>
</table>

ACA 122 College Transfer Success
College Credit: 1 semester hour
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

AHR 120 HVACR Maintenance
College Credit: 2 semester hours
This course introduces the basic principles of industrial air conditioning and heating systems. Emphasis is placed on preventive maintenance procedures for heating and cooling equipment and related components. Upon completion, students should be able to perform routine preventive maintenance tasks, maintain records, and assist in routine equipment repairs.

BPR 111 Blueprint Reading
College Credit: 2 semester hours
This course introduces the basic principles of print reading. Topics include line types, orthographic projections, dimensioning methods, and notes. Upon completion, students should be able to interpret basic prints and visualize the features of a part or system.

BPR 115 Electric/Fluid Power Diagrams
College Credit: 2 semester hours
This course covers sketching of detail and assembly drawings and reading of hydraulic, pneumatic, electrical, mechanical, and piping schematics. Emphasis is placed on interpretation and communication skills utilizing sketches, symbols, diagrams, and other related topics. Upon completion, students should be able to read, demonstrate an understanding of, and draw sketches and schematics commonly used in industry.
COM 231  Public Speaking
College Credit: 3 semester hours
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

CIS 111  Basic PC Literacy
College Credit: 2 semester hours
This course provides an overview of computer concepts. Emphasis is placed on the use of personal computers and software applications for personal and fundamental workplace use. Upon completion, students should be able to demonstrate basic personal computer skills. *Students can receive high school CTE state articulated credit for Microsoft Word, PowerPoint, and Publisher if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.*

ELC 112  DC/AC Electricity
College Credit: 5 semester hours
This course introduces the fundamental concepts of and computations related to DC/AC electricity. Emphasis is placed on DC/AC circuits, components, operation of test equipment; and other related topics. Upon completion, students should be able to construct, verify, and analyze simple DC/AC circuits.

ELC 128  Introduction to PLC
College Credit: 3 semester hours
This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to install PLC systems and create simple programs.

HIS 131  American History I
College Credit: 3 semester hours
This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

HYD 110  Hydraulics/Pneumatics I
College Credit: 3 semester hours
This course introduces the basic components and functions of hydraulic and pneumatic systems. Topics include standard symbols, pumps, control valves, control assemblies, actuators, FRL, maintenance procedures, and switching and control devices. Upon completion, students should be able to understand the operation of a fluid power system, including design, application, and troubleshooting.

ISC 110  Workplace Safety
College Credit: 1 semester hour
This course introduces the basic concepts of workplace safety. Topics include fire, ladders, lifting, lock-out/tag-out, personal protective devices, and other workplace safety issues related to OSHA compliance. Upon completion, students should be able to demonstrate an understanding of the components of a safe workplace.
MEC 111  Machine Processes I  
College Credit: 3 semester hours  
This course introduces shop safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include use and care of tools, safety, measuring tools, and the basic setup and operation of common machine tools. Upon completion, students should be able to manufacture simple parts to specified tolerance.

MNT 110  Introduction to Maintenance Procedures  
College Credit: 2 semester hours  
This course covers basic maintenance fundamentals for power transmission equipment. Topics include equipment inspection, lubrication, alignment, and other scheduled maintenance procedures. Upon completion, students should be able to demonstrate knowledge of accepted maintenance procedures and practices according to current industry standards.

MNT 111  Maintenance Practice  
College Credit: 3 semester hours  
This course provides in-depth theory and practical applications relating to predictive and preventive maintenance programs. Emphasis is placed on equipment failure analysis, maintenance management software, and techniques such as vibration and infrared analysis. Upon completion, students should be able to demonstrate an understanding of modern analytical and documentation methods.

WLD 112  Basic Welding Processes  
College Credit: 2 semester hours  
This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes. Students can receive high school CTE state articulated credit for Agricultural Mechanics II if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.

WLD 117  Industrial SMAW  
College Credit: 3 semester hours  
This course introduces the SMAW (stick) process for joining carbon steel components for industrial applications. Topics include padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, student should be able to safely perform SMAW fillet and groove welds on carbon steel plate with prescribed electrodes.

WLD 121  GMAW (MIG) FCAW/Plate  
College Credit: 4 semester hours  
This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions. Students can receive high school CTE state articulated credit for Welding Technology II if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.

*WLD-115  SMAW (Stick) Plate  
College Credit: 5 semester hours  
This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes.
Information Technology

Course Delivery: Seated
Location: Sanford Main Campus
Program Length: Year-Long Preferred
Grade(s): 11, 12

Credential Earned/Recommended Course Order:

<table>
<thead>
<tr>
<th>IC3 - Internet and Computing Core Certificate</th>
<th>Computer Hardware/Troubleshooting Repair Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td><strong>Fall</strong></td>
</tr>
<tr>
<td>CTS 120 Hardware/Software Support</td>
<td>CTS 120 Hardware/Software Support</td>
</tr>
<tr>
<td>NOS 130 Windows Single User</td>
<td>NOS 130 Windows Single User</td>
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<tr>
<td><strong>Spring</strong></td>
<td><strong>Spring</strong></td>
</tr>
<tr>
<td>CIS 110 Introduction to Computers</td>
<td>CIS 115 Introduction to Programming and Logic</td>
</tr>
</tbody>
</table>
| CTI 120 Network and SEC Foundation           | Prerequisites: Meet the college readiness benchmark in mathematics

Credit Hours: 3 semester hours
This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics (Quantitative).

CIS 115 Introduction to Programming and Logic

Prerequisites: Meet the college readiness benchmark in mathematics
College Credit: 3 semester hours
This course introduces computer programming and problem solving in a structured program logic environment. Topics include language syntax, data types, program organization, problem solving methods, algorithm design, and logic control structures. Upon completion, students should be able to manage files with operating system commands, use top-down algorithm design, and implement algorithmic solutions in a programming language. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural science/mathematics (Quantitative Option).

CSC 151 JAVA Programming
College Credit: 3 semester hours
This course introduces computer programming using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion students should be able to design, code, test, debug JAVA language programs. This course has been approved to satisfy the Comprehensive Articulation Agreement as a premajor and/or elective credit course.

CTI 110 Web, Program, & DB Foundation
College Credit: 3 semester hours
This course covers the introduction of the tools and resources available to students in programming, mark-up language and services on the Internet. Topics include standard mark-up language Internet services, creating web pages, using search engines, file transfer programs; and database design and creation with DBMS products. Upon completion students should be able to demonstrate knowledge of programming tools, deploy a web-site with mark-up tools, and create a simple database table.
CTI 120  Network & Security Foundation
College Credit: 3 semester hours
This course introduces students to the Network concepts, including networking terminology and protocols, local and wide area networks, and network standards. Emphasis is placed on securing information systems and the various implementation policies. Upon completion, students should be able to perform basic tasks related to networking mathematics, terminology, media and protocols.

CTS 115  Information Systems Business Concept
College Credit: 3 semester hours
The course introduces the role of IT in managing business processes and the need for business process and IT alignment. Emphasis is placed on industry need for understanding business challenges and developing/managing information systems to contribute to the decision making process based on these challenges. Upon completion, students should be able to demonstrate knowledge of the ‘hybrid business manager’ and the potential offered by new technology and systems. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

CTS 120  Hardware/Software Support
Local Prerequisite: CIS 110 or CIS 111
College Credit: 3 semester hours
This course covers the basic hardware of a personal computer, including installation, operations and interactions with software. Topics include component identification, memory-system, peripheral installation and configuration, preventive maintenance, hardware diagnostics/repair, installation and optimization of system software, commercial programs, system configuration, and device-drivers. Upon completion, students should be able to select appropriate computer equipment and software, upgrade/maintain existing equipment and software, and troubleshoot/repair non-functioning personal computers.

CTS 220  Advanced Hardware Software Support
Prerequisite: CTS 120
College Credit: 3 semester hours
This course provides advanced knowledge and competencies in hardware and operating system technologies for computer technicians to support personal computers. Emphasis is placed on: configuring and upgrading; diagnosis and troubleshooting; as well as preventive maintenance of hardware and system software. Upon completion, students should be able to install, configure, diagnose, perform preventive maintenance, and maintain basic networking on personal computers.

CTS 285  System Analysis and Design
College Credit: 3 semester hours
This course introduces established and evolving methodologies for the analysis, design, and development of an information system. Emphasis is placed on system characteristics, managing projects, prototyping, CASE/OOM tools, and systems development life cycle phases. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques.

DBA 110  Database Concepts
College Credit: 3 semester hours
This course introduces database design and creation using a DBMS product. Emphasis is placed on data dictionaries, normalization, data integrity, data modeling, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to design and implement normalized database structures by creating simple database tables, queries, reports, and forms.
ENG 111  Writing and Inquiry
Prerequisite: Must meet college readiness benchmark for English/reading
College Credit: 3 semester hours
This course is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is placed on the writing process including audience analysis, topic selection, thesis support and development, editing, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. This course has been approved for transfer under the CAA and ICAA as a general education course in English Composition.

MAT 143  Quantitative Literacy
Prerequisite: Must meet college readiness benchmark for Math and English/reading
College Credit: 3 semester hours
This course is designed to engage students in complex and realistic situations involving the mathematical phenomena of quantity, change and relationship, and uncertainty through project- and activity-based assessment. Emphasis is placed on authentic contexts which will introduce the concepts of numeracy, proportional reasoning, dimensional analysis, rates of growth, personal finance, consumer statistics, practical probabilities, and mathematics for citizenship. Upon completion, students should be able to utilize quantitative information as consumers and to make personal, professional, and civic decisions by decoding, interpreting, using, and communicating quantitative information found in modern media and encountered in everyday life.

NOS 130  Windows Single User
Prerequisite: NOS 110 or CET 211
College Credit: 3 semester hours
This course introduces operating system concepts for single-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating systems functions at the support level in a single-user environment.

NOS 230  Windows Administration I
Prerequisite: NOS 130
College Credit: 3 semester hours
This course covers the installation and administration of a Windows Server network operating system. Topics include managing and maintaining physical and logical devices, access to resources, the server environment, managing users, computers, and groups, and managing/implementing disaster recovery. Upon completion, students should be able to manage and maintain a Windows Server environment.

SEC 110  Security Concepts
College Credit: 3 semester hours
This course introduces the concepts and issues related to securing information systems and the development of policies to implement information security controls. Topics include the historical view of networking and security, security issues, trends, security resources, and the role of policy, people, and processes in information security. Upon completion, students should be able to identify information security risks, create an information security policy, and identify processes to implement and enforce policy.

WEB 140  Web Development Tools
College Credit: 3 semester hours
This course provides an introduction to web development software suites. Topics include the creation of web sites and applets using web development software. Upon completion, students should be able to create entire web sites and supporting applets.
Library & Information Technology

Course Delivery: Online
Location: High School Distance Learning Lab
Program Length: Year-Long Preferred
Grade(s): 11, 12

Credentials Earned:

<table>
<thead>
<tr>
<th>Library Basics Certificate</th>
<th>Library Technical Services Certificate</th>
<th>Library Public Services Certificate</th>
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<td>LIB 110</td>
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<tr>
<th>Library Programs Certificate</th>
<th>Library Cataloging Certificate</th>
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<td>LIB 211</td>
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<td>LIB 212</td>
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Library Course Availability:

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<th>Fall</th>
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<tr>
<td>LIB 110 Introduction to Libraries</td>
<td>LIB 112 Library Collection Dev &amp; Acquisition</td>
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<tr>
<td>LIB 111 Library Info Resources &amp; Services</td>
<td>LIB 114 Library Public Service Operation</td>
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<tr>
<td>LIB 113 Library Cataloging &amp; Classification</td>
<td>LIB 210 Electronic Library Databases</td>
</tr>
<tr>
<td>LIB 211 Library Program Development</td>
<td>LIB 213 Cataloging Non-Print Materials</td>
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<tr>
<td>LIB 212 Library Services/Special Needs</td>
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<tr>
<td>LIB 214 Library Services for Children</td>
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</tbody>
</table>

ACA 122 College Transfer Success

College Credit: 1 semester hour
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

CIS 110 Introduction to Computers

Credit Hours: 3 semester hours
This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics (Quantitative).
COM 231  Public Speaking
College Credit: 3 semester hours
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

LIB 110  Introduction to Libraries
College Credit: 3 semester hours
This course includes the history and future of libraries, a survey of library types, and an overview of library organization, services, and community relationships. Emphasis is placed on societal roles of the library, literary and intellectual freedom, comparisons and contrasts of library types, and the roles of professional organizations. Upon completion, students should be able to discuss literacy and intellectual freedom, describe library organization and compare types of libraries, their materials, and services.

LIB 111  Library Information Resources and Services
College Credit: 3 semester hours
This course provides introductory skills for selecting and using general and specialized information resources in print and electronic formats and related copyright issues. Emphasis is placed on selection tools, print and electronic censorship, core collection materials in various disciplines, compiling bibliographies and interpreting and referring reference questions. Upon completion, students should be able to use numerous resources to answer directional and factual questions and to decide when to refer difficult reference questions.

LIB 112  Library Collection Development and Acquisition
College Credit: 3 semester hours
This course covers library collection development and acquisitions policies and procedures. Emphasis is placed on evaluating mission statements, needs assessment studies, purchasing materials using selection criteria and tools, and related collection development and acquisitions activities. Upon completion, students should be able to evaluate mission statements, conduct needs assessments using selected criteria, and complete related collection development and acquisitions activities.

LIB 113  Library Cataloging and Classification
College Credit: 3 semester hours
This course covers standards and procedures for copy cataloging and types of classification systems. Emphasis is placed on selecting bibliographic records, maintaining and using authority records and the importance of the catalog to the library mission. Upon completion, students should be able to select the appropriate MARC record, search OCLC, and demonstrate an understanding of authority files.

LIB 114  Library Public Service Operation
College Credit: 3 semester hours
This course covers effective library orientations, effective patron service, automated circulation systems, statistics and reports, reserves, and security. Emphasis is placed on public relations, problem solving, communication skills, circulation systems and policies, interlibrary loan procedures, shelving and display options. Upon completion, students should be able to deal with diverse patrons, conduct library orientations, compile reports from statistical data, initiate interlibrary loans, and prepare displays.
LIB 210  Electronic Library Databases
College Credit: 3 semester hours
This course covers developing search strategies for using electronic resources in the humanities, social and behavioral sciences, physical and life sciences, and health-related fields. Emphasis is placed on the reference interview, teaching Boolean logic and other search strategies, retrieving and evaluating information, and citing it in APA/MLA style. Upon completion, students should be able to describe methods of information retrieval, use search strategies to teach basic research using databases, and cite sources appropriately.

LIB 211  Library Program Development
College Credit: 3 semester hours
This course covers the purpose of library programs and various methods used for program design, promotion, delivery, and evaluation. Topics include serving library communities through appropriate program activities such as storytelling, puppet shows, book clubs, lectures, reading aloud, workshops, special collections, and outreach. Upon completion, students should be able to prepare, promote, deliver, and evaluate appropriate library programs.

LIB 212  Library Services/Special Needs
College Credit: 3 semester hours
This course covers basic information for serving library users with special needs. Emphasis is placed on ADA guidelines, the location and use of appropriate resources, and accessibility options. Upon completion, students should be able to access appropriate information about ADA guidelines, locate and use appropriate resources, and be aware of accessibility options.

LIB 213  Cataloging Non-Print Materials
College Credit: 3 semester hours
This course continues the study and application of information cataloging practices. Emphasis is placed on cataloging information resources, updating bibliographic materials in databases, an overview of Dublin Core, and nonprint materials cataloging practices. Upon completion, students should be able to catalog nonprint and electronic resources.

LIB 214  Library Services for Children
College Credit: 3 semester hours
This course covers the location, evaluation, acquisition, and presentation of children's materials in libraries. Emphasis is placed on locating, evaluating, acquiring, and presenting children's literature, video and audio materials, and web sites through programs, displays, talks, and instruction. Upon completion, students should be able to locate, evaluate, acquire, and present a wide range of children's materials to library users.

SOC 210  Introduction to Sociology
College Credit: 3 semester hours
This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies.

WEB 110  Internet/Web Fundamentals
College Credit: 3 semester hours
This course introduces World Wide Web Consortium (W3C) standard markup language and services of the Internet. Topics include creating web pages, search engines, FTP, and other related topics. Upon completion, students should be able to deploy a hand-coded website created with mark-up language, and effectively use and understand the function of search engines. Students can receive high school CTE state articulated credit for Multimedia and Webpage Design if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.
Medical Assisting

Course Delivery: Seated and Online
Location: Sanford Main Campus/High School Distance Learning Lab
Program Length: 1 semester - 2 years
Grade(s): 11 & 12

ACA 115 Success and Study Skills
College Credit: 1 semester hour
This course provides an orientation to the campus resources and academic skills necessary to achieve educational objectives. Emphasis is placed on an exploration of facilities and services, study skills, library skills, self-assessment, wellness, goal-setting, and critical thinking. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals.

COM 231 Public Speaking
College Credit: 3 semester hours
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

HEA 112 First Aid & CPR
College Credit: 2 semester hours
This course introduces the basics of emergency first aid treatment. Topics include rescue breathing, CPR, first aid for choking and bleeding, and other first aid procedures. Upon completion, students should be able to demonstrate skills in providing emergency care for the sick and injured until medical help can be obtained.

HSC 110 Orientation to Health Careers
College Credit: 1 semester hour
This course is a survey of health care professions. Topics include professional duties and responsibilities, working environments, and career choices. Upon completion, students should be able to demonstrate an understanding of the health care professions and be prepared to make informed career choices. Students can receive high school CTE state articulated credit for Health Science II if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.

MED 110 Orientation to Medical Assisting
Credit Hours: 1 semester hour
This course covers the history of medicine and the role of the medical assistant in the healthcare setting. Emphasis is placed on professionalism, communication, attitude, behaviors, and duties in the medical environment. Upon completion, students should be able to project a positive attitude and promote the profession of medical assisting.

MED 121 Medical Terminology I
Credit Hours: 3 semester hours
This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. Students can receive high school CTE state articulated credit for Health Science I if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.
MED 122     Medical Terminology II  
Credit Hours: 3 semester hours  
**Prerequisite: MED 121**  
This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. Students can receive high school CTE state articulated credit for Health Science I if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.

MED 130     Administrative Office Procedures I  
Credit Hours: 2 semester hours  
This course introduces medical office administrative procedures. Topics include appointment processing, written and oral communications, medical records, patient orientation, and safety. Upon completion, students should be able to perform basic administrative skills within the medical environment.

MED 131     Administrative Office Procedures II  
Credit Hours: 2 semester hours  
**Local Prerequisite: MED 130**  
This course provides medical office procedures in both economic and management skills. Topics include physical plant maintenance, equipment and supplies, liability coverage, medical economics, and introductory insurance procedures. Upon completion, students should be able to manage the economics of the medical office and supervise personnel.

MED 140     Exam Room Procedures I  
Credit Hours: 5 semester hours  
This course provides instruction in clinical examining room procedures. Topics include asepsis, infection control, assisting with exams and treatment, patient education, preparation and administration of medications, EKG, vital signs, and medical emergencies. Upon completion, students should be able to demonstrate competence in exam room procedures.

MED 150     Laboratory Procedures I  
Credit Hours: 5 semester hours  
This course provides instruction in basic lab techniques used by the medical assistant. Topics include lab safety, quality control, collecting and processing specimens, performing selective tests, phlebotomy, screening and follow-up of test results, and OSHA/CLIA regulations. Upon completion, students should be able to perform basic lab tests/skills based on course topics.

NUT 110     Nutrition  
College Credit: 3 semester hours  
This course covers basic principles of nutrition and their relationship to human health. Topics include meeting nutritional needs of healthy people, menu modification based on special dietary needs, food habits, and contemporary problems associated with nutrition. Upon completion, students should be able to apply basic nutritional concepts as they relate to health and well being.

OST 149     Medical Legal Issues  
College Credit: 3 semester hours  
This course introduces the complex legal, moral, and ethical issues involved in providing health-care services. Emphasis is placed on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professional liabilities; and medical practice liability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior.
PSY 150 General Psychology
College Credit: 3 semester hours
This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.
Medical Office Administration

Course Delivery: Online
Location: High School Distance Learning Lab
Program Length: 
Grade(s): 11 & 12
Credential Earned:

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<tr>
<th>Medical Office Insurance Coding Certificate</th>
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<tr>
<td>CIS 110</td>
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<td>OST 141</td>
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<td>OST 142</td>
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<td>OST 148</td>
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<td>OST 149</td>
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<td>OST 248</td>
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ACA 122  College Transfer Success
College Credit: 1 semester hour
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

COM 120  Introduction to Interpersonal Communication
Credit Hours: 3 semester hours
This course introduces the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is placed on the communication process, perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication relationships. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

CIS 110  Introduction to Computers
Credit Hours: 3 semester hours
This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics (Quantitative).

OST 131  Keyboarding
Credit Hours: 2 semester hours
This course covers basic keyboarding skills. Emphasis is placed on the touch system, correct techniques, and development of speed and accuracy. Upon completion, students should be able to key at an acceptable speed and accuracy level using the touch system.
OST 134  Text Entry & Formatting  
Credit Hours: 3 semester hours  
Local Prerequisite: OST 131  
This course is designed to provide the skills needed to increase speed, improve accuracy, and format documents. Topics include letters, memos, tables, and business reports. Upon completion, students should be able to produce documents and key timed writings at speeds commensurate with employability.

OST 141  Medical Terminology I - Medical Office  
Credit Hours: 3 semester hours  
Prerequisite: OST 131  
This course uses a language-structure approach to present the terminology and vocabulary that will be encountered in medical office settings. Topics include word parts that relate to systemic components, conditions, pathology, and disorder remediation in approximately one-half of the systems of the human body. Upon completion, students should be able to relate words to systems, pluralize, define, pronounce, and construct sentences with the included terms.

OST 142  Medical Terminology II - Medical Office  
Credit Hours: 3 semester hours  
Prerequisite: OST 141  
This course is a continuation of OST 141 and continues the study, using a language-structure approach, of medical office terminology and vocabulary. Topics include word parts that relate to systemic components, conditions, pathology, and disorder remediation in the remaining systems of the human body. Upon completion, students should be able to relate words to systems, pluralize, define, pronounce, and construct sentences with the included terms.

OST 148  Medical Coding Billing & Insurance  
Corequisite: OST 141  
This course introduces fundamentals of medical coding, billing, and insurance. Emphasis is placed on the medical billing cycle to include third-party payers, coding concepts, and form preparation. Upon completion, students should be able to explain the life cycle of and accurately complete a medical insurance claim.

OST 149  Medical Legal Issues  
Credit Hours: 3 semester hours  
This course introduces the complex legal, moral, and ethical issues involved in providing health care services. Emphasis is placed on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professional liabilities; and medical practice liability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior.

OST 164  Text Editing Applications  
College Credit: 3 semester hours  
This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text.

OST 243  Medical Office Simulation  
College Credit: 3 semester hours  
This course introduces medical systems used to process information in the automated office. Topics include traditional and electronic information resources, storing and retrieving information, and the billing cycle. Upon completion, students should be able to use the computer accurately to schedule, bill, update, and make corrections.
OST 248  Diagnostic Coding
College Credit: 2 semester hours
Prerequisite: MED 121 or OST 141
This course provides an in-depth study of diagnostic coding. Emphasis is placed on ICD coding system. Upon completion, students should be able to properly code diagnoses in a medical facility.

OST 289  Administrative Office Management
Prerequisites: Take One Set - Set 1: OST 134 and OST 164; Set 2: OST 136 and OST 164
This course is designed to be a capstone course for the office professional and provides a working knowledge of modern office procedures. Emphasis is placed on scheduling, telephone procedures, travel arrangements, event planning, office design, and ergonomics. Upon completion, students should be able to adapt in an office environment.

SOC 210  Introduction to Sociology
College Credit: 3 semester hours
This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

WBL 111  Work-Based Learning I
College Credit: 1 semester hour
Local Prerequisite: Approval of Instructor or Department Chairperson
This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.
Nurse Aide

Course Delivery: Seated and Online
Location: W. B. Wicker Center and High School Distance Learning Lab
Program Length: 1 semester; 1st & 2nd Blocks
Grade(s): 12
Credential Earned/Recommended Course Order:

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<th>Nurse Aide Certificate</th>
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<tr>
<td>Fall/Spring</td>
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<tr>
<td>NAS 101 Nursing Assistant I</td>
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<tr>
<td>PSY 150 General Psychology</td>
</tr>
</tbody>
</table>

*This program has special admissions requirements, please see your Career & College Advisor.

ACA 122 College Transfer Success
College Credit: 1 semester hour
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

COM 231 Public Speaking
College Credit: 3 semester hours
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

HEA 112 First Aid & CPR
College Credit: 2 semester hours
This course introduces the basics of emergency first aid treatment. Topics include rescue breathing, CPR, first aid for choking and bleeding, and other first aid procedures. Upon completion, students should be able to demonstrate skills in providing emergency care for the sick and injured until medical help can be obtained.

HSC 110 Orientation to Health Careers
College Credit: 1 semester hour
This course is a survey of health care professions. Topics include professional duties and responsibilities, working environments, and career choices. Upon completion, students should be able to demonstrate an understanding of the health care professions and be prepared to make informed career choices. Students can receive high school CTE state articulated credit for Health Science II if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.

MED 121 Medical Terminology I
College Credit: 3 semester hours
This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. Students can receive high school CTE state articulated credit for Health Science I if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.
MED 122 Medical Terminology II  
College Credit: 3 semester hours  
Prerequisite: MED 121  
This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. **Students can receive high school CTE state articulated credit for Health Science I if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.**

NAS 101 Nursing Assistant I  
College Credit: 6 semester hours  
This course introduces basic nursing skills required to provide personal care for patients, residents, or clients in a healthcare setting. Topics include communications, safety, patients' rights, personal care, vital signs, elimination, nutrition, emergencies, rehabilitation, and mental health. Upon completion, students should be able to demonstrate skills necessary to qualify as Nursing Assistant I with the North Carolina Nurse Aide I Registry. **Students can receive high school CTE state articulated credit for Nursing Fundamentals if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.**

NAS 102 Nursing Assistant II  
College Credit: 6 semester hours  
This course provides training in selected advanced nursing assistant procedures. Emphasis is placed on sterile techniques, respiratory procedures, catheterizations, wound and trach care, irrigations, and ostomy care. Upon completion, students should be able to demonstrate skills necessary to qualify as a Nursing Assistant II with the North Carolina Board of Nursing.

NUT 110 Nutrition  
College Credit: 3 semester hours  
This course covers basic principles of nutrition and their relationship to human health. Topics include meeting nutritional needs of healthy people, menu modification based on special dietary needs, food habits, and contemporary problems associated with nutrition. Upon completion, students should be able to apply basic nutritional concepts as they relate to health and well being.

PSY 150 General Psychology  
College Credit: 3 semester hours  
This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

SOC 210 Introduction to Sociology  
College Credit: 3 semester hours  
This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies.
SOC 240  Social Psychology  
College Credit: 3 semester hours  
This course examines the influence of culture and social groups on individual behavior and personality. Emphasis is placed on the process of socialization, communication, conformity, deviance, interpersonal attraction, intimacy, race and ethnicity, small group experiences, and social movements. Upon completion, students should be able to identify and analyze cultural and social forces that influence the individual in a society.
Telecommunications Installation and Maintenance

**Course Delivery:** Seated

**Location:** NC School of Telecommunications, Sanford

**Program Length:** Year-Long; 1\textsuperscript{st} & 2\textsuperscript{nd} Blocks

**Grade(s):** 12

**Credential Earned/Recommended Course Order:**

<table>
<thead>
<tr>
<th>Telecommunications Installation and Maintenance Certificate</th>
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<tr>
<td><strong>Fall</strong></td>
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<tr>
<td>TEL 100 - Telco Basic Electricity</td>
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<tr>
<td>TCT 103 - Level I Cabling</td>
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<td>TEL 105 Fiber Optics: Splicing</td>
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<td>TEL 106 - Fiber Optics: Connectors</td>
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<td>TEL 108 - Comdial Key Systems</td>
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</table>

**ACA 122 College Transfer Success**

College Credit: 1 semester hour

This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

**BUS 110 Introduction to Business**

College Credit: 3 semester hours

This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).

**CIS 111 Basic PC Literacy**

College Credit: 2 semester hours

This course provides an overview of computer concepts. Emphasis is placed on the use of personal computers and software applications for personal and fundamental workplace use. Upon completion, students should be able to demonstrate basic personal computer skills. *Students can receive high school CTE state articulated credit for Microsoft Word, PowerPoint, and Publisher if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.*

**ENG 102 Applied Communications II**

College Credit: 3 semester hours

*Prerequisites: Must meet college readiness benchmark for English and reading*

This course is designed to enhance writing and speaking skills for the workplace. Emphasis is placed on generating short writings such as job application documents, memoranda, and reports and developing interpersonal communication skills with employees and the public. Upon completion, students should be able to prepare effective, short, and job-related written and oral communications. The computer is used as a writing and design tool for this course. This is a diploma-level course.
HUM 110  Technology and Society
College Credit: 3 semester hours
This course considers technological change from historical, artistic, and philosophical perspectives and its effect on human needs and concerns. Emphasis is placed on the causes and consequences of technological change. Upon completion, students should be able to critically evaluate the implications of technology. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

MAT 110  Mathematical Measurement
College Course: 3 semester hours
Prerequisite: Must meet college readiness benchmark for mathematics
This course provides an activity-based approach to utilizing, interpreting, and communicating data in a variety of measurement systems. Topics include accuracy, precision, conversion, and estimation within metric, apothecary, and avoirdupois systems; ratio and proportion; measures of central tendency and dispersion; and charting of data. Upon completion, students should be able to apply proper techniques to gathering, recording, manipulating, analyzing, and communicating data.

NET 125  Networking Basics
College Credit: 3 semester hours
This course introduces the networking field. Emphasis is placed on network terminology and protocols, local-area networks, wide-area networks, OSI model, cabling, router programming, Ethernet, IP addressing, and network standards. Upon completion, students should be able to perform tasks related to networking mathematics, terminology, and models, media, Ethernet, subnetting, and TCP/IP Protocols. Students can receive high school CTE state articulated credit for Networking Engineering Technology I or II if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.

NET 126  Routing Basics
College Credit: 3 semester hour
Prerequisite: NET 125
This course focuses on initial router configuration, router software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). Emphasis will be placed on the fundamentals of router configuration, managing router software, routing protocol, and access lists. Upon completion, students should have an understanding of routers and their role in WANs, router configuration, routing protocols, TCP/IP, troubleshooting, and ACLs. Students can receive high school CTE state articulated credit for Networking Engineering Technology II if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.

NOS 110  Operating System Concepts
College Course: 3 semester hours
This course introduces students to a broad range of operating system concepts, including installation and maintenance. Emphasis is placed on operating system concepts, management, maintenance, and resources required. Upon completion of this course, students will have an understanding of OS concepts, installation, management, maintenance, using a variety of operating systems.

TCT 103  Installer Level 1 Cabling
College Credit: 2 semester hours
This course covers structured premises cabling for the beginning level installer. Emphasis is placed on Installer Level 1 knowledge of standards and codes for the telecommunications industry and properly structured premises cabling techniques. Upon completion, students should be prepared to take the Building Industry Consulting Service International (BICSI) Installer Level 1 certification examination and install premises cabling systems.
TEL 100   Telecommunications Basic Electricity
College Credit: 3 semester hours
This course covers DC and AC theory with specific emphasis on the specialized needs of telecommunications personnel. Emphasis is placed on electron theory, conductors, insulators, Ohm’s Law, capacitance, and inductance as it relates to small gauge, twisted-pair copper wire. Upon completion, students should be able to understand trouble symptoms and correct faults on the telephone physical plant network.

TEL 105   Fiber Optics Splicing
College Credit: 2 semester hours
This course covers splicing and maintaining aerial or buried, single mode, loose tube buffered fiber optic cable. Emphasis is placed on hands-on cleaving, fusion and mechanical splicing. Upon completion, students should be able to splice, test, and locate faults using an OTDR and an OLTS to return fibers to service.

TEL 106   Fiber Optics Connectors
College Credit: 2 semester hours
This course covers installing and maintaining fiber optic cables, connectors, and patch panels in local area networks. Emphasis is placed on installing and testing connectors including ST, SC, and SFF using anaerobic, crimp and Hotmelt, and then testing using an OLTS. Upon completion, students should be able to install and test connectors and patch cords.

TEL 108   Comdial Key Systems
College Credit: 1 semester hour
This course covers programming and maintaining Comdial 616X and 816X Key Systems. Emphasis is placed on programming new systems and moves and changes in working systems. Upon completion, students should be able to install new systems, complete the initial programming, and perform routine moves and changes.

TEL 201   Station I and R
College Credit: 2 semester hours
This course covers the fundamentals of trouble-free telephone installation from aerial and buried cable in homes and businesses. Emphasis is placed on drop-wire attachments, station protection, and wire runs, as well as methods for testing and checking stations for customer satisfaction. Upon completion, students should be able to correctly install, test, and repair telephone stations and wiring up to entry into the cable plant.

TEL 202   Cable Splicing
College Credit: 2 semester hours
This course covers the cable color-code, splicing methods, and closures used throughout the telephone industry. Emphasis is placed on cable color-code, engineering drawings, proper splicing methods, and cable closures. Upon completion, students should be able to perform the basic functions of a cable splicer and meet telephone industry standards.

TEL 203   Cable Fault Location
College Credit: 1 semester hour
This course covers identifying fault types and using test equipment to locate the faults in aerial and underground cable. Emphasis is placed on identifying fault types and correct uses of various types of test equipment to precisely locate the fault. Upon completion, students should be able to identify fault type, properly use test equipment, and locate the fault within inches.
TEL 205    Digital CO Administration
College Credit: 2 semester hours
This course covers data modifications in DMS-10 digital central office switches from remote or on-site locations. Emphasis is placed on normal day-to-day data modification procedures to support customer-originated service orders, including any required hardware changes. Upon completion, students should be able to successfully perform any software or hardware modifications involved in normal daily operations of the DMS-10 digital switch.

TEL 209    ADSL Installation
College Credit: 1 semester hour
This course provides the hands-on skills necessary for installing and troubleshooting digital subscriber lines (DSL). Topics include DSL technology, services and operation, network wiring, cable pair specifications, computer configuration for DSL operation, and Golite technology. Upon completion, students should be able to install, test, and repair DSL services.
Veterinary Medical Technology

Course Delivery: Online and/or Seated
Location: High School Distance Learning Lab and/or Sanford Main Campus
Program Length: Year-Long
Grade(s): 11, 12

Credential Earned/Recommended Course Order:

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<tr>
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<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td></td>
<td>ACA 115 Success and Study Skills</td>
<td>HSC 110 Orientation to Health Careers</td>
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<tr>
<td></td>
<td>VET 114 Intro to Veterinary Medical Tech</td>
<td>PSY 150 General Psychology</td>
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<tr>
<td></td>
<td>VET 121 Veterinary Medical Terminology</td>
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ACA 115 Success and Study Skills
College Credit: 1 semester hour
This course provides an orientation to the campus resources and academic skills necessary to achieve educational objectives. Emphasis is placed on an exploration of facilities and services, study skills, library skills, self-assessment, wellness, goal-setting, and critical thinking. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals.

HSC 110 Orientation to Health Careers
College Credit: 1 semester hour
This course is a survey of health care professions. Topics include professional duties and responsibilities, working environments, and career choices. Upon completion, students should be able to demonstrate an understanding of the health care professions and be prepared to make informed career choices. Students can receive high school CTE state articulated credit for Health Science II if he/she received a final grade of B or higher and a 93 or higher on the standardized CTE post-assessment.

PSY 150 General Psychology
College Credit: 3 semester hours
This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

VET 110 Animal Breeds and Husbandry
College Credit: 3 semester hours
This course provides a study of the individual breed characteristics and management techniques of the canine, feline, equine, bovine, porcine, ovine, caprine, and laboratory animals. Topics include physiological data, animal health management, and basic care and handling of animals. Upon completion, students should be able to identify breeds of domestic and laboratory animals, list physiological data, and outline basic care, handling, and management techniques.
VET 114  Intro to Veterinary Medical Technology
College Credit: 1 semester hour
This course introduces the standard operating procedures and responsibilities of veterinary medical technology departments, common zoonotic diseases, safety and ethical issues, and USDA/DEA/OSHA regulations/compliance. Emphasis is placed on standard operating procedures, zoonotic diseases, safety and ethical issues, and the importance of USDA/DEA/OSHA regulations and compliance. Upon completion, students should be able to perform duties assigned in veterinary medical technology, recognize potential zoonotic diseases, and establish safety protocols/regulatory compliance.

VET 120  Veterinary Anatomy and Physiology
College Credit: 4 semester hours
This course covers the structure and function of the animal body with emphasis on the similarities and differences among domestic animals. Emphasis is placed on the structure and function of the major physiological systems of domestic, laboratory, and zoo animals. Upon completion, students should be able to identify relevant anatomical structure and describe basic physiological processes for the major body systems.

VET 121  Veterinary Medical Terminology
College Credit: 3 semester hours
This course covers the basic medical terminology required for veterinary technicians. Topics include the pronunciation, spelling and definition of word parts and vocabulary terms unique to the anatomy, clinical pathology, and treatment of animals. Upon completion, students should be able to demonstrate knowledge and understanding of basic medical terms as they relate to veterinary medicine.

VET 137  Veterinary Office Practices
College Credit: 2 semester hours
This course is designed to teach basic administrative techniques, client communication skills, and regulations pertaining to veterinary medicine. Topics include record keeping, telephone techniques, professional liability, office procedures, state and national regulatory laws, human relations, and animal welfare. Upon completion, students should be able to demonstrate effective communication techniques, office procedures, and knowledge of regulatory laws and issues relating to animal welfare.
COLLEGE TRANSFER PATHWAYS

Pre-Associate in Arts

Program Eligibility:
- high school junior or senior
- weighted high school GPA of 3.0 or higher
- demonstrate college readiness (in English, reading, and mathematics) on an assessment or placement test (see below)

<table>
<thead>
<tr>
<th>Test</th>
<th>PLAN</th>
<th>PSAT</th>
<th>Asset</th>
<th>COMPASS</th>
<th>ACCUPLACER</th>
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<tbody>
<tr>
<td>English</td>
<td>15</td>
<td>45</td>
<td>41 Writing</td>
<td>70 Writing</td>
<td>86 Sentence Skills</td>
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<tr>
<td>Reading</td>
<td>18</td>
<td>47</td>
<td>41 Reading</td>
<td>81 Reading</td>
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<tr>
<td>Mathematics</td>
<td>19</td>
<td>47</td>
<td>41 Numerical Skills 41 Int Algebra</td>
<td>47 Pre-Algebra 66 Algebra</td>
<td>55 Arithmetic 75 Elem Algebra</td>
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<tr>
<th>Test</th>
<th>NC DAP</th>
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<tbody>
<tr>
<td>English/Reading</td>
<td>Composite score of 151 or higher</td>
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<tr>
<td>Mathematics</td>
<td>7 on each assessment for DMA 010-060</td>
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<th>SAT</th>
<th>ACT</th>
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<tr>
<td>English</td>
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<tr>
<td>Critical Reading</td>
<td>500</td>
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<tr>
<td>Mathematics</td>
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<tr>
<td>Reading</td>
<td>22</td>
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<tr>
<td>Mathematics</td>
<td>22</td>
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</tbody>
</table>

Course Delivery: Seated or Online

Location: Sanford Main Campus or High School Distance Learning Lab

Program Length: 1-4 semesters

*The general education requirement includes study and courses selected from the Universal General Education Transfer Component (UGETC) component of the Comprehensive Articulation Agreement. Students can earn up to 41 transferable semester hours.

Typical Course Offerings:

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>ACA 122 College Transfer Success</td>
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</tr>
<tr>
<td>ART 111 Art Appreciation</td>
<td>ART 111 Art Appreciation</td>
</tr>
<tr>
<td>ENG 111 Expository Writing</td>
<td>ENG 112 Writing/Research in the Disciplines</td>
</tr>
<tr>
<td>HIS 111 World Civilizations I</td>
<td>HIS 111 World Civilizations I</td>
</tr>
<tr>
<td>MAT 171 Precalculus Algebra</td>
<td>MAT 171 Precalculus Algebra</td>
</tr>
<tr>
<td>PSY 150 General Psychology</td>
<td>PSY 150 General Psychology</td>
</tr>
<tr>
<td>SOC 210 Introduction to Sociology</td>
<td>SOC 210 Introduction to Sociology</td>
</tr>
</tbody>
</table>
**English Composition (2 courses/6 semester hours)**

The following 2 English composition courses are required.

**ENG 111 Expository Writing**  
College Credit: 3 semester hours  
This course is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is placed on the writing process including audience analysis, topic selection, thesis support and development, editing, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. This course has been approved for transfer under the CAA and ICAA as a general education course in English Composition.

**ENG 112 Argument-Based Research**  
College Credit: 3 semester hours  
Prerequisite: ENG 111  
This course, the second in a series of two, introduces research techniques, documentation styles, and argumentative strategies. Emphasis is placed on historical developments and their impact on the modern world through religion, politics, economics, and social developments. Upon completion, students should be able to compare and contrast western and non-western cultures. This course has been approved for transfer under the CAA and ICAA as a general education course in English Composition.

**Humanities/Fine Arts/Communications (3 courses/9 semester hours)**

*Select 3 courses from at least 2 different disciplines*

**ART 111 Art Appreciation**  
College Credit: 3 semester hours  
This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**ART 114 Art History Survey I**  
College Credit: 3 semester hours  
This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**ART 115 Art History Survey II**  
College Credit: 3 semester hours  
This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.
**COM 231  Public Speaking**  
College Credit: 3 semester hours  
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**ENG 231  American Literature I**  
College Credit: 3 semester hours  
_Prerequisite: Take one: ENG 112, ENG 113, or ENG 114_  
This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**ENG 232  American Literature II**  
College Credit: 3 semester hours  
_Prerequisite: Take one: ENG 112, ENG 113, or ENG 114_  
This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**MUS 110  Music Appreciation**  
College Credit: 3 semester hours  
This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**MUS 112  Introduction to Jazz**  
College Credit: 3 semester hours  
This course introduces the origins and musical components of jazz and the contributions of its major artists. Emphasis is placed on the development of discriminating listening habits, as well as the investigation of the styles and structural forms of the jazz idiom. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**PHI 215  Philosophical Issues**  
College Credit: 3 semester hours  
_Prerequisite: ENG 111_  
This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critique the philosophical components of an issue. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.
PHI 240 Introduction to Ethics  
College Credit: 3 semester hours  
Prerequisite: ENG 111
This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on utilitarianism, rule-based ethics, existentialism, relativism versus objectivism, and egoism. Upon completion, students should be able to apply various ethical theories to individual moral issues such as euthanasia, abortion, crime and punishment, and justice. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

Social/Behavioral Sciences (3 courses/9 semester hours)  
Select 3 courses from at least 2 different disciplines

ECO 251 Prin of Microeconomics  
College Credit: 3 semester hours  
This course introduces economic analysis of individual, business, and industry choices in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

ECO 252 Prin of Macroeconomics  
College Credit: 3 semester hours  
This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

HIS 111 World Civilizations I  
College Credit: 3 semester hours  
This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic, and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

HIS 112 World Civilizations II  
College Credit: 3 semester hours  
This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.
HIS 131  American History I  
College Credit: 3 semester hours  
This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

HIS 132  American History II  
College Credit: 3 semester hours  
This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

POL 120  American Government  
College Credit: 3 semester hours  
This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

PSY 150  General Psychology  
College Credit: 3 semester hours  
This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

SOC 210  Introduction to Sociology  
College Credit: 3 semester hours  
This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.
Math (1 course/3-4 semester hours)

Select 1 course

MAT 143  Quantitative Literacy
College Credit: 3 semester hours
This course is designed to engage students in complex and realistic situations involving the mathematical phenomena of quantity, change in relationship, and uncertainty through project and activity based assessment. Emphasis is placed on authentic contexts which will introduce the concepts of numeracy, proportional reasoning, dimensional analysis, rates of growth, personal finance, consumer statistics, practical probabilities, and mathematics for citizenship. Upon completion, students should be able to utilize quantitative information as consumers and to make personal, professional, and civic decisions by decoding, interpreting, using, and communicating quantitative information found in modern media and encountered in everyday life.

MAT 152  Statistical Methods I
College Credit: 4 semester hours
This course provides a project-based approach to introductory statistics with an emphasis on using real-world data and statistical literacy. Topics include descriptive statistics, correlation and regression, basic probability, discrete and continuous probability distributions, confidence intervals and hypothesis testing. Upon completion, students should be able to use appropriate technology to describe important characteristics of a data set, draw inferences about a population from sample data, and interpret and communicate results.

MAT 171  Precalculus Algebra
College Credit: 4 semester hours
This is the first of two courses designed to emphasize topics, which are fundamental to the study of calculus. Emphasis is placed on equations and inequalities, functions (linear, polynomial, rational), systems of equations and inequalities, and parametric equations. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and predictions. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics.

Natural Sciences (1 course/4 semester hours)

Select 1 course

AST 111  Descriptive Astronomy
College Credit: 3 semester hours
*Corequisite: AST 111A*
This course introduces an overall view of modern astronomy. Topics include an overview of the solar system, the sun, stars, galaxies, and the larger universe. Upon completion, students should be able to demonstrate an understanding of the universe around them. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. *Not taught at Central Carolina Community College at this time.*

AST 111A  Descriptive Astronomy Lab
College Credit: 1 semester hour
*Corequisite: AST 111*
This course is a laboratory to accompany AST 111. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 111 and which provide practical experience. Upon completion, students should be able to demonstrate an understanding of the universe around them. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. *Not taught at Central Carolina Community College at this time.*
BIO 110  Principles of Biology
College Credit: 4 semester hours
This course provides a survey of fundamental biological principles for non-science majors. Emphasis is placed on basic chemistry, cell biology, metabolism, genetics, taxonomy, evolution, ecology, diversity, and other related topics. Upon completion, students should be able to demonstrate increased knowledge and better understanding of biology as it applies to everyday life. Under the CAA and ICAA, this course satisfies the general education Natural Science requirement for the AA and AFA degrees. It does not satisfy the general education Natural Science requirement for the AS degree.

BIO 111  General Biology I
College Credit: 4 semester hours
This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics, evolution, classification, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.

CHM 151  General Chemistry I
College Credit: 4 semester hours
This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. Additional topics include laboratory and chemical safety rules, electromagnetic spectrum, spectrometer, and chromatography. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.

GEL 111  Introductory Geology
College Credit: 4 semester hours
This course introduces basic landforms and geological processes. Topics include rocks, minerals, volcanoes, fluvial processes, geological history, plate tectonics, glaciers, and coastal dynamics. Upon completion, students should be able to describe basic geological processes that shape the earth. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.

PHY 110  Conceptual Physics
College Credit: 4 semester hours
Corequisite:  PHY 110A
This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.

PHY 110A  Conceptual Physics Laboratory
College Credit: 4 semester hours
Corequisite:  PHY 110
This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.
Foreign Language (2 courses/6-8 semester hours)

*Choose 2 courses from the same language*

**CHI 111  Elementary Chinese I**
College Credit: 3 semester hours
This course introduces the fundamental elements of the Chinese language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Chinese and demonstrate cultural awareness. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**CHI 112  Elementary Chinese II**
College Credit: 3 semester hours
*Prerequisite: CHI 111*
This course includes the basic fundamentals of the Chinese language within a cultural context of the Chinese people and its history. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Chinese and demonstrate further cultural awareness. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**SPA 111  Elementary Spanish I**
College Credit: 3 semester hours
This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**SPA 112  Elementary Spanish II**
College Credit: 3 semester hours
*Prerequisite: SPA 111*
This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**Transition (1 course/1 semester hour)**

*The following course is required*

**ACA 122  College Transfer Success**
College Credit: 1 semester hour
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.
<table>
<thead>
<tr>
<th>Composition (6 SHC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111 Expository Writing</td>
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<tr>
<td>ENG 112 Writing &amp; Research in the Disciplines</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Humanities/Fine Arts (9 SHC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select courses from at least 2 disciplines. One Literature course is encouraged</td>
</tr>
<tr>
<td>ART 111 Art Appreciation</td>
</tr>
<tr>
<td>ART 114 Art History I</td>
</tr>
<tr>
<td>ART 115 Art History II</td>
</tr>
<tr>
<td>COM 231 Public Speaking</td>
</tr>
<tr>
<td>ENG 231 American Literature I (Prerequisite ENG 112)</td>
</tr>
<tr>
<td>ENG 232 American Literature II (Prerequisite ENG 112)</td>
</tr>
<tr>
<td>MUS 110 Music Appreciation</td>
</tr>
<tr>
<td>MUS 112 Introduction to Jazz</td>
</tr>
<tr>
<td>PHI 215 Philosophical Issues (Prerequisite ENG 111)</td>
</tr>
<tr>
<td>PHI 240 Introduction to Ethics (Prerequisite ENG 111)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Social/Behavioral Science (9 SHC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select courses from at least 2 disciplines. One History course is encouraged</td>
</tr>
<tr>
<td>ECO 251 Principles of Microeconomics</td>
</tr>
<tr>
<td>ECO 252 Principles of Macroeconomics</td>
</tr>
<tr>
<td>HIS 111 World History I</td>
</tr>
<tr>
<td>HIS 112 World History II</td>
</tr>
<tr>
<td>HIS 131 American History I</td>
</tr>
<tr>
<td>HIS 132 American History II</td>
</tr>
<tr>
<td>POL 120 American Government</td>
</tr>
<tr>
<td>PSY 150 General Psychology</td>
</tr>
<tr>
<td>SOC 210 Introduction to Sociology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Natural Sciences (4 SHC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST 111/111A Descriptive Astronomy with Lab</td>
</tr>
<tr>
<td>AST 151/151A General Astronomy I with Lab</td>
</tr>
<tr>
<td>BIO 110 Principles of Biology</td>
</tr>
<tr>
<td>BIO 111 General Biology I</td>
</tr>
<tr>
<td>CHM 151 General Chemistry I</td>
</tr>
<tr>
<td>GEL 111 Introductory Geology</td>
</tr>
<tr>
<td>PHY 110/110A Conceptual Physics with Lab</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mathematics (3-4 SHC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mat 143 Quantitative Literacy</td>
</tr>
<tr>
<td>MAT 152 Statistical Methods I</td>
</tr>
<tr>
<td>MAT 171 Precalculus Algebra</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Academic Success (1 SHC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA 122 College Transfer Success</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Foreign Language (up to 8 SHC)</th>
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</thead>
<tbody>
<tr>
<td>SPA/CHI 111 Elementary Spanish I/Elementary Chinese I</td>
</tr>
<tr>
<td>SPA/CHI 112 Elementary Spanish II/Elementary Chinese II</td>
</tr>
<tr>
<td>SPA/CHI 211 Intermediate Spanish I/Intermediate Chinese I</td>
</tr>
</tbody>
</table>

II. Additional Hours (once UGETC is complete) – Eleven hours should be selected from designated General Education courses based on intended major and transfer university.
Pre-Associate in Science

Program Eligibility:
- high school junior or senior
- weighted high school GPA of 3.0 or higher
- demonstrate college readiness (in English, reading, and mathematics) on an assessment or placement test (see below)

<table>
<thead>
<tr>
<th>Test</th>
<th>PLAN</th>
<th>PSAT</th>
<th>Asset</th>
<th>COMPASS</th>
<th>ACCUPLACER</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>15</td>
<td>45</td>
<td>41 Writing</td>
<td>70 Writing</td>
<td>86 Sentence Skills</td>
</tr>
<tr>
<td>Reading</td>
<td>18</td>
<td>47</td>
<td>41 Reading</td>
<td>81 Reading</td>
<td>80 Reading</td>
</tr>
<tr>
<td>Mathematics</td>
<td>19</td>
<td>47</td>
<td>41 Numerical Skills</td>
<td>47 Pre-Algebra</td>
<td>55 Arithmetic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test</th>
<th>NC DAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>English/Reading</td>
<td>Composite score of 151 or higher</td>
</tr>
<tr>
<td>Mathematics</td>
<td>7 on each assessment for DMA 010-060</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SAT</th>
<th>ACT</th>
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<tbody>
<tr>
<td>English</td>
<td>English</td>
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<tr>
<td>500</td>
<td>18</td>
</tr>
<tr>
<td>Critical Reading</td>
<td>Reading</td>
</tr>
<tr>
<td>500</td>
<td>22</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Mathematics</td>
</tr>
<tr>
<td>500</td>
<td>22</td>
</tr>
</tbody>
</table>

Course Delivery: Seated or Online
Location: Sanford Main Campus or High School Distance Learning Lab
Program Length: 1-4 semesters
*The general education requirement includes study and courses selected from the Universal General Education Transfer Component (UGETC) component of the Comprehensive Articulation Agreement. Students can earn up to 41 transferable semester hours.

Typical Course Offerings:

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA 122 College Transfer Success</td>
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<tr>
<td>PSY 150 General Psychology</td>
<td>PSY 150 General Psychology</td>
</tr>
<tr>
<td>SOC 210 Introduction to Sociology</td>
<td>SOC 210 Introduction to Sociology</td>
</tr>
</tbody>
</table>
English Composition (2 courses/6 semester hours)
The following 2 English composition courses are required.

ENG 111   Expository Writing
College Credit: 3 semester hours
This course is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is placed on the writing process including audience analysis, topic selection, thesis support and development, editing, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. This course has been approved for transfer under the CAA and ICAA as a general education course in English Composition.

ENG 112   Argument-Based Research
College Credit: 3 semester hours
Prerequisite: ENG 111
This course, the second in a series of two, introduces research techniques, documentation styles, and argumentative strategies. Emphasis is placed on historical developments and their impact on the modern world through religion, politics, economics, and social developments. Upon completion, students should be able to compare and contrast western and non-western cultures. This course has been approved for transfer under the CAA and ICAA as a general education course in English Composition.

Humanities/Fine Arts/Communications (2 courses/6 semester hours)
Select 2 courses from at least 2 different disciplines

ART 111   Art Appreciation
College Credit: 3 semester hours
This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

ART 114   Art History Survey I
College Credit: 3 semester hours
This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

ART 115   Art History Survey II
College Credit: 3 semester hours
This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.
COM 231    Public Speaking
College Credit: 3 semester hours
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

ENG 231    American Literature I
College Credit: 3 semester hours
Prerequisite: Take one: ENG 112, ENG 113, or ENG 114
This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

ENG 232    American Literature II
College Credit: 3 semester hours
Prerequisite: Take one: ENG 112, ENG 113, or ENG 114
This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

MUS 110    Music Appreciation
College Credit: 3 semester hours
This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

MUS 112    Introduction to Jazz
College Credit: 3 semester hours
This course introduces the origins and musical components of jazz and the contributions of its major artists. Emphasis is placed on the development of discriminating listening habits, as well as the investigation of the styles and structural forms of the jazz idiom. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

PHI 215    Philosophical Issues
College Credit: 3 semester hours
Prerequisite: ENG 111
This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critique the philosophical components of an issue. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.
PHI 240 Introduction to Ethics
College Credit: 3 semester hours
Prerequisite: ENG 111
This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on utilitarianism, rule-based ethics, existentialism, relativism versus objectivism, and egoism. Upon completion, students should be able to apply various ethical theories to individual moral issues such as euthanasia, abortion, crime and punishment, and justice. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

Social/Behavioral Sciences (2 courses/6 semester hours)
Select 2 courses from at least 2 different disciplines

ECO 251 Principals of Microeconomics
College Credit: 3 semester hours
This course introduces economic analysis of individual, business, and industry choices in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

ECO 252 Principals of Macroeconomics
College Credit: 3 semester hours
This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

HIS 111 World Civilizations I
College Credit: 3 semester hours
This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic, and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

HIS 112 World Civilizations II
College Credit: 3 semester hours
This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.
HIS 131 American History I
College Credit: 3 semester hours
This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

HIS 132 American History II
College Credit: 3 semester hours
This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

POL 120 American Government
College Credit: 3 semester hours
This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

PSY 150 General Psychology
College Credit: 3 semester hours
This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

SOC 210 Introduction to Sociology
College Credit: 3 semester hours
This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.
Math (2 courses/8 semester hours)

Select 2 courses

MAT 171 Precalculus Algebra
College Credit: 4 semester hours
This is the first of two courses designed to emphasize topics, which are fundamental to the study of calculus. Emphasis is placed on equations and inequalities, functions (linear, polynomial, rational), systems of equations and inequalities, and parametric equations. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and predictions. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics.

MAT 172 Precalculus Trigonometry
College Credit: 4 semester hours
This is the second of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is placed on properties and applications of transcendental functions and their graphs, right and oblique triangle trigonometry, conic sections, vectors, and polar coordinates. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics.

MAT 263 Brief Calculus
College Credit: 4 semester hours
This course is designed for students needing one semester of calculus. Topics include functions, graphing, differentiation, and integration with emphasis on applications drawn from business, economics, and biological and behavioral sciences. Upon completion, students should be able to demonstrate an understanding of the use of basic calculus and technology to solve problems and to analyze and communicate results. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics.

MAT 271 Calculus I
College Credit: 4 semester hours
This course covers in-depth the differential calculus portion of a three-course calculus sequence. Topics include limits, continuity, derivatives, and integrals of algebraic and transcendental functions of one variable with applications. Upon completion, students should be able to apply differentiation and integration techniques to algebraic and transcendental functions. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics.

Natural Sciences (2 courses/8 semester hours)

Select 2 courses, must be a sequence

BIO 110 Principles of Biology
College Credit: 4 semester hours
This course provides a survey of fundamental biological principles for non-science majors. Emphasis is placed on basic chemistry, cell biology, metabolism, genetics, taxonomy, evolution, ecology, diversity, and other related topics. Upon completion, students should be able to demonstrate increased knowledge and better understanding of biology as it applies to everyday life. Under the CAA and ICAA, this course satisfies the general education Natural Science requirement for the AA and AFA degrees. It does not satisfy the general education Natural Science requirement for the AS degree.
BIO 111  General Biology I  
College Credit: 4 semester hours  
This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics, evolution, classification, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.

BIO 112  General Biology II  
College Credit: 4 semester hours  
Prerequisite: BIO 111  
This course is a continuation of BIO 111. Emphasis is placed on organisms, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.

CHM 151  General Chemistry I  
College Credit: 4 semester hours  
This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. Additional topics include laboratory and chemical safety rules, electromagnetic spectrum, spectrometer, and chromatography. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.

CHM 152  General Chemistry II  
College Credit: 4 semester hours  
Prerequisite: CHM 151  
This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields. The spectrophotometer, pH meters, solids, liquids, and properties of solutions are covered. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.

GEL 111  Introductory Geology  
College Credit: 4 semester hours  
This course introduces basic landforms and geological processes. Topics include rocks, minerals, volcanoes, fluvial processes, geological history, plate tectonics, glaciers, and coastal dynamics. Upon completion, students should be able to describe basic geological processes that shape the earth. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.

PHY 110  Conceptual Physics  
College Credit: 4 semester hours  
Corequisite: PHY 110A  
This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.
PHY 110A  Conceptual Physics Laboratory
College Credit: 4 semester hours
Corequisite: PHY 110
This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.

PHY 151  College Physics I
College Credit: 4 semester hours
Prerequisite: Take one: MAT 161, MAT 171, or MAT 175
This course uses algebra/trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem solving ability for the topics covered. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.

PHY 152  College Physics II
College Credit: 4 semester hours
Prerequisite: PHY 151
This course uses algebra/trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem solving ability for the topics covered. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.

PHY 251  General Physics I
College Credit: 4 semester hours
Prerequisite: MAT 271
Corequisite: MAT 272
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem solving ability for the topics covered. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.

PHY 252  General Physics II
College Credit: 4 semester hours
Prerequisites: MAT 272 and PHY 251
This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem solving ability for the topics covered. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.
Foreign Language (2 courses/6-8 semester hours)

Choose 2 courses from the same language

**CHI 111**  Elementary Chinese I  
College Credit: 3 semester hours  
This course introduces the fundamental elements of the Chinese language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Chinese and demonstrate cultural awareness. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**CHI 112**  Elementary Chinese II  
College Credit: 3 semester hours  
*Prerequisite: CHI 111*  
This course includes the basic fundamentals of the Chinese language within a cultural context of the Chinese people and its history. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Chinese and demonstrate further cultural awareness. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**SPA 111**  Elementary Spanish I  
College Credit: 3 semester hours  
This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**SPA 112**  Elementary Spanish II  
College Credit: 3 semester hours  
*Prerequisite: SPA 111*  
This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

**Academic Transition (1 course/1 semester hour)**

*The following course is required*

**ACA 122**  College Transfer Success  
College Credit: 1 semester hour  
This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.
## CCP Pre-Associate of Science Tracking Sheet for STEM majors

### Composition (6 SHC)
- ENG 111 Expository Writing
- ENG 112 Writing & Research in the Disciplines

### Humanities/Fine Arts (6 SHC)
*Select courses from at least 2 disciplines. One Literature course is encouraged*

- ART 111 Art Appreciation
- ART 114 Art History I
- ART 115 Art History II
- COM 231 Public Speaking
- ENG 231 American Literature I (Prerequisite ENG 112)
- ENG 232 American Literature II (Prerequisite ENG 112)
- MUS 110 Music Appreciation
- MUS 112 Introduction to Jazz
- PHI 215 Philosophical Issues (Prerequisite ENG 111)
- PHI 240 Introduction to Ethics (Prerequisite ENG 111)

### Social/Behavioral Science (6 SHC)
*Select courses from at least 2 disciplines One History course is encouraged*

- ECO 251 Principles of Microeconomics
- ECO 252 Principles of Macroeconomics
- HIS 111 World History I
- HIS 112 World History II
- HIS 131 American History I
- HIS 132 American History II
- POL 120 American Government
- PSY 150 General Psychology
- SOC 210 Introduction to Sociology

### Natural Sciences (8 SHC)
*Complete a 2-semester course sequence in general biology, general chemistry, or general physics (a-d) or a pair of the one-semester course combinations listed below (e-j). All courses must have a lab component.*

- a. BIO 111 General Biology I & BIO 112 General Biology II
- b. CHM 151 General Chemistry I & CHM 152 General Chemistry II
- c. PHY 151 College Physics I (Prerequisite – MAT 171) & PHY 152 College Physics II
- d. AST 151/A General Astronomy I & BIO 110 Principles of Biology
- e. AST 151/A General Astronomy I & GEL 111 Intro Geology
- f. AST 151/A General Astronomy I & PHY 110/A Conceptual Physics
- g. AST 151/A Gen Astronomy I & PHY 110/A Conceptual Physics
- h. BIO 110 Principles of Biology & GEL 111 Introductory Geology
- i. BIO 110 Principles of Biology & PHY 110/A Conceptual Physics
- j. GEL 111 Introductory Geology & PHY 110/A Conceptual Physics

### Mathematics (8 SHC)
- MAT 171 Precalculus Algebra
- MAT 172 Precalculus Trigonometry (Prerequisite MAT 171)
- MAT 263 Brief Calculus (Prerequisite MAT 171)
- MAT 271 Calculus I (Prerequisite MAT 172)

### Academic Transition (1 SHC)
- ACA 122 College Transfer Success (1 SHC)

### Foreign Language (up to 8 SHC)
- SPA/CHI 111 Elementary Spanish I/Elementary Chinese I
- SPA/CHI 112 Elementary Spanish II/Elementary Chinese II
- SPA/CHI 211 Intermediate Spanish I/Intermediate Chinese I

**II. Additional Hours (once UGETC is complete) – Eleven hours should be selected from designated General Education courses based on intended major and transfer university.**