



# 2021-2022 HIGH SCHOOL COURSE SELECTION GUIDE

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Cumberland County Schools: [www.ccs.k12.nc.us](http://www.ccs.k12.nc.us)

Career Pathways: <http://ctp.ccs.k12.nc.us>

*(See your counselor or Career Development Coordinator for more information)*

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## NON-DISCRIMINATION STATEMENT

It is the policy of the Cumberland County Public School System not to discriminate on the basis of race, ethnic origin, gender, or disability in its educational programs, activities, or employment policies as required by Title IX of the 1972 Educational Amendments, Section 504 of the Rehabilitation Act of 1973, and Title II of the 1990 Americans with Disabilities Act (ADA). All courses are open to students regardless of race, gender, color, national origin, creed, disadvantaging or handicapping condition.

# Information

## Letter from the Superintendent



### BOARD OF EDUCATION

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Dear Students, Parents, and Guardians:

Cumberland County Schools is committed to providing equitable access to engaging learning opportunities that prepare students to be competitive, collaborative, and successful in our global world. Our mission is to provide safe, positive, and rigorous learning environments to prepare lifelong learners to reach their maximum potential.

The high school student of today has more educational options than ever before. Schools of choice, college classes, distance learning, and online virtual courses are available to ensure that graduates will be well trained and globally competitive.

In order to avoid confusion, and to guarantee that all graduation requirements are being met, careful academic planning is key. This 2021-2022 Course Selection Guide is a tool for selecting appropriate courses as you collaboratively design and update a Four-Year Plan with your counselor. Consider making an academic stretch by taking rigorous courses that will complement future career goals. Remember that the choices you make now will determine your post-secondary educational and professional success.

The following sequence is recommended to assist you in the registration process:

- Read the material carefully.
- Consider possible courses that will help you attain career goals.
- Discuss potential choices with parents.
- Consider taking an online class if you have not yet done so.
- Schedule a registration appointment with your school counselor to review your 4-year plan.
- Ensure that graduation requirements are met before altering a proposed schedule.

Careful planning and personal commitment are sure to make this year a meaningful and satisfying experience. Best wishes for success.

Sincere regards,

Dr. Marvin Connelly, Jr.  
Superintendent  
Cumberland County Schools

## How to Use This Guide

1. Read all information in this Course Selection Guide carefully.
2. Study the [Cumberland County High School Graduation Requirements Chart](#). Look at the courses required for graduation and consider the elective course options each year.
3. Choose courses that will prepare you for your intended career and/or college major. Career and College planning materials are available in the counseling office, media center, NC Works Career Center, Cumberland County Public Library, and the FTCC Career Center.
4. Discuss your choices with your parents using the [Registration Worksheet/Four-year Academic Plan](#).
5. Have your parents sign the completed [Registration Worksheet/Four-year Academic Plan](#).
6. Review your completed [Registration Worksheet/Four-year Academic Plan](#) with your counselor.

## Schedule Change Statement

The North Carolina Graduation and Future Ready Core Requirements, mandate that you must complete specific courses in order to graduate with a diploma. To avoid problems caused by schedule changes, you should complete and follow your Registration Worksheet/Four-year Academic plan and meet with your school counselor to review your graduation progress.

## Important Policy Information

The North Carolina Graduation and Future Ready Core Requirements, mandate that you must complete specific courses in order to graduate with a diploma. To avoid problems caused by schedule changes, you should complete and follow your Registration Worksheet/Four-year Academic plan and meet with your school counselor to review your graduation progress.

### **Promotion**

In order to receive a passing grade for a course, you (the student) must be in attendance for ninety percent (90%) of the class time or its equivalent as determined by the principal.

Beginning with the 2003-2004 school year:

Students who attend a high school in which a maximum of eight (8) credits can be earned during the school year (4x4 Schedule).

- For promotion from grade nine (9) to grade ten (10), each student must pass a minimum of six (6) units of course credits. One (1) of these units must be in English.
- For promotion from grade ten (10) to grade eleven (11), each student must pass a minimum of thirteen (13) units of course credit in grades nine (9), ten (10). Two (2) of these must be English.
- For promotion from grade eleven (11) to grade twelve (12), each student must pass a minimum of twenty (20) units of course credit in grades nine (9), ten (10), and eleven (11) and be in a position to graduate at the end of the regular school year. Three (3) of these must be in English.

### **Calculating Credits for Transfers into Cumberland County Schools - 3460-R1**

1. These guidelines are to be applied in conjunction with Board Policy 3460 – Graduation Requirements.
2. Credits required for graduation will be prorated for transferring students, including students transferring from out of state, home schools, private, online, and NC LEAs where students cannot earn 8 credits in 1 year.
3. Credits required for graduation will be calculated as follows:

- Overall potential units of credit x 1 (4-year total: 9th – 12th grade) = number of credits required minus
- Example Number of Credits required: 9th = 6, 10th = 6, 11th = 8, 12th = 8
    - 28 total – 4 = 24 to graduate.
    - Promotion credit requirements would adjust based on the following:
      - 12th = Graduation credits minus 8 (i.e., 24-8 = 16)
      - 11th = Graduation Credits minus 15 (i.e., 24-15 = 9)
      - 10th = Graduation Credits minus 22 (i.e., 24 – 22 = 2)
  - Students must complete local and state curriculum graduation requirements.
  - The principal or designee of the receiving school is responsible for evaluating the transfer student’s academic progress; courses taken at the former school; availability of courses at the receiving school; extenuating circumstances; and any other relevant information before granting credits and assigning classes.
  - The receiving principal may recognize credits, combine similar credits, and use his/her authority to “grade and classify” to facilitate a smooth transition.

**Attendance**

The State Board of Education requires that students be enrolled in the public schools for at least 5.5 hours of instruction daily or 27.5 hours weekly. Students will be assigned to a full instructional day unless they receive appropriate approvals.

**Course for Credit**

A credit course, one for which credit toward high school graduation is awarded and which qualifies as part of the instructional day:

- must consist of a minimum of 150 clock hours of instruction in a traditional schedule or
- must consist of a minimum of 135 clock hours of instruction in a block schedule;
- must be directed by a teacher.

One (1) unit of credit will be awarded for the course upon successful completion.

A course that consists of 300 clock hours of instruction in a traditional schedule or 270 clock hours of instruction in a block schedule will award two (2) units of credit upon successful completion. Credit will be awarded only at the completion of a two-credit hour course. Two-credit hour courses will not award a unit of credit after completion of only half of the course.

**Grading and Weighting of Grades**

Effective with the 2015-2016 school year, high school grades 9-12 shall use one grading scale. The conversion of grades to quality points is standardized. Implicit is a conversion of percentage grades to letter grades according to the following widely used scale: 90-100 = A; 80-89 = B; 70-79 = C; 60-69 = D; ≤ 59 = F

Grade point average calculations are based upon standardization of academic course levels, weighting of course grades, and grading scales. Effective with the freshman class of 2015-16, the weighting for Honors courses shall be one-half (.5) of a quality point. Effective with the freshman class of 2015-16, the weight for Advanced Placement/International Baccalaureate (AP/IB) and specified High School Connections courses shall be one (1) quality point grades to quality points is standardized. Grades and the corresponding number of quality points are shown below.

90-100 (A) = 4.0	80-89 (B) = 3.0	70-79 (C) = 2.0	60-69 (D) = 1.0	≤ 59 and below (F) = 0.0
WP = 0.0	INC = 0.0	AUD = 0.0	P = 0.0	WF = 0.0



## **Honors Courses**

The overall purpose of Honors courses is to provide a more rigorous curriculum in which instruction is expanded and special activities focus appropriately on both depth and breadth of content. Instructors place additional emphasis on the application of content within each course and across related disciplines. Honors courses require advanced reading lists, advanced writing assignments, and independent study/projects. Additional activities may include follow-up assignments on enrichment activities and a portfolio collection of work. You may enroll in an Honors course if you possess the appropriate prerequisite courses and choose to participate in this more rigorous course of study.

## **Advanced Placement Courses**

Advanced Placement courses expose high school students to college-level curriculum. Students may study challenging subjects of interest in a variety of areas: Arts, English, World Language, Mathematics, Science, and Social Studies. In order to enroll in AP coursework, students must possess appropriate.

Prerequisite courses and choose to participate in this advanced course of study. AP exams are administered in the spring of each school year. Colleges and universities may grant credit, placement, or both based on scores on the exams. AP courses require more rigorous and expansive reading, writing, and research than Honors or standard level courses. More information on Advanced Placement may be accessed via the Cumberland County Schools website at <http://k12ag.ccs.k12.nc.us/ap-information>.

## **Teleconferencing**

Teleconferencing was established in an effort to offer students the opportunity to take Advanced Placement courses and unique electives that may not be offered within the schools they attend. Two-way teleconferencing provides students with the opportunity to take coursework in a technology-rich environment while developing critical 21st century skills. To provide maximum learning opportunity and a greater degree of individualized instruction, the per-class student capacity is limited to 20. (Enrollment is based on a first come, first serve basis.)

Each student will utilize a laptop computer, provided by the school system, with high quality sound and picture capability. The television screen used by the instructor is divided into twenty sections, one for each student. When the instructor views the screen, he/she sees the entire class and is able to communicate directly with each individual student. Two-way student/teacher communication is enabled through the use of a headset worn by the student. Lessons are archived to give students access for review if they are absent from class or if they desire reinforcement. Course offerings are determined by the number of students which enroll in the course. Students must enroll in teleconferencing courses through their school counselor. Counselors will have a list of the projected course offerings for the upcoming school year. If you have questions regarding teleconferencing, please contact the office of Secondary Education at (910) 678-2420.

## Career Exploration Made Easy



MajorClarity is a career exploration platform that links academic learning to post-secondary preparation through a highly personalized, student-driven approach to career planning that reflects the unique strengths, abilities, interests, and long-term goals of each child. Interactive career path test-drives mix engaging expert field interviews with realistic workplace scenarios and practice activities that spark student interest and deepen their understanding of career pathways, job growth projections, and employment trends. MajorClarity offers a wide range of productivity, research, and academic and career planning tools to keep students organized and invested while strengthening communications between students, parents, educators, and district stakeholders.

### **What are the Benefits?**

- Best fit career matching that helps students identify compatible career paths based on their preferences, interests, and learning styles.
- User-friendly, pathway-aligned course selection tools allow students to make the most out of their academic experience.
- Select coursework opportunities that best align to the unique strengths, interests, and long-term goals of the student.
- Relevant lesson plans promote college and workplace readiness while exposing students to a wide range of industries and occupations.

### **How Do I Get Started?**

- Meet with your school counselor to help navigate the platform.
- Use your CCS Google Mail username and password to log into your account at: [platform.majorclarity.com](https://platform.majorclarity.com).
- Follow the prompts and answer the questions to determine your top traits and recommended test drives.
- Select your pathway to begin building your high school plan that aligns with your post-secondary interests.
- Use your account to help you complete the Registration Worksheet/Four-Year Academic Plan.

# Graduation Requirements

## High School Graduation Requirements: Future Ready Core

Cumberland County High School Future Ready Core Graduation Requirements		
<p>From the time you enter kindergarten, you are getting ready for high school graduation. To make sure you are on track, remember that every high school student must meet state and local requirements. To see your Course and Credit Requirements, look in the colored blocks for the section that matches when you entered ninth grade for the first time. Your school counselor is available to answer questions you may have about what you need to reach your goal of high school graduation.</p>		
Content Area	For Ninth Graders Entering in 2012-2013 and Later Future – Ready Core	For some Ninth Graders with Cognitive Disabilities 2000-> OCS Requirements (Selected IEP students excluded from EOC Proficiency Level requirements)
English	4 Credits I, II, III, IV	4 Credits OCS English I, II, III, IV
Mathematics	4 Credits NC Math I*, NC Math II, NC Math III and a 4 <sup>th</sup> math course to be aligned with the student's post high school plans. ** <i>A student, in rare instances, may be able to take an alternative math course sequence as outlined under State Board of Education Policy. Please see your counselor for more details.</i>	3 Credits OCS Introductory Mathematics I, OCS Mathematics I, OCS Financial Management
Science	3 Credits A physical science course, Biology, Earth Environmental Science	2 Credits OCS Applied Science, OCS Biology
Social Studies	4 Credits <b>For students who entered 2014-2015 through 2019-2020:</b> American History: The Founding Principles, Civics, and Economics, World History. The new courses may be substituted. At least one of: American History I, American History II, American History or AP US History and additional Social Studies course. *** <b>For students who begin high school in 2020-2021:</b> World History, American History, Founding Principles of the United States and North Carolina: Civic Literacy, and Economics & Personal Finance.	2 Credits American History I Civics & Economics
World Language	Not required for high school graduation. A two-credit minimum of the same foreign language is required for admission to a university in the UNC system.	Not required
Health/Physical Education	1 Credit Health/Physical Education	1 Credit Health/Physical Education
Electives or other requirements	6 Credits Required. 2 Elective credits in any combination of: Career and Technical Education (CTE), Arts Education, or World Languages 4 Elective credits from one of the following is strongly recommended: <ul style="list-style-type: none"> <li>• <u>CTE</u> – 4 credits within a NC Career Cluster with at least 1 credit at the second or complete level</li> <li>• <u>Arts Education</u> – 4 credits (any combination) from any of the four Arts Ed. disciplines with at least 1 credit at the second level</li> <li>• <u>JROTC</u> – 4 credits</li> <li>• <u>World Language</u> – 4 credits within the same world language</li> <li>• <u>Advanced Placement and International Baccalaureate</u> – 4 credits of AP/IB courses</li> <li>• <u>Cross Disciplinary</u> – 4 credits from any combination of courses that relate to students' career or other interests, with at least 1 credit at the second or honors level.</li> <li>• <u>Career and College Promise</u> – 4 high school credits in any of the 3 Career and College Promise Pathways</li> </ul> 6 Additional Electives from any content area	12 Credits Required. <ul style="list-style-type: none"> <li>• 6 Occupational Prep credits</li> <li>• 4 CTE credits</li> <li>• 2 additional elective credits</li> </ul>
<b>Total</b>	<b>28 Credits</b>	<b>24 Credits Plus any local requirements</b>

- \* Beginning in the 2007-2008 school year, the Math I requirement may be fulfilled by successfully completing Math I in the 8th grade. This course will count toward graduation requirements, but the students' GPA will be computed with only courses taken during the high school years.
- \*\* Students seeking to complete minimum application requirements for UNC universities must complete four mathematics courses, including a fourth math course with Math III as a prerequisite.
- \*\*\* A student who takes American History or AP US History instead of taking American History I and American History II must also take an additional social studies course in order to meet the four credits requirement.
- \*\*\*\*\* CPR requirement is a result of legislation HB 837.
- Completion of 300 hours of school-based training, 240 hours of community-based training, and 360 hours of paid employment. Footnote for OCS: Beginning in the second semester of the 2013-2014 school year, OCS graduate standards will total 24 credits.

**NOTE:** Graduation requirements for transfer students will be four (4) less than the maximum number of credits the student could have earned over four (4) regular high school years.

# High School Graduation Requirements: Exceptional Children's Program Occupational Course of Study

## Cumberland County High School Exceptional Children's Program Occupational Course of Study (OCS) Graduation Requirements

From the time you enter kindergarten, you are getting ready for high school graduation. To make sure you are on track, remember that every high school student must meet state and local requirements. To see your Course and Credit Requirements, look in the colored blocks for the section that matches when you entered ninth grade for the first time. Your school counselor is available to answer questions you may have about what you need to reach your goal of high school graduation.

Content Area	For some Ninth Graders with Cognitive Disabilities 2000-> OCS Requirements (Selected IEP students excluded from EOC Proficiency Level requirements)	For some Ninth Graders with Cognitive Disabilities 2021-2022-> OCS Requirements (Selected IEP students excluded from EOC Proficiency Level requirements)
<b>English</b>	<b>4 Credits</b> OCS English I, II, III, IV	<b>4 Credits</b> OCS English I, II, III, IV
<b>Mathematics</b>	<b>3 Credits</b> OCS Introductory Mathematics I, OCS Mathematics I, OCS Financial Management	<b>4 Credits</b> OCS Introductory Mathematics I, OCS Mathematics I, OCS Financial Management, OCS Employment Preparation IV: Math (to include 150 work hours)
<b>Science</b>	<b>2 Credits</b> OCS Applied Science, OCS Biology	<b>3 Credits</b> OCS Applied Science, OCS Biology, OCS Employment Preparation I: Science (to include 150 work hours)
<b>Social Studies</b>	<b>2 Credits</b> American History I Civics & Economics	<b>4 Credits</b> Founding Principles of the United States of America and North Carolina: Civic Literacy, Economic and Personal Finance, Employment Preparation II: Citizenship IA (to include 75 work hours), Employment Preparation II: Citizenship IB (to include 75 work hours)
<b>World Language</b>	<b>Not required</b>	<b>Not required</b>
<b>Health/Physical Education</b>	<b>1 Credit</b> Health/Physical Education	<b>1 Credit</b> Health/Physical Education
<b>Electives or other requirements</b>	<b>12 Credits Required.</b> <ul style="list-style-type: none"> <li>• 6 Occupational Prep credits</li> <li>• 4 CTE credits</li> <li>• 2 Additional Elective Credits</li> </ul>	<b>6 Credits Required.</b> <ul style="list-style-type: none"> <li>• <b>2 Additional Employment Preparation Education credits</b>, which shall be: Employment Preparation III: Citizenship IIA (to include 75 work hours) and Employment Preparation III: Citizenship IIB (to include 75 work hours)</li> <li>• <b>4 CTE credits</b></li> <li>• <b>Career Portfolio</b></li> <li>• <b>Completion of the student's IEP objectives</b></li> </ul>
<b>Work Hours</b>		<b>The 600 total work hours included in Employment Preparation I, II, III, IV shall be as follows:</b> <ul style="list-style-type: none"> <li>• 150 hours of school-based training with work activities and experiences that align with student's post school goals, and</li> <li>• 225 hours of community-based training, and</li> <li>• 225 hours of paid employment or 225 hours of unpaid vocational training, unpaid internship, paid employment at community rehabilitation facilities, and volunteer and/or community services hours.</li> </ul>
<b>Total</b>	<b>24 Credits Plus any local requirements</b>	<b>22 Credits Plus any local requirements</b>

**NOTE:** Graduation requirements for transfer students will be four (4) less than the maximum number of credits the student could have earned over four (4) regular high school years.

# Registration

## Registration Worksheet: Four-year Academic Plan

<b>Registration Worksheet/Four-year Academic Plan</b>								
NAME:	LAST			FIRST		MIDDLE		IDENTIFICATION NUMBER
COURSE PLANNING CHART								
Grade 9		Grade 10		Grade 11		Grade 12		
English		English		English		English		
Math		Math		Math		Math		
Science		Science		Science		Science		
Social Studies		Social Studies		Social Studies		Social Studies		
Health/PE		Elective		Elective		Elective		
Elective		Elective		Elective		Elective		
Elective		Elective		Elective		Elective		
Elective		Elective		Elective		Elective		
<b>Total Units</b>		<b>Total Units</b>		<b>Total Units</b>		<b>Total Units</b>		
ADDITIONAL COURSES (8 <sup>th</sup> Grade (High School Credit Course), Summer School, NCVPS, and High School Connections)								
<b>Total Units</b>		<b>Total Units</b>		<b>Total Units</b>		<b>Total Units</b>		

# Graduation Requirements Checklist

Student Name: \_\_\_\_\_

ID#: \_\_\_\_\_

<b>ENGLISH</b> (4 Credits)	9 <sup>th</sup> Grade-Eng. I	10 <sup>th</sup> Grade-Eng. II	11 <sup>th</sup> Grade-Eng. III OR AP Language	12 <sup>th</sup> Grade-Eng. IV OR AP Literature
	<input type="checkbox"/> completed	<input type="checkbox"/> completed	<input type="checkbox"/> completed	<input type="checkbox"/> completed
<b>MATHEMATICS</b> (4 Credits)	NC Math I	NC Math II	NC Math III	4 <sup>th</sup> Math Course (aligned with the student's post high school plans)
	<input type="checkbox"/> completed	<input type="checkbox"/> completed	<input type="checkbox"/> completed	<input type="checkbox"/> completed
<b>SCIENCE</b> (3 Credits)	Earth/Environmental Science		Biology	A Physical Science Course (Physical Science, Chemistry, or Physics)
	<input type="checkbox"/> completed		<input type="checkbox"/> completed	<input type="checkbox"/> completed
<b>SOCIAL STUDIES</b> (4* Credits) Students Enrolled 2014-15 & 2019- 2020	World History	American History I	American History II	AH: FPC&E or FPUSNC:CL  <input type="checkbox"/> completed
	<input type="checkbox"/> completed	<b>OR</b>		
		AP US History or Ameri- can History	4 <sup>th</sup> Social Studies Course	
<input type="checkbox"/> completed	<input type="checkbox"/> completed	<input type="checkbox"/> completed	<input type="checkbox"/> completed	
<b>SOCIAL STUDIES</b> (4* Credits) Students beginning 9th grade 2020- 2021	World History	American History, American History I, American History II, or AP US History	AH: FPC&E or FPUSNC:CL	Economics & Personal Finance
	<input type="checkbox"/> completed	<input type="checkbox"/> completed	<input type="checkbox"/> completed	<input type="checkbox"/> completed
<b>HEALTH &amp; PE</b> (1 Credit)	Health/PE (1 Credit)		CPR (0 Credit/pass an approved skills test)	
	<input type="checkbox"/> completed		<input type="checkbox"/> completed	
<b>WORLD LANGUAGE</b>	Not required for graduation. A two-credit minimum of the same foreign language is required for admission to a university in the UNC system.			
	<input type="checkbox"/> completed <input type="checkbox"/> completed			
<b>ELECTIVES</b> (6 required Credits)	2 Elective credits of any combination from either:		4 Elective credits (four credit concentration) (strongly recommended)	
	<ul style="list-style-type: none"> <li>● Career and Technical Education (CTE)</li> <li>● Arts Education</li> <li>● World Languages</li> </ul> <input type="checkbox"/> completed <input type="checkbox"/> completed		from one of the following: <ul style="list-style-type: none"> <li>● Cross-Disciplinary</li> <li>● Career and Technical Education (CTE)</li> <li>● Arts Education</li> <li>● JROTC</li> <li>● World Language</li> <li>● Advanced Placement/International Baccalaureate</li> <li>● Career &amp; College Promise</li> </ul> <input type="checkbox"/> completed <input type="checkbox"/> completed <input type="checkbox"/> completed <input type="checkbox"/> completed	

Reviewed on: \_\_\_\_\_  
Date

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Parent Signature

# High School Mathematics Registration Information



## High School Mathematics Registration Information 2021-2022

- Standards for the fourth math courses have been revised and will be implemented in 2020-2021. Courses with new standards include Math 4, Math 4 Honors, Precalculus Honors, Discrete Math for Computer Science and Discrete Math for Computer Science Honors.
- AFM & SREB will no longer be offered. Credit recovery for AFM may be offered to students previously enrolled in this course.
- A student's fourth mathematics course should be aligned with the student's post high school plans.
- NC Math 4 is intended for students who will continue their education in a Non-Stem related field.
- Precalculus Honors is intended for students who will continue their education in a Stem related field.
- Discrete Math for Computer Science is intended for students pursuing a Computer Science or related field.

### Recommendations for Most Rigorously Appropriate Mathematics Course Placement for Rising 9<sup>th</sup> Graders

Schools will place students in appropriate course levels, based on any one or more data points below.

8th Grade Course	Data Source	Threshold	Recommendation
Math 8	8 <sup>th</sup> Grade Math Course Grade	A or B in either level	NC Math 1
	or		
	8 <sup>th</sup> Grade EOG Score for Math	4 or 5	NC Math 1 Honors
		3	NC Math 1
	2 and below	Foundations of NC Math 1	
NC Math 1	NC Math 1 Course Grade	A or B	NC Math 2 (Honors)
		C or D	NC Math 2
	or		
	NC Math 1 EOC	3, 4, or 5	NC Math 2 (Honors)
2 and below		Foundations of NC Math 2 or NC Math 2	

### Additional Registration Information

Students transferring in with credits from a traditional pathway are recommended for the following math course placements:

Math Credits Transferring In	Math Course Placement
Algebra I	NC Math 2
Algebra I, Geometry	Both NC Math 2 and NC Math 3 <i>Students going from Geometry to NC Math 3 will miss significant portions of algebra content.</i>
Algebra I, Algebra II	Both NC Math 2 and NC Math 3 <i>Students going from Algebra II to NC Math 3 will miss significant portions of geometry content.</i>

## Typical High School Mathematics Course Sequences

Below are typical course sequences for taking mathematics in high school. This is not all possible scenarios. The gray-shaded box indicates the last course the student must complete to satisfy graduation requirements. Courses in **BOLD** indicate a math credit. Courses not in bold indicate elective credit.

Year 1		Year 2		Year 3		Year 4
Foundations of NC Math 1	<b>NC Math 1</b>	Foundations of NC Math 2	<b>NC Math 2</b>	Foundations of NC Math 3	<b>NC Math 3</b>	<b>NC Math 4</b>
<b>NC Math 1</b>		<b>NC Math 2</b>		<b>NC Math 3</b>		<b>NC Math 4 or Precalculus Honors or Discrete Math for CS</b>
<b>NC Math 1 (Honors)</b>		<b>NC Math 2 (Honors)</b>		<b>NC Math 3 (Honors)</b>		<b>NC Math 4 (Honors) or Precalculus Honors or Discrete Math for CS Honors</b>
<b>NC Math 2</b>		<b>NC Math 3</b>		<b>Precalculus (Honors) or NC Math 4 (Honors)</b>		<b>AP Statistics and/or Discrete Math for CS (Honors)</b>
<b>NC Math 2 (Honors)</b>		<b>NC Math 3 (Honors)</b>		<b>Precalculus (Honors) or Discrete Math for CS Honors</b>		<b>AP Calculus AB/BC and/or AP Statistics</b>
<b>NC Math 3 (Honors)</b>		<b>Precalculus (Honors)</b>		<b>AP Calculus AB</b>	<b>AP Calculus BC</b>	<b>AP Statistics</b>



## Career and Technical Education (CTE) Credentials

Credentials are defined as certifications issued by professional associations, vendors, or employers. Credentials demonstrate that the student or employee "has acquired the designated knowledge, skills and abilities to perform a specific job" (Bielick, Cronen, Stone, Montaquila & Roth, 2013). A credential can be based on a written, oral or performance-based examination, or some combination of the three, and may require a prescribed period of supervised practice after successfully passing the exam.

Credentials differ from licenses, which are generally issued by a governmental entity. Licenses frequently are required for a practitioner to enter a field, while credentials help potential employees get hired or qualify them for a higher pay level but are not legally mandated.

Education and work-related credentials are important milestones for many individual career pathways. Both at the secondary and postsecondary level, students have the opportunity to earn credentials that verify skill mastery, educational attainment, and the authority to perform a task or operation – conveying real economic benefits in the labor market. Credentials are also valuable to employers, allowing them to determine the skill or education level of job applicants without having to perform an assessment for each one.

Certifications indicate mastery or competency in specific knowledge, skills or processes that can be measured against a set of accepted standards. These are not tied to a specific educational program but are typically awarded through assessment and validation of skills and in cooperation with business, trade association or industry groups.

The following credentials are available through Career and Technical Education Courses in Cumberland County Schools:

- Adobe Creative Cloud
- Autodesk
- Certified Cybersecurity Associate (PCCSA)
- Certified SolidWorks
- Community Emergency Response Team (CERT) IS-317
- CompTIA Security+
- CPR/AED
- EMT Basic
- EverFi
- Microsoft Office Specialist
- NC NCCER
- NCOSFM-Firefighter
- NIMS (DHS/FEMA)
- OSHA 10-Hour Industry Certification
- Woodwork Career Alliance (WCA) Sawblade Certificate
- Pre-Professional Assessment and Certification in Culinary Arts
- ANSI-Accredited Certified Food Protection Manager
- Automotive Service Excellence (ASE)
- Certified Protection Officer (CPO)
- CFR 14 Part 107 UAS Remote Pilot Certification
- CompTIA IT Fundamentals+
- Conover Credential Workplace Readiness
- Elanco Veterinary Medical Applications Certification
- Equine Management and Evaluation Certification
- First Aid
- NAFTrack
- NCDOT NC UAS Operator Permit
- NECI 911 Basic Communications
- North Carolina Nurse Aide I
- Platinum ProLevel 1 for Refinishing
- Venture Entrepreneurial Expedition

## Cumberland County Schools Career Pathways

Career Pathways provide engaging student learning experiences that prepare students for coursework after high school, future careers, and life as productive citizens. Career Pathways enhance core academic, technical, and employability skills to provide education and training for high-demand, high-opportunity careers. Cumberland County Schools offers career pathways in 14 career clusters. For each cluster, there are pathway course sequences listed to help with coursework planning for high school and post-secondary options through FTCC High School Connections through advanced coursework options and career opportunities. Students can also explore intracurricular activities through Career and Technical Student Organizations. Major Clarity can help students identify the career pathway that best fits their interests and abilities. Options may vary. See your School Counselor for details.

**Agriculture, Food, & Natural Resources Career Cluster**

Animal Science Career Pathway (ANSC)				
Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
AU022YB Exploring Animal and Plant Science  AU022YD Exploring Agricultural Issues AU022YE  Fundamentals of the Agricultural Science Program  AU022YF Agriculture and Our Social and Economic Well-Being CC582YA Exploring Personal Characteristics and Careers  CC582YB Exploring Careers and Employment		AA21 Animal Science I	AA22 Animal Science II OR  AA23 Animal Science II-Small Animal	CS95 CTE Advanced Studies OR  CS96 CTE Apprenticeship OR  CS97 CTE Internship OR  Academy of Agriculture & Natural Resources-CFHS
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint  CC45 Career Management		
	Supplemental Technical Courses	AU10 Agriscience Applications		
	High School Connections	Approved Career & College Promise Career Technical Education Pathway		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Animal  Science Associate of Applied Science-Agribusiness  Technology Associate of Applied Science-Equine  Associate of Applied Science-Veterinary Technology	Bachelor of Science-Animal Science  Bachelor of Science-Applied Ecology  Bachelor of Science-Biological and Agricultural Engineering	\$26,300-\$32,600  Four Year College Post-Graduate Salary Range:  \$39,000-\$92,000	Agriculture & Food Science Technician  Environmental Science Technician  Environmental Engineer Forest & Conservation Technician  Natural Science Managers  Poultry Scientist  Veterinarian  Veterinary Technician	
Intracurricular Career and Technical Student Organizations: FFA				

- \* Salary ranges for pathways are based on NC median income as reported by NC Commerce.
- \* Check with colleges of interests for more specific major options.
- \* The orange highlighted course indicates the concentrator course in the pathway for ACT WorkKeys eligibility.

## Equine Science Career Pathway (EQSC)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
AU022YB Exploring Animal and Plant Science AU022YD Exploring Agricultural Issues AU022YE Fundamentals of the Agricultural Science Program AU022YF Agriculture and Our Social and Economic Well-Being. CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment		AA31 Equine Science I	AA32 Equine Science II	CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship OR Academy of Agriculture & Natural Resources-CFHS
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	AU10 Agriscience Applications AA21 Animal Science I		
	High School Connections	Approved Career & College Promise Career Technical Education Pathway		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Animal Science Associate of Applied Science-Agribusiness Technology Associate of Applied Science-Equine Associate of Applied Science-Veterinary Technology	Bachelor of Science-Animal Science Bachelor of Science-Applied Ecology Bachelor of Science-Biological and Agricultural Engineering	\$26,300-\$32,600  Four Year College Post-Graduate Salary Range:  \$39,000-\$92,000	Agriculture & Food Science Technician Environmental Science Technician Environmental Engineer Forest & Conservation Technician Natural Science Managers Poultry Scientist Veterinarian Veterinary Technician Zoologist	
Intracurricular Career and Technical Student Organizations: FFA				

## Plant Systems Career Pathway (PLSV)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
AU022YB Exploring Animal and Plant Science AU022YD Exploring Agricultural Issues AU022YE Fundamentals of the Agricultural Science Program AU022YF Agriculture and Our Social and Economic Well-Being		AP41 Horticulture I	AP42 Horticulture II OR AP44 Horticulture II – Landscaping	CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship OR Academy of Agriculture & Natural Resources-CFHS
CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	AU10 Agriscience Applications		
	High School Connections	C1524AH1 Horticulture-Basic		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:  Agriculture & Food Science Technician Environmental Science Technician Environmental Engineer Forest & Conservation Technician Natural Science Managers Poultry Scientist Veterinarian Veterinary Technician Zoologist	
Associate of Applied Science-Animal Science Associate of Applied Science-Agribusiness Technology Associate of Applied Science-Equine Associate of Applied Science-Veterinary Technology	Bachelor of Science-Animal Science Bachelor of Science-Applied Ecology Bachelor of Science-Biological and Agricultural Engineering	\$26,300-\$32,600		
		Four Year College Post-Graduate Salary Range:		
		\$39,000-\$92,000		

Intracurricular Career and Technical Student Organizations: FFA

**Architecture and Construction Career Cluster**

Carpentry Career Pathway (CARP)				
Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
CC582YA Exploring Personal Characteristics and Careers  CC582YB Exploring Careers and Employment	IC00 Core and Sustainable Construction	IC21 Carpentry I	IC22 Carpentry II	IC23 Carpentry III OR  CS95 CTE Advanced Studies OR  CS96 CTE Apprenticeship OR  CS97 CTE Internship OR  Academy of Green Energy Technology-DBHS
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	FI51 Interior Design I CS11 Project Management I		
	High School Connections	C35100H1 A/C, Heating & Refrigeration-Basic C35140H1 Construction Technology C35130H1 Electricity, Motors, Controls PLC-Basic C40100H1 Green Sustainable Architecture C35130H1 Photovoltaic Systems C35300H1 Plumbing-Basic		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Architectural Technology  Associate of Applied Science-Building Construction Technology  Associate of Applied Science-Civil Engineering  Associate of Applied Science-HVAC  Associate of Applied Science-Electronic Engineering Technology  Associate of Applied Science-Electrical Systems Technology  Carpentry Diploma  Plumbing Diploma	Bachelor of Science-Architecture Engineering  Bachelor of Science-Civil Engineering  Bachelor of Science-Mechanical Engineering	\$27,390-\$51,260	Architect  Architecture & Civil Drafter  Carpenter  Civil Engineering Technician  Civil Engineer  Construction Manager  Cost Estimator  Electrician  HVAC Mechanic  Mechanical Engineer  Plumber	
		Four Year College Post-Graduate Salary Range:		
		\$38,380-\$97,290		
Intracurricular Career and Technical Student Organizations: SkillsUSA				

## Drafting Architectural Career Pathway (DRFA)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation	
CC582YA Exploring Personal Characteristics and Careers  CC582YB Exploring Careers and Employment		IC61 Drafting I	IC62 Drafting II – Architectural	IC63 Drafting III – Architectural OR  CS95 CTE Advanced Studies OR  CS96 CTE Apprenticeship OR  CS97 CTE Internship	
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint  CC45 Career Management			
	Supplemental Technical Courses	FI51 Interior Design I  CS11 Project Management I			
	High School Connections	C35100H1 A/C, Heating & Refrigeration-Basic  C35140H1 Construction Technology  C35130H1 Electricity, Motors, Controls PLC-Basic  C40100H1 Green Sustainable Architecture  C35130H1 Photovoltaic Systems  C35300H1 Plumbing-Basic			
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:		
Associate of Applied Science-Architectural Technology  Associate of Applied Science-Building Construction Technology  Associate of Applied Science-Electronic Engineering Technology  Associate of Applied Science-Civil Engineering  Associate of Applied Science-HVAC  Associate of Applied Science-Electronic Engineering Technology Associate of Applied Science-Electrical Systems Technology  Carpentry Diploma  Plumbing Diploma	Bachelor of Science-Architecture Engineering  Bachelor of Science-Civil Engineering  Bachelor of Science-Mechanical Engineering	\$27,390-\$51,260	Architect  Architecture & Civil Drafter  Carpenter  Civil Engineering Technician  Civil Engineer  Construction Manager  Cost Estimator  Electrician  HVAC Mechanic  Mechanical Engineer  Plumber		
		Four Year College Post-Graduate Salary Range:			\$38,380-\$97,290
		Intracurricular Career and Technical Student Organizations: SkillsUSA			

## Interior Design Career Pathway (INDE)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
FC012YC Exploring Apparel and Interior Design  CC582YA Exploring Personal Characteristics and Careers  CC582YB Exploring Careers and Employment		FI51 Interior Design I	FI52 Interior Design II	CS95 CTE Advanced Studies OR  CS96 CTE Apprenticeship OR  CS97 CTE Internship OR  Academy of Green Energy Technology-DBHS
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint  CC45 Career Management		
	Supplemental Technical Courses	CS11 Project Management I  IC61 Drafting I  II31 Adobe Visual Design  FA31 Apparel and Textile Production		
	High School Connections	C35100H1 A/C, Heating & Refrigeration-Basic  C35140H1 Construction Technology  C35130H1 Electricity, Motors, Controls PLC-Basic  C40100H1 Green Sustainable Architecture  C35130H1 Photovoltaic Systems  C35300H1 Plumbing-Basic		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Architectural Technology  Associate of Applied Science-Building Construction Technology  Associate of Applied Science-Civil Engineering  Associate of Applied Science-HVAC  Associate of Applied Science-Electronic Engineering Technology  Associate of Applied Science-Electrical Systems Technology  Carpentry Diploma  Plumbing Diploma	Bachelor of Science-Architecture Engineering  Bachelor of Science-Civil Engineering  Bachelor of Science-Mechanical Engineering	\$27,390-\$51,260	Architect  Architecture & Civil Drafter  Carpenter  Civil Engineering Technician  Civil Engineer  Construction Manager  Cost Estimator  Electrician  HVAC Mechanic  Mechanical Engineer  Plumber	
		Four Year College Post-Graduate Salary Range:		
		\$38,380-\$97,290		
Intracurricular Career and Technical Student Organizations: FCCLA				



## Masonry Career Pathway (MASO)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
CC582YA Exploring Personal Characteristics and Careers  CC582YB Exploring Careers and Employment	IC00 Core and Sustainable Construction	IC11 Masonry I	IC11 Masonry II	IC13 Masonry III OR CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship OR Academy of Green Energy Technology-DBHS
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	CS11 Project Management I   IC61 Drafting I II31 Adobe Visual Design FA31 Apparel and Textile Production I		
	High School Connections	C35100H1 A/C, Heating & Refrigeration-Basic C35140H1 Construction Technology C35130H1 Electricity, Motors, Controls PLC-Basic C40100H1 Green Sustainable Architecture C35130H1 Photovoltaic Systems C35300H1 Plumbing-Basic		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Architectural Technology  Associate of Applied Science-Building Construction Technology  Associate of Applied Science-Civil Engineering  Associate of Applied Science-HVAC  Associate of Applied Science-Electronic Engineering Technology Associate of Applied Science-Electrical Systems Technology  Carpentry Diploma  Plumbing Diploma	Bachelor of Science-Architecture Engineering  Bachelor of Science-Civil Engineering  Bachelor of Science-Mechanical Engineering	\$27,390-\$51,260	Architect  Architecture & Civil Drafter  Carpenter  Civil Engineering Technician  Civil Engineer  Construction Manager  Cost Estimator  Electrician  HVAC Mechanic  Mechanical Engineer  Plumber	
		Four Year College Post-Graduate Salary Range:		
		\$38,380-\$97,290		

Intracurricular Career and Technical Student Organizations: SkillsUSA

**Arts, Audio/Video Technology & Communications Career Cluster**

Adobe Academy Career Pathway (ADAC)				
Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
BU012YA Computer Science Discoveries I		II31 Adobe Visual Design	II32 Adobe Digital Design OR II33 Adobe Video Design	CS95 CTE Advanced Studies OR
BU012YB Computer Science Discoveries II				CS96 CTE Apprenticeship OR
BU012YC Computer Science Discoveries III				CS97 CTE Internship
CC582YA Exploring Personal Characteristics and Careers				
CC582YB Exploring Careers and Employment	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	MM51 Marketing		
	High School Connections	C25450H2 3 D Animation C30100H1 Graphic Design C25450H1 Simulation and Game Development		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Advertising & Graphic Design	Bachelor of Arts-Broadcast Communications	\$22,130-\$37,100	Art Director	
Associate of Applied Science-Digital Media Technology	Bachelor of Arts-Graphic Design Bachelor of Arts-Journalism	Four Year College Post-Graduate Salary Range:	Broadcast Technician	
Associate of Applied Science-Simulation and Game Development	Bachelor of Arts-Mass Communications	\$29,340-\$88,400	Graphic Designer	
	Bachelor of Arts-Media Arts		Multimedia Artists & Animator	
			Technical Writer	
			Writer/Author	
Intracurricular Career and Technical Student Organizations: SkillsUSA				

## Apparel and Textile Production Career Pathway (ATPR)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
FC012YC Exploring Apparel and Interior Design  CC582YA Exploring Personal Characteristics and Careers  CC582YB Exploring Careers and Employment		FA31 Apparel and Textile Production I	FA32 Apparel and Textile Production II	CS95 CTE Advanced Studies OR  CS96 CTE Apprenticeship OR  CS97 CTE Internship
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint  CC45 Career Management		
	Supplemental Technical Courses	MI21 Fashion Merchandising  ME11 Entrepreneurship I  II31 Adobe Visual Design  CS11 Project Management I		
	High School Connections	C25450H2 3 D Animation C30100H1 Graphic Design  C25450H1 Simulation and Game Development		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Advertising & Graphic Design  Associate of Applied Science-Digital Media Technology  Associate of Applied Science-Simulation and Game Development	Bachelor of Arts-Broadcast Communications  Bachelor of Arts-Graphic Design Bachelor of Arts-Journalism  Bachelor of Arts-Mass Communications Bachelor of Arts-Media Arts	\$22,130-\$37,100	Art Director Broadcast Technician  Graphic Designer Multimedia Artists & Animator  Technical Writer Writer/Author	
		Four Year College Post-Graduate Salary Range:		
		\$29,340-\$88,400		
Intracurricular Career and Technical Student Organizations: FCCLA				

## Programming & Broadcasting (PB/Local Option)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
FC012YC Exploring Apparel and Interior Design CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment		IL70 Programming & Broadcasting I	IL71 Programming & Broadcasting II	CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	MI21 Fashion Merchandising ME11 Entrepreneurship I II31 Adobe Visual Design CS11 Project Management I C25450H2 3 D Animation		
	High School Connections	C30100H1 Graphic Design C25450H1 Simulation and Game Development		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Advertising & Graphic Design Associate of Applied Science-Digital Media Technology Associate of Applied Science-Simulation and Game Development	Bachelor of Arts-Broadcast Communications	\$22,130-\$37,100	Art Director Broadcast Technician Graphic Designer Multimedia Artists & Animator Technical Writer Writer/Author	
	Bachelor of Arts-Graphic Design Bachelor of Arts-Journalism	<b>Four Year College Post-Graduate Salary Range:</b>		
	Bachelor of Arts-Mass Communications Bachelor of Arts-Media Arts	\$29,340-\$88,400		
Intracurricular Career and Technical Student Organizations: FCCLA				

**Business Management and Administration Career Cluster**

Entrepreneurship Career Pathway (ENTRE)				
Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
BU202YA Exploring Business and Entrepreneurship		ME11 Entrepreneurship I	ME12 Entrepreneurship II	CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship
BU202YB Exploring Economic Systems				
BU202YC Exploring Business Activities	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
BU202YD Exploring Business Procedures and Leadership	Supplemental Technical Courses	BF10 Principles of Business and Finance MM51 Marketing BM20 Microsoft Excel BM40 Microsoft Access		
CC582YA Exploring Personal Characteristics and Careers	High School Connections	C25120H1 Business Foundations C25310H2 Healthcare Customer Service C25370H2 Office Administration Legal		
CC582YB Exploring Careers and Employment				
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Entrepreneurship	Bachelor of Science-Business Administration	\$22,900-\$38,300	Administrative Services Manager Compensation & Benefits Manager Computer & Information Systems Manager Customer Service Representative Entrepreneur General & Operations Manager Human Resource Assistant Management Analyst Office Support Personnel	
Associate of Applied Science-General Business Administration	Bachelor of Science-Business Analytics	Four Year College Post-Graduate Salary Range:		
Associate of Applied Science-General Office Administration	Bachelor of Science-International Business	\$38,420-\$135,740		
Associate of Science-Human Resources Management	Bachelor of Science-Management			
Associate of Science-Medical Office Professional	Bachelor of Science-Management Information Systems			
Intracurricular Career and Technical Student Organizations: DECA, FBLA				

## General Management Career Pathway (GMGT)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
BU202YA Exploring Business and Entrepreneurship BU202YB Exploring Economic Systems BU202YC Exploring Business Activities BU202YD Exploring Business Procedures and Leadership CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment	BF10 Principles of Business and Finance  Supplemental Career Employability Skills Courses  Supplemental Technical Courses  High School Connections	BB40 Business Management I  Two Year College Post-Graduate Salary Range: \$22,900-\$38,300  Four Year College Post-Graduate Salary Range: \$38,420-\$135,740	BB42 Business Management II  BM10 Microsoft Word and PowerPoint CC45 Career Management  BA10 Accounting I BB30 Business Law BM20 Microsoft Excel BM40 Microsoft Access C25120H1 Business Foundations C25310H2 Healthcare Customer Service C25370H2 Office Administration Legal	CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship  Careers: Administrative Services Manager Compensation & Benefits Manager Computer & Information System Manager Customer Service Representative Entrepreneur General & Operations Manager Human Resource Assistant Management Analyst Office Support Personnel
Two Year College Major Options:	Four Year College Major Options			
Associate of Applied Science-Entrepreneurship Associate of Applied Science-General Business Administration Associate of Applied Science-General Office Administration Associate of Science-Human Resources Management Associate of Science-Medical Office Professional	Bachelor of Science-Business Administration Bachelor of Science-Business Analytics Bachelor of Science-International Business Bachelor of Science-Management Bachelor of Science-Management Information Systems			
Intracurricular Career and Technical Student Organizations: DECA, FBLA				

## Project Management Career Pathway (PMGT)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
BU202YA Exploring Business and Entrepreneurship BU202YC Exploring Business Activities BU202YD Exploring Business Procedures and Leadership CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment		CS11 Project Management I	CS12 Project Management II	CS13 Project Management III OR CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	BM20 Microsoft Excel BM40 Microsoft Access BF10 Principles of Business and Finance C25120H1 Business Foundations		
	High School Connections	C25310H2 Healthcare Customer Service C25370H2 Office Administration Legal		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Entrepreneurship Associate of Applied Science-General Business Administration Associate of Applied Science-General Office Administration Associate of Science-Human Resources Management Associate of Science-Medical Office Professional	Bachelor of Science-Business Administration Bachelor of Science-Business Analytics Bachelor of Science-International Business Bachelor of Science-Management Bachelor of Science-Management Information Systems	\$22,900-\$38,300 Four Year College Post-Graduate Salary Range: \$38,420-\$135,740	Administrative Services Manager Compensation & Benefits Manager Computer & Information Systems Manager Customer Service Representative Entrepreneur General & Operations Manager Human Resource Assistant Management Analyst Office Support Personnel	
Intracurricular Career and Technical Student Organizations: DECA, FBLA				

**Finance Career Cluster**

Accounting Career Pathway (ACCT)				
Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
BU202YA Exploring Business and Entrepreneurship BU202YB Exploring Economic Systems BU202YC Exploring Business Activities BU202YD Exploring Business Procedures and Leadership CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment		BA10 Accounting I	BA20 Accounting II	CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship OR Academy of Finance-DBHS
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	BM20 Microsoft Excel BM40 Microsoft Access		
	High School Connections	C25800H1 Accounting Foundations		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Finance	Bachelor of Science-Accounting	\$29,810-\$49,440	Accountant Auditor Auto Insurance Appraiser Claims Adjuster/Examiner/Investigator Credit Analyst Financial Advisor Financial Analyst Insurance Sales Agent Loan Clerk Loan Officer	
Associate of Applied Science-Accounting and Finance	Bachelor of Science-Economics	Four Year College Post-Graduate Salary Range:		
Associate of Applied Science-Financial Services	Bachelor of Science-Finance	\$55,490-\$80,740		
Intracurricular Career and Technical Student Organizations: FBLA				



## Financial Securities and Investments Career Pathway (FSIN)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
BU202YA Exploring Business and Entrepreneurship BU202YB Exploring Economic Systems BU202YC Exploring Business Activities BU202YD Exploring Business Procedures and Leadership CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment	BF10 Principles of Business	BF21 Wealth Building	BF22 Wealth Management	CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	BM20 Microsoft Excel BM40 Microsoft Access		
	High School Connections	C25800H1 Accounting Foundations		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Finance Associate of Applied Science-Accounting and Finance Associate of Applied Science-Financial Services	Bachelor of Science-Accounting	\$29,810-\$49,440	Accountant Auditor Auto Insurance Appraiser Claims Adjuster/Examiner/Investigator Credit Analyst Financial Advisor Financial Analyst Insurance Sales Agent Loan Clerk Loan Officer	
	Bachelor of Science-Economics	Four Year College Post-Graduate Salary Range:		
	Bachelor of Science-Finance	\$55,490-\$80,740		
Intracurricular Career and Technical Student Organizations: FBLA				

**Health Sciences Career Cluster**

Biomedical Technology Career Pathway (BTCP)				
Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
HB052YA Fundamentals of Biotechnology HB052YB Introduction to Biotechnology HB052YC Biotechnology and Healthcare CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment		HU40 Health Science I	HB11 Biomedical Technology	CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship OR Academy of Health Sciences & Technology-WOHS
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	HUXX Foundations of Health Science HH32 Pharmacy Technician C456330H1 Health and Fitness Science		
	High School Connections	C45480H1 Nurse Aide C45180H1 Central Sterile Processing		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Dental Hygiene Associate of Applied Science-Emergency Medical Science Associate of Applied Science-Nursing Associate in General Education-Nursing Associate of Applied Science-Pharmacy Technology Associate of Applied Science-Physical Therapy Assistant Associate of Applied Science-Radiography Associate of Applied Science-Respiratory Therapy Associate of Applied Science-Speech Language Pathology Assistant Associate of Applied Science-Surgical Technology Dental Assistant Diploma Nurse Aide Diploma	Bachelor of Science-Biochemistry	\$26,450-\$56,410	Dental Hygienist Licensed Practical Nurse Medical Assistant Nurse Aide Physical Therapist Assistant Physical Therapist Pharmacy Assistant Radiation Therapist Radiologic Technologist Registered Nurse Respiratory Therapist Surgical Technologist	
	Bachelor of Science-Biology Pre-Medical Tracks	Four Year College Post-Graduate Salary Range:		
	Bachelor of Science-Exercise and Sport Science Bachelor of Science-Health Science Bachelor of Science-Kinesiology Bachelor of Science-Pharmaceutical Sciences Bachelor of Science-Nursing	\$50,330-\$62,940		
Intracurricular Career and Technical Student Organizations: HOSA Future Health Professionals				

## Healthcare Professional Career Pathway (HPCP)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
HB052YA Fundamentals of Biotechnology HB052YB Introduction to Biotechnology HB052YC Biotechnology and Healthcare CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment		HU40 Health Science I	HU42 Health Science II	HN43 Nursing Fundamentals and Practicum (2 credits) OR CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship OR Academy of Health Sciences & Technology-WOHS
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	HUXX Foundations of Health Science HH32 Pharmacy Technician		
	High School Connections	C456330H1 Health and Fitness Science C45480H1 Nurse Aide C45180H1 Central Sterile Processing		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Dental Hygiene	Bachelor of Science-Biochemistry	\$26,450-\$56,410	Dental Hygienist Licensed Practical Nurse Medical Assistant Nurse Aide Physical Therapist Assistant Physical Therapist Pharmacy Assistant Radiation Therapist Radiologic Technologist Registered Nurse Respiratory Therapist Surgical Technologist	
Associate of Applied Science-Emergency Medical Science	Bachelor of Science-Biology Pre-Medical Tracks	Four Year College Post-Graduate Salary Range:		
Associate of Applied Science-Nursing	Bachelor of Science-Exercise and Sport Science	\$50,330-\$62,940		
Associate in General Education-Nursing	Bachelor of Science-Health Science			
Associate of Applied Science-Pharmacy Technology	Bachelor of Science-Kinesiology			
Associate of Applied Science-Physical Therapy Assistant	Bachelor of Science-Pharmaceutical Sciences			
Associate of Applied Science-Radiography	Bachelor of Science-Nursing			
Associate of Applied Science-Respiratory Therapy				
Associate of Applied Science-Speech Language Pathology Assistant				
Associate of Applied Science-Surgical Technology				
Dental Assistant Diploma				
Nurse Aide Diploma				

Intracurricular Career and Technical Student Organizations: HOSA Future Health Professionals

**Hospitality & Tourism Career Cluster**

Culinary Arts Applications Career Pathway (CULA)-Commercial Facilities				
Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
FC012YB Exploring Nutrition and Wellness  FC012YD Exploring Personal Finance and Hospitality  CC582YA Exploring Personal Characteristics and Careers  CC582YB Exploring Careers and Employment	FH10 Culinary Arts & Hospitality	FH11 Culinary Arts & Hospitality II Applications	FH13 Culinary Arts & Hospitality III	FH14 Culinary Arts & Hospitality IV Applications OR  CS95 CTE Advanced Studies OR  CS96 CTE Apprenticeship OR  CS97 CTE Internship
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	FN41 Food and Nutrition I		
	High School Connections	C5510H1 Demi-Chef		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Culinary Arts  Associate of Applied Science-Hospitality Management	Bachelor of Arts-Hospitality Management	\$18,500-\$57,150	Chef/Head Cook Flight Attendant Food Service Managers Lodging Managers Meeting, Convention & Event Planners Recreation Workers Reservation & Transport Agents Resort Managers	
	Bachelor of Arts-Hospitality and Tourism Administration	Four Year College Post-Graduate Salary Range:		
	Bachelor of Arts-Service Management Bachelor of Science-Business Administration	\$29,160-\$57,150		
Intracurricular Career and Technical Student Organizations: FCCLA				

## Culinary Arts Internship Career Pathway (CULI)-Residential Facilities

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
FC012YB Exploring Nutrition and Wellness	FH10 Culinary Arts & Hospitality I	FH12 Culinary Arts & Hospitality II Internship	FH13 Culinary Arts & Hospitality III	**FH12 includes a work-based learning experience.
FC012YD Exploring Personal Finance and Hospitality	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
CC582YA Exploring Personal Characteristics and Careers		Supplemental Technical Courses	FN41 Food and Nutrition I	
CC582YB Exploring Careers and Employment	High School Connections	C5510H1 Demi-Chef		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Culinary Arts	Bachelor of Arts-Hospitality Management	\$18,500-\$57,150	Chefs & Head Cooks Flight Attendants Food Service Manager Lodging Manager Meeting, Convention & Event Planners Recreation Worker Reservation & Transport Agent Resort Manager	
Associate of Applied Science-Hospitality Management	Bachelor of Arts-Hospitality and Tourism Administration	Four Year College Post-Graduate Salary Range:		
	Bachelor of Arts-Service Management	\$29,160-\$57,150		
	Bachelor of Science-Business Administration			

Intracurricular Career and Technical Student Organizations: FCCLA

## Sports & Entertainment Marketing Career Pathway (SEMK)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
BU202YA Exploring Business and Entrepreneurship BU202YC Exploring Business Activities		MH31 Sports & Entertainment Marketing I	MH32 Sports & Entertainment Marketing II	CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship
CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	CS11 Project Management I ME11 Entrepreneurship I		
	High School Connections	C5510H1 Demi-Chef		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Culinary Arts	Bachelor of Arts-Hospitality Management	\$18,500-\$57,150	Chefs & Head Cooks Flight Attendants Food Service Manager Lodging Manager Meeting, Convention & Event Planners Recreation Worker Reservation & Transport Agent Resort Manager	
Associate of Applied Science-Hospitality Management	Bachelor of Arts-Hospitality and Tourism Administration	Four Year College Post-Graduate Salary Range:		
	Bachelor of Arts-Service Management	\$29,160-\$57,150		
	Bachelor of Science-Business Administration			
Intracurricular Career and Technical Student Organizations: DECA				

## Travel & Tourism Career Pathway (TRTO)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
BU202YA Exploring Business and Entrepreneurship BU202YC Exploring Business Activities FC012YD Exploring Personal Finance and Hospitality CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment		MH31 Sports & Entertainment Marketing I OR MM51 Marketing OR BF10 Principles of Business	MH42 Hospitality and Tourism	CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	CS11 Project Management I ME11 Entrepreneurship I		
	High School Connections	C5510H1 Demi-Chef		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:  Chefs & Head Cooks Flight Attendants Food Service Manager Lodging Manager Meeting, Convention & Event Planners Recreation Worker Reservation & Transport Agent Resort Manager	
Associate of Applied Science-Culinary Arts Associate of Applied Science-Hospitality Management	Bachelor of Arts-Hospitality Management Bachelor of Arts-Hospitality and Tourism Administration Bachelor of Arts-Service Management Bachelor of Science-Business Administration	\$18,500-\$57,150  Four Year College Post-Graduate Salary Range:  \$29,160-\$57,150		
Intracurricular Career and Technical Student Organizations: DECA				

**Human Services Career Cluster**

Early Childhood Development & Services Career Pathway (EACH)				
Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
FC012YA Exploring Interpersonal Relationships & Childcare		FE60 Child Development	FE11 Early Childhood Education I (2 credit course)	FE12 Early Childhood Education II (2 credit course)
FC012YB Exploring Nutrition and Wellness	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
CC582YA Exploring Personal Characteristics and Careers		Supplemental Technical Courses	FC11 Principles of Family and Human Services	
CC582YB Exploring Careers and Employment	High School Connections	C55860H1 Early Childhood Preschool C55400H1 Manicuring/Nail Technology		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Early Childhood Education	Bachelor of Arts-Early Childhood Education	\$17,400-\$27,700	Child, Family, & School Social Worker Community Health Worker Elementary School Teacher Pre-School Teacher Social and Community Service Worker <b>Other Human Services Related Careers:</b> Cosmetologist Esthetician Massage Therapist Nail Technician	
Associate in Applied Science-B-K Licensure Transfer (Teaching)	Bachelor of Arts-Early Childhood Administration	Four Year College Post-Graduate Salary Range:		
Associate of Applied Science-B-K Non-Licensure	Bachelor of Science-Elementary Education Bachelor of Science-Social Work	\$35,400-\$64,360		
Intracurricular Career and Technical Student Organizations: FCCLA				



## Food & Nutrition Career Pathway (FONU)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
FC012YA Exploring Interpersonal Relationships & Childcare  FC012YB Exploring Nutrition and Wellness  CC582YA Exploring Personal Characteristics and Careers  CC582YB Exploring Careers and Employment		FN41 Food and Nutrition I	FN42 Food and Nutrition II	CS95 CTE Advanced Studies OR  CS96 CTE Apprenticeship OR  CS97 CTE Internship
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	FC11 Principles of Family and Human Services		
	High School Connections	C1524AH1 Horticulture-Basic C55860H1 Early Childhood Preschool C55400H1 Manicuring/Nail Technology		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Horticulture Technology  Associate of Applied Science-Food Sciences Technology  Associate of Applied Science-Food Processing Technology  Associates of Applied Science-Nutrition and Dietetics	Bachelor of Science-Agriculture	\$26,300-\$32,600	Agriculture & Food Science Technician Animal Scientist Environmental Engineer Environmental Science Technician Environmental Engineer Forest & Conservation Technician Natural Science Managers Poultry Scientist Veterinarian Veterinary Technician Zoologist Other Human Services Related Careers: Cosmetologist Early Childhood Worker Esthetician Fitness Trainer Massage Therapist Nail Technician	
	Bachelor of Science-Applied Ecology	Four Year College Post-Graduate Salary Range:		
	Bachelor of Science-Food Science	\$39,000-\$140,600		
	Bachelor of Science-Food and Environmental Nutrition			
	Bachelor of Science-Food Science and Human Nutrition			
	Bachelor of Science-Nutrition Bachelor of Science-Horticulture			
Intracurricular Career and Technical Student Organizations: FCCLA				

**Information Technology Career Cluster**

**Computer Science Principles Career Pathway (CSPR)**

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
BU012YA Computer Science Discoveries I BU012YB Computer Science Discoveries II BU102YC Computer Science Discoveries III BU102YA Keyboarding and Basic Word Processing BU102YB Introduction to Office Productivity		BP41 Computer Science I	BP42 Computer Science II	2A02 AP Computer Science OR CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship OR Academy of Information Technology-GCHS & PFHS
BU102YC Office Productivity Applications BU102YD Digital Literacy CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment	Supplemental Career Employability Skills Courses  Supplemental Technical Courses  High School Connections		BM10 Microsoft Word and PowerPoint CC45 Career Management  BI12 CompTIA IT Fundamentals BP01 Introduction to Computer Science BM20 Microsoft Excel BM40 Microsoft Access C25590H1 CISCO Network C25590H4 Computer Technology C30100H1 Graphic Design C25590H3 Hardware and Software C25590H1 IOS Swift C25590H5 Network Defense C25590H8 Python Programming C25590H1 SAS Programming	
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Computer Programming and Development Associate of Applied Science-Database Management Associate of Applied Science-Digital Media Technology Other Options: Many IT areas require certifications for competitive pay.	Bachelor of Science-Computer Programming	\$33,130-\$68,520	Computer Applications Software Developer Computer Network Architect Computer Network Support Specialist Computer Systems Analyst Computer Support Specialist Cybersecurity Analyst Cybersecurity Engineer Database Administrator Information Security Analyst Network & Computer System Administrator Web Developer	
	Bachelor of Science-Computer Engineering	Four Year College Post-Graduate Salary Range:		
	Bachelor of Science-Computer Science	\$54,900-\$106,170		
	Bachelor of Science-Cybersecurity Bachelor of Science-Data Management Bachelor of Science-Information Technology Bachelor of Science-Information Technology & Security			

Intracurricular Career and Technical Student Organizations: FBLA

## AP Computer Science Principles Career Pathway (APCS)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
BU012YA Computer Science Discoveries I BU012YB Computer Science Discoveries II BU102YC Computer Science Discoveries III BU102YA Keyboarding and Basic Word Processing		OA02 AP Computer Science Principles	2A02 AP Computer Science	CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship OR Academy of Information Technology-GCHS & PFHS
BU102YB Introduction to Office Productivity BU102YC Office Productivity Applications	Supplemental Career Employability Skills Courses		BM10 Microsoft Word and PowerPoint CC45 Career Management	
BU102YD Digital Literacy CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment	Supplemental Technical Courses		BI12 CompTIA IT Fundamentals BP01 Introduction to Computer Science BM20 Microsoft Excel BM40 Microsoft Access C25590H1 CISCO Network	
	High School Connections		C25590H4 Computer Technology C30100H1 Graphic Design C25590H3 Hardware and Software C25590H1 IOS Swift C25590H5 Network Defense C25590H8 Python Programming C25590H1 SAS Programming	
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Computer Programming and Development Associate of Applied Science-Database Management Associate of Applied Science-Digital Media Technology Other Options: Many IT areas require certifications for competitive pay.	Bachelor of Science-Computer Programming	\$33,130-\$68,520	Computer Applications Software Developer Computer Network Architect Computer Network Support Specialist Computer Systems Analyst Computer Support Specialist Cybersecurity Analyst Cybersecurity Engineer Database Administrator Information Security Analyst Network & Computer System Administrator Web Developer	
	Bachelor of Science Computer Engineering	Four Year College Post-Graduate Salary Range:		
	Bachelor of Science-Computer Science	\$54,900-\$106,170		
	Bachelor of Science-Cybersecurity			
	Bachelor of Science-Data Management			
	Bachelor of Science-Information Technology			
	Bachelor of Science-Information Technology & Security			
Intracurricular Career and Technical Student Organizations: FBLA				

## Network Security Career Pathway (NESE)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
BU012YA Computer Science Discoveries I BU012YB Computer Science Discoveries II BU102YC Computer Science Discoveries III BU102YA Keyboarding and Basic Word Processing	BC10 Cybersecurity Essentials	BN31 Network Security I	BN32 Network Security II	CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship OR Academy of Information Technology-GCHS & PFHS
BU102YB Introduction to Office Productivity BU102YC Office Productivity Applications	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
BU102YD Digital Literacy	Supplemental Technical Courses	BI12 CompTIA IT Fundamentals		
CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment	High School Connections	C25590H1 CISCO Network C25590H4 Computer Technology C30100H1 Graphic Design C25590H3 Hardware and Software C25590H1 IOS Swift C25590H5 Network Defense C25590H8 Python Programming C25590H1 SAS Programming		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Computer Programming and Development Associate of Applied Science-Database Management Associate of Applied Science-Digital Media Technology Other Options: Many IT areas require certifications for competitive pay.	Bachelor of Science-Computer Programming	\$33,130-\$68,520	Computer Applications Software Developer Computer Network Architect Computer Network Support Specialist Computer Systems Analyst Computer Support Specialist Cybersecurity Analyst Cybersecurity Engineer Database Administrator Information Security Analyst Network & Computer System Administrator Web Developer	
	Bachelor of Science-Computer Engineering	Four Year College Post-Graduate Salary Range:		
	Bachelor of Science-Computer Science	\$54,900-\$106,170		
	Bachelor of Science-Cybersecurity Bachelor of Science-Data Management Bachelor of Science-Information Technology Bachelor of Science-Information Technology & Security			
Intracurricular Career and Technical Student Organizations: FBLA, TSA, SkillsUSA				

**Law, Public Safety, Corrections and Security Career Cluster**

Emergency Management Career Pathway (EMMG)					
Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation	
<p>CC582YA Exploring Personal Characteristics and Careers</p> <p>CC582YB Exploring Careers and Employment</p>		IP11 Public Safety I	IP51 Emergency Management I	<p>IP52 Emergency Management II OR</p> <p>CS95 CTE Advanced Studies OR</p> <p>CS96 CTE Apprenticeship OR</p> <p>CS97 CTE Internship OR</p> <p>CCS Fire Science Academy OR</p> <p>Academy of Public Safety-SVHS</p>	
	Supplemental Career Employability Skills Courses	<p>BM10 Microsoft Word and PowerPoint</p> <p>CC45 Career Management</p>			
	Supplemental Technical Courses	HU40 Health Science I			
	High School Connections	<p>C55180H1 Criminal Justice-Introduction</p> <p>C55180H3 Criminal Justice-Private Investigations &amp; Loss Prevention</p>			
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:		
<p>Associate of Applied Science-Emergency Management Technology</p> <p>Associate of Applied Science-Emergency Medical Science</p> <p>Associate in Applied Science-Fire Protection Technology</p> <p>Other Options:</p> <p>Many Law, Public Safety, Corrections and Securities areas may require specific certifications to include Basic Law Enforcement Training.</p>	<p>Bachelor of Arts-Criminal Justice</p> <p>Bachelor of Science-Fire and Emergency Management</p> <p>Bachelor of Science-Disaster and Emergency Management</p>	\$23,360-\$32,590	<p>Criminal Investigator</p> <p>Detective</p> <p>EMT/Paramedic</p> <p>Fire Inspector/Investigator</p> <p>Forensic Science Technician</p> <p>Patrol Officer</p> <p>Police Officer</p>		
		Four Year College Post-Graduate Salary Range:			
		\$35,250-\$59,000			
Intracurricular Career and Technical Student Organizations: SkillsUSA					

## Emergency Medical Technology Career Pathway (EMMT)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation	
<p>CC582YA Exploring Personal Characteristics and Careers</p> <p>CC582YB Exploring Careers and Employment</p>		IP21 Emergency Medical Technology I	IP22 Emergency Medical Technology II	<p>CS95 CTE Advanced Studies OR</p> <p>CS96 CTE Apprenticeship OR</p> <p>CS97 CTE Internship OR</p> <p>CCS Fire Science Academy OR</p> <p>Academy of Public Safety-SVHS</p>	
	Supplemental Career Employability Skills Courses	<p>BM10 Microsoft Word and PowerPoint</p> <p>CC45 Career Management</p>			
	Supplemental Technical Courses	<p>IP11 Public Safety I</p> <p>IP51 Emergency Management I HU40 Health Science I</p>			
	High School Connections	<p>C55180H1 Criminal Justice-Introduction</p> <p>C55180H3 Criminal Justice-Private Investigations &amp; Loss Prevention</p>			
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:		
<p>Associate of Applied Science-Emergency Management Technology</p> <p>Associate of Applied Science-Emergency Medical Science</p> <p>Associate in Applied Science-Fire Protection Technology</p> <p>Other Options:</p> <p>Many Law, Public Safety, Corrections and Securities areas may require specific certifications to include Basic Law Enforcement Training.</p>	<p>Bachelor of Arts-Criminal Justice</p> <p>Bachelor of Science-Fire and Emergency Management</p> <p>Bachelor of Science-Disaster and Emergency Management</p>	\$23,360-\$32,590	<p>Criminal Investigator</p> <p>Detective</p> <p>EMT/Paramedic</p> <p>Fire Inspector/Investigator</p> <p>Forensic Science Technician</p> <p>Patrol Officer</p> <p>Police Officer</p>		
		Four Year College Post-Graduate Salary Range:			
		\$35,250-\$59,000			
Intracurricular Career and Technical Student Organizations: HOSA, SkillsUSA					

## Firefighter Technology Career Pathway (FIFI)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation	
<p>CC582YA Exploring Personal Characteristics and Careers</p> <p>CC582YB Exploring Careers and Employment</p>		IP31 Firefighter Technology I	IP32 Firefighter Technology II	<p>IP33 Firefighter Technology III OR</p> <p>IP51 Emergency Management I OR</p> <p>CS95 CTE Advanced Studies OR</p> <p>CS96 CTE Apprenticeship OR</p> <p>CS97 CTE Internship</p>	
	Supplemental Career Employability Skills Courses	<p>BM10 Microsoft Word and PowerPoint</p> <p>CC45 Career Management</p>			
	Supplemental Technical Courses	IP11 Public Safety I			
	High School Connections	<p>C55180H1 Criminal Justice-Introduction</p> <p>C55180H3 Criminal Justice-Private Investigations &amp; Loss Prevention</p>			
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:		
<p>Associate of Applied Science-Emergency Management Technology</p> <p>Associate of Applied Science-Emergency Medical Science</p> <p>Associate in Applied Science-Fire Protection Technology</p> <p>Other Options:</p> <p>Many Law, Public Safety, Corrections and Security areas may require specific certifications to include Basic Law Enforcement Training.</p>	<p>Bachelor of Arts-Criminal Justice</p> <p>Bachelor of Science-Fire and Emergency Management</p> <p>Bachelor of Science-Disaster and Emergency Management</p>	\$23,360-\$32,590	<p>Criminal Investigator</p> <p>Detective</p> <p>EMT/Paramedic</p> <p>Fire Inspector/Investigator</p> <p>Forensic Science Technician</p> <p>Patrol Officer</p> <p>Police Officer</p>		
		Four Year College Post-Graduate Salary Range:			
		\$35,250-\$59,000			
Intracurricular Career and Technical Student Organizations: SkillsUSA					

## Law & Justice Career Pathway (LAWJ)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
<p>CC582YA Exploring Personal Characteristics and Careers</p> <p>CC582YB Exploring Careers and Employment</p>		IP41 Law & Justice I	IP42 Law & Justice II	<p>IP51 Emergency Management I OR</p> <p>CS95 CTE Advanced Studies OR</p> <p>CS96 CTE Apprenticeship OR</p> <p>CS97 CTE Internship OR</p> <p>CCS Fire Science Academy OR</p> <p>Academy of Public Safety-SVHS</p>
	Supplemental Career Employability Skills Courses	<p>BM10 Microsoft Word and PowerPoint</p> <p>CC45 Career Management</p>		
	Supplemental Technical Courses	IP11 Public Safety I		
	High School Connections	<p>C55180H1 Criminal Justice-Introduction</p> <p>C55180H3 Criminal Justice-Private Investigations &amp; Loss Prevention</p>		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
<p>Associate of Applied Science-Emergency Management Technology</p> <p>Associate of Applied Science-Emergency Medical Science</p> <p>Associate in Applied Science-Fire Protection Technology</p> <p>Other Options:</p> <p>Many Law, Public Safety, Corrections and Securities areas may require specific certifications to include Basic Law Enforcement Training</p>	Bachelor of Arts-Criminal Justice	\$23,360-\$32,590	<p>Criminal Investigator</p> <p>Detective EMT/Paramedic</p> <p>Fire Inspector/Investigator</p> <p>Forensic Science Technician</p> <p>Patrol Officer</p> <p>Police Officer</p>	
	Bachelor of Science-Fire and Emergency Management	Four Year College Post-Graduate Salary Range:		
	Bachelor of Science-Disaster and Emergency Management	\$35,250-\$59,000		
Intracurricular Career and Technical Student Organizations: SkillsUSA				



## Public Safety Career Pathway (PUSA)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
<p>CC582YA Exploring Personal Characteristics and Careers</p> <p>CC582YB Exploring Careers and Employment</p>		IP11 Public Safety I	IP12 Public Safety II	<p>CS95 CTE Advanced Studies OR</p> <p>CS96 CTE Apprenticeship OR</p> <p>CS97 CTE Internship OR</p> <p>CCS Fire Science Academy OR</p> <p>Academy of Public Safety-SVHS</p>
	Supplemental Career Employability Skills Courses	<p>BM10 Microsoft Word and PowerPoint</p> <p>CC45 Career Management</p>		
	Supplemental Technical Courses			
	High School Connections	<p>C55180H1 Criminal Justice-Introduction</p> <p>C55180H3 Criminal Justice-Private Investigations &amp; Loss Prevention</p>		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
<p>Associate of Applied Science-Emergency Management Technology</p> <p>Associate of Applied Science-Emergency Medical Science</p> <p>Associate in Applied Science-Fire Protection Technology</p> <p>Other Options:</p> <p>Many Law, Public Safety, Corrections and Securities areas may require specific certifications to include Basic Law Enforcement Training.</p>	<p>Bachelor of Arts-Criminal Justice</p> <p>Bachelor of Science-Fire and Emergency Management</p> <p>Bachelor of Science-Disaster and Emergency Management</p>	\$23,360-\$32,590	<p>Criminal Investigator</p> <p>Detective</p> <p>EMT/Paramedic</p> <p>Fire Inspector/Investigator</p> <p>Forensic Science Technician</p> <p>Patrol Officer</p> <p>Police Officer</p>	
		Four Year College Post-Graduate Salary Range:		
		\$35,250-\$59,000		
Intracurricular Career and Technical Student Organizations: SkillsUSA				

**Manufacturing Career Cluster**

Woodworking Career Pathway (WOWO)				
Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment		IM21 Woodworking I	IM22 Woodworking II	CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	CS11 Project Management I IM11 Advanced Manufacturing I		
	High School Connections	C50210H1 Basic Computer Integrated Machining C50420H1 Basic Welding Technology C40200H1 Electronics Engineering Technology C50240H1 Mechanical Maintenance		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Computer Integrated Machining Technology  Associate of Applied Science-Electronics Engineering Technology  Associate of Applied Science-Electrical Systems Technology  Associate of Applied Science-Industrial Systems Technology Welding Diploma	Bachelor of Science-Electrical Engineering	\$26,140-\$44,930	Electrical/Electronic Drafters  Electrical Engineer  Electrical/Electronic Engineering Technician  Industrial Engineer  Machine Tool Programmer  Maintenance & Repair Worker  Mechanic  Textile Production Manager  Tool & Die Maker	
	Bachelor of Science-Industrial Systems Engineering	Four Year College Post-Graduate Salary Range:		
	Bachelor of Science-Materials Science and Engineering  Bachelor of Science-Textile Engineering	\$37,910-\$63,620		
Intracurricular Career and Technical Student Organizations: SkillsUSA				

**Marketing Career Cluster**

Marketing Management Career Pathway (MMGT)				
Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
BU202YA Exploring Business and Entrepreneurship BU202YB Exploring Economic Systems BU202YC Exploring Business Activities BU202YD Exploring Business Procedures and Leadership		MM51 Marketing	MA52 Marketing Applications	CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship
CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	II31 Adobe Visual Design BF10 Principles of Business		
	High School Connections	C25620H1 Logistics and Distribution Management Foundations		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Business Administration: Marketing	Bachelor of Science-Business Administration: Marketing	\$26,640-\$59,920	Marketing Research Analyst Marketing Manager	
Associate of Applied Science-Supply Chain Management/Distribution Management	Bachelor of Science-Business Administration: Marketing Management and Sales	Four Year College Post-Graduate Salary Range:	Property/Community Manager Public Relations Manager Public Relations Specialist	
Associate of Applied Science-Supply Chain Management/Global Logistics Technology	Bachelor of Science-Business Administration: Operations and Supply Chain Management	\$39,810-133,190	Real Estate Agent Sales Manager Wholesale/Manufacturing Sales Representative	
Intracurricular Career and Technical Student Organizations: DECA				

## Sales Career Pathway (PRSM)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
BU202YA Exploring Business and Entrepreneurship BU202YB Exploring Economic Systems		MI31 Sales I	MI32 Sales II	CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship
BU202YC Exploring Business Activities BU202YD Exploring Business Procedures and Leadership	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management MM51 Marketing		
CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment	Supplemental Technical Courses	BF10 Principles of Business and Finance		
	High School Connections	C25620H1 Logistics and Distribution Management Foundations		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:  Marketing Research Analyst Marketing Manager Property/Community Manager Public Relations Manager Public Relations Specialist Real Estate Agent Sales Manager Wholesale/Manufacturing Sales Representative	
Associate of Applied Science-Business Administration: Marketing	Bachelor of Science-Business Administration: Marketing	\$26,640-\$59,920		
Associate of Applied Science-Supply Chain Management/Distribution Management	Bachelor of Science-Business Administration: Marketing Management and Sales	Four Year College Post-Graduate Salary Range:		
Associate of Applied Science-Supply Chain Management/Global Logistics Technology	Bachelor of Science-Business Administration: Operations and Supply Chain Management	\$39,810-133,190		
Intracurricular Career and Technical Student Organizations: DECA				

**Science, Technology, Engineering & Mathematics Career Cluster**

Drafting Engineering Career Pathway (DREN)				
Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
TE012YB Exploring Engineering and Design TE012YD Invention and Innovation TE012YE Design and Creativity CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment		IC61 Drafting I	IV22 Drafting II - Engineering	IV23 Drafting III - Engineering OR CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship OR Academy of Engineering Technology-WOHS OR Academy of Integrated Systems Technology-JBHS
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	CS11 Project Management I		
	High School Connections	C40140H1 Civil Engineering Technology C50240H1 Mechanical Maintenance		
Two Year College Major Options:	Four Year College Major Options	Two Year College Post-Graduate Salary Range:	Careers:	
Associate in Engineering	Bachelor of Science-Applied Engineering Technology	\$36,020-\$52,380	Aerospace Engineer Biomedical Engineer Chemical Engineer Chemist Computer Hardware Engineer Electrical Engineer Electronics Engineer Environmental Scientist Geologist Geophysicist Geoscientist Geneticist Ocean Engineer Researcher	
	Bachelor of Science-Engineering (various concentrations)	Four Year College Post-Graduate Salary Range:		
	Bachelor of Science-Biology Bachelor of Science-Chemistry Bachelor of Science-Mathematics Bachelor of Science-Physics	\$44,190-\$108,440		
Intracurricular Career and Technical Student Organizations: SkillsUSA				

**Transportation, Distribution, & Logistics Career Cluster**

Automotive Services Career Pathway (AUTO)				
Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
CC582YA Exploring Personal Characteristics and Careers  CC582YB Exploring Careers and Employment	IT11 Automotive Service Fundamentals	IT16 Automotive Service I	IT17 Automotive Service II	IT18 Automotive Service III OR  CS95 CTE Advanced Studies OR  CS96 CTE Apprenticeship OR  CS97 CTE Internship
	Supplemental Career Employability Skills Courses	BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	CS11 Project Management I		
	High School Connections	C60130H1 Collision Repair & Refinishing C25620H1 Logistics and Distribution Management C60160H Maintenance, and Light Repair		
Two Year College Major Options:	Four Year College Major Options	Four Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Automotive Technology  Diesel Engine Repair Diploma  Small Engine Repair Diploma  Other Options:  Many Automotive Service areas require certifications for competitive pay.	Bachelor of Science-Mechanical Engineering  Other Options:  Many Automotive Service areas require automotive industry certifications for competitive pay to include the National Institute for Automotive Service Excellence.	\$53,693-\$97,210	Air Traffic Controller  Aircraft Mechanic/Service Technician  Automotive Body & Related Repairer  Auto Service Technician/Mechanic  Diesel Engine Specialist  Motorcycle Mechanic  Transport Distribution Manager	
Intracurricular Career and Technical Student Organizations: SkillsUSA				

## Collision Repair Career Pathway (COLL)

Middle Grades Exploration	Foundational Prerequisite	Prerequisite	Concentrator	CTE Honors Designation
CC582YA Exploring Personal Characteristics and Careers CC582YB Exploring Careers and Employment	IT30 Collision Repair Fundamentals	IT31 Collision Repair I	IT32 Collision Repair II Non-Structural OR IT33 Collision Repair II Refinishing	CS95 CTE Advanced Studies OR CS96 CTE Apprenticeship OR CS97 CTE Internship
	Supplemental Career Employability Skills Courses	IT31 Collision Repair I BM10 Microsoft Word and PowerPoint CC45 Career Management		
	Supplemental Technical Courses	CS11 Project Management I		
	High School Connections	C60130H1 Collision Repair & Refinishing C25620H1 Logistics and Distribution Management C60160H Maintenance, and Light Repair		
Two Year College Major Options:	Four Year College Major Options	Four Year College Post-Graduate Salary Range:	Careers:	
Associate of Applied Science-Automotive Technology Diesel Engine Repair Diploma Small Engine Repair Diploma Other Options: Many Automotive Service areas require certifications for competitive pay.	Bachelor of Science-Mechanical Engineering Other Options: Many Automotive Service areas require automotive industry certifications for competitive pay to include the National Institute for Automotive Service Excellence.	\$53,693-\$97,210	Air Traffic Controller Aircraft Mechanic/Service Technician Automotive Body & Related Repairer Auto Service Technician/Mechanic Diesel Engine Specialist Motorcycle Mechanic Transport Distribution Manager	

# North Carolina Academic Scholars and Diploma Endorsements

North Carolina Academic Scholars (Students Must)	College/UNC Endorsement (Students Must)	College Endorsement (Students Must)
Have an overall 4-year UNWEIGHTED grade point average of 3.5*	Have an overall 4-year WEIGHTED grade point average of 2.5*	Have an overall 4-year UNWEIGHTED grade point average of 2.6*
Complete all course requirements under the Future-Ready Core Course of Study	Complete all course requirements under the Future-Ready Core Course of Study.	Complete all course requirements under the Future-Ready Core Course of Study
Complete the Future-Ready Core mathematics sequence of NC Math I, NC Math II, NC Math III, and a fourth mathematics course that meets University of North Carolina system Minimum Admission Requirements. The student shall complete three units of science including an Earth/Environmental science course, Biology, and at least one physical science course that must include physics or chemistry. For students entering 9th grade prior to 2012-13, the student shall complete three units of social studies including U.S. History, World History, and Civics and Economics. For students entering 9th grade in 2012-13 or later, the student shall complete four units of social studies including World History, American History: Founding principles Civics & Economics, American History I & II or AP US History and 4th SS elective.	Complete the Future-Ready Core mathematics sequence of NC Math I, NC Math II, NC Math III, and a fourth mathematics course that meets University of North Carolina system Minimum Admission Requirements. Three (3) credits of science including at least one physical science with a lab, one life science, and one additional science. (NOTE: NC's physical science course counts towards this requirement). The student shall complete U.S. History or equivalent coursework.	Complete the Future-Ready Core mathematics sequence of NC Math I, NC Math II, NC Math III, and a fourth mathematics course aligned with the student's post-secondary plans. The fourth math course must meet University of North Carolina system Minimum Admission Requirements or be acceptable for earning placement in a credit-bearing college math class under the North Carolina Community College System's Multiple Measures Placement policy.
Two (2) elective credits in the same a world language (other than English).	The student shall complete two units of the same world language (other than English).	No World Language required
Four (4) elective credits in any one subject area, such as: Career and Technical Education (CTE), JROTC, Arts Education, World Languages, or in another content area.	No concentration required	No concentration required
Three (3) elective higher-level courses taken during junior and/or senior years which carry quality points such as: AP; IB; Dual or college equivalent course; Advanced CTE/CTE credentialing course; honors level courses, or Project Lead the Way courses.	No additional requirement	No additional requirements
Career Endorsement (Students Must)	Global Languages Endorsement (Students Must)	
Have an overall 4-year UNWEIGHTED grade point average of 2.6*	Have a combined 2.5-UNWEIGHTED grade point average or above for the four English Language Arts courses required for graduation.	
Complete all course requirements under the Future-Ready Core Course of Study	Complete all course requirements under the Future-Ready Core Course of Study	
Complete the Future-Ready Core mathematics sequence of NC Math I, NC Math II, NC Math III, and a fourth mathematics course aligned with the student's post-secondary plans. Acceptable fourth math courses for the Career Endorsement include any math course that may be used to meet NC high school graduation requirements, including applied math courses found in the Career and Technical Education (CTE) domain.	No specific mathematics sequence required	
No world language required	<p>The student shall establish proficiency in one or more languages in addition to English, using one of the options below:</p> <ul style="list-style-type: none"> <li>I: Pass an external exam approved by the North Carolina Department of Public Instruction establishing "Intermediate Low" proficiency or higher per the American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale.</li> <li>II: Complete a four-course sequence of study in the same world language, earning an overall unweighted grade point average of 2.5 or above in those courses.</li> <li>III: Establish "Intermediate Low" proficiency or higher per the ACTFL proficiency scale using the Credit by Demonstrated Mastery policy described in GCS-M-001.</li> </ul> <p>Limited English Proficiency students shall complete all the requirements of GPA requirement and language requirement and reach "Developing" proficiency per the World-Class Instructional Design and Assessment (WIDA) proficiency scale in all four domains on the most recent state identified English language proficiency test.</p>	
Four (4) elective credits constituting a Career and Technical Education (CTE) concentration in one of the approved CTE Cluster areas.	No concentration required	
Earn at least one industry-recognized credential. Earned credentials can include: -Career Readiness Certificates (CRC) at the Silver level or above from Work-Keys assessments OR another appropriate industry credential/certification	Limited English Proficiency students shall complete all the requirements of sections above and reach "Developing" proficiency per the World Class Instruction Design and Assessment (WIDA) proficiency scale in all four domains on the most recent identified English Language proficiency test.	



# Choice Program

## Cumberland County School of Choice Program

The following School of Choice programs are available for high school students. [Click here to go to Academy specific course descriptions.](#)

- Students can attend programs outside their assigned school.
- Admission is by application only.
- Transportation is generally the responsibility of the parent or guardian.
- Students may participate in athletics at their home schools if attending a classical high school.

### **Cross Creek Early College High School**

*Cross Creek Early College High School* is located on the campus of Fayetteville State University. Candidates for this high school are first-year freshmen or sophomores based on vacancies, and generally First-Generation College bound students. The mission of the school is to provide an academic environment that fosters growth and success by developing relationships, responsibility, and respect through relevant and rigorous coursework. Community Service hours are an integral part of the early college experience.

The curriculum focus is English, math, science, social studies honors level, and AVID (Advancement via Individual Determination) to prepare students for college level coursework. Students who complete the four-year high school experience at Cross Creek will participate in experiential learning projects, university experience, and potentially earn up to 60 hours of college credit tuition free.

### **Cumberland Academy 6-12**

*Cumberland Academy 6-12* is a premier, fully virtual school within CCS. The fully functioning virtual school is designed to provide students and their families with an alternative learning option using online, engaging, and interactive course content. Students take the same curricular courses as the district's traditional schools. The flexible learning environment allows students to be self-paced with the support of online teachers.

### **Cumberland International Early College High School**

The goal of *Cumberland International Early College High School* is to graduate globally competent students who are prepared to communicate, collaborate, and compete locally, nationally, and internationally. This school is located on Fayetteville State University. Candidates for this high school are first-year freshmen or sophomores. The mission of the school is to provide a smaller academic global learning environment that fosters growth and success by developing relationships, responsibility, and respect through relevant and rigorous math, English, social studies and science courses through project-based learning with an added required support class called AVID (Advancement via Individual Determination). Students are also required to take a World Language (Mandarin Chinese, Spanish, or Arabic). Students who complete this four-year high school experience at Cumberland International will participate in Global Learning Service Projects, community service, communication with learners worldwide, and have the opportunity to earn up to 60 credit hours of college tuition free.

## **Cumberland Polytechnic High School**

*Cumberland Polytechnic High School*, located on the Fayetteville Technical Community College campus, offers a full range of high school courses leading to a high school diploma and at the same time afford all our students the opportunity to experience college life, earning college credits, in a small more personalized learning environment. The focus is building an educational foundation (certificate and/or associate degree) toward a future in one of the following eight career pathways: Finance, Transportation, Distribution & Logistics, Information Technology, Manufacturing, Human Services, Education & Training, Business Management & Administration, and Health Sciences. Through the cooperative innovative high school model, the curriculum incorporates rigorous coursework, project-based learning, and community service projects.

## **Douglas Byrd High School-Academy of Finance**

The *Academy of Finance at Douglas Byrd High School* offers students the unique opportunity to gain specialized preparation in the field of finance while they complete their core curriculum. Affiliated with and administered by the National Academy Foundation, based in New York City, this program is designed to facilitate the transition from high school to more advanced training and eventually a career in the financial services industry.

Academy students, during their junior and senior years, complete in depth, specialized courses in finance both in high school and at local colleges, a paid internship, and a variety of enrichment activities. Students who complete all program requirements will receive a Certificate of Financial Studies in addition to their high school diploma.

## **Douglas Byrd High School-Academy of Green Technology**

The *Academy of Green Technology at Douglas Byrd High School* offers students the opportunity to build an educational foundation for a future career in alternative energy and sustainability. It provides opportunities for students to learn science, math, technology, and communication skills in real-life contexts with hands-on green technology and sustainability curriculum. Students take specialized high school and community college courses and work with local business partners to develop problem-solving skills and will have the opportunity to earn certification as Solar PV Installers and Residential Energy Auditors.

## **E. E. Smith High School-Cumberland County Schools Fire Academy**

The *Cumberland County Schools Fire Academy at E. E. Smith High School* is in partnership with the City of Fayetteville Fire Department, Fayetteville Technical Community College, and Fayetteville State University to prepare students for a rewarding career as a professional firefighter. Upon completion of the Academy courses, students may receive North Carolina Firefighter I and II certification.

## **E.E. Smith High School-Academy of Math and Science**

The *Academy of Math and Science at E. E. Smith High School* is designed to provide a technology-enhanced environment that challenges and motivates students to become leaders in the fields of math and science. Academy students will develop proficiency in math/science process skills using technology to promote practical understanding of those skills. They will manipulate scientific equipment while participating in advanced laboratory research. Moreover, students in this program will participate in specialized science courses that integrate math courses to develop a deeper understanding of scientific principles and concepts.

### **Massey Hill Classical High School**

*Massey Hill Classical High School* provides a classical education in a college preparatory environment that emphasizes academics, the arts, and the development of character, school pride, and civic responsibility. Students are enrolled in a rigorous course of study and must take courses in English, World Language, Mathematics, Science, and Social Studies. Participation in and appreciation for the arts are part of the academic expectations through a variety of course offerings and enrichment activities. Students are required to participate in Socratic Seminars and to perform community service throughout the school year.

### **Pine Forest High School-Academy of Information Technology**

The *Academy of Information Technology at Pine Forest High School* presents a challenging academic and technical curriculum through a combination of high school and community college classes that prepare students for employment and/or post-secondary education in the field of information technology. This small learning community provides a program of study in computer engineering, software installation, computer hardware maintenance, networking, computer security, web design, computer programming, and simulation and gaming design to introduce students to the broad career opportunities in the information technology industry and build a foundation of skills necessary for this evolving career.

### **Reid Ross Year-Round Classical High School**

*Reid Ross Year-Round Classical High School* will provide a traditional education in a structured environment that emphasizes academics, the arts, and the development of character, school pride, and civic responsibility. Students are enrolled in a rigorous course of study and must take courses in English, Foreign Language, Mathematics, Science, and Social Studies every year. Participation in and appreciation for the arts are encouraged through a variety of course offerings and enrichment activities. In addition, the year-round feature will encourage a continuity of learning with inter-sessions that feature both enrichment and acceleration of learning. Uniforms are mandatory.

### **Seventy-First High School-Academy of Arts Education**

As an integral part of a strong academic program, the *Academy of Arts Education at Seventy-First High School* challenges both the intellectual and aesthetic capabilities of students. Students engage in a rigorous course of arts study that broadens creative interest, develops artistic skills and abilities, and promotes physical, intellectual, emotional and social growth. The Academy of Arts Education provides a framework for students to explore and to develop their artistic abilities, to participate in integrated learning experiences, and to develop skills in critical and creative thinking, problem recognition/problem solving, and teamwork. In addition to developing their own artistic abilities, students focus on enhancing their knowledge, understanding, and appreciation of the arts through the study of a variety of world cultures, historical periods, and contemporary styles and trends.

Students enrolled in the Academy of Arts Education must complete at least one arts class per year over a four-year period in one of the following arts disciplines: Band, Chorus, Dance, Orchestra, Theatre, or Visual Arts.

### **South View High School-Academy of Public Safety and Security**

The *Academy of Public Safety and Security* offers students the opportunity to get in-depth instruction in law enforcement, private security, and crime scene investigation. Students are enrolled in a combination of high school and community college courses and upon graduation, are eligible for certificate in Latent Evidence Technology and have up to 24 hours of college credit through Fayetteville Technical Community College.

### **South View High School-International Baccalaureate Academy**

The *International Baccalaureate (IB) Academy* is an internationally accredited college preparatory program with a rigorous four-year curriculum. Students take a Prerequisite honor courses their freshman and sophomore years. Juniors and seniors receive advanced level instruction and well-rounded curriculum which includes English, World Language, social studies, sciences, math, and the arts. This prepares them for nationally recognized examinations that may earn college credit. Successful completion of the IB curriculum would earn the prestigious IB Diploma awarded from Geneva, Switzerland.

The goals of the IB Academy include the education of the whole person. Required community involvement encourages relevant application of student education. There is an emphasis on research, writing, and analytical thinking skills in the classroom across the curriculum. Committed students will find in IB a trusting atmosphere that fosters intellectual risk taking and growth. In the forty-one years since its founding, IB has become a symbol of academic integrity. All IB Diploma candidates are required to take the appropriate IB exams.

### **Terry Sanford High School-Academy of Global Studies**

The *Academy of Global Studies at Terry Sanford High School* offers students a rigorous college preparatory curriculum. The Global Studies program is recognized as an AP Capstone™ program which offers an innovative and engaging college-level program for high school students that complements and enhances discipline-specific AP courses. It is built on two new courses—AP® Seminar and AP Research—that immerse students in the practice of critical skills needed to distinguish themselves in college and life. AP Capstone is the pinnacle of the high school experience, encouraging a passion for learning and transforming students into curious, collaborative, and independent thinkers with skills that are valued and sought after by colleges and universities. Global Studies fosters critical and creative thinking, argumentation, and research skills at the core of college readiness and essential for lifelong learning. The program emphasizes global awareness and is designed for all motivated students who maintain set academic, behavioral, and attendance standards.

### **Westover High School-Academy of Engineering Technologies**

The *Academy of Engineering Technologies at Westover High School* offers a comprehensive and intensive pre-professional and pre-technical secondary program through Project Lead the Way (PLTW). PLTW is a non-profit organization partnering with public schools, organization in the private sector, and higher education institutions to increase the quantity of engineers graduating from our educational system. PLTW has developed a four-year sequence of courses, which when combined with traditional mathematics and science courses in high school, introduces students to the scope, rigor and discipline of engineering and engineering technology prior to entering college. The courses are Introduction to Engineering Design, Digital Electronics, Principles of Engineering, Computer Integrated Manufacturing, Engineering Design and Development, and Civil Engineering and Architecture. At the end of all courses except Engineering Design and Development, students who score between a 6-9 stanine score on the end of course assessment, are eligible for college credit at over 55 colleges and universities. For more information go to [www.pltw.org](http://www.pltw.org)

### **Westover High School-Academy of Health Sciences and Technology**

The *Academy of Health Sciences and Technology at Westover High School* offers a curriculum that combines both academic rigor and technical competencies essential to the pursuit of a successful health career through Project Lead the Way (PLTW). PLTW is a non-profit organization partnering with public schools, organizations in the private sector, and higher education institutions to increase the quantity and quality of healthcare professionals graduating from our educational system. The PLTW Biomedical Sciences curriculum engages high school students in problems related to the human body, cell biology, genetics, disease, and other biomedical topics in a sequence of four courses. The courses are Principles of Biomedical Science, Human Body Systems, Medical Interventions and Biomedical Innovations. At the end of all courses except Biomedical Innovations, students who score between a 6-9 stanine score on the end of course assessment, are eligible for college credit at over 11 colleges and universities. For more information go to [www.pltw.org](http://www.pltw.org)

During the senior year, students will have the opportunity to participate in an internship at Womack Army Medical Center or a mentorship with an approved healthcare provider. A variety of enrichment activities are offered through Southern Regional Area Health Education Center and Health Occupations Students of America. Students are offered certification in CPR/First Aid, Vision Screening, and Certified Nurse Aide.

### **Westover High School-Collision Repair Career Pathway**

This new, exciting pathway offers students up-to-date training across several key collision repair roles. Courses to be included are Introduction to Collision Repair, Collision Repair I, Collision Repair-Non-Structural and Collision Repair Refinishing. Students will be afforded the opportunity to earn industry-recognized credentials from I-CAR (Inter-Industry Conference on Auto Collision Repair).

## Online Options

### Cumberland Academy 6 – 12

Cumberland Academy 6 – 12 is a fully virtual school within the Cumberland County School System. The fully functioning virtual school is designed to provide students and their families with an alternative learning option using online, engaging, and interactive course content. Students take the same curricular courses as the district's traditional schools. The flexible learning environment allows students to be self-paced with the support of online teachers.

### North Carolina Virtual Public School (NCVPS)

The North Carolina Virtual Public School (NCVPS), established by the North Carolina State Board of Education, is an online school community serving middle and high school students throughout the state of North Carolina. NCVPS is not degree granting, but instead transfers credit to the local school of record for placement on the student transcript upon successful course completion. Students must go to their local high school of record for any state mandated end-of-course testing and/or North Carolina final exams. For more information visit [www.ncvps.org](http://www.ncvps.org) and contact your school counseling office.

# Articulation Agreement

## High School to Community College CTE Course Transfer Agreement

High School Course		FTCC Transfer Designation (PACE)	
AP41	Horticulture I	HOR150	Introduction to Horticulture
AP42	Horticulture II	HOR116	Landscape Management I
AP41	Horticulture I AND AP42 Horticulture II	HOR160	Plant Materials I
BA10	Accounting I AND BA20 Accounting II	ACC111	Financial Accounting
BD10	Multimedia & Webpage Design	DME115	Graphic Design Tools
BF05	Personal Finance	BUS125	Personal Finance
BM10	Microsoft Word & PowerPoint	CIS111	Basic PC Literacy <b>OR</b> OST136 Word Processing
BM20	Microsoft Excel	CTS130	Spreadsheet
BM10	Microsoft Word & PowerPoint <b>AND</b> FE 12 Early Childhood Education II	CIS111	Basic PC Literacy <b>OR</b> OST137 Office Software Applications
CN10	AOF Principles of Finance	BUS125	Personal Finance
CN18	AOF Financial Services	BAF110	Principals of Banking
FE11	Early Childhood Education I <b>AND</b> FE12 Early Childhood Education II	EDU119	Introduction to Early Childhood Education
FE60	Parenting & Child Development	EDU144	Child Development I
FH21	Culinary Arts & Hospitality I <b>AND</b> ServeSafe Certification	CUL135A	Food and Beverage Service Lab
FH21	Culinary Arts & Hospitality I <b>AND</b> FH22 Culinary Arts & Hospitality II	CUL140	Basic Culinary Skills <b>OR</b> CUL110 Garde Manager I
FN41	Foods II-Enterprise <b>AND</b> ServeSafe Certification <b>OR</b> FH20 Introduction to Culinary Arts & Hospitality	CUL110 & CUL110A	Sanitation & Safety <b>AND</b> Sanitation & Safety Lab
FN41	Foods I <b>AND</b>	NUT110	Nutrition <b>OR</b>
FN42	Foods II-Enterprise <b>AND</b> ServeSafe Certification	CUL112 & 112A	Nutrition for Foodservice <b>AND</b> Nutrition for Foodservice Lab
HN43	Nursing Fundamentals	NAS101	Nursing Assistant I
HU40	Health Science I	MED120	Survey of Medical Terminology
HU40	Health Science I <b>AND</b> Valid Heartsaver CPR AED Card	HSC120	CPR
IC00	Core and Sustainable Construction	CAR110	Introduction to Carpentry
IC00	Core and Sustainable Construction <b>AND</b> OSHA 10 Construction Certification	ISC115	Construction Safety
IC00	Core and Sustainable Construction <b>AND</b> IC21 Carpentry I	CAR111	Carpentry I
IC00	Core and Sustainable Construction <b>AND</b> IC21 Carpentry I <b>AND</b> IC22 Carpentry II	CAR112	Carpentry II
IC61	Drafting I	ARC111	Introduction to Architecture
IC61	Drafting I <b>AND</b> IC62 Drafting II-Architecture	ARC114	Architectural CAD <b>AND</b> ARC114A Architectural CAD Lab
IC61	Drafting I <b>AND</b> IV22 Drafting II-Engineering	ARC114	Architectural CAD <b>AND</b> ARC114A Architectural CAD Lab
IV23	Drafting III-Engineering	ARC221	DFT151 CAD I <b>AND</b> ARC114A Architectural 3D CAD
IT30	Introduction to Collision Repair <b>AND</b> ICAR Intro Series Certificate	TRN110	Introduction to Transportation
IT31	Collision Repair I <b>AND</b> I-CAR Non-Structural Pro Level 1 Certification	AUB121	Non-Structural Damage I
MA52	Marketing Applications	MKT123	Fundamentals of Selling
MH31	Sports & Entertainment Marketing I	MKT229	Special Events Production
MH32	Sports & Entertainment Marketing II	MKT230	Public Relations
MH42	Hospitality & Tourism	HMR110	Introduction to Hospitality <b>AND</b> HRM240 Marketing for Hospitality
MM51	Marketing	MKT120	Principles of Marketing
MU92	Strategic Marketing	MKT221	Consumer Behavior
TE11	Principles of Technology I <b>AND</b> TE22 Principles of Technology II	PHY121	Applied Physics I <b>AND</b> PHY122 Applied Physics II
TP11	PLTW Introduction to Engineering Design	EGR115	Introduction to Technology

Students planning to attend a North Carolina community college other than Fayetteville Technical Community College must meet the articulation criteria under the North Carolina state-wide Articulation Agreement.



2021-2022

Visit our website for more information:

<http://www.faytechcc.edu/academics/high-school-connections>

Contact information: High School Connections Office  
(910) 678-8583 or [HSC@faytechcc.edu](mailto:HSC@faytechcc.edu)

North Carolina's Career and College Promise program provides seamless dual enrollment educational opportunities for eligible high school students to accelerate completion of college certificates, diplomas, and associate degrees that lead to college transfer or provide entry-level job skills. There are two pathways in which an eligible high school student can enroll:

1. A College Transfer Pathway.
2. A Career and Technical Education Pathway.

#### **College Transfer Pathways**

The College Transfer Pathways are designed for high school juniors and seniors who wish to begin earning credit towards a baccalaureate degree. The College Transfer Pathways provide tuition free college credits as part of the Universal General Education Transfer Component (UGETC). UGETC courses with a final grade of "C" or better are guaranteed to transfer for general education equivalency credit to each of the 16 UNC institutions.

1. To be eligible for enrollment, a student must meet the following criteria:
  - a. Be a high school junior or senior; **AND**
  - b. Have an unweighted minimum GPA of 2.8 on high school courses **AND/OR**
  - c. Demonstrate college readiness on placement assessment(s) in English, Reading, and Mathematics
2. To maintain eligibility for continued enrollment, a student must:
  - a. Continue to make progress toward high school graduation, and
  - b. Maintain a 2.0 GPA in college coursework after completing two courses.

**NOTE:** Students who fall below a 2.0 GPA in their college coursework will become ineligible for future courses with High School Connections.

3. A student may enroll in **one** College Transfer Pathway program of study and may not substitute courses in one program for courses in another.
4. A student may enroll in both a College Transfer Pathway and a Career and Technical Education Pathway. Prior approval of the high school principal or his/her designee and the FTCC's Chief Academic Officer are required.



## Career and Technical Education Pathways

Career and Technical Education Pathways are programs of study to provide expanded opportunities for eligible high school students to participate in Career and Technical Education tuition free courses and to expose students to a variety of high-skill career options. Career and Technical Education Pathways lead to certificates aligned with a high school career cluster.

1. To be eligible for enrollment, a high school student must meet the following criteria:
  - a. Be a high school junior or senior; **AND**
  - b. Have an unweighted minimum GPA of 2.8 on high school courses **AND/OR**
  - c. Demonstrate college readiness on placement assessment(s) in English, Reading, and Mathematics for applicable programs **OR**
  - d. Have the written recommendation waiver from the high school principal or his/her designee specific to why that CTE pathway aligns with the future plans of the specific student.
2. Career Technical Education courses may be used to provide partial or full fulfillment of a four-unit career cluster. Where possible, students should be granted articulated credit based on the local or state North Carolina High School to Community College articulation agreement.
3. To maintain eligibility for continued enrollment, a student must
  - a. Continue to make progress toward high school graduation, and
  - b. Maintain a 2.0 in college coursework after completing two courses.

**NOTE:** Students who fall below a 2.0 GPA in their college coursework will become ineligible for future courses with High School Connections.

4. A student may not substitute courses in one program for courses in another. A student may enroll in two CTE programs at the same time, provided the exception has been approved by the college's Chief Academic Officer.
5. College transferable courses may be in some CTE pathways and count for weighted credit toward the high school academic grade point average.

## Other Important Information Regarding FTCC Courses Outlined in this Publication.

- Students must register for classes through their high school.
- Tuition is free. **The student is responsible for textbook and supply costs.** Supply costs may include the costs associated with a required uniform, tools, kits, and other equipment. Parents and students are strongly encouraged to review textbook and supply costs *prior* to enrolling in programs. FTCC does not have a textbook rental program. Students can be dropped from courses for not having required materials.
- High School Connections classes are composed only of high school students and follow the Cumberland County Schools calendar and inclement weather schedule.
- Students may take approved FTCC courses concurrently with adult students. Concurrent classes follow the FTCC calendar and do not observe the CCS calendar and inclement weather schedule.
- Classes are offered on FTCC's campus(es), online, and at select high schools. Transportation shuttle services may be offered by CCS from many of the high schools.
- FTCC uses the Blackboard learning management system for online learning. Students will need to gain access to their FTCC Blackboard and FTCC email accounts.
- Students who successfully complete a Career & Technical Education certificate program with a minimum 2.0 FTCC GPA will be eligible to participate in the FTCC spring commencement ceremony.

**College Transfer Pathways**

Students and parents are encouraged to determine which College Transfer Pathway best fits the long-term goals of the student while taking into consideration the student’s strengths and interests.

Program Eligibility/College Ready Benchmarks on Approved Diagnostic Assessments

Test	PSAT 10 and PSAT/NMSQT (2015 and beyond)	SAT (March 2016 and beyond)	Pre-ACT and ACT	RISE PLACEMENT TEST (CCRG)	Advanced Place- ment (AP)
English	26 or a composite score of 460 for Evidence-Based Reading and Writing	480 composite score for Evidence-Based Reading and Writing	18	70 or higher on Tier 1 <b>and</b> Tier 2	3 or higher on English Language and Composition  3 or higher on English Literature and Composition
Reading	26 or a composite score of 460 for Evidence-Based Reading and Writing	480 composite score for Evidence-Based Reading and Writing	22	70 or higher on Tier 1 <b>and</b> Tier 2	
Mathematics	24.5 or 510	530	22	70 or higher on Tier 1 <b>and</b> Tier 2 <b>and</b> Tier 3	3 or higher on Calculus AB  3 or higher on Calculus BC

## College Transfer Pathway: Associate in Arts

The Associate in Arts pathway is designed for high school students who wish to begin study toward the Associate in Arts degree and a baccalaureate degree in a non-stem major.

SEM	COURSE	NAME	DAYS	TIMES	FTCC Credit	High School Credit
Fall	COM-231	Public Speaking	MW	1:00-2:50	3	1
Fall	ENG-111	Writing & Inquiry	MW	1:00-2:50	3	1
Fall	HIS-131	American History I	MW	1:00-2:50	3	1
Fall	HIS-132	American History 2	MW	1:00-2:50	3	1
Fall	MUS-110	Music Appreciation	MW	1:00-2:50	3	1
Fall	SOC-210	Introduction to Sociology	MW	1:00-2:50	3	1
Fall	SPA-111	Elementary Spanish 1	MW	1:00-2:50	3	1
Fall	COM-231	Public Speaking	TTH	1:00-2:50	3	1
Fall	ENG-111	Writing & Inquiry	TTH	1:00-2:50	3	1
Fall	FRE-111	Elementary French 1	TTH	1:00-2:50	3	1
Fall	HIS-131	American History 1	TTH	1:00-2:50	3	1
Fall	MAT-152	Statistical Methods	TTH	1:00-2:50	4	1
Fall	SOC-210	Introduction to Sociology	TTH	1:00-2:50	3	1
Fall	MUS-110	Music Appreciation	TTH	1:00-2:50	3	1
Fall	ACA-122	College Transfer Success	Online	Online	1	N/A
Fall	HIS-131	American History 1	Online	Online	3	1
Spring	ART-114	Art History Survey 1	MW	1:00-2:50	3	1
Spring	COM-231	Public Speaking	MW	1:00-2:50	3	1
Spring	ENG-111	Writing & Inquiry	MW	1:00-2:50	3	1
Spring	HIS-131	American History 1	MW	1:00-2:50	3	1
Spring	HIS-132	American History 2	MW	1:00-2:50	3	1
Spring	SOC-210	Introduction to Sociology	MW	1:00-2:50	3	1
Spring	SPA-112	Elementary Spanish 2*	MW	1:00-2:50	3	1
Spring	COM-231	Public Speaking	TTH	1:00-2:50	3	1
Spring	ENG-112	Writing/Research in the Disc*	TTH	1:00-2:50	3	1
Spring	FRE-112	Elementary French 2*	TTH	1:00-2:50	3	1
Spring	HIS-132	American History 2	TTH	1:00-2:50	3	1
Spring	MAT-152	Statistical Methods	TTH	1:00-2:50	4	1
Spring	SOC-210	Introduction to Sociology	TTH	1:00-2:50	3	1
Spring	ACA-122	College Transfer Success	Online	Online	1	N/A
Spring	ENG-111	Writing & Inquiry	Online	Online	3	1
Spring	HIS-132	American History 2	Online	Online	3	1
Either	ASL-111	Elementary ASL 1	Concurrent	Concurrent	3	1
Either	ASL-112	Elementary ASL 2*	Concurrent	Concurrent	3	1
Either	BIO-111	General Biology 1	Concurrent	Concurrent	4	1

**NOTE:** Eligible community college courses shall have a high school weight of one additional quality point. See your school counselor for details regarding course weight and your academic grade point average. Courses with 1-2 community college credit values will not count as high school course credit or weight.

\* indicates course prerequisites apply.

## College Transfer Pathway: Associate In Arts-Teacher Preparation-**New**

The Associate in Arts in Teacher Preparation is designed for high school students who wish to begin study toward the Associate in Arts in Teacher Preparation degree and a baccalaureate degree in teaching a non-STEM major.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC Credit	High School Credit
Fall	COM-231	Public Speaking	MW	1:00-2:50	3	1
Fall	ENG-111	Writing & Inquiry	MW	1:00-2:50	3	1
Fall	MUS-110	Music Appreciation	MW	1:00-2:50	3	1
Fall	SOC-210	Introduction to Sociology	MW	1:00-2:50	3	1
Fall	SPA-111	Elementary Spanish 1	MW	1:00-2:50	3	1
Fall	COM-231	Public Speaking	TTH	1:00-2:50	3	1
Fall	ENG-111	Writing & Inquiry	TTH	1:00-2:50	3	1
Fall	FRE-111	Elementary French 1	TTH	1:00-2:50	3	1
Fall	MAT-152	Statistical Methods	TTH	1:00-2:50	4	1
Fall	SOC-210	Introduction to Sociology	TTH	1:00-2:50	3	1
Fall	MUS-110	Music Appreciation	TTH	1:00-2:50	3	1
Fall	ACA-122	College Transfer Success	Online	Online	1	0
Spring	COM-231	Public Speaking	MW	1:00-2:50	3	1
Spring	ENG-111	Writing & Inquiry	MW	1:00-2:50	3	1
Spring	SOC-210	Introduction to Sociology	MW	1:00-2:50	3	1
Spring	SPA-112	Elementary Spanish 2*	MW	1:00-2:50	3	1
Spring	COM-231	Public Speaking	TTH	1:00-2:50	3	1
Spring	ENG-112	Writing/Research in the Disc*	TTH	1:00-2:50	3	1
Spring	FRE-112	Elementary French 2*	TTH	1:00-2:50	3	1
Spring	MAT-152	Statistical Methods	TTH	1:00-2:50	4	1
Spring	SOC-210	Introduction to Sociology	TTH	1:00-2:50	3	1
Spring	ACA-122	College Transfer Success	Online	Online	1	0
Spring	ENG-111	Writing & Inquiry	Online	Online	3	1
Either	ART-111	Art Appreciation	Concurrent	Concurrent	3	1
Either	ASL-111	Elementary ASL 1	Concurrent	Concurrent	3	1
Either	ASL-112	Elementary ASL 2*	Concurrent	Concurrent	3	1
Either	BIO-111	General Biology 1	Concurrent	Concurrent	4	1
Either	EDU-187	Teaching and Learning for All	Concurrent	Concurrent	4	1
Either	EDU-216	Foundations of Education	Concurrent	Concurrent	3	1

**NOTE:** Eligible community college courses shall have a high school weight of one additional quality point. See your school counselor for details regarding course weight and your academic grade point average. Courses with 1-2 community college credit values will not count as high school course credit or weight.

- indicates course prerequisites apply.

## College Transfer Pathway: Associate in Science

SEM	COURSE	NAME	DAYS	TIMES	FTCC Credit	High School Credit
Fall	COM-231	Public Speaking	MW	1:00-2:50	3	1
Fall	ENG-111	Writing & Inquiry	MW	1:00-2:50	3	1
Fall	MAT-171	Precalculus Algebra	MW	1:00-2:50	4	1
Fall	PSY-150	General Psychology	MW	1:00-2:50	3	1
Fall	SPA-111	Elementary Spanish 1	MW	1:00-2:50	3	1
Fall	COM-231	Public Speaking	TTH	1:00-2:50	3	1
Fall	ENG-111	Writing & Inquiry	TTH	1:00-2:50	3	1
Fall	FRE-111	Elementary French 1	TTH	1:00-2:50	3	1
Fall	MAT-171	Precalculus Algebra	TTH	1:00-2:50	4	1
Fall	POL-120	American Government	TTH	1:00-2:50	3	1
Fall	PSY-150	General Psychology	TTH	1:00-2:50	3	1
Fall	ACA-122	College Transfer Success	Online	Online	1	N/A
Fall	PSY-150	General Psychology	Online	Online	3	1
Spring	COM-231	Public Speaking	MW	1:00-2:50	3	1
Spring	ENG-111	Writing & Inquiry	MW	1:00-2:50	3	1
Spring	MAT-172	Precalculus Trigonometry*	MW	1:00-2:50	4	1
Spring	PSY-150	General Psychology	MW	1:00-2:50	3	1
Spring	SPA-112	Elementary Spanish 2*	MW	1:00-2:50	3	1
Spring	COM-231	Public Speaking	TTH	1:00-2:50	3	1
Spring	ENG-112	Writing/Research in the Disc*	TTH	1:00-2:50	3	1
Spring	FRE-112	Elementary French 2*	TTH	1:00-2:50	3	1
Spring	MAT-171	Precalculus Algebra	TTH	1:00-2:50	4	1
Spring	PHI-240	Introduction to Ethics*	TTH	1:00-2:50	3	1
Spring	PSY-150	General Psychology	TTH	1:00-2:50	3	1
Spring	ACA-122	College Transfer Success	Online	Online	1	N/A
Spring	ENG-111	Writing & Inquiry	Online	Online	3	1
Either	ASL-111	Elementary ASL 1	Concurrent	Concurrent	3	1
Either	ASL-112	Elementary ASL 2*	Concurrent	Concurrent	3	1
Either	CHM-151	General Chemistry 1*	Concurrent	Concurrent	4	1
Either	CHM-152	General Chemistry 2*	Concurrent	Concurrent	4	1

**NOTE:** Eligible community college courses shall have a high school weight of one additional quality point. Courses with 1-2 community college credit values will not count as high school course credit.

- *indicates course prerequisites apply.*

## College Transfer Pathway: Associate In Science-Teacher Preparation-*New*

The Associate in Science pathway is designed for high school students who wish to begin studies toward the Associate in Science in Teacher Preparation degree and a baccalaureate degree in teaching a STEM or major.

SEM	COURSE	NAME	DAYS	TIMES	FTCC Credit	High School Credit
Fall	COM-231	Public Speaking	MW	1:00-2:50	3	1
Fall	ENG-111	Writing & Inquiry	MW	1:00-2:50	3	1
Fall	MAT-171	Precalculus Algebra	MW	1:00-2:50	4	1
Fall	PSY-150	General Psychology	MW	1:00-2:50	3	1
Fall	SPA-111	Elementary Spanish 1	MW	1:00-2:50	3	1
Fall	COM-231	Public Speaking	TTH	1:00-2:50	3	1
Fall	ENG-111	Writing & Inquiry	TTH	1:00-2:50	3	1
Fall	FRE-111	Elementary French 1	TTH	1:00-2:50	3	1
Fall	MAT-171	Precalculus Algebra	TTH	1:00-2:50	4	1
Fall	POL-120	American Government	TTH	1:00-2:50	3	1
Fall	PSY-150	General Psychology	TTH	1:00-2:50	3	1
Fall	ACA-122	College Transfer Success	Online	Online	1	0
Fall	PSY-150	General Psychology	Online	Online	3	1
Spring	COM-231	Public Speaking	MW	1:00-2:50	3	1
Spring	ENG-111	Writing & Inquiry	MW	1:00-2:50	3	1
Spring	MAT-172	Precalculus Trigonometry*	MW	1:00-2:50	4	1
Spring	PSY-150	General Psychology	MW	1:00-2:50	3	1
Spring	SPA-112	Elementary Spanish 2*	MW	1:00-2:50	3	1
Spring	COM-231	Public Speaking	TTH	1:00-2:50	3	1
Spring	ENG-112	Writing/Research in the Disc*	TTH	1:00-2:50	3	1
Spring	FRE-112	Elementary French 2*	TTH	1:00-2:50	3	1
Spring	MAT-171	Precalculus Algebra	TTH	1:00-2:50	4	1
Spring	PHI-240	Introduction to Ethics*	TTH	1:00-2:50	3	1
Spring	PSY-150	General Psychology	TTH	1:00-2:50	3	1
Spring	ACA-122	College Transfer Success	Online	Online	1	0
Spring	ENG-111	Writing & Inquiry	Online	Online	3	1
Either	ART-111	Art Appreciation	Concurrent	Concurrent	3	1
Either	ASL-111	Elementary ASL 1	Concurrent	Concurrent	3	1
Either	ASL-112	Elementary ASL 2*	Concurrent	Concurrent	3	1
Either	BIO-111	General Biology I	Concurrent	Concurrent	4	1
Either	BIO-112	General Biology II	Concurrent	Concurrent	4	1
Either	EDU-187	Teaching and Learning for All	Concurrent	Concurrent	4	1
Either	EDU-126	Foundations of Education	Concurrent	Concurrent	3	1

**NOTE:** Eligible community college courses shall have a high school weight of one additional quality point. See your school counselor for details regarding course weight and your academic grade point average. Courses with 1-2 community college credit values will not count as high school course credit or weight.

- indicates course prerequisites apply.

## College Transfer Pathway: Associate in Engineering

SEM	COURSE	NAME	DAYS	TIMES	FTCC Credit	High School Credit
Fall	COM-231	Public Speaking	MW	1:00-2:50	3	1
Fall	ENG-111	Writing & Inquiry	MW	1:00-2:50	3	1
Fall	MUS-110	Music Appreciation	MW	1:00-2:50	3	1
Fall	SPA-111	Elementary Spanish 1	MW	1:00-2:50	3	1
Fall	COM-231	Public Speaking	TTH	1:00-2:50	3	1
Fall	ENG-111	Writing & Inquiry	TTH	1:00-2:50	3	1
Fall	FRE-111	Elementary French 1	TTH	1:00-2:50	3	1
Fall	ACA-122	College Transfer Success	Online	Online	1	N/A
Spring	ART-114	Art History Survey I	MW	1:00-2:50	3	1
Spring	COM-231	Public Speaking	MW	1:00-2:50	3	1
Spring	ENG-111	Writing & Inquiry	MW	1:00-2:50	3	1
Spring	SPA-112	Elementary Spanish 2*	MW	1:00-2:50	3	1
Spring	COM-231	Public Speaking	TTH	1:00-2:50	3	1
Spring	ENG-112	Writing/Research in the Disc*	TTH	1:00-2:50	3	1
Spring	FRE-112	Elementary French 2*	TTH	1:00-2:50	3	1
Spring	PHI-240	Introduction to Ethics*	TTH	1:00-2:50	3	1
Spring	ACA-122	College Transfer Success	Online	Online	1	N/A
Spring	ENG-111	Writing & Inquiry	Online	Online	3	1
Either	CHM-151	General Chemistry 1*	Concurrent	Concurrent	4	1
SPRING	DFT-170	Engineering Graphics-	TTH	1:00-2:50	3	1
Either	ECO-251	Survey of Economics	Concurrent	Concurrent	3	1
FALL	EGR-150	Intro to Engineering-	MW	1:00-2:50	2	N/A
Either	MAT-271	Calculus I*	Concurrent	Concurrent	4	1
Either	MAT-272	Calculus II*	Concurrent	Concurrent	4	1
Either	PHY-251	General Physics I*	Concurrent	Concurrent	4	1
Either	PHY-252	General Physics II*	Concurrent	Concurrent	4	1
Either	ASL-111	Elementary ASL 1	Concurrent	Concurrent	3	1
Either	ASL-112	Elementary ASL 2*	Concurrent	Concurrent	3	1
Either	CHM-151	General Chemistry 1*	Concurrent	Concurrent	4	1
Either	CHM-152	General Chemistry 2*	Concurrent	Concurrent	4	1

**NOTE:** Eligible community college courses shall have a high school weight of one additional quality point. Courses with 1-2 community college credit values will not count as high school course credit.

- indicates course prerequisites apply.

## Career & Technical Education Pathway

Credit obtained in the High School Connections CTE pathways can generally be transferred directly into the corresponding Associate Degree or Diploma program at FTCC. Some certificates require additional courses to be taken concurrently in order for the student to complete the program and be eligible for FTCC graduation.

These additional courses will be noted below each program and are not offered as high school sections. Classes below are listed with the FTCC and High School (HS) credit awarded. Some credits have weighted high school value as indicated by the > sign beside the unit.

- + College Transfer Course/Pathway (Must meet College Transfer Eligibility Requirements)
- ^ PACE course (See PACE/Transfer Designation information on page 18)
- Course

Prerequisites apply.

### Agriculture, Food, and Natural Resources

#### *Horticulture-Basic C1524AH1*

Basic Horticulture is designed to give students an introduction to the broad field of horticulture. Emphasis is placed on instruction in plant science, landscape management and irrigation, plant materials, pest management and plant propagation.

**NOTE:** Courses located at FTCC's Horticulture Education Center (Cape Fear Botanical Garden).

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	HOR 162	Applied Plant Science	MW	1:00-2:50	3	1 S
	HOR 134	Greenhouse Operations	TTH	1:00-2:50	3	1 S
Spring	TRF 110	Intro to Turfgrass Cult & ID	MWF	1:00-2:50	4	1 S
	HOR 168	Plant Propagation	TTH	1:00-2:50	3	1 S

### Architecture and Construction

#### *A/C, Heating & Refrigeration-Basic (Two Year Program) C35100H1*

Basic A/C, Heating & Refrigeration is designed to prepare individuals for entry-level positions in the air conditioning, heating & refrigeration field. Courses include basic hands-on training in the installation, maintenance and repair of residential heating and air conditioning equipment.

**NOTE:** Evening Courses Available.

COURSE	NAME	FTCC	H.S.
AHR 110	Intro to Refrigeration	5	2 S
AHR 112	Heating Technology**	4	1 S
AHR 113	Comfort Cooling	4	1 S
AHR 114	Heat Pump Tech**	4	1 S



*Building Construction Tech General Maintenance C35140H2-New*

Building Construction Technology General Maintenance is designed to provide students with an introduction to the building construction industry. Coursework includes the exploration of different construction careers including carpentry, electrical, plumbing, and HVAC. Graduates should qualify for entry-level jobs in any general construction setting as an on-the-job trainee.

**NOTE: Evening Courses Available.**

SEMESTER	COURSE	NAME	FTCC	H.S.
Fall	CAR 140	Basic Carpentry	4	1 S
	ISC 115	Construction Safety	2	0
	PLU 115	Basic Plumbing	4	1 S
Spring	AHR 120	HVACR Maintenance	2	0
	AHR 160	Refrigerant Certification	1	0
	ELC 113	Residential Wiring	4	1 S

*Construction Technology-Introduction C35140H1*

Building Construction Technology is designed to provide students with an introduction to the building construction industry. Coursework includes basic construction concepts such as general construction, blueprint reading, and building codes. Graduates should qualify for entry-level jobs in any general construction setting as an on-the-job trainee.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	CAR 111AA	Carpentry I (part one)	M - F	1:00-2:50	4	1 S
	BPR 130	Blueprint Reading	Online	Online	3	1 S
	CMT 120	Codes and Inspections	Online	Online	3	1 S
Spring	CAR 111BB	Carpentry I (part two)	M - F	1:00-2:50	4	1 S
	CST 131	OSHA/Safety/Certification	Online	Online	3	1 S

*Electricity, Motors and Controls, and PLC- Basic C35130H1*

This certificate curriculum is designed to provide training for persons interested in the installation and maintenance of electrical systems found in residential and industrial facilities. Coursework, most of which is hands on, will include such topics as DC/AC theory, basic wiring practices, industrial motor controls, and programmable logic controllers.

**NOTE: Evening Courses Available.**

COURSE	NAME	FTCC	H.S.
BPR 130	Blueprint Reading/Const	3	1 S
ELC 112	DC/AC Electricity	5	2 S
ELC 117	Motors and Controls	4	1 S
ELC 128	Intro to PLC	3	1 S
ELC 229	Applications Project	2	0

### Green Sustainable Architecture C40100H1

Green Sustainable Architecture introduces the concepts and principles related to green site development and architectural design. Students receive instruction in construction document preparation, materials and methods, environmental and structural systems, computer applications, and complete a design project.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	ARC 111^	Intro to Architectural Tech	MWF	1:00-2:50	3	1 S
	SST 140	Green Building	TTH	1:00-2:50	3	1 S
Spring	ARC 112	Const Materials & Methods	MWF	1:00-2:50	4	1 S
	ARC 114^	Architectural CAD	TTH	1:00-2:50	2	1 S

### Photovoltaic Systems-Introduction C35130H1

Intro to Photovoltaic Systems provides training for persons interested in the installation and maintenance of electrical systems that convert solar energy into electricity with photovoltaic (PV) technologies. Topics include site analysis for system integration, building codes, electrical specifications, PV system components, and array design.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	ELC 118	National Electrical Code	MW	1:00-2:50	2	1 S
	ELC 220	Photovoltaic Systems Tech	TTH	1:00-2:50	3	1 S
	ELC 112	DC/AC Electricity	MTWTH	1:00-2:50	5	2 S
Spring	ELC 221	Advanced PV Systems Tech**	MW	1:00-2:50	3	1 S
	ELC 229	Applications Proj	Online	Online	4	1 S

### Plumbing-Basic C35300H1

The Plumbing certificate is designed to prepare individuals for entry-level positions in plumbing. Coursework includes fundamental practices in plumbing assembly and repair, and in basic plumbing codes.

COURSE	NAME	FTCC	H.S.
PLU 110	Modern Plumbing	9	3 S
BPR 130	Blueprint Reading	3	1 S
PLU 140	Intro to Plumbing Codes	2	0
PLU 150	Plumbing Diagrams**	2	0

### Arts, Audio/Video, Tech and Communications

#### 3D Animation C25450H2

Students in this program learn the basics of 3D modeling and animation. They are introduced to texturing and motion capture. This certificate prepares students for entry into the game, film, and digital entertainment industries or for further study in commercial digital arts.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	SGD 114	3D Modeling	M - F	1:00-2:50	3	1 S
	SGD 116	Graphic Design Tools	M - F	1:00-2:50	3	1 S
Spring	SGD 162	SG 3D Animation	M - F	1:00-2:50	3	1 S
	SGD 262	SG 3D Animation II	M - F	1:00-2:50	3	1 S

### Audio and Video Editing Certificate C255590H10-New

In the Audio and Video Editing certificate students learn the basics of audio and video editing technology. They are also introduced to graphic tools, multimedia applications, and animation.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	MIT 115	Intro to Video Concepts	MW	1:00-2:50	3	1 S
	MIT 120	Intro to Audio Concepts	TTH	1:00-2:50	3	1 S
Spring	DME 120	Intro to Multimedia App	MW	1:00-2:50	3	1 S
	DME 140	Intro to Audio/Video Media	TTH	1:00-2:50	3	1 S

### Graphic Design Basics C30100H1

Graphic Design Basics prepares students for entry-level positions in the graphic design profession. Students will learn design, advertising, illustration, and digital & multimedia preparation of printed/electronic promotional materials.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	GRD 141	Graphic Design I (1st 8 weeks)	M - F	1:00-2:50	2	0
	GRD 151	Comp Design Basics (2nd 8 weeks)	M - F	1:00-2:50	4	1 S
Spring	GRD 110	Typography I (1st 8 weeks)	M - F	1:00-2:50	3	1 S
	GRD 152	Comp Design Tech I* (2nd 8 weeks)	M - F	1:00-2:50	3	1 S

### Simulation and Game Development C25450H1

Simulation and Game Development introduces students to the skills they would need for entry-level positions in the field. Students will learn about designing simulation, game programming, and 3D modeling.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	SGD 111	Introduction to SGD* (1st 8 weeks)	M - F	1:00-2:50	3	1 S
	SGD 114	3D Modeling (2nd 8 weeks)	M - F	1:00-2:50	3	1 S
Spring	SGD 112	SGD Design* (1st 8 weeks)	M - F	1:00-2:50	3	1 S
	SGD 113	SGD Programming* (2nd 8 weeks)	M - F	1:00-2:50	3	1 S

### Business Management and Administration

#### Business Foundations C25120H1+

Business Foundations is designed to teach students basic business principles. The certificate emphasizes business concepts from an individual, business, and national perspective. Coursework includes an introduction to business principles, business law, management, marketing, and economics.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	BUS 110+	Introduction to Business	MW	1:00-2:50	3	1+
	BUS 115+	Business Law I	TTH	1:00-2:50	3	1+
Spring	BUS 137+	Principles of Management	MW	1:00-2:50	3	1+
	MKT 120^	Principles of Marketing	TTH	1:00-2:50	3	1 S

## Healthcare Customer Service C25310H2

Healthcare Customer Service prepares students for employment in a medical office or other healthcare related business. Students will learn medical terminology; medical insurance and billing; as well as medical ethics and healthcare customer relations. Upon completion of this program, students would be able to perform the necessary skills required in today's medical office or transfer the course credits to the Medical Office Professional track for an Associate of Applied Science degree.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
<b>Fall</b>	OST 141^	Terms I-Med Office* (1st 8 weeks)	MW	1:00-2:50	3	1 S
	OST 142^	Terms II-Med Office** (2nd 8 weeks)	MW	1:00-2:50	3	1 S
	OST 148	Coding/Bill/Ins.**	TTH	1:00-2:30	3	1 S
<b>Spring</b>	OST 149	Medical Legal Issues*	MW	1:00-2:30	3	1 S
	OST 263	Healthcare Customer Relations	TTH	1:00-2:30	3	1 S

## Office Administration/Legal Office Foundations C25370H2

The Legal Office Foundation program is designed to introduce students to the foundations of a legal office. Coursework includes legal terminology, business law, office applications, and office procedure skills.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
<b>Fall</b>	OST 155	Legal Terminology	MW	1:00-2:50	3	1 S
	BUS 115+	Business Law I*	TTH	1:00-2:50	3	1 S
<b>Spring</b>	OST 181	Office Procedures	MW	1:00-2:50	3	1 S
	OST 137	Office Applications I	TTH	1:00-2:50	3	1 S

## Finance

### Accounting Foundations C25800H1+

The Accounting certificate is designed to provide students with the knowledge and skills that form the foundation for accounting. Using the "language of business," accountants assemble and analyze, process, and communicate essential information about financial operations.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
<b>Fall</b>	ACC 120+	Principles of Financial Acc	MW	1:00-2:50	4	1 +
	BUS 115+	Business Law I	TTH	1:00-2:50	3	1 +
<b>Spring</b>	ACC 121+	Prin. of Managerial Acc*	MW	1:00-2:50	4	1 +
	ECO 251+	Principles of Microeconomics	TTH	1:00-2:50	3	1 +

## HEALTH SCIENCE

### *Central Sterile Processing C45180H1+ -New*

The Central Sterile Processing curriculum is designed to prepare individuals for the field of Sterile Processing and Central Service Supply. Graduates will be able to take the Certification Board for Sterile Processing and Distribution, Inc. Employment opportunities include surgery centers, sterile processing departments in hospitals and traveling consultation services. This is an in-demand local career pathway with very limited seating.

**NOTE: Seniors Only. CPR, Immunizations, and Uniform are required.**

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
<b>Fall</b>	STP 101	Intro to Sterile Processing	M-TH	2:00-4:00	8	2 S
	CIS 110	Introduction to Computers	Online	Online	3	1 S
<b>Spring</b>	STP 102	STP Clinical Practice	M-TH	2:00-6:30	3	1 S
	STP 103	Prof Success Prep	Online	Online	1	0

### *Health and Fitness Science C45630H1*

The Health and Fitness Science program is designed to provide students with the knowledge and skills necessary for employment in the fitness and exercise industry. Students will be trained in exercise science and be able to administer basic fitness tests and health risk appraisals, teach specific exercise and fitness classes, and provide instruction in the proper use of exercise equipment and facilities. All credits acquired in this program of study will transfer into the Health and Fitness Science Associate Degree program, provided that all grades earned are a "B" or higher. Courses with a final mark of "C" or lower will not transfer into the Associate Degree program.

**NOTE: Seniors Only.**

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
<b>Fall</b>	HFS 110	Exercise Science	MW	1:00-2:50	4	1 +
	BIO 168+	Anatomy & Physiology I*	TTH	2:00-4:50~	4	1 +
<b>Spring</b>	HFS 111	Fitness & Exercise Testing I	MW	1:00-2:50	4	1 +
	BIO 169+	Anatomy & Physiology II**	TTH	2:00-4:50~	4	1 +

~ Indicates a class for which students will have to provide their own transportation at least one way.

## Nurse Aide C45480H1

Nurse Aide prepares individuals to work under the supervision of licensed health care professionals in performing nursing care and services for persons of all ages. Coursework emphasizes personal care, vital signs, communication, nutrition, medical asepsis, catheterization, tracheostomy care, dressing changes, oxygen therapy, and legal scope of practice for Nurse Aides. Graduates of this curriculum may be eligible to be listed on the registry as a Nurse Aide I and Nurse Aide II.

**NOTE: Seniors Only. NAS courses follow FTCC academic calendar and meet over a 16-week period. CPR, Immunizations, and Uniform are required. Seating is limited.**

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	NAS 101	Nursing Assistant I (1st 8 weeks)	M - TH	2:00-4:30~	6	2 S
		(2nd 8 weeks)	MT	2:00-4:30~		
		(2nd 8 weeks)	TH	2:00-8:00~		
	MED-120	Survey of Med Terminology	Online	Online	1	1 S
Spring	NAS 102	Nursing Assistant II**	MT	2:00-4:30~	6	2 S
			TH	2:00-8:00~		

~ Indicates a class for which students will have to provide their own transportation at least one way.

## Hospitality and Tourism

### Demi-Chef C55150H1

Demi-Chef prepares students for entry-level positions in the catering and cold foods display fields. Students will learn basic cookery and cold food preparation concepts and techniques.

**NOTE: Uniform is required. Cost is approximately \$100.00.**

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	CUL 110^	Sanitation and Safety (1st 4 weeks)	M-F	1:00-2:50	2	0
	CUL 140	Basic Culinary Skills*	M - TH	1:00-2:50	5	2 S
Spring	CUL 160	Baking I*	M-W	1:00-2:50	3	1 S
	CUL 170	Garde-Manger I*	TTH	1:00-2:50	3	1 S

## Human Services

### Early Childhood Preschool C55860H1

This curriculum prepares individuals to work with preschool aged children (3-5) in diverse learning environments. Students will combine learned theories, competency-based knowledge, and practice in actual settings with preschool children.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	EDU 119	Intro to Early Child Ed (1st 5 weeks)	M-F	1:00-2:50	4	1 S
	EDU 131	Child, Family, Comm (2nd 5 weeks)	M-F	1:00-2:50	3	1 S
	EDU 145	Child Development II (3rd 5 weeks)	M-F	1:00-2:50	3	1 S
Spring	EDU 153	Health, Safety, Nutr (1st 8 weeks)	M-TH	1:00-2:50	3	1 S
	EDU 146	Child Guidance (2nd 8 weeks)	M-TH	1:00-2:50	3	1 S

### Manicuring/Nail Technology C55400H1

Nail Technology curriculum provides competency-based knowledge, scientific/artistic principles, and hands-on fundamentals associated with the nail technology industry. Graduates of this program should be prepared to take the NC Cosmetology State Board Licensing Exam and upon passing be licensed and qualify for employment in beauty/nail salons.

**NOTE:** Seniors only. Uniform, Books, and Nail Kit are required. Approximately cost of the program is \$550. Seating is very limited.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	COS 121	Manicure/Nail Technology I	MWF	1:00 - 2:50	6	2 S
			TTH	1:00 - 4:50~		
Spring	COS 222	Manicure/Nail Technology II**	MWF	1:00 - 2:50	6	2 S
			TTH	1:00 - 4:50~		

~ Indicates a class for which students will have to provide their own transportation at least one way.

### Natural Haircare C55170H1-New

This program provides instruction and clinical practice in twisting, wrapping, extending, locking, blow dry and hot iron as well as sanitization. Students will be able to perform natural hair styling and decoration in a salon setting. Graduates of this program should be prepared to take the NC Cosmetology State Board Licensing Exam and upon passing be licensed and qualify for employment in beauty/nail salons.

**NOTE:** Seniors only. Uniform, Books, and Nail Kit are required. Approximately cost of the program is \$550. Seating is very limited.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	COS 127	Natural Hair Care I	MWF	1:00 - 2:50	6	2 S
			TTH	1:00 - 4:50~		
Spring	COS 228	Natural Hair Care II**	MWF	1:00 - 2:50	6	2 S
			TTH	1:00 - 4:50~		

~ Indicates a class for which students will have to provide their own transportation at least one way.

### Information Technology

#### CISCO Entry Networking Certificate C25590H1

Cisco Networking Academy is a global education program that teaches students how to design, build, troubleshoot, and secure computer networks for increased access to career and economic opportunities in communities around the world.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	CTI 120	Network & Sec Foundations	M - F	1:00-2:30	3	1 S
	NET 125	Networking Basics	M - F	1:00-2:30	3	1 S
Spring	NOS 110	Operating Systems Concepts	M - F	1:00-2:30	3	1 S
	NET 126	Routing Basics*	M - F	1:00-2:30	3	1 S
Fall	CTI 120	Network & Sec Foundations	M - F	1:00-2:30	3	1 S

### CISCO Entry Networking Certificate C25590H4

Computer Technologies is designed to provide students with the fundamental skills in the computer field. Coursework will include creating a basic webpage and database as well as basic skills in networking, security, and computer operating systems. Students will also learn basic virtualization techniques.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	CTI 110	Web, Pgm & DB Foundation	MW	1:00-2:50	3	1 S
	NET 110	Networking Concepts	TTH	1:00-2:50	3	1 S
Spring	SEC 110	Security Concepts	MW	1:00-2:50	3	1 S
	NOS 110	Operating Systems Concepts	TTH	1:00-2:50	3	1 S

### Hardware and Software Certificate C25590H3

Hardware and Software is designed to prepare graduates for entry-level employment with organizations that use computers to process, manage, and communicate information. Classes cover computer operations and terminology, operating systems, database, networking, security, and technical support. Coursework prepares students for the A+ Certification.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	CTI 110	Web, Pgm, & DB Fnd. (1st 8weeks)	MW	1:00-2:50	3	1 S
	CTS 120	Hardware/Software Support (16 weeks)	T-TH	1:00-2:50	3	1 S
	NET 110	Networking Concepts (2nd 8weeks)	MW	1:00-2:50	3	1 S
Spring	CTS 220	Adv Hard/Software Support (16 weeks)	MW	1:00-2:50	3	1 S
	NOS 110	Operating Syst Concepts (1st 9weeks)	T-TH	1:00-2:50	3	1 S
	SEC 110	Security Concepts (2nd 8weeks)	T-TH	1:00-2:50	3	1 S

### Illustration Basics C30100H2-New

Illustration Basics prepares students for entry-level positions producing vector graphics. Students will learn drawing fundamentals, design principles, technical proficiency in vector-based drawing software, introductory and intermediate illustration skills for print and digital publishing.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	GRD 151	Computer Design Basics (1st 8 weeks)	M-F	1:00-2:50	3	1 S
	GRD 141	Graphic Design I (2nd 8 weeks)	M-F	1:00-2:50	4	1 S
Spring	GRD 121	Drawing Fundamentals I (1st 5 weeks)	M-F	1:00-2:50	2	0
	GRD 131	Illustration I (2nd 5 weeks)	M-F	1:00-2:50	2	0
	GRD 132	Illustration II (3rd 5 weeks)	M-F	1:00-2:50	2	0

### Intro To IOS Development Using Swift C25590H1

This program introduces students to the highly interactive Swift programming language for MACOS, IOS, WATCHOS, and TVOS. Upon completion of this program, students will be able to develop advanced, multifunctional iOS and Apple applications using Swift.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	CIS 115	Intro to Programming & Logic	MW	1:00-2:50	3	1 S
	CTI 110	Web, Pgm, Db Foundation	TTH	1:00-2:50	3	1 S
Spring	CSC 118	Swift Program I (1st 8 weeks)	M-F	1:00-2:50	3	1 S
	CSC 218	Swift Program II (2nd 8 weeks)	M-F	1:00-2:50	3	1 S



### Network Defense Specialist C25590H5

The Network Defense Certificate is designed to introduce students to the basics of networking and security and how to defend your network against attacks. Coursework includes networking and security concepts, Linux operating systems, and network vulnerabilities. Students will learn how to defend and protect network data.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	NET 110	Networking Concepts	MW	1:00-2:50	3	1 S
	SEC 110	Security Concepts	TTH	1:00-2:50	3	1 S
Spring	CCT 250	Network Vulnerabilities I	TTH	1:00-2:50	3	1 S
	NOS 120	Linux Single User	MW	1:00-2:50	3	1 S

### Python Programming C25590H8+

The PYTHON Programming certificate is designed to prepare individuals for employment as programmers in PYTHON through study and applications in computer concepts, logic, and programming procedures using the PYTHON programming language. Upon completion of this program, a student will have the necessary PYTHON skills for an entry level PYTHON programming position.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	CTI 110	Web, Pgm, and DB Foundation	MW	1:00-2:50	3	1 S
	CIS 115+	Intro to Prog & Logic	TTH	1:00-2:50	3	1 +
Spring	CSC 121	Python Programming	M	1:00-2:50	3	1 S
	CSC 221	Advanced Python Programming	W	1:00-2:50	3	1 S
	WEB 151	Mobile Application Dev I	T	1:00-2:50	3	1 S
	WEB 251	Mobile Application Dev II	TH	1:00-2:50	3	1 S

### SAS Programming Certificate C25590H1

Simulation and Game Development introduces students to the skills they would need for entry-level positions in the field. Students will learn about designing simulation, game programming, and 3D modeling.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	DBA 110	Database Concepts	M - F	1:00-2:50	3	1 S
	CSC 152	SAS	M - F	1:00-2:50	3	1 S
Spring	DBA 120	Database Program I (1st 8weeks)	M - F	1:00-2:50	3	1 S
	DBA 224	SAS DB Program II (2nd 8 weeks) M - F	1:00-2:50	3	1 S	

## Law, Public Safety, Corrections, and Security

### *Arson Fundamentals C55240H2-New*

The Fundamentals of Arson certificate program provides students with a foundation to build upon within the emergency services delivery programs. Topics include Fire Services Law and Ethics, Occupational Health Standards, dynamic environment of fire and its characteristics, basic building construction principles, and Investigative principles for the Arson Investigator. This program will prepare students for entry level knowledge required for an understanding of Arson Investigations and its fundamental tenants within the Fire Services Industry. This certificate program is offered in the spring only as part of a dual certificate program with the Fire Protection Technology Certificate in the fall.

**NOTE: Spring Only.**

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
<b>Spring</b>	FIP 128	Detection & Investigation	MW	1:00-2:50	3	1 S
	FIP 164	OSHA Standards	TTH	1:00-2:50	3	1 S
	FIP 152	Fire Protection Law	MW	1:00-2:50	3	1 S
	FIP 229	Fire Dynamics and Combust	TTH	1:00-2:50	3	1 S

### *Criminal Justice-Private Introduction C55180H1+*

Criminal Justice Technology is designed to provide knowledge of criminal justice systems and operations. Study will focus on local, state, and federal law enforcement, judicial process, corrections, and security services. The criminal justice system's role within society will be explored. This certificate is accelerated with eight-week classes.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
<b>Fall</b>	CJC 111+	Intro to Criminal Justice (1st 8 weeks)	M-TH	1:00-2:30	3	1 +
	CJC 131	Criminal Law (2nd 8 weeks)	M-TH	1:00-2:30	3	1 S
<b>Spring</b>	CJC 221	Investigative Principles (1st 8 weeks)	M-TH	1:00-2:30	4	1 S
	CJC 231	Constitutional Law (2nd 8 weeks)	M-TH	1:00-2:30	3	1 S

### *Criminal Justice-Private Investigations/Loss Prev C55180H3*

The Private Investigations/Loss Prevention Certificate program provides an in-depth study of private and corporate security loss and prevention. Topics include loss prevention, threat assessment, and high-risk event planning. This program prepares the student with additional knowledge required for employment as a Private Investigator, Loss Prevention Specialist, or Corporate Security Specialist.

**NOTE: Seniors Only.**

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
<b>Fall</b>	CJC 111+	Intro to Criminal Justice	Online	Online	3	1 +
	CJC 120	Interviews/Inter (1st 5 weeks)	M-TH	1:00-2:30	2	0
	CJC 132	Court Proced & Evid (2nd 5 weeks)	M-TH	1:00-2:30	3	1 S
	CJC 151	Intro to Loss Prev (1st 5 weeks)	M-TH	1:00-2:30	3	1 S
<b>Spring</b>	CJC 115	Crime Scene Photo (1st 4 weeks)	M-TH	1:00-2:30	3	1 S
	CJC 260	Threat Assess (2nd 4 weeks)	M-TH	1:00-2:30	2	0
	CJC 262	High-Risk Eve Plan (3rd 4 weeks)	M-TH	1:00-2:30	2	0

*Disaster Management C55460H2-New*

The Emergency Management Certificate program provides students with a foundation to build upon within the emergency services delivery program. This program will prepare students for entry level knowledge required for employment in the Emergency Management Industry. This certificate program is offered in the spring only as part of a dual certificate program with the Emergency Management Certificate in the fall.

**NOTE: Spring Only.**

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	CJC 170	Critical Incident Mgmt Pub Safety	MW	1:00-2:50	3	1 S
	EPT 275	Emergency OPS Center Mgt	TTH	1:00-2:50	3	1 S

*Emergency Management C55460H1-New*

The Emergency Management Certificate program provides students with a foundation to build upon within the emergency services delivery program. This program will prepare students for entry level knowledge required for employment in the Emergency Management Industry.

**NOTE: Fall Only.**

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	EPT 120	Sociology of Disaster	MW	1:00-2:50	3	1 S
	EPT 130	Mitigation & Preparedness	TTH	1:00-2:50	3	1 S
	EPT 210	Response & Recovery	MW	1:00-2:50	3	1 S
	EPT 220	Terrorism & Emergency Mgmt	TTH	1:00-2:50	3	1 S

*Fire Protection Technology C55250H1-New*

Fire Protection Technology provides an in-depth study of fire protection and prepares students for entry level positions in the fire protection industry. This certificate program is offered in the fall only as part of a dual certificate program with the Arson Fundamentals Certificate in the spring.

**NOTE: Fall Only.**

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	FIP 120	Introduction to Fire Protection	MW	1:00-2:50	3	1 S
	FIP 124	Fire Prevention & Public Ed	TTH	1:00-2:50	3	1 S
	FIP 132	Building Construction	MW	1:00-2:50	3	1 S
	FIP 220	Fire Fighting Strategies	TTH	1:00-2:50	3	1 S

## Manufacturing & STEM (Science, Technology, Engineering and Math)

### *Civil Engineering Technology C40140H1+*

The Civil Engineering Technology curriculum prepares students to use basic engineering principles and technical skills to carry out planning, documenting and supervising tasks in sustainable land development and public works and facilities projects. Coursework includes instruction in the communication and computational skills required for materials testing, structural testing, field and laboratory testing, site analysis, estimating, project management, plan preparation, hydraulics, environmental technology and surveying.

**NOTE:** Students enrolled in this program will need to also enroll in MAT 171. MAT 171 is a co-requisite for SRV 110.

COURSE	NAME	FTCC	H.S.
CEG 151	CAD for Engineering Technology	3	1 S
SRV 110	Surveying I	4	1 S
CEG111	Intro to GIS and GNSS	4	1 S
EGR 115	Intro to Technology	3	1 S

### *Computer-Integrated Machining- Basic (Two Year Program) C50210H1*

Basic Computer-Integrated Machining is designed to develop fundamental skills in the operation of machine tools including drilling, turning, milling, and grinding. Training in basic measuring, layout, and blueprint reading is also provided. Students will be prepared for employment as entry-level machine operators or machinist apprentices.

COURSE	NAME	FTCC	H.S.
MAC 111	Machining Technology I	6	2 S
MAC 112	Machining Technology II	6	2 S
MAC 131	Blueprint Reading/Mach I	2	0
MAC 151	Machining Calculations	2	0

### *Electronics Engineering Technology C40200H1*

The Electronics Engineering Technology curriculum prepares students to apply basic engineering principles and technical skills to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communication systems, and power electronic systems. Includes instruction in mathematics, basic electricity, solid-state fundamentals, digital concepts, and microprocessors or programmable logic controllers.

COURSE	NAME	FTCC	H.S.
EGR 120	Eng and Design Graphics	3	1 S
ELC 131	Circuit Analysis I/Circuit Analysis Lab	5	2 S
ELN 131	Analog Electronics I	4	1 S
ELN 133	Digital Electronics	4	1 S

### Mechanical Maintenance C50240H1

This certificate program instructs students to theory and the skills training needed for inspecting, testing, troubleshooting, and diagnosing mechanical systems.

COURSE	NAME	FTCC	H.S.
MNT 110	Intro to Maint Procedures	2	0
ELC 112	DC/AC Electricity	5	2 S
MAC 141	Machining Applications I	4	1 S
WLD 112	Basic Welding Processes	2	0

### Welding Technology- Basic C50420H1

This certificate program is designed to give individuals the opportunity to acquire fundamental skills in welding. Coursework includes electrode welding and cutting processes and welding symbols and specifications.

COURSE	NAME	FTCC	H.S.
WLD 110	Cutting Processes	2	0
WLD 115	SMAW (Stick) Plate	5	2 S
WLD 121	GMAW (MIG) FCAW/Plate	4	1 S
WLD 131	GTAW (TIG) Plate	4	1 S

### Transportation, Distribution, and Logistics

#### Collision Repair & Refinishing Technology C60130H1

Basic Collision Repair and Refinishing Technology is designed to prepare students for entry-level positions as helpers in the auto body repair industry. Instruction will include hands-on repairs in areas of non-structural and structural repairs, mechanical and electrical components, painting, and refinishing.

**NOTE:** Courses located at FTCC's Collision Repair and Refinishing Tech Center off Santa Fe Drive. Transportation may be provided with substantial demand and enrollment.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
<b>Fall</b>	AUB 121	Non-Struc Damage I	M - F	1:10-2:30	3	1 S
	TRN 110	Intro to Transport Tech	M - F	1:10-2:30	2	0
<b>Spring</b>	AUB 111	Painting & Refinish I	M - F	1:10-2:30	4	1 S
	AUM 112	Emerging Trends-Auto Ind	M - F	1:10-2:30	3	1 S

### *Logistics and Distribution Management Foundations C25620H1*

The Logistics and Distribution Management Foundations certificate prepares individuals for a multitude of career opportunities in distribution, transportation, warehousing, supply chain, and manufacturing organizations. Coursework includes the movement of goods from the raw materials source(s) through production and ultimately to the consumer.

SEMESTER	COURSE	NAME	DAYS	TIMES	FTCC	H.S.
Fall	LOG 110	Intro to Logistics	MW	1:00-2:50	3	1 S
	LOG 125	Transportation Log	TTH	1:00-2:50	3	1 S
Spring	LOG 215	Supply Chain Management**	MW	1:00-2:50	3	1 S
	LOG 211	Distribution Management**	TTH	1:00-2:50	3	1 S

### *Maintenance and Light Repair C60160H2*

This certificate program is designed to prepare individuals for entry-level positions in automotive service and to earn Ford certifications in Basic Electrical, Basic Brakes, and Advanced Brakes.

COURSE	NAME	FTCC	H.S.
AUT 151/A	Brake Systems and Lab	4	1 S
TRN 110	Intro to Transp Tech	2	0
TRN 120	Basic Transp Electricity	5	2 S
TRN 170	PC Skills for Transp	2	0

## Course Descriptions

Not all schools offer all courses.

Each school provides supplementary information on course offerings during registration.

### English/Language Arts

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#### ENGLISH I

**Grade Level: 9**

**Prerequisite: None**

**Credit: 1 unit**

This course follows the NCSCOS for grade 9 and requires students to demonstrate proficiency for standards of reading literature, reading informational text, writing, speaking and listening and language. For students to be college and career ready, they must read from a wide range of high-quality, increasingly challenging texts, reflecting global perspectives, and comprehend texts of steadily increasing complexity. Students learn how to offer and support opinions/arguments, demonstrate understanding of topics of study and convey experiences in writing, clearly and coherently. Teachers provide students ample opportunities to communicate their thinking orally, including effective use of data and evidence. Students use effective and correct language skills in all contexts.

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#### ENGLISH I HONORS

**Grade Level: 9**

**Prerequisite: None**

**Credit: 1 unit**

This course provides challenging reading, writing and speaking opportunities designed to develop the students' abilities in language arts as preparation for education beyond high school. This course follows the NCSCOS for grade 9 and requires students to demonstrate proficiency for standards of reading literature, reading informational text, writing, speaking and listening and language. For students to be college and career ready, they must read from a wide range of high-quality, increasingly challenging texts, reflecting global perspectives, and comprehend texts of steadily increasing complexity. Students learn how to offer and support opinions/arguments, demonstrate understanding of topics of study and convey experiences in writing, clearly and coherently. Teachers provide students ample opportunities to communicate their thinking orally, including effective use of data and evidence. Students use effective and correct language skills in all contexts.

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#### ENGLISH II

**Grade Level: 10**

**Prerequisite: English I**

**Credit: 1 unit**

This course follows the NCSCOS for grade 10 and requires students to demonstrate proficiency for standards of reading literature, reading informational text, writing, speaking and listening and language. For students to be college and career ready, they must read from a wide range of high-quality, increasingly challenging texts, reflecting global perspectives, and comprehend texts of steadily increasing complexity. Students learn how to offer and support opinions/arguments, demonstrate understanding of topics of study and convey experiences in writing, clearly and coherently. Teachers provide students ample opportunities to communicate their thinking orally, including effective use of data and evidence. Students use effective and correct language skills in all contexts.

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#### ENGLISH II HONORS

**Grade Level: 10**

**Prerequisite: English I**

**Credit: 1 unit**

This course provides challenging writing and speaking opportunities designed to develop the students' abilities in language arts as preparation for education beyond high school. This course follows the NCSCOS for grade 10 and requires students to demonstrate proficiency for standards of reading literature, reading informational text, writing, speaking and listening and language. For students to be college and career ready, they must read from a wide range of high-quality, increasingly challenging texts, reflecting global perspectives, and comprehend texts of steadily increasing complexity. Students learn how to offer and support opinions/arguments, demonstrate understanding of topics of study and convey experiences in writing, clearly and coherently. Teachers provide students ample opportunities to communicate their thinking orally, including effective use of data and evidence. Students use effective and correct language skills in all contexts.

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#### ENGLISH III

**Grade Level: 11**

**Prerequisite: English II**

**Credit: 1 unit**

This course follows the NCSCOS for grade 11 and requires students to demonstrate proficiency for standards of reading literature, reading informational text, writing, speaking and listening and language. For students to be college and career ready, they must read from a wide range of high-quality, increasingly challenging texts and comprehend texts of steadily increasing complexity. Students learn how to offer and support opinions/arguments, demonstrate understanding of topics of study and convey experiences in writing, clearly and coherently. Teachers provide students ample opportunities to communicate their thinking orally, including effective use of data and evidence. Students use effective and correct language skills in all contexts.

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#### ENGLISH III HONORS

**Grade Level: 11**

**Prerequisite: English II**

**Credit: 1 unit**

This course provides challenging reading, writing and speaking opportunities designed to develop the students' abilities in language arts as preparation for education beyond high school. This course follows the NCSCOS for grade 11 and requires students to demonstrate proficiency for standards of reading literature, reading informational text, writing, speaking and listening and language. For students to be college and career ready, they must read from a wide range of high-quality, increasingly challenging texts and comprehend texts of steadily increasing complexity. Students learn how to offer and support opinions/arguments, demonstrate understanding of topics of study and convey experiences in writing, clearly and coherently. Teachers provide students ample opportunities to communicate their thinking orally, including effective use of data and evidence. Students use effective and correct language skills in all contexts.

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#### ENGLISH IV

**Grade Level: 12**

**Prerequisite: English III**

**Credit: 1 unit**

This course follows the NCSCOS for grade 12 and requires students to demonstrate proficiency for standards of reading literature, reading informational text, writing, speaking and listening and language. For students to be college and career ready, they must read from a wide range of high-quality, increasingly challenging texts and comprehend texts of steadily increasing complexity. Students learn how to offer and support opinions/arguments, demonstrate understanding of topics of study and convey experiences in writing, clearly and coherently. Teachers provide students ample opportunities to communicate their thinking orally, including effective use of data and evidence. Students use effective and correct language skills in all contexts. This course provides application of all communication skills and completes the global perspective initiated in English I.

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## ENGLISH IV HONORS

**Grade Level:** 12

**Prerequisite:** English III

**Credit:** 1 unit

This course provides challenging reading, writing and speaking opportunities designed to develop students' abilities in language arts as preparation for education beyond high school. This course follows the NCSCOS for grade 12 and requires students to demonstrate proficiency for standards of reading literature, reading informational text, writing, speaking and listening and language. For students to be college and career ready, they must read from a wide range of high-quality, increasingly challenging texts and comprehend texts of steadily increasing complexity. Students learn how to offer and support opinions/arguments, demonstrate understanding of topics of study and convey experiences in writing, clearly and coherently. Teachers provide students ample opportunities to communicate their thinking orally, including effective use of data and evidence. Students use effective and correct language skills in all contexts. This course provides in-depth application of all communication skills and completes the global perspective initiated in English I.

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## AP LANGUAGE AND COMPOSITION

**Grade Level:** 11

**Prerequisite:** English II Honors

**Credit:** 1 unit

The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum. The AP English Language and Composition course focuses on the development and revision of evidence-based analytic and argumentative writing, the rhetorical analysis of nonfiction texts, and the decisions writers make as they compose and revise. Students evaluate, synthesize, and cite research to support their arguments. Additionally, they read and analyze rhetorical elements and their effects in nonfiction texts—including images as forms of text—from a range of disciplines and historical periods. At the completion of the course, students take the Advanced Placement Exam and may receive college credit based upon their scores and the requirements of the college of their choice.

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## AP LITERATURE AND COMPOSITION

**Grade Level:** 12

**Prerequisite:** English III HONORS or AP Language/Composition

**Credit:** 1 unit

The AP English Literature and Composition course aligns to an introductory college-level literature and writing curriculum. The AP English Literature and Composition course focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, drama) from various periods. Students engage in close reading and critical analysis of imaginative literature to deepen their understanding of the way's writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, and symbolism. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. At the completion of the course, students take the Advanced Placement Exam and may receive college credit based upon their scores and the requirements of the college of their choice.

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## ANNUAL STAFF (ANNUAL A, ANNUAL B)

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

The annual staff develops, organizes, and publishes the yearbook. Students select and group pictures, sell advertisements, design layouts of copy, identify pictures, organize materials, and write copy. Students also learn business management skills in sales while producing and distributing the annual.

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## DEBATE I

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** Successful participation in Middle School Forensics program, Speech I

**Credit:** 1 unit

This course focuses on a wide range of competitive public speaking and debate skills and techniques. Students are expected to participate in local forensics tournaments and have opportunities to compete in selected public speaking and debating tournaments. Skill development includes advanced techniques in diction, articulation, enunciations, and projection. Students begin to analyze pieces of literature, create orations, and evaluate performances.

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## DEBATE II

**Grade Level:** 10, 11, 12

**Prerequisite:** Debate I

**Credit:** 1 unit

This course further develops skills in communication, logic and reasoning through participation in scholastic forensics competitions. Students specialize in at least one of the speaking events, begin to develop expertise in a second area and compete at local, regional and state tournaments. Students continue to refine diction, articulation, enunciation, and projection skills while applying more advanced techniques of public speaking. Students exhibit team responsibility and develop skills of evaluation and analysis.

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## DEBATE II HONORS

**Grade Level:** 10, 11, 12

**Prerequisite:** Debate I

**Credit:** 1 unit

This course further develops skills in communication, logic, and reasoning through participation in scholastic forensics competitions. Students specialize in and demonstrate expertise in at least one of the speaking events, begin to develop a second area and compete at local, regional and state tournaments. Students continue to refine diction, articulation, enunciation, and projection skills while applying more advanced techniques of public speaking. Students exhibit team responsibility and develop skills of evaluation and analysis. Honors activities may include required/advanced reading lists, required/advanced writing assignments, special projects, enrichment activities and a portfolio of student activities/performances.

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## DEBATE III

**Grade Level:** 10, 11, 12

**Prerequisites:** Debate II and/or II HONORS

**Credit:** 1 unit

This course expands public speaking and forensics skills and abilities such as selecting and editing quality literature, sharpening research skills, and analyzing current issues. Students polish performances in two or more areas and perform in a variety of settings. They further develop skills of analysis and evaluation by beginning to coach team members, lead parent and volunteer judging seminars, and present workshops to middle school forensics students. Students are expected to compete at local, regional and state tournaments.

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## DEBATE III HONORS

**Grade Level:** 10, 11, 12

**Prerequisites:** Debate II or Debate II Honors

**Credit:** 1 unit

Students consistently demonstrate an advanced level of skill in selecting and editing quality literature, research methods, analysis of current issues, and analysis and evaluation of public speaking and debate activities. Students compete at local, regional and state tournaments. Honors activities may include required/advanced reading lists, required/advanced writing assignments, special projects, enrichment activities, and a portfolio of student activities/performances.



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## DEBATE IV

Grade Level: 10, 11, 12

Prerequisites: Debate III or III Honors

Credit: 1 unit

This is an advanced standard level course that prepares students for advanced competition in three or more competition events in a variety of settings. Students learn principles of leadership, sportsmanship, coaching techniques, and scholarship through the development of superior skills of analysis, evaluation and performance. Students provide leadership for team activities such as judging seminars and event workshops, peer coaching and tournament hosts. Students are expected to compete at local, regional and state tournaments.

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## DEBATE IV HONORS

Grade Level: 11, 12

Prerequisites: Debate IV

Credit: 1 unit

This is an advanced honors level course for students participating in advanced competition in three or more public speaking and debate events in a variety of settings. It continues the honors level focuses on leadership, performance excellence, sportsmanship, and scholarship. Students compete at local, regional, and state tournaments. Honors activities may include required/advanced reading lists, required/advanced writing assignments, special projects, enrichment activities, and a portfolio of student activities/performances.

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## JOURNALISM I (I-A, I-B)

Grade Level: 9, 10, 11, 12

Prerequisite: None

Credit: 1 unit

Students study techniques of journalistic writing, layout, the organization of the newspaper staff, and the history of American journalism. Students also survey the mass media, photography, television and radio reporting. Journalism I students receive on-the-job training, as they assist in reporting, layout, selling, and circulating each edition of the newspaper.

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## JOURNALISM II (II-A, II-B)

Grade Level: 10, 11, 12

Prerequisites: Journalism I

Credit: 1 unit

The primary duties of Journalism II students are to produce a school Newspaper and/or magazine. Students further their knowledge and skills in writing, layouts, and organizing a quality publication. They explore the use of technology in preparing written publications.

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## JOURNALISM III (III-A, III-B)

Grade Level: 11, 12

Prerequisite: Journalism II

Credit: 1 unit

Journalism III students refine their knowledge of journalism basics as well as receive instruction in specialized areas of media. These students write, layout, and publish the newspaper and/or a literary magazine. They learn sales/business management in the sale and preparation of advertising.

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## JOURNALISM IV (IV-A, IV-B)

Grade Level: 12

Prerequisites: Journalism III

Credit: 1 unit

Journalism IV students work in leadership positions, assuming leadership responsibility for written or broadcast media with an emphasis on TV broadcasting. They manage the production of the written or broadcast media.

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## JOURNALISM IV HONORS (IV HONORS-A, IV HONORS-B)

Grade Level: 12

Prerequisites: Journalism III

Credit: 1 unit

Students continue to define their journalistic skills and serve in top leadership positions in the production of written and broadcast media. They serve as editors and are responsible for all aspects of planning, organizing, and preparing quality journalistic products.

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## READING/WRITING FOR SUCCESS

Grade Level: 10, 11, 12

Prerequisite: None

Credit: 1 unit

This course helps improve students' reading and writing skills through active use of reading and writing strategies. Students practice reading for information and comprehension, for improving vocabulary, and for gaining fluency. The process writing skills are used to develop practical skills including planning, drafting, revising, and editing a composition.

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## SPEECH I

Grade Level: 9, 10, 11, 12

Prerequisite: None

Credit: 1 unit

This course aids students in the fundamentals of communication. Topics of study include interviewing skills, interpersonal communications, panel discussions, parliamentary procedure, and oral interpretation of written pieces, research methods and constructive criticism. Students improve diction, articulation, enunciation, and projection.

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## SPEECH II

Grade Level: 9, 10, 11, 12

Prerequisite: Speech I

Credit: 1 unit

This course further develops the fundamentals of communication.

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## THEMES IN LITERATURE

Grade Level: 10, 11, 12

Prerequisite: None

Credit: 1 unit

This course offers a study of literary themes in poetry, short stories and drama designed to improve analytical and evaluative skills needed in reading and discussing important literary works. The course introduces literary global perspectives focusing on literature from the Americas (Caribbean, Central, South and North), Africa, Eastern Europe, Asia and the Middle East. Influential U.S. historical documents and a Shakespearean play should be included.

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## THEMES IN LITERATURE/CREATIVE WRITING II

Grade Level: 11, 12

Prerequisite: None

Credit: 1 unit

This course is open to students who are self-disciplined, highly motivated, gifted in self-expression, and eager to read. The students explore new and exciting short stories, plays, poems, and novellas for their global perspectives and issues. Students will write to acquire meaning, to analyze U.S. historical documents to establish connections to contemporary issues, as well as to establish style, voice and purpose in communication. At least one Shakespearean play should be included.

## English as a Second Language

**NOTE:** English as a Second Language (ESL) courses are intended for students with limited English proficiency. ESL teachers evaluate students to determine eligibility.

### ENGLISH AS A SECOND LANGUAGE (ESL) I (ESL I-A, ESL I-B)

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

The purpose of this course is to introduce non-English proficient students to the English language. It will provide students with basic skills in listening, speaking, reading, and writing through a "whole language" approach. Cultural similarities as well as differences are studied. Student assessment in all four-language skills will determine eligibility.

### ENGLISH AS A SECOND LANGUAGE (ESL) II (ESL II-A, ESL II-B)

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** ESL I

**Credit:** 1 unit

This course is a continuation of ESL I. It provides limited English proficient students with intermediate skills in listening, speaking, reading, and writing. Increased progress in communication skills, vocabulary development, grammatical structure, literature, and culture are emphasized. Placement will be based on a student's mastery of skills in ESL I. End-of-year student assessment in all four language skills will determine if a student will "exit" the program or may continue on to ESL III.

### ENGLISH AS A SECOND LANGUAGE (ESL) III (ESL III-A, ESL III-B)

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** ESL II

**Credit:** 1 unit

This course is a continuation of ESL II. It provides limited English proficient students with advanced skills in listening, speaking, reading, and writing. Focus is on the student's enhancement of second language acquisition through reinforcement and refinement of skills learned in ESL II. Short stories, prose, and poetry are included. Placement will be based on a student's mastery of skills in ESL II. End-of-year assessment in all four language skills will determine if a student has mastered the skills needed to "exit" the program.

### ENGLISH AS A SECOND LANGUAGE IV (ESL IV-A, ESL IV-B)

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** ESL III

**Credit:** 1 unit

This course is a continuation of ESL III. It provides advanced limited English proficient students with opportunities to develop full competency in listening, speaking, reading, and writing. Students will continue to refine critical thinking skills, continue to develop vocabulary and grammar skills, study various forms of literature in-depth, and exhibit competency in narrative, descriptive, expository, and persuasive writing. End-of-year assessment of students will determine if a student has mastered the language skills necessary to succeed in regular classes.

## World Language

### AMERICAN SIGN LANGUAGE (ASL) I

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

This course covers the beginning level of sign language for high school students. Beginning Sign Language is designed to assist the student in obtaining a basic introductory knowledge of Sign Language. The student will learn basic sign language, sign vocabulary, grammatical structure, facial expression and body language. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered through FTCC; FTCC also offers American Sign Language II.

### ARABIC I

**Grade Level:** 9, 10

**Prerequisite:** None

**Credit:** 1 unit

This course introduces the fundamental elements of the modern standard Arabic language within the cultural context of Arabic-speaking people. 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 Arabic and demonstrate cultural awareness. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered only at Cumberland International Early College.

### ARABIC II

**Grade Level:** 9, 10, 11

**Prerequisite:** Arabic I and language proficiency

**Credit:** 1 unit

Students will continue to improve speaking proficiency, listening, comprehension and writing skills. By the conclusion of the school year, students should be able to speak casually about daily and common activities. Students will begin a more intensive study of grammatical forms of Arabic and vocabulary words. They will conduct research and make presentations of current and historical events in Arabic speaking regions in the world. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered only at Cumberland International Early College.

### ARABIC III HONORS

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** Arabic II and language proficiency

**Credit:** 1 unit

Arabic III focuses on strengthening the basic language skills of reading, writing, listening, and speaking, all in cultural context. It reinforces grammar and vocabulary in an intermediate language level through constant review and expands to challenge students as their skills develop. Students will conduct research and make presentations of current and historical events in Arabic speaking regions of the world. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered only at Cumberland International Early College.

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## ARABIC IV HONORS

**Grade Level:** 10, 11, 12

**Prerequisite:** Arabic III Honors and language proficiency **Credit:** 1 unit

This course includes communicative competencies in speaking, listening comprehension, reading and writing at an intermediate level with attention to cultural awareness. Emphasis is placed on intermediate skills in speaking, reading, writing, and comprehension of spoken language. Upon completion, students should be able to demonstrate simple conversations and read works written in modern standard Arabic. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered only at Cumberland International Early College.

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## FRENCH I

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

French I is an introduction to the French language and various francophone cultures. Emphasis is on listening, speaking, reading, writing and culture. There is much oral practice with many personalized questions and a variety of classroom activities emphasizing personal expression. Students will perform the most basic functions of the reading and writing aspects of the language. A variety of media are used to introduce different aspects of French culture and civilization. Integration of other disciplines is ongoing throughout the course. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered at Douglas Byrd, Gray's Creek, Massey Hill, and Terry Sanford High Schools.

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## FRENCH II

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** French I or French I Part I and French I Part II (Middle School) and language proficiency

**Credit:** 1 unit

French II is a continuation of French I. Students enrolled in this course have either successfully completed the Level I course at the high school or at the middle school or have placed out of Level I due to previous language study at the elementary and/or middle grades. The course covers increased oral accuracy, vocabulary development, grammatical structure, reading, writing, civilization, and culture. These objectives will be reinforced through increased use of the French language. Students continue to develop multicultural awareness and integration of other disciplines. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered at Douglas Byrd, Gray's Creek, Massey Hill, and Terry Sanford, High Schools.

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## FRENCH III HONORS

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** French II and language proficiency

**Credit:** 1 unit

In Level III an increasing integration of the four language skills is stressed. Students initiate and maintain face to face communication. Continued emphasis is placed on reading, examination of other cultures, and integration with other disciplines. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered at Douglas Byrd, Gray's Creek, Massey Hill, and Terry Sanford, High Schools.

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## HONORS FRENCH CONVERSATION AND COMPOSITION

**Grade Level:** 10, 11, 12

**Prerequisite:** French III Honors and language proficiency **Credit:** 1 unit

The Intensive French Conversation course introduces students to conversation through viewing and discussing French films. The recent films serve as an introduction to specific linguistic objectives, and to contemporary cultural issues. This course represents an ideal opportunity to develop content cultural knowledge while practicing conversation skills. Emphasis will be placed on regular practice in conversation and composition with review of grammar and continuing work on language skills in French. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered at Douglas Byrd, Gray's Creek, Massey Hill, and Terry Sanford High Schools.

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## FRENCH IV HONORS

**Grade Level:** 10, 11, 12

**Prerequisite:** French III Honors and language proficiency **Credit:** 1 unit

The students of French IV will expand their knowledge of basic structures, vocabulary, and fluency of speech. Students will do advanced studies in French history, literature and culture. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered at Douglas Byrd, Gray's Creek, Massey Hill, and Terry Sanford High Schools.

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## AP FRENCH LANGUAGE AND CULTURE

**Grade Level:** 11, 12

**Prerequisites:** French III Honors or French IV Honors, language proficiency

**Credit:** 1 unit

This college level course is designed to lead the student to a high level of proficiency through intensive study of vocabulary, advanced grammar review and extensive writing and speaking. Students will read literature and magazine articles. The course will provide mastery of the four skills of listening, reading, speaking and writing. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered at Douglas Byrd, Gray's Creek, Massey Hill, and Terry Sanford High Schools.

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## MANDARIN CHINESE I

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

Chinese I is an introductory course to Mandarin Chinese. Though students will receive instruction in all four aspects of the language (oral, listening, reading and writing), during the early stages of their Chinese studies, class time will primarily be devoted to acquiring basic oral and listening skills. Once students are more familiar with structural conventions they will be challenged with reading and writing materials that include some unknown characters in order for them to develop their skills under more authentic circumstances. In addition to gaining communicative and linguistic competence, students will be exposed to the Chinese culture in order to better understand the cultural context in which their language skills will be used. The course will provide students with the ability to communicate interpersonally in daily life. Topics will include greetings, basic introductions, making appointments, location, countries, languages, descriptions, shopping and food. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered at Seventy-First, Cumberland International Early College, South View, and Westover High Schools.

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## MANDARIN CHINESE II

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** Mandarin Chinese I or Mandarin Chinese I Part I and Mandarin Chinese I Part II (Middle School) and language proficiency

**Credit:** 1 unit

This course builds on the skills introduced in Chinese I. Aural comprehension, pronunciation and speaking exercises facilitate oral communication. Additional vocabulary and grammar are introduced to further develop reading and writing skills. Students expand their capacity to read and write Chinese characters. Students continue to study Chinese history, culture and society. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered at Seventy-First, Cumberland International Early College, South View, and Westover High Schools.

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## MANDARIN CHINESE III HONORS

**Grade Level:** 10, 11, 12

**Prerequisite:** Mandarin Chinese II and language proficiency

**Credit:** 1 unit

In this course, students will continue to gain oral proficiency through a variety of language activities including games, dialogues, oral presentations, and imaginative tasks. Meanwhile, efforts will be continuously made to improve the accuracy of the student's pronunciation and the ability to convey meaning. Reading and writing skills will be taught in meaningful contexts. The culture and language integration at this level will be focused on the "life way" study, and the student will develop an appreciative acquaintance with Chinese culture. Students will take what they have learned and will use them in more complex sentences, phrases, and conversation. Students are expected to speak longer sentences and ask simple questions on familiar and unfamiliar topics. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered at Seventy-First, Cumberland International Early College, South View, and Westover High Schools.

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## HONORS MANDARIN CHINESE CONVERSATION/COMPOSITION

**Grade Level:** 10, 11, 12

**Prerequisite:** Mandarin Chinese III Honors and language proficiency

**Credit:** 1 unit

This course aims to enhance the students' understanding of Chinese culture and introduce them to issues in contemporary China through reading and discussion. Authentic texts of Modern Chinese, including newspaper articles and published writings of literary, cultural, and social interest will be introduced in the course. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered only at Seventy-First High School.

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## MANDARIN CHINESE IV HONORS

**Grade Level:** 10, 11, 12

**Prerequisite:** Mandarin Chinese III Honors and language proficiency

**Credit:** 1 unit

This course offers continuing instruction in listening, speaking, reading and writing, with particular emphasis on consolidating basic conversational skills and improving reading confidence and depth. Chinese I, II, III and IV form a sequence. Upon completion of this course, students should be able to speak in Chinese, with some fluency on basic conversational topics, they should be able to read texts composed of characters introduced in the textbook in both simplified and traditional characters, and they should be able to write short compositions using these characters. Classes are made up of lecture sessions, cultural studies, drill practices, discussion, reading comprehension practice, listening. Comprehension practice, situational dialogue practice, and language games. Classes will be conducted in Mandarin. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered only at Seventy-First High, South View High, and Westover High Schools.

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## AP CHINESE LANGUAGE AND CULTURE

**Grade Level:** 11, 12

**Prerequisite:** Mandarin Chinese III Honors or Mandarin Chinese IV Honors, language proficiency

**Credit:** 1 unit

This is an intensive course designed for highly motivated students to improve competency and gain proficiency in Chinese. The course provides extensive preparation for the AP Chinese Language and Culture exam given in May. Students write biweekly compositions in Chinese and develop their speaking, listening and writing skills at an advanced level by making recordings. Students are expected to become competent in reading and in understanding spoken Chinese using authentic sources. A concise review of grammar and extensive vocabulary are addressed throughout the year. World Language studies at the Diploma Level require students to read, write, and speak in the target language while exploring cultures related to the language. Students engage in discussion with classmates and their teacher, read and respond to texts, and describe and analyze photographs representing cultural images. Proficiency exam will be given at the end of the course.

**NOTE:** Course is offered only at Seventy-First High School.

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## IB WORLD LANGUAGES CHINESE I & II

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** World Language Levels 1, 2, and 3

**Credit:** 1 unit

World Language studies at the Diploma Level require students to read, write, and speak in the target language while exploring cultures related to the language. Students engage in discussion with classmates and their teacher, read and respond to texts, and describe and analyze photographs representing cultural images.

**NOTE:** Course is offered only at South View High School.

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## LATIN I

**Grade Level: 9, 10, 11, 12**

**Prerequisite: None**

**Credit: 1 unit**

This course introduces basic Latin vocabulary, inflections, and grammar as it applies to reading and translating simple Latin sentences. Special emphasis is placed on building English derivatives and vocabulary. Roman culture, art, history, law, and government are also explored to help build an appreciation of the ancients' effects on modern American society. Proficiency exam will be given at the end of the course.

**NOTE: Course is offered at Jack Britt, Massey Hill Classical, and Reid Ross Classical High Schools.**

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## LATIN II

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Latin I or Latin I Part I and Latin I Part II (Middle School) and language proficiency**

**Credit: 1 unit**

Students continue building vocabulary and studying more complex grammar. The study of ancient Roman history is expanded as students begin reading the simpler texts written by ancient authors. Proficiency exam will be given at the end of the course.

**NOTE: Course is offered at Jack Britt, Massey Hill Classical, and Reid Ross Classical High Schools.**

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## LATIN III HONORS

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Latin II and language proficiency**

**Credit: 1 unit**

Students continue building vocabulary and studying more complex grammar. Through their study of Latin, students reinforce and further their understanding of English. They expand their study of Roman history as they begin reading simpler texts written by ancient authors. Proficiency exam will be given at the end of the course.

**NOTE: Course is offered at Jack Britt, Massey Hill Classical, and Reid Ross Classical High Schools.**

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## LATIN IV HONORS

**Grade Level: 10, 11, 12**

**Prerequisite: Latin III Honors and language proficiency**

**Credit: 1 unit**

Students in advanced Latin continue to trace Greco-Roman history, culture, and language and its impact on modern civilizations. Reading comprehension is stressed through the exploration of more advanced texts, especially Catullus, Horace, and Vergil. Emphasis is placed on the reading and scansion of the poetry of these authors. Proficiency exam will be given at the end of the course.

**NOTE: Course is offered at Jack Britt, Massey Hill Classical, and Reid Ross Classical High Schools.**

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## AP LATIN

**Grade Level: 11, 12**

**Prerequisite: Latin III Honors or Latin IV Honors, and language proficiency**

**Credit: 1 unit**

Students at this advanced language level are expected to demonstrate greater and more sophisticated use of the four skills of listening, speaking, reading, and writing. Literature, History, and culture are taught primarily through the active use of the second language. Those continent/skills areas and Roman authors, which are outlined for the Advanced Placement Test by the College Board, form the basis for the course of study. Proficiency exam will be given at the end of the course.

**NOTE: Course is offered at Jack Britt, Massey Hill Classical, and Reid Ross Classical High Schools.**

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## SPANISH I

**Grade Level: 9, 10, 11, 12**

**Prerequisite: None**

**Credit: 1 unit**

This course is intended for the beginning Spanish language student. Spanish I is designed to give students a balanced exposure to all four language skills. The course objectives emphasize accurate pronunciation, structure knowledge with primary focus on the present tense and language acquisition of basic vocabulary. The course provides students with opportunities to: respond to and give oral directions and commands and to make routine requests in the classroom and in public places; understand and use appropriate forms of address in courtesy expressions and be able to talk about daily routines and events; ask and answer simple questions and participate in brief guided conversations related to their needs and interests. Students will begin to speak and write in the target language. Cultural similarities as well as differences between Spanish-speaking countries and the United States are studied. Proficiency exam will be given at the end of the course.

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## SPANISH I HERITAGE/IMMERSION

**Grade Level: 9, 10, 11**

**Prerequisite: Student must be a native or heritage speaker of Spanish**

**Credit: 1 unit**

This course is designed for students for whom Spanish is their native or heritage language. It provides those students with the opportunity to expand their existing proficiency and to develop their reading and writing skills. Spelling and vocabulary development are stressed. Proficiency exam will be given at the end of the course.

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## SPANISH II

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Spanish I or Spanish I Part I and Spanish I Part II (Middle School) and language proficiency**

**Credit: 1 unit**

Spanish II is a continuation of Spanish I with substantial amount of new grammatical structures. The course increases emphasis on listening, with different aspects of the culture, including the visual arts, architecture, reading and writing. Students will begin to understand spoken Spanish and converse on a more sophisticated level. The students will become familiar, literature and music. Culture and history of Hispanic countries are also studied. The course enables students to participate in classroom and extracurricular activities related to the language studied as well as to participate in conversations dealing with daily activities and personal interests. Proficiency exam will be given at the end of the course.

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## SPANISH III HONORS

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Spanish II or Spanish as Language Arts II and language proficiency**

**Credit: 1 unit**

This course reviews Spanish II concepts. Students should have a basic mastery of level II grammar and vocabulary. Oral proficiency continues to be a major focus with increased emphasis on the depth of study of the many target cultures represented in the Spanish-speaking world. Reading and writing skills are stressed. Students read for comprehension from a variety of authentic materials, such as advertisements in newspapers, magazines, cartoons and personal correspondence, short literacy selections of poetry, plays, and short stories. Student writes, paraphrases, summarizes, and writes brief compositions. The course provides instruction enabling students to understand and appreciate other cultures by comparing social behaviors and values of people using the target language. Proficiency exam will be given at the end of the course.

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## HONORS SPANISH II HERITAGE/IMMERSION

**Grade Level:** 9, 10, 11

**Prerequisite:** Spanish I Heritage/Immersion

**Credit:** 1 unit

This course is designed for students for whom Spanish is their native or heritage language. It provides those students with the opportunity to expand their existing proficiency and to develop their reading and writing skills. Spelling and vocabulary development are stressed. Proficiency exam will be given at the end of the course.

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## SPANISH IV HONORS

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** Spanish III Honors or Spanish Heritage Speaker II and language proficiency

**Credit:** 1 unit

Spanish IV provides an advanced application of skills learned in Spanish I, II, and III Honors. The course is divided into thematic units, which provide vocabulary enrichment and language integrated skills. Students receive constant exposure to spoken Spanish and will develop reading strategies through the study of history, literature, and culture of Spanish-speaking countries. The course enables the students to express opinions and make judgments, respond to factual and interpretive questions and interact in complex social situations. Students read for comprehension from a variety of longer authentic materials and are aware of the major literary, musical, and artistic periods and genres of at least one of the cultures in the target language. Proficiency exam will be given at the end of the course.

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## SPANISH V HONORS

**Grade Level:** 11, 12

**Prerequisite:** Spanish IV Honors and language proficiency

**Credit:** 1 unit

This course is designed for students who wish to continue building skills in speaking, reading, and writing. Students receive opportunities to speak and write extensively in Spanish. Knowledge of grammatical structure is stressed. Students will demonstrate an understanding of the principal elements of nonfiction, articles in newspapers, create stories and poems, short plays, and skits based on personal experiences and exposure to themes analyzing the main plot, characters and their descriptions and roles. Proficiency exam will be given at the end of the course.

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## HONORS SPANISH CONVERSATION AND COMPOSITION

**Grade Level:** 10, 11, 12

**Prerequisite:** Spanish III and language proficiency

**Credit:** 1 unit

This course is appropriate for students who wish to continue building skills in speaking and writing. The course is divided into thematic units and provides vocabulary enrichment, as well as opportunities to speak and write extensively in Spanish. Knowledge of grammatical structures presented in levels II and III is expected. Proficiency exam will be given at the end of the course.

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## AP SPANISH LANGUAGE AND CULTURE

**Grade Level:** 11, 12

**Prerequisites:** Spanish III Honors or Spanish IV Honors, language proficiency

**Credit:** 1 unit

This is an intensive course designed for highly motivated students to improve competency and gain proficiency in Spanish. The course provides extensive preparation for the AP Spanish language exam given in May. Students write compositions in Spanish and develop their speaking skills at an advanced level by making recordings. Students are expected to become competent in reading and in understanding spoken Spanish using authentic sources. A concise review of grammar and extensive vocabulary are addressed throughout the year. Course content might best reflect interests shared by the students and the teacher, e.g., the arts, current events, literature, culture, sports, etc. Spanish Language, Advanced Placement seeks to develop language skills that are useful and that can be applied to various activities and disciplines rather than being limited to any specific subject matter. Extensive practice in the organization and writing of compositions should also be emphasized. Proficiency exam will be given at the end of the course.

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## IB WORLD LANGUAGES SPANISH I & II

**Grade Level:** 9, 10, 11, 12

**Prerequisites:** World Language levels 1, 2, and 3.

**Credit:** 1 unit

World Language studies at the Diploma Level require students to read, write, and speak in the target language while exploring cultures related to the language. Students engage in discussion with classmates and their teacher, read and respond to texts, and describe and analyze photographs representing cultural images.

**NOTE:** Course is offered only at South View High School.

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## Mathematics

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### FOUNDATIONS OF NC MATH 1

**Grade Level:** 9, 10, 11

**Prerequisite:** None

**Credit:** 1 unit

Foundations of NC Math 1 is a continuation of the mathematical skills and concepts studied in middle school. This course is intended for students who need a stronger, slower mathematical foundation before enrolling in NC Math 1. There will be an emphasis on developing concepts in algebra, functions and numbers and operations.

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### NC MATH 1

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

NC Math 1 provides students the opportunity to study concepts of algebra, geometry, functions, number and operations, statistics, and modeling throughout the course. The focus in NC Math 1 is on linear, exponential, and quadratic functions. These concepts include expressions in the real number system, creating and reasoning with equations and inequalities, interpreting and building simple functions, expressing geometric properties, interpreting categorical and quantitative data.

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### NC MATH 1 HONORS

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

NC Math 1 Honors addresses the topics of NC Math 1 at a more comprehensive and rigorous level. Additional topics and requirements with real-world applications are included.

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## FOUNDATIONS OF NC MATH 2

**Grade Level:** 10, 11, 12

**Prerequisite:** NC Math 1

**Credit:** 1 unit

Foundations of NC Math 2 is a continuation of the mathematical skills and concepts studied in NC Math 1. This course is intended for students who need a stronger, slower mathematical foundation before enrolling in NC Math 2. There will be an emphasis on developing concepts in algebra, geometry and statistics.

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## NC MATH 2

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** NC Math 1

**Credit:** 1 unit

NC Math 2 continues a progression of the standards established in NC Math 1. In addition, there is a focus on quadratic, square root, and inverse variation functions. NC Math 2 includes congruence and similarity of figures, right triangle trigonometry, modeling with geometry, probability, and justifying conclusions.

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## NC MATH 2 HONORS

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** NC Math 1

**Credit:** 1 unit

NC Math 2 Honors addresses the topics of NC Math 2 at a more comprehensive and rigorous level. Additional topics and requirements with real-world applications are included.

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## FOUNDATIONS OF NC MATH 3

**Grade Level:** 10, 11, 12

**Prerequisite:** NC Math 2

**Credit:** 1 unit

Foundations of NC Math 3 is a continuation of the mathematical skills and concepts studied in NC Math 2. This course is intended for students who need a stronger, slower mathematical foundation before enrolling in NC Math 3. There will be an emphasis on developing concepts in algebra, functions and geometry.

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## NC MATH 3

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** NC Math 2

**Credit:** 1 unit

NC Math 3 progresses from the standards learned in NC Math 1 and NC Math 2. In addition to these standards, NC Math 3 focuses on Exponential, Logarithmic, Rational, Polynomial, Absolute Value, and Trigonometric Functions. This extends to include algebraic concepts such as the complex number system, trigonometric functions and the unit circle. NC Math 3 also includes the geometric concepts of radians, angles, segments, and random sampling.

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## NC MATH 3 HONORS

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** NC Math 2

**Credit:** 1 unit

NC Math 3 Honors addresses the topics of NC Math 3 at a more comprehensive and rigorous level. Additional topics and requirements with real-world applications are included.

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## NC MATH 4

**Grade Level:** 10, 11, 12

**Prerequisite:** NC Math 3

**Credit:** 1 unit

NC Math 4 focuses on functions and statistical thinking, continuing the study of algebra, functions, trigonometry and statistical concepts previously experienced in NC Math 1-3. The course is designed to be a capstone to introductory statistical concepts. Additionally, the course intentionally integrates concepts from algebra and functions to demonstrate the close relationship between algebraic reasoning as applied to the characteristics and behaviors of more complex functions. In many cases, undergraduate students majoring in non-STEM fields will take an entry-level Algebra or Introductory Statistics course. Students will be prepared for college level algebra and statistics or as a bridge to prepare students for Precalculus or other advanced math courses.

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## NC MATH 4 HONORS

**Grade Level:** 10, 11, 12

**Prerequisite:** NC Math 3

**Credit:** 1 unit

NC Math 4 Honors addresses the topics of NC Math 4 at a more comprehensive and rigorous level. Additional topics and requirements with real-world applications are included.

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## DISCRETE MATHEMATICS FOR COMPUTER SCIENCE

**Grade Level:** 10, 11, 12

**Prerequisite:** NC Math 3

**Credit:** 1 unit

Discrete mathematics is the study of mathematical structures that are countable or otherwise distinct and separable. The mathematics of modern computer science is built almost entirely on discrete mathematics, such as logic, combinatorics, proof, and graph theory. At most universities, an undergraduate-level course in discrete mathematics is required for students who plan to pursue careers as computer programmers, software engineers, data scientists, security analysts and financial analysts. Students will be prepared for college level algebra, statistics, and discrete mathematics courses.

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## DISCRETE MATHEMATICS FOR COMPUTER SCIENCE HONORS

**Grade Level:** 10, 11, 12

**Prerequisite:** NC Math 3

**Credit:** 1 unit

Discrete mathematics Honors for Computer Science addresses the topics of Discrete Math for Computer Science at a more comprehensive and rigorous level.

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## PRECALCULUS HONORS

**Grade Level:** 10, 11, 12

**Prerequisite:** NC Math 3

**Credit:** 1 unit

Precalculus will build upon the study of algebra, functions, and trigonometry experienced in previous high school mathematics courses. This course will build on students' algebraic skills and understanding of functions to delve into real world phenomena and to deepen understanding of the functions in the course. This course is designed for students pursuing careers in STEM-related fields. Students will be prepared for Calculus, AP Calculus and any entry-level college course.

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## AP STATISTICS

Grade Level: 11, 12

Prerequisite: NC Math 3

Credit: 1 unit

AP Statistics, which follows the College Board Curriculum, introduces students to the major statistical concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will observe patterns and departures from patterns, decide what and how to measure, produce models using probability and simulation, and confirm models. Appropriate technology, from manipulatives to calculators and application software, will be used regularly for instruction and assessment. At the completion of this course, students will be required to take the Advanced Placement Exam.

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## AP CALCULUS (AB and BC)

Grade Level: 12

Prerequisite: Precalculus Honors

Credit: 1 unit

AP Calculus follows the College Board Curriculum to develop the students' understanding of the concepts of calculus (functions, graphs, limits, derivatives, and integrals) and provides experiences with its methods and applications. These courses encourage the geometric, numerical, analytical, and verbal expressions of concepts, results, and problems. Appropriate technology, from manipulatives to calculators and application software, will be used regularly for instruction and assessment. At the completion of either course, students will be required to take the Advanced Placement Exam.

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## CAREER AND COLLEGE READY GRADUATE COURSE (CCRG)

Grade Level: 10, 11, 12

Prerequisite: None

Credit: 1 unit

The State Board of Community Colleges (SBCC) in consultation with the State Board of Education (SBOE) developed a program that introduces the college developmental math curriculum in high school. High school students that are not career and college ready by the end of their junior year, will have opportunities for college remediation prior to high school graduation through cooperation with community college partners. This course does not count as a fourth level math.

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## ALTERNATE MATHEMATICS I

Grade Level: 9, 10, 11, 12

Prerequisite: None

Credit: 1 unit

Alternate Mathematics I provides learners an opportunity to apply mathematics concepts and skills from earlier high school mathematics courses in practical situations while focusing on learning skills associated with information and communication technology.

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## ALTERNATE MATHEMATICS II

Grade Level: 10, 11, 12

Prerequisite: Alternate Mathematics I

Credit: 1 unit

Alternate Mathematics II provides learners an opportunity to apply, mathematical concepts and skills from earlier high school mathematics courses to financial situations while using learning skills associated with information and communication technology.

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## Science

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### ANATOMY & PHYSIOLOGY

Grade Level: 11, 12

Prerequisite: Biology I; Chemistry I

Credit: 1 unit

Anatomy & Physiology is designed for students interested in pursuing a career in the health services. Emphasis will be placed on study of the function and structure of the human body. Laboratory investigations will be used to study important concepts.

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### ANATOMY & PHYSIOLOGY HONORS

Grade Level: 11, 12

Prerequisite: Biology I Honors; Chemistry I Honors

Credit: 1 unit

Anatomy & Physiology Honors is a rigorous curriculum designed to allow highly motivated students to conduct an in-depth study of the function and structure of the human body. Students are expected to work more independently completing two to three additional research projects.

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### BIOLOGY I

Grade Level: 9, 10, 11

Prerequisite: None

Credit: 1 unit

Through laboratory and literary investigations, the Biology course provides in-depth study of the following concepts: the cell, the molecular basis of heredity, biological evolution theory, the interdependence of organisms, matter, energy and organization in living systems, and the adaptive responses of organisms.

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### BIOLOGY I HONORS

Grade Level: 9, 10

Prerequisite: None

Credit: 1 unit

Honors Biology is designed to give the student a more challenging and in-depth experience. Students are expected to work independently on a variety of assignments and accept greater responsibility for their learning. In addition to the North Carolina Standard Course of Study for Biology standards and objectives, students are expected to: design and carry out several independent investigations of biological questions, read and report on recent research in biology and demonstrate a more in-depth understanding of all biology objectives.

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### BIOLOGY II

Grade Level: 11, 12

Prerequisite: Biology I

Credit: 1 unit

Biology II is a continuation of the Biology I program of study. The course considers selected topics studied in Biology I through extended laboratory and literary investigations.

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### BIOLOGY II HONORS

Grade Level: 11, 12

Prerequisite: Biology I Honors, Chemistry I Honors

Co-requisite: (Spring Semester): AP Biology

Credit: 1 unit

Biology II Honors is designed to be taken in the fall semester and partner with AP Biology course taken during the spring semester. This course provides additional laboratory study, student-directed exploration and research involving objectives in the Advanced Placement course of study.

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### AP BIOLOGY

Grade Level: 11, 12

Prerequisites: Biology I & II Honors, Chemistry I Honors

Credit: 1 unit

Advanced Placement Biology is equivalent to a two-semester college biology course that includes eight major themes: science as a process, evolution, energy transfer, continuity and change, relationship of structure to function, regulation, interdependence in nature, and science, technology, and society. At the completion of this course, students will be required to take the Advanced Placement Exam.



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## EARTH/ENVIRONMENTAL SCIENCE

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

The Earth/Environmental Science curriculum focuses on the functions of Earth's systems. Emphasis is placed on matter, energy, plate tectonics, origin and evolution of the earth, solar system, and universe, environmental awareness, weather and climate, human population dynamics and sustainable living, and the cycles that circulate matter and energy through the earth system.

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## EARTH/ENVIRONMENTAL SCIENCE HONORS

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

Honors Earth/Environmental Science is designed to allow highly motivated students to conduct an in-depth study of the Earth and Environmental Sciences. Students are expected to work independently on a variety of assignments and accept greater responsibility for their learning. In order to develop a greater understanding of the processes that shape our everyday lives, the curriculum will integrate inquiry investigations and a variety of technologies with the study of earth as a system.

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## AP ENVIRONMENTAL SCIENCE

**Grade Level:** 11, 12

**Prerequisites:** Biology I Honors and Chemistry I Honors

**Credit:** 1 unit

Advanced Placement Environmental Science is equivalent to a one-semester college course that includes the following major topics: the origin and structure of the Universe, the interdependence of Earth Systems, human population dynamics, renewable and nonrenewable resources, air, water and soil quality, global changes and their consequences, and environmental decision making. At the completion of this course, students will be required to take the Advanced Placement Exam.

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## CHEMISTRY I

**Grade Level:** 10, 11, 12

**Co-requisite:** NC Math 3

**Credit:** 1 unit

The Chemistry course encourages students to continue their investigation of the structure of matter along with chemical reactions and the conservation of energy in these reactions. Inquiry is applied to the study of the transformation, composition, structure, and properties of substances.

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## CHEMISTRY I HONORS

**Grade Level:** 10, 11, 12

**Co-requisite:** NC Math 3

**Credit:** 1 unit

Chemistry Honors is an accelerated comprehensive laboratory course designed to give the students a more conceptual and in-depth understanding of concepts in the North Carolina Standard Course of Study in Chemistry. Students are expected to work independently on a variety of assignments and accept greater responsibility for their learning. The course will include additional Honors objectives and an in-depth study of at least two enrichment topics. Students will design and complete at least one in-depth independent study of chemistry directed questions.

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## CHEMISTRY II

**Grade Level:** 11, 12

**Prerequisite:** Chemistry I

**Credit:** 1 unit

Chemistry II is designed to help students develop an in-depth understanding of topics covered in Chemistry I. Laboratory investigations are used to stress important concepts relative to topics including molecular chemistry, electrochemistry, gas-laws, and acid-base reactions.

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## CHEMISTRY II HONORS

**Grade Level:** 11, 12

**Prerequisite:** Biology I Honors, Chemistry I Honors

**Co-requisite: (Spring Semester):** AP Chemistry

**Credit:** 1 unit

Chemistry II Honors is designed to be taken in the fall semester and partner with AP Chemistry course taken during the spring semester. This course provides additional laboratory study, student-directed exploration and research involving objectives in the Advanced Placement course of study.

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## AP CHEMISTRY

**Grade Level:** 11, 12

**Prerequisites:** Biology I Honors and Chemistry I & II

**Honors**

**Credit:** 1 unit

Advanced Placement Chemistry is equivalent to a two-semester college chemistry course. Topics include atomic and molecular structure, descriptive inorganic and organic chemistry, stoichiometry, thermodynamics, chemical kinetics, chemical equilibrium, electrochemistry, the chemistry of aqueous solutions, and basic techniques of qualitative analysis. At the completion of this course, students will be required to take the Advanced Placement Exam.

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## PHYSICAL SCIENCE

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** Math I

**Credit:** 1 unit

The Physical Science course will provide a foundation for the continued study of science. The curriculum will integrate the following topics in chemistry and physics: structure of atoms, structure and properties of matter, motion and forces, conservation of energy, matter, and charge.

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## PHYSICS

**Grade Level:** 11, 12

**Prerequisites:** NC Math 3

**Credit:** 1 unit

Physics, the most fundamental of the natural sciences, is quantitative in nature and uses the language of mathematics to describe natural phenomena. Inquiry is applied to the study of matter and energy and their interaction. The following topics are "uncovered" in this curriculum: conservation of mass and energy, conservation of momentum, waves, and interactions of matter and energy.

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## PHYSICS HONORS

**Grade Level:** 11, 12

**Prerequisites:** NC Math 3

**Credit:** 1 unit

Honors Physics uses the North Carolina Standard Course of Study for Physics as a foundation for more challenging and advanced study that enriches key topics and broadens the student's view of the larger physics community including current research. Increased depth of each topic as well as student-directed exploration and experimentation is a vital part of this course. At least two of the following enrichment topics will be included in course objectives: optics, nuclear physics, modern physics, electromagnetism, thermodynamics, and engineering.

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## AP PHYSICS 1: ALGEBRA BASED

**Grade Level:** 11, 12

**Co-requisite:** Precalculus or NC Math 4

**Credit:** 1 unit

Advanced Placement Physics 1: Algebra Based is equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits. At the completion of this course, students will be required to take the Advanced Placement Exam.

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## AP PHYSICS 2: ALGEBRA BASED

Grade Level: 11, 12

Prerequisite: AP Physics 1: Algebra Based

Co-requisite: Precalculus or NC Math 4

Credit: 1 unit

Advanced Placement Physics 2: Algebra-Based is the equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics. At the completion of this course, students will be required to take the Advanced Placement Exam.

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## AP PHYSICS C: ELECTRICITY AND MAGNETISM

Grade Level: 11, 12

Prerequisite: Physics Honors and AP Calculus

Credit: 1 unit

Advanced Placement Physics C: Electricity and Magnetism is equivalent to a semester college physics course and should provide instruction in each of the following five content areas; electrostatics; conductors, capacitors and dielectrics; electric circuits; magnetic fields; and electromagnetism. Calculus is used to develop concepts. One part of the Physics C examination covers mechanics; the other part covers electricity and magnetism. Students are permitted to take either one or both parts of this examination, and separate grades are reported for the two subject areas. At the completion of this course, students will be required to take the Advanced Placement Exam.

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## AP PHYSICS C: MECHANICS

Grade Level: 11, 12

Prerequisite: Physics Honors and AP Calculus

Credit: 1 unit

Advanced Placement Physics C: Mechanics is equivalent to a semester college physics course and should provide instruction in each of the following six content areas: kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation and oscillations and gravitation. Calculus is used to develop concepts. One part of the Physics C examination covers mechanics; the other part covers electricity and magnetism. Students are permitted to take either one or both parts of this examination, and separate grades are reported for the two-subject area. At the completion of this course, students will be required to take the Advanced Placement Exam.

## Social Studies

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### AMERICAN HISTORY: THE FOUNDING PRINCIPLES, CIVICS, AND ECONOMICS

Prerequisite: None

Credit: 1 unit

Through the study of the Founding Principles, students will acquire the skills and knowledge necessary to become responsible and effective citizens in an interdependent world. This is a survey course that gives students the needed practical understanding of civic participation and government as well as a study of the basic economics that affect their lives as consumers and citizens. All students are required to take either American History: The Founding Principles, Civics, and Economics or Founding Principles of the United States of America and North Carolina: Civic Literacy or the Honors equivalent for graduation.

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### AMERICAN HISTORY: THE FOUNDING PRINCIPLES, CIVICS, AND ECONOMICS HONORS

Prerequisite: None

Credit: 1 unit

Honors Founding Principles provides a more rigorous examination of American government and economic systems. Instructional pacing accelerated beyond the standard Civics and Economics course. The course builds and extends on the government and economic topics and concepts taught in the standard Civics and Economics course. Students will be expected to read and/or interact with a wide spectrum of more challenging, relevant instructional material. All students are required to take either American History: The Founding Principles, Civics, and Economics or Founding Principles of the United States of America and North Carolina: Civic Literacy or the Honors equivalent for graduation.

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### AMERICAN HISTORY I

Prerequisite: None

Credit: 1 unit

This course explores early American History, beginning with the European exploration of the new world through Reconstruction. Students will examine the historical and intellectual origins of the United States from European exploration and colonial settlement to the Revolutionary and Constitutional eras. Students will learn about the important political and economic factors that contributed to the development of colonial America and the outbreak of the American Revolution as well as the consequences of the Revolution, including the writing and key ideas of the U.S. Constitution. Students will study the establishment of political parties, America's westward expansion, the growth of sectional conflict, how that sectional conflict led to the Civil War, and the consequences of the Civil War, including Reconstruction. American History I expands upon earlier studies of American history by developing higher level thinking skills and encouraging students to make historical assessments and evaluations. American History I and II or the equivalent AP or IB coursework is a graduation requirement for students who entered high school prior to the 2020-2021 academic year.

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### AMERICAN HISTORY I HONORS

Prerequisite: None

Credit: 1 unit

Honors American History I provides students with opportunities to gain a deeper understanding of historical events which shaped the United States from European Exploration to the early nineteenth century. Instructional pacing is accelerated beyond the standard American History I course. The course builds on the historical and intellectual origins of the United States. Students are expected to read and/or interact with a wide spectrum of more challenging, relevant instructional material. Students entering 9<sup>th</sup> grade in 2012- 2013 and beyond are required to take American History I and II or American History I Honors and II Honors. This is a graduation requirement for students who entered high school prior to the 2020- 2021 academic year.

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### AMERICAN HISTORY II

Prerequisite: None

Credit: 1 unit

This course guides students from the late nineteenth century through the early 21<sup>st</sup> century. Students examine the political, economic, social, and cultural development of the United States from the end of the Reconstruction era to present times. The essential standards of American History II trace the change in the ethnic composition of American society; the movement toward equal rights for racial minorities and women; and the role of the United States as a major world power. An emphasis is placed on the expanding role of the federal government and federal courts as well as the continuing tension between the individual and the state. The desired outcome of this course is for students to develop an understanding of the cause-and-effect relationship between past and present events, recognize patterns of interactions, and understand the impact of events on the United States in an interconnected world. Students entering 9<sup>th</sup> grade in 2012-2013 and beyond are required to take American History I and II or American History I Honors and II Honors. This is a graduation requirement for students who entered high school prior to the 2020-2021 academic year.

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## AMERICAN HISTORY II HONORS

**Prerequisite:** None

**Credit:** 1 unit

Honors American History II provides students with opportunities to gain a deeper understanding of historical events which shaped the United States from late nineteenth century to early 21<sup>st</sup> century. Instructional pacing is accelerated beyond the standard American History II course. The course builds and extends on understanding the role the federal government has had on the development of the United States. Students are expected to read and/or interact to a wide spectrum of more challenging, relevant instructional material. Students entering 9<sup>th</sup> grade in 2012-2013 and beyond are required to take American History I and II or American History I Honors and II Honors. This is a graduation requirement for students who entered high school prior to the 2020-2021 academic year.

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## AMERICAN HISTORY

**Prerequisite:** None

**Credit:** 1 unit

Providing a foundation to understand our nation's past and present, the American History course begins with the end of the French and Indian War in 1763 and continues through the most recent presidential election. This course will explore the overarching themes, trends, and concepts of our nation's history, including the development and evolution of the American system of government, the patterns and impact of migration and immigration, cultural development through the arts and technological innovations, relationships with foreign nations, and the role of both the individual and diverse groups in building the American story. Rooted in Inquiry-based skills, students will trace American development while learning to craft compelling questions, synthesize and evaluate evidence, develop claims, communicate ideas, and take informed action. As well-rounded, productive citizens, the students will leave the American History course with both the knowledge and the skills to engage with the modern world by recognizing contemporary patterns and connections. This course satisfies the American History requirement for students who begin their freshman year in the 2020-2021 academic year or beyond.

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## FOUNDING PRINCIPLES OF THE UNITED STATES AND NORTH CAROLINA: CIVIC LITERACY

**Prerequisite:** None

**Credit:** 1 unit

Civic Literacy is the study and understanding of citizenship and government. Through the Inquiry-based C3 Framework, this one-semester course provides students with a sound understanding of civic life, politics, and government, including a short history of government's foundation and development in the United States of America. Students learn how power and responsibility are shared and limited by the government, the impact American politics has on world affairs, law in the American constitutional system, and the rights that the American government guarantees its citizens. Students also examine how the world is organized politically and how to be an active participant in the American and global political systems. Students will study the foundations of American democracy and the origins of American government. The roles of political parties, campaigns & elections, public opinion, and the media will be analyzed to determine their effects on the individual and all who call the United States home. This course satisfies the "Founding Principles" graduation requirement for students who begin their freshman year in the 2020-2021 academic year or beyond.

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## ECONOMICS AND PERSONAL FINANCE

**Prerequisite:** None

**Credit:** 1 unit

The Economics and Personal Finance (EPF) course is intended to be a study of economics, personal finance, income and education, money management, critical consumerism, and financial planning. This course has been legislated by N.C. Session Law 2019-82, House Bill 924. Mastery of the standards and objectives of this course will inform and nurture responsible, participatory citizens who are competent and committed to responsible money management and financial literacy. This course is a graduation requirement for students who begin their freshman year in the 2020-2021 academic year or beyond.

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## WORLD HISTORY

**Prerequisite:** None

**Credit:** 1 unit

World History is designed to be a historical study of societies, nations, economies, events, and cultures of the many regions of the world, providing historical background for each area and details inclusive of change over time, historical impact, religion, diplomacy, culture practices and beliefs, and economic, political, and social institutions. The course is intended to examine the historical development of the world and global issues and patterns since 1200. The course also explores underlying themes of power and authority, change and continuity, human-environment interaction, globalization, cultural diffusion, and individual and group identity. This course seeks to move beyond the rote teaching of world history to the teaching of history in context to the world and global society in which students currently live and need to understand. With this in mind, it is important to note that this course is not designed to be a chronological study of history through periodization. The goal of this course is to blend the historical with the contemporary and current so that students begin to acquire an understanding of how the historical events and decisions of ancient, classical, and modern history have implications or lasting impacts that have influenced the world in which we currently live. This course or its equivalent is a graduation requirement.

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## WORLD HISTORY HONORS

**Prerequisite:** None

**Credit:** 1 unit

World History Honors provides challenging opportunities for students to examine the historical development of the world and global issues and patterns since 1200. Specialized projects provide the student with a more extensive examination of the events which have influenced the development of the world. This course or its equivalent is a graduation requirement.

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## WORLD HISTORY: GLOBAL ISSUES AND PATTERNS SINCE 1200

**Prerequisite:** None

**Credit:** 1 unit

World History: Global Issues and Patterns since 1200 is designed to be a study of nations, economies, events, and cultures of the many regions of the world, providing historical background for each area and details on language, religion, diplomacy, and economic, political, and social institutions. The course also explores underlying themes of power and authority; change and continuity; human-environment interaction; globalization and cultural diffusion; and individual and group identity. This course seeks to move beyond the rote teaching of World History to the teaching of history in context to the world and global society in which students currently live and need to understand. With this in mind, it is important to note that this course is not designed to be a chronological study of history through periodization. The goal of this course is to blend the historical with the contemporary and current. It is important for students in today's rapidly evolving global society to be able to understand the contemporary patterns and connections of globalization. Likewise, it is important they know that in order to do so one must study the historical precedents and antecedents of those patterns and connections. Ultimately, students will be able to use this knowledge to engage with the world as collaborative and productive global citizens. This course replaces World History for students who begin their freshman year in the 2020-2021 academic year or beyond.

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## AP EUROPEAN HISTORY

**Recommendation:** World History

**Credit:** 1 unit

AP European History is divided into three major categories: Political and diplomatic; intellectual and cultural; and social and economic. Students trace the development of these categories through several papers, and class discussions assist the student in tracing the development of these categories through history. This course cannot be used to satisfy the World History graduation requirement. At the completion of this course, students will be required to take the Advanced Placement Exam.

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## AP HUMAN GEOGRAPHY

**Prerequisite:** None

**Credit:** 1 unit

Advanced Placement Human Geography introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students learn to employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. Students also learn about the methods and tools geographers use in their research and applications. At the completion of this course, students will be required to take the Advanced Placement Exam.

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## AP PSYCHOLOGY

**Grade level recommendation:** 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

This course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students will also learn about the ethics and methods psychologists use in their science and practice. At the completion of this course, students will be required to take the Advanced Placement Exam.

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## AP U.S. HISTORY

**Prerequisite:** None

**Credit:** 1 unit

The AP program in United States History is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials in studying the history of the United States beyond the state mandated survey course. The AP course prepares students for intermediate and advanced college courses. The work is designed to be extremely rigorous and challenging both in content and in its accelerated pacing. In depth writing assignments aligned to College Board standards are required. At the completion of this course, students will be required to take the Advanced Placement Exam. This course fulfills the American History graduation requirement.

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## AP UNITED STATES GOVERNMENT AND POLITICS

**Recommendation:** American History: The Founding Principles, Civics, and Economics or Founding Principles of the United States and North Carolina: Civic Literacy

**Credit:** 1 unit

This course is a study of the governmental institutions affecting the structure and function of the American federal system. Students examine the relationship among the three branches of government and evaluate Constitutional issues focusing on the freedoms of American citizens. Because this is a College Board approved class with an exit exam, it provides a more rigorous curriculum focusing on critical analysis of issues through research and discussion. At the completion of this course, students will be required to take the Advanced Placement Exam.

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## AP WORLD HISTORY: MODERN

**Prerequisite:** None

**Credit:** 1 unit

Advanced Placement World History offers examination in World History to students who wish to complete studies in secondary school equivalent to an introductory college course in world history. The purpose of this course is to develop greater understanding of the evolution of global processes and contacts and interaction among different types of human societies. At the completion of this course, students will be required to take the Advanced Placement Exam. This course may be taken to meet the World History graduation requirement.

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## 21<sup>ST</sup> CENTURY GLOBAL GEOGRAPHY

**Prerequisite:** None

**Credit:** 1 unit

This geography course will emphasize the increasing interconnectedness of Earth's people due to globalization, as well as the notion of "spatial variation"-how and why things differ from place to place both physically and culturally on the earth's surface. Globalization is the ongoing process of increasing interconnectedness and interdependence among humankind. While its origins are debatable, this process has been significantly amplified with the onset of new communication technologies that have improved economic, political, social, cultural, historic, and geographic connections among individuals, groups, and nations. The mounting flow of goods, services, finances, ideas, and people across national and international borders has created a world ever more devoid of physical and political boundaries and dependent upon empathy and collaboration. Since the consequences of the process are not predetermined, an awareness of the positive or negative possibilities of these connections is paramount to individual improvement and the advancement of humanity.

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## AFRICAN AMERICAN STUDIES

**Prerequisite:** None

**Credit:** 1 unit

African Americans have made significant contributions to the economic, political, social, and cultural development of the United States. Through this course, students discover how African Americans have always been an integral part of the American experience. However, African Americans have also been a viable force unto themselves with their own experiences, culture, and aspirations. African American history cannot be understood except in the broader context of the United States' history.

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## CURRENT AFFAIRS

**Grade level recommendation:** 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

Current Affairs is a study and discussion of local, national, and international current events. Emphasis is placed on determining how these events affect the lives of Americans. In order to promote greater student understanding of contemporary issues, students also study the historical background related to each topic. This course cannot be used as a substitute for American History: The Founding Principles, Civics, and Economics.

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## LEADERSHIP DEVELOPMENT

**Prerequisites:** SGA, Class or Club Officer

**Credit:** 1 unit

Planning for school activities, school service, and parliamentary procedure will be stressed in this course. This class should provide a study of the legal, educational and philosophical bases of student government. Activities may include travel to other campuses, area conferences and state conferences. The course is designed to teach leadership skills and to give practical experience in the field of student government. Course may be taken three times for credit.

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## MINORITY STUDIES

**Grade level recommendation:** 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

Minority Studies focuses on the contributions made by minority groups to American society and to the world. This class offers an examination of the social, political, and economic roles of various minority groups in the United States. Students study issues that have created conflict and analyze the search for equity in all facets of American life.

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## PSYCHOLOGY

**Grade level recommendation:** 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

The elective course, Psychology, engages students in the understanding, articulation, and dissemination of psychology as a science. Students are introduced to psychology, with a focus on the scientific study of human development, learning, motivation, and personality. It emphasizes the empirical examination of behavior and mental process and it infuses perspectives fostering students' growth, development, and understanding of cultural diversity. Students of psychology acquire information from a variety of sources, use information as they make decisions and evaluations, and solve problems. The study of psychology enables students to recognize and cope with uncertainty and ambiguity in human behavior.

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## SOCIOLOGY

**Grade level recommendation:** 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

This course is designed to give students the tools necessary to concentrate on the systematic study of human society and human interaction. Students will develop a sociological imagination in which they will observe the connections between their personal lives within society, as well as public policy issues. Using observation, the scientific method, and cross-cultural examination, students will discover how patterns of behavior develop, culture is learned, and social predictions are made.

## Arts Education

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### GENERAL MUSIC (Music Specialization-Beginning)

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

Students develop knowledge and skills in musical literacy, response and relevancy. Course content is aligned to the Essential Standards curriculum for music at the beginning level. Students gain musical literacy through singing and playing simple instruments, reading and notating music, improvising, composing, and arranging music. For musical response, students focus on listening to, describing, analyzing, critiquing, and evaluating music. Students understand musical relevancy by applying musical knowledge in relation to history, culture, heritage, other content areas, concepts, 21<sup>st</sup> century skills and lifelong learning.

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### MUSIC APPRECIATION (Music Specialization-Beginning)

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

Students develop an understanding and appreciation of music as a fine art through the study of varied music literature. Students build musical literacy through an examination of the interacting elements of music in response to music literature and music performances. Students develop knowledge and skills in musical response and relevance as they listen to, analyze, and evaluate music in relation to history, culture, and other content areas. Course content is aligned to the Essential Standards curriculum for music at the beginning level.

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### MUSIC THEORY (Music Specialization-Proficient)

**Grade Level:** 10, 11, 12

**Prerequisite:** Successful completion of an intermediate level music course

**Credit:** 1 unit

Music Theory is a standard level course open to students who have prior musical experience (vocal or instrumental) at an intermediate level in high school. This course is a survey of musical form, structure, notation, sight singing, and development as applied to practice in contemporary American music as well as historical contributions of various cultures and geographic influences. This course is aligned to the Essential Standards curriculum for music at the proficient level. Students create and maintain portfolios containing written, audio, or visual examples of their work for evaluation.

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### MUSIC THEORY (10-12) AP (AP Music Theory)

**Grade Level:** 11, 12

**Prerequisite:** Proficient level music course

**Credit:** 1 unit

This course is designed for the advanced music student who plans to study or major in music or music education in college. The course reflects the content and level of skills of a first-year college music course. The goal of this course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a musical score. Students develop aural, sight-singing, written, compositional, and analytical skills through listening, performance, written, creative and analytical activities and assignments. Students create and maintain portfolios containing written, audio, or visual examples of their work. Additional emphasis is placed on music styles and cultural and historical influences. At the completion of this course, students are expected to take the Advanced Placement Exam.

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### VOCAL MUSIC-BEGINNING

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

Vocal Music-Beginning is an introductory choral music course for students interested in singing and musical performance but have limited choral music experience. This course provides a mixed performing ensemble featuring vocal music literature at levels II-III. Students develop and demonstrate appropriate vocal practices, refine the use of the voice as an instrument, sing vocal literature which include changes in tempi, keys, and meters and represent diverse genres, styles, historical periods, and cultures. Course components include the fundamentals of music sight-singing, vocal techniques, ensemble and performance techniques as well as improvising, composing and arranging music and listening to, analyzing, and evaluating musical experiences. Course content is aligned to the Essential Standards curriculum for music at the beginning level. Activities may include required evening and weekend rehearsals and performances. All concert rules apply.

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### VOCAL MUSIC-INTERMEDIATE

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** Placement Audition

**Credit:** 1 unit

Vocal Music-Intermediate provides a mixed performing ensemble featuring vocal music literature at Levels III-IV. Students should be able to sight-read and have a general understanding of music theory and notation. Music of various styles, cultures, and historical periods are included in the repertoire of choral literature studied and performed. Course content is aligned to the Essential Standards curriculum for music at the intermediate level. Performance is an important component of this course and may include required evening and weekend concerts. All concert rules apply.

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## VOCAL MUSIC-PROFICIENT

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Successful completion of an intermediate level music course and Placement Audition** **Credit: 1 unit**

Vocal Music-Proficient is an honors level course offering a performing ensemble for students displaying refined levels of vocal practice and uses of the voice as an instrument. Students study and perform vocal music literature at levels IV-V and gain an understanding of vocal literature in relationship to varied styles, history, cultures, and other content areas. Course content is aligned to the Essential Standards curriculum for music at the proficient level. Learning activities build skills in improvising, composing, and arranging music. Students also listen to, analyze, and evaluate musical performances. Students create and maintain portfolios containing written, audio, or visual examples of their work for evaluation. Performance is an important and required component of this course and may include required evening and weekend participation. All concert rules apply.

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## VOCAL MUSIC-ADVANCED

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Successful completion of a proficient level choral music course and Placement Audition** **Credit: 1 unit**

Vocal Music-Advanced is an honors level course offering an advanced vocal performance ensemble. Students perform choral literature at levels V-VI that requires advanced technical and interpretive skills, the ability to perform in various meters, keys, unusual meters, complex rhythms, and subtle dynamic requirements of music of varied styles, cultures, and historical periods. Course content is aligned to the Essential Standards music curriculum at the advanced level. Students create and maintain portfolios containing a combination of written, audio, or visual examples of their work for evaluation. Performance is an important component of this course and student may be required to participate in evening and weekend activities and performances. All concert rules apply.

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## VOCAL ENSEMBLE I (Vocal Music-Proficient)

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Successful completion of an intermediate level choral course and audition** **Credit: 1 unit**

This course features a balanced S.A.T.B. (Soprano, Alto, Tenor, Bass) vocal ensemble that performs a varied repertoire of traditional and contemporary musical levels IV-V. Movement and choreography accompany appropriate literature. Vocal Ensemble I is an honors level course aligned to the Essential Standards music curriculum at the proficient level. Students create and maintain portfolios containing written, audio, or visual examples of their work for evaluation. Performance is an integral part of this course and may involve required evening and weekend rehearsal and concerts. All concert rules apply.

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## VOCAL ENSEMBLE II (Vocal Music-Advanced)

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Successful completion of a proficient level choral course and audition** **Credit: 1 unit**

This course features a balanced S.A.T.B. (Soprano, Alto, Tenor, Bass) vocal ensemble that performs a varied repertoire of traditional and contemporary musical levels V-VI. Movement and choreography accompany appropriate literature. Vocal Ensemble II is an honors level course aligned to the Essential Standards music curriculum at the advanced level. Students create and maintain portfolios containing written, audio, or visual examples of their work for evaluation. Performance is an integral part of this course and may involve required evening and weekend rehearsal and concerts. All concert rules apply.

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## BAND-BEGINNING

**Grade Level: 9, 10, 11, 12**

**Prerequisite: None** **Credit: 1 unit**

This course is offered only as needed with the approval of the band director and principal. Band students who have successfully completed the middle school band program are eligible to enroll in Band-Intermediate. Band-Beginning is an introductory level band class for students with limited or no instrumental experience. This course is a performance-oriented class with emphasis on music at levels I-III. Students develop and demonstrate fundamental instrumental practices and play literature that may include changes in tempi, keys, and meters. Students develop basic skills in improvising, composing and arranging music and apply reading, music notation as well as skills in listening to, analyzing, and evaluating musical experiences. Music of varied styles, cultures, and historical periods is studied and played. All scheduled activities are required and may include evening and weekend concerts, assemblies, parades, festivals/concert contests, school-sponsored events, and community activities. Band students are expected to be members of the marching band. The principal or band director may permit exceptions.

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## BAND-INTERMEDIATE

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Successful participation in a middle school band program, Placement Audition** **Credit: 1 unit**

Band-Intermediates a performance-oriented class with emphasis on music literature at levels III-IV. Students develop and demonstrate appropriate instrumental practices and play literature that may include changes in tempi, keys, and meters. Students develop skills in improvising, composing and arranging music and apply reading, music notation as well as skills in listening to, analyzing, and evaluating musical experiences. Music of varied styles, cultures, and historical periods is studied and played. This course is aligned to the Essential Standards music curriculum at the intermediate level. All scheduled activities are required and may include evening and weekend concerts, assemblies, parades, festivals/concert contests, school-sponsored events, and community activities. Band students are expected to be members of the marching band. The principal or band director may permit exceptions.

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## BAND-PROFICIENT

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Successful completion of an intermediate level band course and Placement Audition** **Credit: 1 unit**

Band-Proficient is an honors level performance-oriented course that develops technical accuracy and expression needed for rigorous ensemble and solo performance. This course is aligned to the Essential Standards music curriculum at the proficient level. Band-Proficient focuses on music literature at levels IV-V that requires well-developed technical skills, attention to phrasing and interpretation, and the ability to perform various meters and rhythms in a variety of keys. This course provides a foundation for proficiencies in performance, conducting, listening, appreciation, history, analyzing, composing, the use of current technology, and research culminating in written reports. Students broaden and refine their skills in improvising, composing and arranging music and their knowledge of music in the context of historical periods, cultures, and contemporary styles and genres. Students formulate and apply aesthetic criteria to analyze, evaluate, and describe musical compositions and performances. Students create and maintain portfolios containing written, audio, or visual examples of their work for evaluation. All scheduled activities are required and may include evening and weekend concerts, assemblies, parades, festivals/concert contests, school-sponsored events, and community activities. Band members are expected to be members of the marching band. The principal or band director may make exceptions.

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## BAND-ADVANCED

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Successful completion of a proficient level band course and Placement Audition** **Credit: 1 unit**

Band-Advanced is an advanced honors level performing ensemble for highly skilled and motivated high school band students. This course is aligned to the Essential Standards music curriculum at the advanced level and focuses on music literature at levels V-VI. Students gain advanced proficiencies in performance, conducting, listening, appreciation, history, analyzing, composing, the use of current technology, and research. This course promotes advanced technical and interpretive skills, the ability to perform in various meters, keys, unusual meters, complex rhythms, and subtle dynamic requirements. Students develop personal aesthetic criteria for analysis and evaluation. Students create and maintain portfolios containing written, audio, or visual examples of their work for evaluation. Membership is determined by instrumental proficiency and instrumentation needs. All scheduled activities are required and may include evening and weekend concerts, assemblies, parades, festivals/concert contests, school-sponsored events, and community activities. Band students are expected to be members of the marching band. The principal or band director may make exceptions.

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## JAZZ ENSEMBLE I

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Audition** **Credit: 1 unit**

Jazz Ensemble students study and perform music of many styles, ranging from the Jazz and Big Band eras to Post-Modern and Contemporary. Instrumentation is based on enrollment and auditions as determined by the band director. Music literature to be performed will focus on intermediate level III-IV. Jazz Ensemble is aligned to the Essential Standards music curriculum at the intermediate level. Jazz Ensemble is a performance-oriented class and may include evening and weekend performances for student participation and evaluation. All scheduled activities and performances are required.

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## JAZZ ENSEMBLE II (Music Specialization-Proficient)

**Grade Level: 10, 11, 12**

**Prerequisite: Audition** **Credit: 1 unit**

Jazz Ensemble II students continue in the study and performance of music of many styles, ranging from the Jazz and Big Band eras to Post-Modern and Contemporary. Instrumentation is based on enrollment and auditions as determined by the band director. Music literature to be performed will focus on intermediate levels IV-V. Jazz Ensemble II is aligned to the Essential Standards music curriculum at the proficient level. Jazz Ensemble II is a performance-oriented class and may include evening and weekend performances for student participation and evaluation. All scheduled activities and performances are required.

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## ORCHESTRA-BEGINNING

**Grade Level: 9, 10, 11, 12**

**Prerequisite: None** **Credit: 1 unit**

This course is offered only as needed with the approval of the orchestra director and principal. This course may not be offered at high schools with one orchestra class. Orchestra-Beginning is an introductory level course for students with little or no string instrument experience. Instruction on individual and group technique is offered for the violin, viola, cello, and string bass and is aligned with the Essential Standards music curriculum at the beginning level. This course is a performance-oriented class that plays instrumental literature at levels I-III focusing on music fundamentals, changes in tempi, key signatures, and meter. Music literature represents diverse genres, styles, cultures and historical periods. Students develop basic skills in improvising, composing and arranging music as well as listening to, analyzing, and evaluating musical experiences. Scheduled activities are required including concerts, assemblies, festivals/contests, school-sponsored events, and community activities during the school day, evening or weekend.

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## ORCHESTRA-INTERMEDIATE

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Successful completion of Middle school Orchestra program, Placement Audition** **Credit: 1 unit**

Orchestra-Intermediate offers instruction on individual and group technique in violin, viola, cello, and string bass and is aligned to the Essential Standards music curriculum at the intermediate level. This is a performance-oriented class with emphasis on music at levels III-IV featuring intermediate technical demands, expanded ranges, and varied interpretive requirements. Music literature represents diverse genres, styles, cultures and historical periods. Students develop skills in improvising, composing and arranging music as well as listening to, analyzing, and evaluating musical experiences. Scheduled activities are required including concerts, assemblies, festivals/contests, school-sponsored events, and community activities during the school day, evening or weekend.

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## ORCHESTRA-PROFICIENT

**Grade Level: 9, 10, 11, 12S**

**Prerequisite: Successful completion of an intermediate level orchestra course and Placement Audition** **Credit: 1 unit**

Orchestra-Proficient is an honors level course that promotes student proficiencies as individual players and as members of a performing ensemble. This course is a performance-oriented class with emphasis on music at levels IV-V requiring well-developed technical skills, attention to phrasing and interpretation and the ability to perform various meters and rhythms in a variety of keys. This course is aligned to the Essential Standard music curriculum at the proficient level. An understanding of instrumental literature in relationship to history, culture, and other content areas is gained by studying and playing literature representing diverse genres, styles, and cultures. This course also promotes proficiencies in conducting, listening, analyzing, composing, the use of current technology, and research. Students create and maintain portfolios that contain a combination of written, audio, or visual examples of their work for evaluation. Participation in daytime, evening and weekend rehearsals, concerts and events is required.

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## ORCHESTRA-ADVANCED

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Successful completion of proficient level orchestra course and Placement Audition** **Credit: 1 unit**

Orchestra-Advanced is an advanced honors level performing ensemble for highly skilled and motivated high school orchestra students focusing on music literature at levels V-VI. This course promotes advanced technical and interpretive skill, the ability to perform in various meters, keys, unusual meters, complex rhythms, and subtle dynamic requirements. This course is aligned to the Essential Standards music curriculum at the advanced level and provides instruction for advanced proficiencies in performance, conducting, listening, appreciation, history, analyzing, composing, the use of current technology, and research. Students create and maintain portfolios that contain a combination of written, audio, or visual examples of their work for evaluation. Focuses include orchestral techniques, instrumental pedagogy, music theory, music history, improvisation, composition, analysis and evaluation of musical experiences and ensemble skills. Students develop personal aesthetic criteria for analysis and evaluation. Participation in daytime, evening and weekend rehearsals, concerts and events is required.

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## ART APPRECIATION (Visual Arts Specialization-Beginning)

**Grade Level: 9, 10, 11, 12**

**Prerequisite: None**

**Credit: 1 unit**

Through the study of significant artists and artworks, students gain an appreciation of the elements of art, design principles and creative processes involved in visual arts. Students expand their use of art terminology as they view, analyze and critique artwork from various cultures and historical periods. Students use oral and written analysis and evaluation of artworks to develop critical thinking skills to gain an understanding of the connections that the visual arts have to culture, history, other disciplines and careers. Course content is aligned to the Essential Standards visual arts curriculum at the beginning level.

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## VISUAL ARTS-BEGINNING

**Grade Level: 9, 10, 11, 12**

**Prerequisite: None**

**Credit: 1 unit**

Visual Arts-Beginning is an introductory studio art course for students with limited art experiences. This course is aligned to the Essential Standards visual arts curriculum at the beginning level and features the foundational study of the elements of art and principles of design, color theory, art vocabulary, use and care of art tools and equipment, art criticism, art history and safety in the art room. Visual Arts-Beginning explores various art media, processes, procedures, aesthetic theories and historical developments. Essential materials are supplied. Students may be asked to supply special project materials.

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## VISUAL ARTS-INTERMEDIATE

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Successful completion of a beginning level art course, submission of Placement Portfolio**

**Credit: 1 unit**

Visual Arts-Intermediate is a studio course aligned to the Essential Standards visual arts curriculum at the intermediate level. Various art processes, techniques, procedures, and theories are presented in a problem-solving context allowing for independent choices and personal solutions. Students use a larger variety of tools, media, and processes and learn to select the most appropriate for finding innovative artistic solutions. Students begin developing their personal artistic style while adhering to basic design principles. Students use art vocabulary to analyze and evaluate the composition of works of art. Students gain knowledge and understanding of past and present art forms, through the study of a variety of artists, artworks, cultures and historical periods. Essential materials are supplied. Students may be asked to supply special project materials.

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## VISUAL ARTS-PROFICIENT

**Grade Level: 10, 11, 12**

**Prerequisite: Successful completion of an intermediate level art course with submission of Placement Portfolio**

**Credit: 1 unit**

Visual Arts-Proficient is an honors level studio course that provides a more in-depth approach to the study of art processes and techniques, aesthetic issues, art criticism, art appreciation and art history. Students create art by analyzing the relationship between media, processes, and results. Students use art vocabulary to analyze and evaluate compositions, understand the relationship between personal expression and design and recognize historical and contemporary art styles, themes and genres. Students form artistic goals, develop appropriate work habits, and consider art careers. Knowledge of the arts in relation to culture, history, other disciplines, and careers is promoted through visual, verbal, and written means. Art history, criticism, and aesthetics are studied in conjunction with selected artworks leading to the development of a personal philosophy of art. Students create and maintain portfolios to document personal choices and growth as artists. Essential materials are supplied. Students may be asked to supply special project materials.

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## VISUAL ARTS-ADVANCED

**Grade Level: 10, 11, 12**

**Prerequisite: Successful completion of a proficient level art course with submission of Placement Portfolio**

**Credit: 1 unit**

Visual Arts-Advanced is an advanced level honors course promoting an in-depth knowledge of art processes, media, styles, history and aesthetics. Student efforts are based on further developing personal expression and styles, applied design, analysis of compositional components and contemporary themes. Students use specialized art tools, processes and media appropriately, safely and effectively. Assignments may focus on artistic analysis and critique through reading and writing assignments, independent research, and art appreciation activities. Students create and maintain portfolios to document personal choices and growth as artists for evaluation. Students take part in planning and installing an exhibition of their work. Essential materials are supplied. Students may supply special project materials.

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## STUDIO ART (Drawing (9-12) AP; 2-Design (9-12) AP; Studio Art: 3-D Design (9-12) AP)

**Grade Level: 10, 11, 12**

**Prerequisite: Proficient level visual arts course**

**Credit: 1 unit**

The AP Studio Art program offers three choices of Advanced Placement level portfolios: Drawing, 2-D Design or 3-D Design designed to provide students with learning experiences equivalent to **STUDIO ART (Drawing (9-12) AP; 2-Design (9-12) AP; Studio Art: 3-D Design (9-12) AP)** introductory college level courses. According to the Advanced Placement College Board National Guidelines, students are to develop and submit for evaluation one portfolio of artwork in their chosen concentration which reflects the artistic quality, concentration and breadth of an intense examination of the elements and principles in their artwork. Student work should reflect artistic quality, concentration and breadth in a selected concentration of either Drawing, 2-D Design or 3-D Design. Students are required to furnish some special project materials. Students create and maintain portfolios to document personal choices and growth as artists. At the completion of this course, students are expected to submit digital and physical portfolios of their work for evaluation.

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## ART HISTORY (9-12) AP

**Grade Level: 10, 11, 12**

**Prerequisite: Proficient level visual arts course**

**Credit: 1 unit**

Art History is an advanced placement level course offering students similar instructional experiences as an introductory college course in art history. Students examine and critically analyze major forms of artistic expression including architecture, sculpture, painting and other media from the past and the present from a variety of cultures. Students learn to look at works of art critically, with intelligence and sensitivity. Students may furnish special project materials. Students create and maintain portfolios for documentation and evaluation. At the completion of this course, students are expected to take the Advanced Placement Exam.

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## THEATRE ARTS-BEGINNING

**Grade Level: 9, 10, 11, 12**

**Prerequisite: None**

**Credit: 1 unit**

Theatre Arts-Beginning is an introductory level course for students with little to no theatre arts experiences. This course is aligned to the Essential Standards theatre arts curriculum at the beginning level. This course focuses on essential theatre arts vocabulary and creative processes, writing simple plays and scenes, reading and researching theatre literature, acting and basic technical theatre. The fundamentals of speaking, acting, improvisation, stage movement, directing, technical theatre, make-up, scenery, lighting, and costumes are covered with a highlight on practical application through the presentation of informal productions such as scenes and simple plays. Students develop an understanding of theatre literature reflecting on aspects of the theatre through history and different cultures. Activities and performances may include required daytime, evening and weekend participation.



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## THEATRE ARTS-INTERMEDIATE

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Successful completion of a beginning level Theatre Arts course** **Credit: 1 unit**

Theatre Arts-Intermediate offers a more detailed study of theatre vocabulary, reading, writing and critiquing of theatre literature, acting techniques and technical theatre. This course is aligned to the Essential Standards theatre arts curriculum at the intermediate level. Students use both verbal and non-verbal skills such as observation, concentration, and characterization to explore improvisation and acting techniques. Students analyze plot structure and thematic, technical and dramatic elements in selected theatre arts literature. Students build and apply skills in technical theatre, costuming, publicity, and box office management. Students extend their acting skills by participating in a variety of formal and informal theatrical presentations. Students study theatre arts literature reflecting historical and contemporary genres and cultures. Activities and performances may include required daytime, evening or weekend participation.

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## TECHNICAL THEATRE I (Theatre Arts Specialization- Intermediate)

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Successful completion of a beginning level Theatre Arts course** **Credit: 1 unit**

This intermediate level course is for students with an interest in "hands-on" learning about the technical elements of theatrical production. Students get a "behind the scenes" look at theatre organization, management and operation. Students learn about stagecrafts as they design, build, and paint scenery, explore special effects and typical theatrical machinery. Students learn about lighting, sound, and scenic design through a theatrical production. This course is aligned to the Essential Standards theatre arts curriculum at the intermediate level. Performances for the school and community are required and may involve some daytime, evening, or weekend participation.

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## TECHNICAL THEATRE II (Theatre Arts Specialization- Proficient)

**Grade Level: 10, 11, 12**

**Prerequisite: Successful completion of Technical Theatre I** **Credit: 1 unit**

Technical Theatre II is an honors level course for students with a foundational understanding of theatrical production. This course is aligned to the Essential Standards theatre arts curriculum at the proficient level. Students are offered opportunities for leadership and artistic design as they continue their study of production and technical elements of lighting, sound, sets, costuming, makeup, and other stagecrafts as well as theatre organization, management and operation. Students create and maintain portfolios that contain a combination of written, audio, or visual examples of their work for valuation. Performances for the school and community are required and may involve some daytime, evening or weekend participation.

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## THEATRE ARTS-PROFICIENT

**Grade Level: 10, 11, 12**

**Prerequisite: Successful completion of an intermediate level theatre arts course and placement audition** **Credit: 1 unit**

Theatre Arts-Proficient is an honors level course offering opportunities for students to use their voices, bodies, and minds to communicate as they develop into well-rounded actors and begin to practice analysis and critique of their own work and the work of others. This course places a greater emphasis on the execution of skills, ensemble work, and collaboration with other artists. Students read and analyze a wider variety of theatre literature and styles from theatre history and various cultures with special focus on American history and traditions. Through the study of directing, students learn how to use stage space, communicate effectively with actors, and develop prompt books, and direct scenes and one-act plays. Students apply their technical knowledge to analyze design concepts and problem solve in technical areas of sound, lighting, set, and costuming. Performances for the school and community are required and may require daytime, evening or weekend participation. Students maintain portfolios of their work and experiences for evaluation.

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## PLAY PRODUCTION (Theatre Arts Specialization- Proficient)

**Grade Level: 10, 11, 12**

**Prerequisite: Successful completion of an intermediate level theatre arts course and placement audition** **Credit: 1 unit**

Play Production is an honors level course requiring students to use organizational and communication skills in producing ensemble performances for the school and community. Play Production is aligned to the Essential Standards theatre arts curriculum at the proficient level. Opportunities to examine self-motivation, personal discipline and the ability to work independently and with others are features of the instructional process as students form aesthetic judgments and refine artistic choices. Rehearsals and performances may require some daytime, weekend, or evening participation. Students are required to perform technical theatre duties in the areas of makeup, costuming, lighting, sound, and sets. Students maintain a portfolio of their work and related activities for evaluation.

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## THEATRE ARTS-ADVANCED

**Grade Level: 10, 11, 12**

**Prerequisite: Successful completion of a proficient level theatre arts course and placement audition** **Credit: 1 unit**

Theatre Arts-Advanced is a rigorous honors level course aligned to the Essential Standards theatre arts curriculum at the advanced level. This course challenges students to be initiators and leaders as they apply verbal, non-verbal and movement skills for expression in both improvisational and scripted theatrical settings and individual, ensemble and collaborative working environments. Students analyze and critique plot structure, pacing, given circumstances and character development within plays from a variety of theatre literature. Students use technical knowledge and design skills to formulate designs for productions. Students investigate and understand the traditions, roles and conventions of theatre as an art form through an analysis of social, historical and cultural contexts. Performances for the school and community are required and may require some daytime, evening or weekend participation. Students maintain a portfolio of their work and experiences for evaluation.

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## DANCE-BEGINNING

**Grade Level: 9, 10, 11, 12**

**Prerequisite: None**

**Credit: 1 unit**

Dance-Beginning is an introductory level course for students with little to no dance experience and is aligned to the Essential Standards dance curriculum at the beginning level. This course explores movement as a creative art form and focuses on the use of kinesthetic awareness, proper body alignment, physical strength, flexibility and endurance, and care of the dance instrument. Students explore the use of dance elements, choreographic principles, improvisation, and basic modern dance technique to create and enhance dances that communicate ideas, experiences, feelings, and images. Through dance ensemble work, students experience the role of both choreographer and dancer and have opportunities to present their work. Students explore dance in various cultures and historical periods, career opportunities and connections with other art forms and subject areas. Rehearsals and performances are required and may require some daytime, weekend, or evening participation.

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## DANCE-INTERMEDIATE

**Grade Level: 9, 10, 11, 12**

**Prerequisite: Successful completion of beginning level dance course and placement audition**

**Credit: 1 unit**

Dance-Intermediate emphasizes intermediate movement skills and performance values, through the study of selected dance techniques and genres. This course is aligned to the Essential Standards dance curriculum at the intermediate level. Students learn to take responsibility for their personal health and to care for their dance instrument. Students continue to explore improvisation, dance elements and composition as both dancer and choreographer. Students create dances that vary the use of dance elements and use simple choreographic principles and structures to fulfill choreographic tasks. Students present the skills they have learned to selected audiences and use technical/theatrical skills for dance production. Students extend their understanding of dance as an art form through the study of aesthetic and philosophical perspectives of selected dance artists and dance history in a variety of cultural contexts. Students learn and use appropriate dance behaviors and etiquette as dancers, performers, choreographers and observers. Rehearsals and performances are required and may include daytime, weekend, or evening participation.

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## DANCE-PROFICIENT

**Grade Level: 10, 11, 12**

**Prerequisite: Successful completion of an intermediate level dance course and placement audition**

**Credit: 1 unit**

Dance-Proficient is an honors level course focusing on dance technique, choreography, dance history and aesthetic exploration. Students demonstrate commitments to personal fitness and to attaining proficient levels of technical skill through the integration of anatomy, body organization and body skills in dance. Students perform with greater fluency, precision, and articulation and integrate breath support into dance movement, phrasing, and expression. Students combine the use of improvisation, dance elements, choreographic principles, and technical/theatrical elements to explore the creation of meaningful dance compositions. Students use a defined creative process to plan, create, revise and present dances using selected dance elements, choreographic principles, structures, processes and production elements to fulfill artistic intent and meet aesthetic criteria. Students analyze the impact of their own choreography and the work of others and use teacher, peer and self-assessments to refine performance and compositions. Students create interdisciplinary projects and continue their study of dance through a variety of cultures and historical periods with an emphasis on the role of dance in US history. This course is aligned to the Essential Standards dance curriculum at the proficient level. Students create and maintain portfolios containing written and visual examples of their work for evaluation. Rehearsals and performances are required and may include some daytime, weekend, or evening participation.

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## DANCE-ADVANCED (Dance IV)

**Grade Level: 10, 11, 12**

**Prerequisite: Successful completion of a proficient level dance course and placement audition**

**Credit: 1 unit**

Dance-Advanced is a rigorous honors level course aligned to the Essential Standards dance curriculum at the advanced level. Students create dances using movement choices, choreographic principles, structures, processes and production elements to fulfill artistic intent and aesthetic criteria. Students use expanded aesthetic criteria to analyze, synthesize, and evaluate their own choreography as well as work of others. Students examine the creative process of integrating movement with choreographic intent. Students interpret dance from personal, cultural, and historical contexts focusing on the dance styles of important 20th and 21st century choreographers. Students maintain portfolios containing written and visual examples of their work for evaluation. Rehearsals and performances are required and may include some daytime, weekend, or evening participation.

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## Agricultural Education

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### AGRISCIENCE APPLICATIONS

**Prerequisite: None**

**Credit: 1 unit**

This course focuses on integrating biological/physical sciences with technology as related to the environment, natural resources, food production, science, and agribusiness. Topics of instruction include agricultural awareness and literacy, employability skills and introduction to all aspects of the total agricultural industry. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course are apprenticeship, cooperative education, mentorship, school-based enterprise, service learning, job shadowing, and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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### ANIMAL SCIENCE I

**Prerequisite: Agriscience Applications Strongly Recommended**

**Credit: 1 unit**

This course provides hands-on instruction and emphasizes safety skills needed by landscape technicians in the field. This course is based on the North Carolina Nursery and Landscape Association skill standards for a Certified Landscape Technician. Students are instructed in interpreting landscape designs, identifying landscape plants, and planting/maintaining trees, shrubs, and turf. Landscape construction is emphasized in the areas of grading and drainage, irrigation, paver installation, and the use/maintenance of landscape equipment. Current topic discussions provide students an understanding of careers and the employability skills needed to enter the landscape industry. Honors curriculum extends the standard course to a higher, more challenging level. Students can expect to complete focused assignments and be exposed to individual landscape projects. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, job shadowing, and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## ANIMAL SCIENCE II- SMALL ANIMAL

**Prerequisite:** Animal Science I

**Credit:** 1 unit

This course provides instruction on animal science topics related to small animals that are served by a veterinarian. Content related to the breeding, grooming, care and marketing of animals that fit into this category are taught in this course. English language arts, mathematics, and science are reinforced in this class. Work-based learning strategies appropriate for this course are apprenticeship, cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, job shadowing, and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## ANIMAL SCIENCE II-SMALL ANIMAL-HONORS

**Prerequisite:** Animal Science I

**Credit:** 1 unit

This course provides instruction on animal science topics related to small animals that are served by a veterinarian. Content related to the breeding, grooming, care and marketing of animals that fit into this category are taught in this course. This honors course extends the standard course to a higher, more challenging level. Students can expect to complete focused assignments and create a portfolio. English language arts, mathematics, and science are reinforced in this class. Work-based learning strategies appropriate for this course are apprenticeship, cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, job shadowing, and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards, and workplace readiness skills through authentic experiences.

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## HORTICULTURE I

**Prerequisite:** Agriscience Applications Strong Recommended

**Credit:** 1 unit

This course provides instruction on the broad field of horticulture with emphasis on the scientific and technical knowledge for a career in horticulture. Topics in this course include plant growth and development, plant nutrition, media selection, basic plant identification, pest management, chemical disposal, customer relations, and career opportunities. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course are apprenticeship, cooperative education, internship, mentorship, school-based enterprise, job shadowing, and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## HORTICULTURE II

**Prerequisite:** Horticulture I

**Credit:** 1 unit

This course covers instruction that expands scientific knowledge and skills to include more advanced scientific computations and communication skills needed in the horticulture industry. Topics include greenhouse plant production and management, bedding plant production, watering systems, light effects, basic landscape design, installation and maintenance, lawn and turf grass management, and personal development. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course are apprenticeship, cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, job shadowing, and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## HORTICULTURE II-HONORS

**Prerequisite:** Horticulture I

**Credit:** 1 unit

This course covers instruction that expands scientific knowledge and skills to include more advanced scientific computations and communication skills needed in the horticulture industry. Topics include greenhouse plant production and management, bedding plant production, watering systems, light effects, basic landscape design, installation and maintenance, lawn and turf grass management, and personal development. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course are apprenticeship, cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, job shadowing, and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. This honors course extends the standard course to a higher, more challenging level. Students can expect to complete focused assignments and create a portfolio and be exposed to intensive plant identification.

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## HORTICULTURE II-LANDSCAPING-HONORS

**Prerequisite:** Horticulture I

**Credit:** 1 unit

This course provides hands-on instruction and emphasizes safety skills needed by landscape technicians in the field. This course is based on the North Carolina Nursery and Landscape Association skill standards for a Certified Landscape Technician. Students are instructed in interpreting landscape designs, identifying landscape plants, and planting/maintaining trees, shrubs, and turf. Landscape construction is emphasized in the areas of grading and drainage, irrigation, paver installation, and the use/maintenance of landscape equipment. Current topic discussions provide students an understanding of careers and the employability skills needed to enter the landscape industry. Honors curriculum extends the standard course to a higher, more challenging level. Students can expect to complete focused assignments and be exposed to individual landscape projects. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, job shadowing, and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## NATURAL RESOURCES I

**Prerequisite:** Agriscience Applications Strongly Recommended

**Credit:** 1 unit

This course provides an introduction to environmental studies, which includes topics of instruction in renewable and non-renewable natural resources, history of the environment, personal development, water and air quality, waste management, land use regulations, soils, meteorology, fisheries, forestry, and wildlife habitat. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course are apprenticeship, cooperative education, mentorship, school-based enterprise, service learning, job shadowing, and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## NATURAL RESOURCES II

**Prerequisite:** Environmental & Natural Resources I **Credit:** 1 unit

This course covers instruction in best management practices in methods of environmental monitoring and conservation, air and water regulations, sampling methodologies, prescribing conservation techniques, and wild-life and forestry management. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course are apprenticeship, cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, job shadowing, and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. This course is approved for honors weighting.

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## NATURAL RESOURCES II-HONORS

**Prerequisite:** Environmental & Natural Resources I **Credit:** 1 unit

This course covers instruction in best management practices in methods of environmental monitoring and conservation, air and water regulations, sampling methodologies, prescribing conservation techniques, and wild-life and forestry management. Honors curriculum extends rigor in the following subject areas: timber evaluation, global positioning systems, recreational camping, and judging evaluation, habitat observation, aquatic crop marketing, and careers in the environmental and natural resources industry. Advanced understanding of English language arts, mathematics, and science are required for this course. Work-based learning strategies appropriate for this course are apprenticeship, cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, job shadowing, and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## CTE ADVANCED STUDIES-AGRICULTURE

**Prerequisite:** Two technical credits in one Career Cluster **Credit:** 1 unit

This culminating course is for seniors who have earned two technical credits, one of which is a completer course, in one Career Cluster. The Advanced Studies course must augment the content of the completer course and prepare students for success in transitioning to postsecondary education and future careers. Students work under the guidance of a teacher with expertise in the content of the completer course in collaboration with community members, business representatives, and other school-based personnel. The four parts of the course include writing a research paper, producing a product, developing a portfolio, and delivering a presentation. Students demonstrate their abilities to use 21st century skills. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

## Business Finance and Marketing Education

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## ACCOUNTING I

**Prerequisite:** None **Credit:** 1 unit

This course is designed to help students understand the basic principles of the accounting cycle. Emphasis is placed on the analysis and recording of business transactions, preparation, and interpretation of financial statements, accounting systems, banking and payroll activities, basic types of business ownership, and an accounting career orientation. Mathematics is reinforced. Work-based learning strategies appropriate for this course include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. Future Business Leaders of America (FBLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## ACCOUNTING II-HONORS

**Prerequisite:** Accounting I **Credit:** 1 unit

This course is designed to provide students with an opportunity to develop in-depth knowledge of accounting procedures and techniques utilized in solving business problems and making financial decisions. Emphasis includes departmental accounting, corporate accounting, cost accounting, and inventory control systems, managerial accounting and budgeting, and further enhancement of accounting skills. Honors credit is based on expanded learning opportunities that include practical applications of concepts. Mathematics is reinforced. Work-based learning strategies appropriate for this course include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. Future Business Leaders of America (FBLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## BUSINESS LAW

**Prerequisite:** None **Credit:** 1 unit

This course is designed to acquaint students with the basic legal principles common to all aspects of business and personal law. Business topics include contract law, business ownership including intellectual property, financial law, and national and international laws. Personal topics include marriage and divorce law, purchasing appropriate insurance, renting and owning real estate, employment law, and consumer protection laws. Social studies and English language arts are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, internship, and job shadowing. Apprenticeship and cooperative education are not available for this course. Future Business Leaders of America (FBLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## BUSINESS LAW-HONORS

**Prerequisite:** None **Credit:** 1 unit

This course is designed to acquaint students with the basic legal principles common to all aspects of business and personal law. Business topics include contract law, business ownership including intellectual property, financial law, and national and international law. Personal topics include marriage and divorce law, purchasing appropriate insurance, renting and owning real estate, employment law, and consumer protection laws. Honors credit is based on expanded learning opportunities that include practical applications of concepts. Social studies and English language arts are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, internship, and job shadowing. Apprenticeship and cooperative education are not available for this course. Future Business Leaders of America (FBLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## BUSINESS MANAGEMENT I

**Prerequisite:** Principles of Business and Finance **Credit:** 1 unit

This course is designed to introduce students to core management concepts. The experience includes how managers plan, organize, staff, and direct the business's resources that enhance the effectiveness of the decision-making process. Also, the experience includes students working through ethical dilemmas and problem-solving situations with customer service while academic and critical thinking skills. English language arts is reinforced.

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## BUSINESS MANAGEMENT II

**Prerequisite:** Business Management I

**Credit:** 1 unit

This course is designed to enable students to acquire, understand, and appreciate the significance of management to business organizations. Understanding how managers control financial resources, inventory, ensure employee safety, and protect customer data enhances the effectiveness of their decision making. Students will work through ethical dilemmas, practice problem solving, and enhance their teamwork skills. English language arts and mathematics are reinforced.

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## ENTREPRENEURSHIP I

**Prerequisite:** None

**Credit:** 1 unit

In this course, students evaluate the concepts of going into business for themselves and working for or operating a small business. Emphasis is on the exploration of feasible ideas of products/services, research procedures, business financing, marketing strategies, and access to resources for starting a small business. Students develop components of a business plan and evaluate startup requirements. English language arts and social studies are reinforced. Work-based learning strategies appropriate include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. DECA (an association for Marketing Education students) and Future Business Leaders of America (FBLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experience.

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## ENTREPRENEURSHIP I-HONORS

**Prerequisite:** None

**Credit:** 1 unit

In this course, students evaluate the concepts of going into business for themselves and working for or operating a small business. Emphasis is on the exploration of feasible ideas of products/services research procedures, business financing, marketing strategies, and access to resources for starting a small business. Students develop components of a business plan and evaluate startup requirements. English language arts and social studies are reinforced. This honors level course will extend the depth, rigor, pacing, complexity, challenges, and creativity beyond the standard level course. Work-based learning strategies appropriate include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. DECA (an association for Marketing Education students) and Future Business Leaders of America (FBLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## ENTREPRENEURSHIP II HONORS

**Prerequisite:** Entrepreneurship I

**Credit:** 1 unit

In this course, students develop an understanding of pertinent decisions to be made after obtaining financing to open a small business. Students acquire in-depth understanding of business regulations, risks, management, and marketing. Students develop a small-business management handbook. English language arts and social studies are reinforced.

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## FASHION MERCHANDISING

**Prerequisite:** None

**Credit:** 1 unit

In this course students are introduced to the fashion and merchandising industries. Students acquire transferable knowledge and skills among the concepts of the business of fashion, fashion promotion events, the evolution and movement of fashion, the fashion industry, career development, merchandising of fashion, and the selling of fashion. Mathematics and science are reinforced. Work-based learning strategies appropriate include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. DECA (an association for Marketing Education students) and Family, Career and Community Leaders of America (FCCLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## HOSPITALITY AND TOURISM

**Prerequisite:** Marketing OR Principles of Business and Finance OR

Sports and Entertainment Marketing I

**Credit:** 1 unit

In this course, students are introduced to the industry of travel, tourism, and recreational marketing. Students acquire knowledge and skills on the impact of tourism, marketing strategies of the major hospitality and tourism segments, destinations, and customer relations. Emphasis is on career development, customer relations, economics, hospitality and tourism, travel destinations, and tourism promotion. Mathematics and social studies are reinforced. Work-based learning strategies appropriate include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. DECA (an association for Marketing Education students) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## MARKETING

**Prerequisite:** None

**Credit:** 1 unit

In this course, students develop an understanding of the processes involved from the creation to the consumption of products/services. Students develop an understanding and skills in the areas of distribution, marketing-information management, market planning, pricing, product/service management, promotion, and selling. Students develop an understanding of marketing functions applications and impact on business operations. Mathematics and social studies are reinforced. Work-based learning strategies appropriate include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. DECA (an association for Marketing Education students) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## MARKETING APPLICATIONS

**Prerequisite:** Marketing

**Credit:** 1 unit

In this course, students acquire an understanding of management environments of marketing concepts and functions. Topics include human resources, marketing information, products/services, distribution, promotion, and selling. Students develop an understanding of marketing functions applications and impact on business decisions. English language arts and social studies are reinforced. Work-based learning strategies appropriate include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. DECA (an association for Marketing Education students) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## PRINCIPLES OF BUSINESS AND FINANCE

**Prerequisite:** None

**Credit:** 1 unit

This course introduces students to topics related to business, finance, management, and marketing to cover business in the global economy, functions of business organization and management, marketing basics, and significance of business financial and risk management. English language arts, social studies, and mathematics are reinforced. Work-based learning strategies appropriate for this course include mentorship, school-based enterprise, service learning, and job shadowing. Cooperative education is not available for this course. Apprenticeship is not available for this course. DECA (an association for Marketing Education students) and Future Business Leaders of America (FBLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## PROJECT MANAGEMENT I

**Prerequisite:** None

**Credit:** 1 unit

This course will introduce students to the principles, concepts, and software applications used in the management of projects. Through project-based learning, students will understand how to use the framework of initiating, planning, executing, monitoring and controlling, and closing a project in authentic situations. Art, English language arts, and mathematics are reinforced. Work-based learning strategies appropriate for this course include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. DECA (an association for Marketing Education students), Future Business Leaders of America (FBLA), FFA, Family, Career and Community Leaders of America (FCCLA), SkillsUSA, and Technology Student Association (TSA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## PROJECT MANAGEMENT II

**Prerequisite:** Project Management I

**Credit:** 1 unit

This project-based course focuses on the use of information technology to increase the effectiveness and efficiency of project management and integrated enterprise. Students will learn operational strategies for managing advanced technology and innovation as well as how to map the high technology operations environment to business settings. Art, English language arts, and mathematics are reinforced.

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## SPORTS AND ENTERTAINMENT MARKETING I

**Prerequisite:** None

**Credit:** 1 unit

In this course, students are introduced to the industry of sports, entertainment, and event marketing. Students acquire transferable knowledge and skills among related industries for planning sports, entertainment, and event marketing. Topics included are branding, licensing, and naming rights; business foundations; concessions and on-site merchandising; economic foundations; human relations; and safety and security. Mathematics and social studies are reinforced. Work-based learning strategies appropriate include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. DECA (an association for Marketing Education students) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## SPORTS AND ENTERTAINMENT MARKETING II HONORS

**Prerequisite:** Sports and Entertainment Marketing I

**Credit:** 1 unit

In this course, students acquire an understanding of sports, entertainment, and event marketing. Emphasis is on business management, career development, client relations, contracts, ethics, event management, facilities management, legal issues, and sponsorships. Mathematics and social studies are reinforced. Work-based learning strategies appropriate include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. DECA (an association for Marketing Education students) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## SALES I

**Prerequisite:** None

**Credit:** 1 unit

This course will teach students the basic knowledge around the sales profession. Students will explore careers in selling, personal branding, communication skills, customer service, buying behavior, technology, types of selling, product knowledge, and the selling process. Project-based learning, English language arts, mathematics, and social studies are reinforced. DECA (an association for Marketing Education students) and Future Business Leaders of America (FBLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## SALES II

**Prerequisite:** Sales I

**Credit:** 1 unit

This course will teach students the art of selling and will build on the content from the Sales I course. Students will further develop their personal brand and will continue to work on communication and customer service skills in addition to learning about pre and post-sales activities. Students will use role plays to engage in the selling process and will learn to think on their feet. Project-based learning, English language arts, mathematics, and social studies are reinforced. DECA (an association for Marketing Education students) and Future Business Leaders of America (FBLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## Career Development Education

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### CAREER MANAGEMENT

**Prerequisite:** None

**Credit:** 1 unit

This course prepares students to locate, secure, keep, and change careers. Emphasis is placed on self-assessment of characteristics, interests, and values; education and career exploration; evaluation of career information and creation of a career plan. Based on the National Career Development Guidelines, skills learned in this course include, but are not limited to communications, interpersonal skills, problem solving, personal management and teamwork. English language arts are reinforced. Work-based learning strategies appropriate for this course include business/industry field trips, internships, job shadowing, and service learning. Student participation in Career and Technical Student Organization (CTSO) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## CTE-INTERNSHIP

**Prerequisite:** None

**Credit:** 1 unit

A CTE Internship allows for additional development of career and technical competencies within a general career field. Internships allow students to observe and participate in daily operations, develop direct contact with job personnel, ask questions about particular careers, and perform certain job tasks. This activity is exploratory and allows the student to get hands-on experience in a number of related activities. The teacher, student, and the business community jointly plan the organization, implementation, and evaluation of an internship, regardless of whether it is an unpaid or paid internship.

## Computer Science and Information Technology Education

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### ADOBE DIGITAL DESIGN

**Prerequisite:** Adobe Visual Design

**Credit:** 1 unit

This course is a project-based course that develops ICT, career, and communication skills in Web design and animation using Adobe tools. This course is aligned to Adobe Dreamweaver and Flash certification. English language arts are reinforced. Work-based learning strategies appropriate for this course include job shadowing. Apprenticeship and cooperative education are possible for this course. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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### ADOBE DIGITAL DESIGN - HONORS

**Prerequisite:** Adobe Visual Design

**Credit:** 1 unit

This course is a project-based course that develops ICT, career, and communication skills in Web design and animation using Adobe tools. Honors credit is based on expanded learning opportunities that include practical applications of concepts. This course is aligned to Adobe Dreamweaver and Flash certification. English language arts are reinforced. Work-based learning strategies appropriate for this course include job shadowing. Apprenticeship and cooperative education are possible for this course. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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### ADOBE VIDEO DESIGN

**Prerequisite:** Adobe Visual Design

**Credit:** 1 unit

This course is a project-based video course that develops career and communication skills in video production using Adobe tools. This course is aligned to Adobe Premiere certification. English language arts are reinforced. Work-based learning strategies appropriate for this course include job shadowing. Apprenticeship and cooperative education are possible for this course. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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### ADOBE VIDEO DESIGN - HONORS

**Prerequisite:** Adobe Visual Design

**Credit:** 1 unit

This course is a project-based video course that develops career and communication skills in video production using Adobe tools. Honors credit is based on expanded learning opportunities that include practical applications of concepts. This course is aligned to Adobe Premiere certification. English language arts are reinforced. Work-based learning strategies appropriate for this course include job shadowing. Apprenticeship and cooperative education are possible for this course. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## ADOBE VISUAL DESIGN

**Prerequisite:** None

**Credit:** 1 unit

This course is a project-based course that develops ICT, career, and communication skills in print and graphic design using Adobe tools. This course is aligned to Adobe Photoshop, Adobe InDesign, and Adobe Illustrator certifications. English language arts are reinforced. Work-based learning strategies appropriate for this course include job shadowing. Apprenticeship and cooperative education are possible for this course. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## ADOBE VISUAL DESIGN - HONORS

**Prerequisite:** None

**Credit:** 1 unit

This course is a project-based course that develops ICT, career, and communication skills in print and graphic design using Adobe tools. Honors credit is based on expanded learning opportunities that include practical applications of concepts. This course is aligned to Adobe Photoshop, Adobe InDesign, and Adobe Illustrator certifications. English language arts are reinforced. Work-based learning strategies appropriate for this course include job shadowing. Apprenticeship and cooperative education are possible for this course. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## AP COMPUTER SCIENCE

**Prerequisite:** AP Computer Science Principles

**Credit:** 1 unit

This is a college-level introductory course in computer science. Because the design and implementation of computer programs to solve problems involve skills that are fundamental to the study of computer science, a large part of the course is built around the development of computer programs that correctly solve a given problem. These programs should be understandable, adaptable, and when appropriate, reusable. At the same time, the design and implementation of computer programs is used as a context for introducing other important aspects of computer science, including the development and analysis of algorithms, the development and use of fundamental data structures, the study of standard algorithms and typical applications, and the use of logic and formal methods. In addition, the responsible use of these systems is an integral part of the course. The course is designed to be the equivalent of a first-semester college course in computer science. Mathematics is reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Future Business Leaders of America (FBLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## AP COMPUTER SCIENCE PRINCIPLES

**Prerequisite:** None

**Credit:** 1 unit

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.

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## COMPUTER SCIENCE PRINCIPLES I

Prerequisite: None

Credit: 1 unit

Computer Science Principles I is an introductory course intended to familiarize students with the general concepts and thinking practices of computing, computer science, and information science. Students will learn computing concepts through authentic visual and interactive projects using visual programming languages. Students will focus on the "big CS ideas" in creative ways that emphasize conceptual knowledge and thinking practices rather than on programming alone. The big ideas in CSP include computing as a creative activity, abstraction, facilitating knowledge creation through computing, algorithms, problem-solving, the Internet, and the global impact of computing. Emphasis is placed on problem-solving, communication, creativity, and exploring the impacts of computing on how we think, communicate, work, and play. Art, English language arts, and mathematical concepts are reinforced.

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## COMPUTER SCIENCE PRINCIPLES II

Prerequisite: Computer Science Principles I

Credit: 1 unit

This is a second level introductory course in computer science (based on The Beauty and Joy of Computing) builds on the foundation of Computer Science Principles I. This course offers a more in-depth examination of the "big CS ideas" including a broad range of foundational topics such as programming, algorithms, the internet, big data, digital privacy and security, and the societal impacts of computing. Emphasis is placed on problem-solving, communication, creativity, and exploring the impacts of computing on how we think, communicate, work, and play. Students will extend their programming skills to include more complex constructs including objects and data abstraction. As an option, performance tasks may be included to obtain AP credit.

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## CYBERSECURITY ESSENTIALS

Prerequisite: None

Credit: 1 unit

This course is designed for students who are considering IT as a career with specialization in cybersecurity. This foundational course provides an overview of the fundamentals of networking and general concepts involved in maintaining a secure network computing environment. This course also provides students with an overview of the fundamentals of cybersecurity, the nature and scope of today's cybersecurity challenges, strategies for network defense, as well as detailed information about next generation cybersecurity solutions. English language arts, mathematics, science, and social studies are reinforced.

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## FOUNDATIONS OF INFORMATION TECHNOLOGY

Prerequisite: None

Credit: 1 unit

This introductory course provides students with the foundation to pursue further study in information technology. Emphasis is on network systems, information support and services, programming and software development, and interactive media. Mathematics is reinforced.

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## INTRODUCTION TO COMPUTER SCIENCE USING MAKE CODE

Prerequisite: None

Credit: 1 unit

This is an introduction to coding and computer science by way of making and design, using the revolutionary new micro:bit microcontroller board, and Microsoft's easy and powerful MakeCode block-based coding environment. It is a project-based curriculum with a maker philosophy at its core; the idea is that by making physical objects, students create a context for learning the coding and computer science concepts. Mathematics is reinforced. Future Business Leaders of America (FBLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## MICROSOFT EXCEL HONORS

Prerequisite: None

Credit: 1 unit

Students in Microsoft Imagine Academy benefit from world-class Microsoft curriculum and cutting-edge software tools to tackle real-world challenges in the classroom environment. This class is designed to prepare students for successful completion of the Microsoft Office Specialist Excel Core and Excel Expert exams. Successful candidates for the Microsoft Office Specialist Excel 2016 certification exam will have a fundamental understanding of the Excel environment and the ability to complete tasks independently. They will know and demonstrate the correct application of the principle features of Excel 2016. Candidates create and edit a workbook with multiple sheets, and they use a graphic element to represent data visually. Workbook examples include professional-looking budgets, financial statements, team performance charts, sales invoices, and data-entry logs. Expert-level candidates for the Excel 2016 exam have an advanced understanding of the Excel environment and have the ability to guide others to the proper use of the program's features. They create, manage, and distribute professional spreadsheets for a variety of specialized purposes and situations. They customize their Excel environments to meet project needs and to enhance productivity. Expert workbook examples include custom business templates, multiple-axis financial charts, amortization tables, and inventory schedules. Career possibilities may include accountants, financial analysts, data analysts, commercial bankers, and others. This honors level course will extend the depth, rigor, pacing, complexity, challenges and creativity beyond the standard level course.

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## MICROSOFT WORD AND POWERPOINT

Prerequisite: None

Credit: 1 unit

Students in Microsoft IT Academies benefit from world-class Microsoft curriculum and software tools to tackle real-world challenges in the classroom environment. In the first part, students will learn to use the newest version of Microsoft Word interface, commands, and features to create, enhance, customize, share and create complex documents, and publish them. In the second part, students will learn to use the newest version of Microsoft PowerPoint interface, commands, and features to create, enhance, customize, and deliver presentations. English language arts are reinforced. Work-based learning strategies appropriate for this course include cooperative education, internship, service learning, and job shadowing. Apprenticeship is not available for this course. Future Business Leaders of America (FBLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Students who successfully complete the course will be prepared and eligible to take an examination to earn the Microsoft Office Certification as a Microsoft Office Specialist.

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## NETWORK SECURITY I

Prerequisite: None

Credit: 1 unit

This course is designed to provide students with a solid foundation in Network Security. The experience includes students focusing on threats, attacks and vulnerabilities, technologies and tools, and architecture and design. English language arts, mathematics, science, and social studies are reinforced.

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## NETWORK SECURITY II

Prerequisite: Network Security I

Credit: 1 unit

This course is designed to prepare students with the skills and knowledge to install, configure, and troubleshoot computer networks. The experience includes students focusing on the identifying and accessing management, risk management, and cryptography and PKI. English language arts, mathematics, science, and social studies are reinforced.



# Family & Consumer Sciences Education

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## APPAREL AND TEXTILE PRODUCTION I

**Recommended Maximum Enrollment: 20\***

**Prerequisite: None**

**Credit: 1 unit**

In this course students are introduced to the Apparel and Textile industry in the areas of design, textiles and apparel engineering. Emphasis is placed on students applying these design and engineering skills to create and produce apparel products. Art, literacy, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include service learning and job shadowing. Apprenticeship and Cooperative education are not available for this course. Family, Career and Community Leaders of America (FCCLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. *\*For safety reasons, enrollment is not to exceed 20 in this course.*

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## APPAREL AND TEXTILE PRODUCTION II

**Prerequisite: FA31 Apparel and Textile Production I**

**Credit: 1 unit**

Students in this course will gain a deeper understanding of design principles, engineering, fabrication and global needs of an ever-changing Apparel and Textile industry. The course provides a major focus on textile design, textile science, product construction, global manufacturing and the apparel/textile market while incorporating and scaffolding Prerequisite concepts. Emphasis is placed on application of design and engineering skills used to create, produce and prepare a product for market. Students will also gain the entrepreneurial skills necessary for successful marketing and distribution of an apparel product. Art, literacy, mathematics, science, and social studies concepts are reinforced throughout. Work-based learning strategies appropriate for this course include service learning and job shadowing. Apprenticeship and Cooperative education are not available for this course. Family, Career and Community Leaders of America (FCCLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. *\*For safety reasons, enrollment is not to exceed 20 in this course.*

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## APPAREL AND TEXTILE PRODUCTION II - HONORS

**Recommended Maximum Enrollment: 20\***

**Prerequisite: FA31 Apparel and Textile Production I**

**Credit: 1 unit**

Students in this course will gain a deeper understanding of design principles, engineering, fabrication and global needs of an ever-changing Apparel and Textile industry. The course provides a major focus on textile design, textile science, product construction, global manufacturing and the apparel/textile market while incorporating and scaffolding Prerequisite concepts. Emphasis is placed on application of design and engineering skills used to create, produce and prepare a product for market. Students will also gain the entrepreneurial skills necessary for successful marketing and distribution of an apparel product. Art, literacy, mathematics, science, and social studies concepts are reinforced throughout. Work-based learning strategies appropriate for this course include service learning and job shadowing. Apprenticeship and Cooperative education are not available for this course. Family, Career and Community Leaders of America (FCCLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Apparel and Textile Production II-Honors is designed to give the highly motivated student a challenging and in-depth experience. Students are expected to work independently on a variety of assignments and accept a greater responsibility for their learning. Students enrolling in this course are required to have a strong foundation in sewing production. Increased depth of each topic as well as student-directed exploration and experimentation is a vital part of this course. *\*For safety reasons, enrollment is not to exceed 20 in this course.*

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## CULINARY ARTS AND HOSPITALITY I

**Recommended Maximum Enrollment: 20**

**Prerequisite: None**

**Credit: 1 Unit**

This course is designed to introduce students to the hospitality and food service industry by learning about components of professional practice and building basic knowledge and skills in food preparation, garde manager, baking, and food service operations. The introduction includes students learning food safety, breakfast cookery, salads and sandwiches, quick breads and cookies, and dining room service. Art, English language arts, mathematics, science, and social studies are reinforced.

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## CULINARY ARTS & HOSPITALITY II APPLICATIONS

**Recommended Maximum Enrollment: 20**

**Prerequisite: Culinary Arts and Hospitality I**

**Credit: 1 unit**

This course is designed for students to demonstrate their knowledge and skills in basic food preparation, garde manager, baking and food service operations by planning and executing the program's school-based enterprise. The experience includes students preparing and selling breakfast items, salads and sandwiches, and quick breads and cookies while applying safety, sanitation, and guest service skills. Arts, English and language arts, mathematics, science, social studies, and are reinforced.

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## CULINARY ARTS & HOSPITALITY II INTERNSHIP

**Recommended Maximum Enrollment: 20**

**Prerequisite: Culinary Arts and Hospitality I**

**Credit: 1 Unit**

This course is designed for students to demonstrate their knowledge and skills in basic food preparation, garde manager, baking and food service operations through mentored work experiences in the food service industry. The experience includes students preparing and selling breakfast items, salads and sandwiches, and quick breads and cookies while applying safety, sanitation, and guest service skills. Arts, English and language arts, mathematics, science, and social studies are reinforced.

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## CULINARY ARTS & HOSPITALITY III

**Recommended Maximum Enrollment: 18**

**Prerequisite: Culinary Arts & Hospitality II Applications OR Culinary Arts & Hospitality II Internship**

**Credit: 1 Unit**

This course is designed for students to further develop their knowledge and skills through learning about advanced food preparation, garde manager, baking and pastry, and food service operations. The experience includes students learning cooking techniques, food preservation, yeast breads and pastries preparation, human relations management, menu planning, and food service purchasing and receiving. Arts, English and language arts, mathematics, science, and social studies are reinforced.

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## CULINARY ARTS & HOSPITALITY IV APPLICATIONS

**Maximum Enrollment: 20**

**Prerequisite: Culinary Arts & Hospitality III**

This course is designed for students to demonstrate their knowledge and skills in advanced food preparation, garde manager, baking and pastry, and food service operations by planning and executing the program's school-based enterprise. The experience includes students preparing and selling a variety of meat, poultry, and seafood entrées served with accompaniments and sauces and yeast breads, desserts, and pastries, while applying human relations management, menu planning, and food service purchasing and receiving. Arts, English and language arts, mathematics, science, and social studies are reinforced.

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## CULINARY ARTS & HOSPITALITY IV INTERNSHIP

**Recommended Maximum Enrollment: 20**

**Prerequisite: Culinary Arts & Hospitality III**

This course is designed for students to demonstrate their knowledge and skills in advanced food preparation, garde manager, baking and pastry, and food service operations through mentored work experiences in the food service industry. The experience includes students preparing and selling a variety of meat, poultry, and seafood entrées served with accompaniments and sauces and yeast breads, desserts, and pastries, while applying human relations management, menu planning, and food service purchasing and receiving. Arts, English and language arts, mathematics, science, and social studies are reinforced.

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## EARLY CHILDHOOD EDUCATION I

**Prerequisite: Child Development and students must be 16**

**by October 1<sup>st</sup>**

**Credit: 2 units**

This two-credit course prepares students to work with children in early education and child care settings. Areas of study include personal and professional preparation, child development from birth to age 12, techniques and procedures for working with young children, and history, trends and opportunities in this field. An internship makes up 50 percent of instructional time. Work-based learning strategies appropriate for this course include internship, mentorship, service learning, and job shadowing. Cooperative education and apprenticeship are not available for this course. Family, Career and Community Leaders of America (FCCLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Parenting and Child Development is recommended as preparation for this course.

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## EARLY CHILDHOOD EDUCATION II-HONORS

**Prerequisite: Early Childhood Education I and student must be 16 by**

**October 1st**

**Credit: 2 units**

This two-credit course provides advanced experiences in working with children from infancy to age 12 in early education and child care settings. Areas of study include program planning and management, developmentally appropriate practice, procedures and strategies for working with special groups of children, and career development and professionalism. Students enrolled in the honors section will be required to complete one honor's project within each unit. Each project will allow students to demonstrate a deeper analysis and an application of the concepts being taught. An internship makes up 50 percent of instructional time. Work-based learning strategies appropriate for this course include internship, mentorship, service learning, and job shadowing. Cooperative education and apprenticeship are not available for this course. Family, Career and Community Leaders of America (FCCLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## FOOD & NUTRITION I

**Credit: 1 unit**

**Prerequisite: None**

**Credit: 1 unit**

This course examines the nutritional needs of the individual. Emphasis is placed on the relationship of diet to health, kitchen and meal management, food preparation and sustainability for a global society, and time and resource management. English language arts, mathematics, science, and social studies are reinforced. Work-based learning strategies appropriate for this course include service learning and job shadowing. Apprenticeship and cooperative education are not available for this course. Family, Career and Community Leaders of America (FCCLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## FOOD & NUTRITION II

**Prerequisite: Foods I OR Culinary Arts and Hospitality I Credit: 1 unit**

This course focuses on advanced food preparation techniques while applying nutrition, food science, and test kitchen concepts using new technology. Food safety and sanitation receive special emphasis, with students taking the exam for a nationally recognized food safety credential. Students develop skills in preparing foods such as beverages, salads and dressing, yeast breads, and cake fillings and frostings. A real or simulated in-school food business component allows students to apply instructional strategies. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning and job shadowing. Family, Career and Community Leaders of America (FCCLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## INTERIOR DESIGN I

**Prerequisite: None**

**Credit: 1 unit**

This course focuses on housing needs and options of individuals and families at various stages of the life cycle. Emphasis is placed on selecting goods and services and creating functional, pleasing living environments using sound financial decisions and principles of design. Topics of study include elements and principles of design, backgrounds and furnishings, architectural styles and features, and functional room design. Art and mathematics are reinforced. Work-based learning strategies appropriate for this course include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. Family, Career and Community Leaders of America (FCCLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## INTERIOR DESIGN II

**Prerequisite: Interior Design I**

**Credit: 1 unit**

This course prepares students for entry-level and technical work opportunities in the residential and non-residential interior design fields. Students deepen their understanding of design fundamentals and theory by designing interior plans to meet living space needs of specific individuals or families. Topics include application of design theory to interior plans and production, selection of materials, and examination of business procedures. Art and mathematics are reinforced. Work-based learning strategies appropriate for this course include cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship is not available for this course. Family, Career and Community Leaders of America (FCCLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## CHILD DEVELOPMENT

**Prerequisite: None**

**Credit: 1 unit**

This course introduces students to responsible nurturing and basic applications of child development theory with children from infancy through age six. Areas of study include parenthood decisions, child care issues, prenatal development and care, and development and on responsibilities of parents, readiness for parenting, and the influence parents have on children while providing care and guidance. Art, English language arts, and science are reinforced. Work-based learning strategies appropriate for this course include service learning and job shadowing. Apprenticeship is not available for this course. Family, Career and Community Leaders of America (FCCLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## CTE ADVANCED STUDIES-FACS

**Prerequisite:** Two technical credits in one Career Cluster **Credit:** 1 unit

This culminating course is for seniors who have earned two technical credits, one of which is a completer course, in one Career Cluster. The Advanced Studies course must augment the content of the completer course and prepare students for success in transitioning to postsecondary education and future careers. Students work under the guidance of a teacher with expertise in the content of the completer course in collaboration with community members, business representatives, and other school-based personnel. The four parts of the course include writing a research paper, producing a product, developing a portfolio, and delivering a presentation. Students demonstrate their abilities to use 21<sup>st</sup> century skills. Family, Career and Community Leaders of America (FCCLA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

## Health Science Education

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### BIOMEDICAL TECHNOLOGY I

**Prerequisite:** NC Math I Recommended

**Credit:** 1 unit

This course challenges students to investigate current medical and health care practices using technology and advances in health care research. Topics include ethics, forensic medicine, infectious diseases, organ transplants, cell biology and cancer, and biomedical research. English language arts and science are reinforced in this course. Work-based learning strategies appropriate for this course include service learning and job shadowing. Apprenticeship and cooperative education are not available for this course. Health Occupations Students of America (HOSA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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### HEALTH SCIENCE I

**Prerequisite:** Biology, and NC Math I Recommended

**Credit:** 1 unit

This course focuses on human anatomy, physiology and human body diseases and disorders, and biomedical therapies. Students will learn about healthcare careers within the context of human body systems. Projects, teamwork, and demonstrations serve as instructional strategies that reinforce the curriculum content. English language arts and science are reinforced in this course. Work-based learning strategies appropriate for this course include service learning and job shadowing. Apprenticeship and cooperative education are not available for this course. This Health Occupations Students of America (HOSA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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### HEALTH SCIENCE I HONORS

**Prerequisite:** Biology and NC Math I Recommended

**Credit:** 1 unit

This course focuses on human anatomy, physiology and human body diseases and disorders, and biomedical therapies. Honors credit is based on expanded learning opportunities that include practical applications of concepts. Students will learn about healthcare careers within the context of human body systems. Projects, teamwork, and demonstrations serve as instructional strategies that reinforce the curriculum content. English language arts and science are reinforced in this course. Work-based learning strategies appropriate for this course include service learning and job shadowing. Apprenticeship and cooperative education are not available for this course. This Health Occupations Students of America (HOSA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## HEALTH SCIENCE II

**Prerequisite:** Health Science I or PLTW Human Body Systems

**Credit:** 1 unit

This course is designed to help students expand their understanding of financing and trends of healthcare agencies, fundamentals of wellness, legal and ethical issues, concepts of teamwork, and effective communication. Students will learn healthcare skills, including current CPR and first aid training. English language arts and science are reinforced in this course. Work-based learning strategies appropriate for this course include service learning and job shadowing. Apprenticeship and cooperative education are not available for this course. Health Occupations Students of America (HOSA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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### HEALTH SCIENCE II HONORS

**Prerequisite:** Health Science I or PLTW Human Body Systems

**Credit:** 1 unit

This course is designed to help students expand their understanding of financing and trends of healthcare agencies, fundamentals of wellness, legal and ethical issues, concepts of teamwork, and effective communication. Honors credit is based on expanded learning opportunities that include practical applications of concepts. Students will learn healthcare skills including current CPR and first aid training. English language arts and science are reinforced in this course. Work-based learning strategies appropriate for this course include service learning and job shadowing. Apprenticeship and cooperative education are not available for this course. Health Occupations Students of America (HOSA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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### NURSING FUNDAMENTALS-HONORS

**Prerequisite:** Health Science II and application process **Credit:** 2 units

This course is designed for students interested in medical careers where personal care and basic nursing skills are used. This course is an enhanced adaptation of the North Carolina Division of Health Service Regulation (DHSR) Nurse Aide I (NAI) curriculum and helps prepare students for the National Nurse Aide Assessment (NNAAP). Students who pass the NNMP become listed on the NCNAI Registry. Students who successfully complete the course will be eligible to take the N.C. Nurse Aide I examination to earn certification as a nurse aide. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include a required clinical internship in a long-term care agency. Healthcare agencies may require testing for tuberculosis and/or other diseases and a criminal record check for felonies related to drugs. Cooperative education is not available for this course. HOSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## CTE ADVANCED STUDIES-HEALTH SCIENCE

**Prerequisite:** Health Science II and application process    **Credit:** 1 unit

This culminating course is for seniors who are career focused on an allied health or medical career. The Advanced Studies course must augment the content of the Health Science II concentrator course and prepare students for success in transitioning to postsecondary education and future careers. Students work under the guidance of a teacher with expertise in the content of Health Sciences in collaboration with community members, business representatives, and other school-based personnel. The four parts of the course include writing a research paper, producing a product, developing a portfolio, and delivering a presentation. Students demonstrate their abilities to use 21st century skills. HOSA (Health Occupations Student Association) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Students are also mentored in the clinical setting. Healthcare agencies may require testing for tuberculosis and/or other diseases and a criminal record check for felonies related to drugs prior to the mentorship.

## Trade, Technology, Engineering, and Industrial Education

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### AUTOMOTIVE SERVICE FUNDAMENTALS

**Prerequisite:** None    **Credit:** 1 unit

This course introduces automotive safety, basic automotive terminology, system & component identification, knowledge and introductory skills in hand tools, shop equipment, basic servicing, and use of service information. Also careers and various job opportunities in the automotive repair industry will be discussed. As part of the NATEF accreditation, topics are aligned to the Maintenance and Light Repair (MLR) requirements. English language arts are reinforced. Work-based learning strategies appropriate for this course include job shadowing. Apprenticeship and cooperative education are not available for this course. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. *Due to potentially hazardous processes and equipment, a maximum enrollment of 20 is recommended.*

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### AUTOMOTIVE SERVICE I

**Prerequisite:** Automotive Service Fundamentals    **Credit:** 1 unit

This course develops automotive knowledge and skills in performing scheduled automotive maintenance, servicing and basic testing of brakes, electrical, drivetrain, engine, HVAC and steering & suspension systems, emphasizing hands-on experience. As part of the NATEF accreditation, topics are aligned to the Maintenance and Light Repair (MLR) requirements. English language arts are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, entrepreneurship, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. *Due to potentially hazardous processes and equipment, a maximum enrollment of 20 is recommended.*

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### AUTOMOTIVE SERVICE II - HONORS

**Prerequisite:** Automotive Service I    **Credit:** 1 unit

This course builds on the knowledge and skills introduced in automotive servicing I and develops advanced knowledge and skills in vehicle system repair and/or replacement of components in the brakes, electrical systems, drivetrain, engine, HVAC and steering & suspension systems, emphasizing hands-on experience. As part of the NATEF accreditation, topics are aligned to the Maintenance and Light Repair (MLR) requirements. English language arts are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, entrepreneurship, internship, and job shadowing. This course helps prepare students for the Automotive Service Excellence (ASE) certification in Maintenance and Light Repair (MLR- G1). SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. *Due to potentially hazardous processes and equipment, a maximum enrollment of 20 is recommended.*

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### AUTOMOTIVE SERVICE III - HONORS

**Prerequisite:** Automotive Service II    **Credit:** 1 unit

This course builds on the skills and knowledge introduced in Automotive Service I & II. Building advanced automotive skills and knowledge in vehicle servicing, testing, repair, and diagnosis of brakes, electrical, drivetrain, engine, HVAC and steering & suspension systems, while emphasizing hands-on experience. As part of the NATEF accreditation, topics are aligned to the Maintenance and Light Repair (MLR) requirements. English language arts and mathematics are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, entrepreneurship, internship, and job shadowing. This course helps prepare students for the Automotive Service Excellence (ASE) certification in Maintenance and Light Repair (MLR- G1). SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. *Due to potentially hazardous processes and equipment, a maximum enrollment of 20 is recommended.*

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### CARPENTRY I

**Prerequisite:** Core and Sustainable Construction Credential    **Credit:** 1 unit

This course covers basic carpentry terminology and develops technical aspects of carpentry with emphasis on the development of introductory skills to include orientation to the trade, building materials, fasteners, and adhesives, hand and power tools, reading plans and elevations, introduction to concrete, reinforcing materials, and forms, floor system construction procedures, wall and ceiling framing procedures, and basic stair layout. English language arts and mathematics are reinforced. \*Due to potentially hazardous processes and equipment a maximum enrollment of 20 is recommended.

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### CARPENTRY II HONORS

**Prerequisite:** Carpentry I    **Credit:** 1 unit

This course builds on skills mastered in Carpentry I and provides an emphasis on roof framing procedures, roofing applications, thermal and moisture protection, windows and exterior doors installation, exterior finishing, and the introduction to weatherization module. English language arts and mathematics are reinforced. \*Due to potentially hazardous processes and equipment a maximum enrollment of 20 is recommended.

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## COLLISION REPAIR FUNDAMENTALS

**Prerequisite:** None

**Credit:** 1 unit

This course introduces safety, basic collision repair terminology, system and component identification, knowledge and introductory skills in hand tools, shop equipment, basic servicing, and use of service information. Also, careers and various job opportunities in the collision repair industry will be discussed. English language arts are reinforced. Work-based learning strategies appropriate for this course include job shadowing. Apprenticeship and cooperative education are not available for this course. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. *Due to potentially hazardous processes and equipment, a maximum enrollment of 20 students is recommended.*

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## COLLISION REPAIR I

**Prerequisite:** Collision Repair Fundamentals

**Credit:** 1 unit

This course focuses on non-structural repairs to automobiles. Using curriculum materials from the industry recognized I-CAR organization, students will learn about trim and hardware, material identification, steel cosmetic straightening and plastic repair, moveable glass replacement, and bolted-on parts replacement. Work-based learning strategies appropriate for this course include job shadowing. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, entrepreneurship, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Due to potentially hazardous processes and equipment, a maximum enrollment of 20 students is recommended.

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## COLLISION REPAIR II REFINISHING - HONORS

**Prerequisite:** Collision Repair I

**Credit:** 1 unit

This course focuses on refinishing automobiles. Using curriculum from the industry recognized I-CAR organization, students will learn about repairing and priming vehicles and vehicle parts; use and maintain a spray gun; mix, store, and dispose of hazardous materials; understand the corrosion protection process; sand, buff, and detail a refinished vehicle. Work-based learning strategies appropriate for this course include job shadowing. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, entrepreneurship, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Due to potentially hazardous processes and equipment, a maximum enrollment of 20 students is recommended.

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## CORE AND SUSTAINABLE CONSTRUCTION

**Prerequisite:** None

**Credit:** 1 unit

This course covers the National Center for Construction Education and Research (NCCER) Core certification modules required for all of the NCCER curriculum area programs, and an additional Green module. The course content includes basic safety, introduction to construction math, introduction to hand tools, introduction to power tools, introduction to blueprints, material handling, basic communication skills, and basic employability skills, and "Your Role in the Green Environment". The additional Green module has been added to provide students with instruction in the green environment, green construction practices, and green building rating systems. Also, it will help students better understand their personal impact on the environment making them more aware of how to reduce their carbon footprint. English language arts and mathematics are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. This course prepares students for additional National Center for Construction Education and Research (NCCER) Core certification. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Geometry is recommended as preparation for this course.

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## DRAFTING I

**Prerequisite:** None

**Credit:** 1 unit

This course introduces students to the use of simple and complex graphic tools used to communicate and understand ideas and concepts found in the areas of architecture, manufacturing, engineering, science, and mathematics. Topics include problem-solving strategies, classical representation methods such as sketching, geometric construction techniques, as well as computer assisted design (CAD), orthographic projection, and 3-D modeling. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## DRAFTING II ARCHITECTURAL-HONORS

**Prerequisite:** IC61 Drafting I

**Credit:** 1 unit

This course focuses on the principles, concepts, and use of complex graphic tools used in the field of architecture, structural systems, and construction trades. Emphasis is placed on the use of computer assisted design (CAD) tools in the creation of floor plans, wall sections, and elevation drawings. English language arts, mathematics, and science are reinforced. This honors course extends the standard course to a higher, more challenging level. Students can expect to complete focused assignments and create a portfolio. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## DRAFTING II-ENGINEERING-Honors

**Prerequisite:** Drafting I

**Credit:** 1 unit

This course focuses on engineering graphics introducing the student to symbol libraries, industry standards, and sectioning techniques. Topics include coordinate systems, principles of machine processes and gearing, and the construction of 3-D wireframe models using computer assisted design (CAD). English language arts, mathematics, and science are reinforced. This honors course extends the standard course to a higher, more challenging level. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## DRONE TECHNOLOGY I

**Prerequisite:** None

**Credit:** 1 unit

This course is designed to provide students basic information about the drone industry to gain an understanding of careers and skills in this field. FAA 14 CFR part 107 (The Small UAS Rule), officially known as "Part 107 Remote Pilot Certificate" is covered. The Small UAS rule adds a new part 107 to Title 14 Code of Federal Regulations (14 CFR) to allow for routine civil operation of small Unmanned Aircraft Systems (UAS) in the National Airspace System (NAS) and provide safety rules for those operations. This course is also designed for an introduction to basic flight of drones to include manual flight and flight and mapping software. Minimum 16 age requirement for enrollment by the end of the course due to FAA Part 107 U.S. Commercial Drone Pilot Certification testing age requirement. English language arts are reinforced.

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## DRONE TECHNOLOGY II

**Prerequisite:** Drone Technology I, FAA 107 certification, and NCDOT certification

**Credit:** 1 unit

This course is designed to provide students, who have their FAA CFR 14 Part 107 (The Small UAS Rule), officially known as "Part 107 Remote Pilot Certificate" the knowledge and skills needed to be a commercial pilot in the Drone Industry. Entrepreneurship, Fleet management, and Drone software are included in this course with the main focus being on the student choosing a specific field within the Drone Industry to complete an industry application. Industry application choices include Construction, Agriculture, Public Safety, and Cinematography uses are covered. English language arts are reinforced.

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## ENGINEERING DESIGN

**Prerequisite:** TE11 Technology Engineering and Design Recommended  
**Maximum Enrollment:** 20\*

**Credit:** 1 unit

This course continues to apply the skills, concepts, and principles of engineering. Students explore various technological systems and engineering processes in related career fields. Topics include investigating technological system, design optimization, and problem solving. Students utilize CAD and physical and virtual modeling concepts to construct, test, collect, and report data. Art, English language arts, mathematics and science are reinforced. \*Due to potentially hazardous processes and equipment a maximum enrollment of 20 is recommended.

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## LAW & JUSTICE I

**Prerequisite:** Public Safety I Strongly Recommended

**Credit:** 1 unit

This course examines the basic concepts of law related to citizens' rights and officers' responsibilities to maintain a safe society. This course begins with a study of various careers in public safety. The course will explore the history and development of law enforcement in the United States. Students will then examine the components of the criminal justice system, including the roles and responsibilities of the police, courts, and corrections. Additionally, students will learn the classification and elements of crimes. Students will receive instruction in critical areas including communicating with diverse groups, conflict resolution, the use of force continuum, report writing, operation of police and emergency equipment, and courtroom testimony. Career planning and employability skills will be emphasized. English language arts are reinforced. Work-based learning strategies appropriate for this course include job shadowing. Apprenticeship and cooperative education are not possible for this course. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## LAW & JUSTICE II - HONORS

**Prerequisite:** Law and Justice I

**Credit:** 1 unit

This course emphasizes "need-to-know" information for protection officers throughout the security industry and is aligned to the International Federation of Protection Officers (IFPO) certification as a Certified Protection Officer (CPO). Course content includes: Foundations in Law Enforcement and Protective Services. Communications in Law Enforcement and Protective Services, Protection Officers Functions, Crime Prevention and Physical Security, Safety and Fire Protection, Information Protection, Deviance Crime and Violence, Risk and Threat Management, Procedures in Investigations, Legal Aspects of Security, Procedures for Officer Safety and Use of Force, Procedures for Relations with Others, and AHA First Aid Certification. English language arts are reinforced.

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## MASONRY I HONORS

**Prerequisite:** Core and Sustainable Construction

**Credit:** 1 unit

This course covers basic masonry terminology and develops technical aspects of the masonry industry with emphasis on the development of introductory skills to include the introduction to masonry, masonry tools and equipment, measurement, drawings and specifications, mortar procedures, and masonry units and installation techniques. Mathematics and English language arts are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. \*Due to potentially hazardous processes and equipment, a maximum enrollment of 20 is recommended.

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## MASONRY II

**Prerequisite:** Masonry I

**Credit:** 1 unit

This course builds on skills mastered in Masonry I and provides an emphasis on residential plans and drawing interpretation, residential masonry, grout and other reinforcement processes, metalwork in masonry, and the introduction to weatherization. English language arts and mathematics are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. \*Due to potentially hazardous processes and equipment, a maximum enrollment of 20 is recommended.

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## PROGRAMMING & BROADCASTING I

**Prerequisite:** None

**Credit:** 1 unit

This course includes instruction in the various components used within television production including the use of video cameras, lighting, sound, props, editing, and recording. It assists students in production programs shown over a school's closed-circuit television system. Communication, problem solving, and mathematical skills are reinforced in this course.

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## PROGRAMMING & BROADCASTING II

**Prerequisite:** Programming & Broadcasting I

**Credit:** 1 unit

This course introduces students to more advanced television production and programming skills within a studio setting. It assists students in developing programs to air on a school's closed-circuit system. Communication, mathematical, problem solving, and technical skills are reinforced in this course.

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## PUBLIC SAFETY I

**Prerequisite:** None

**Credit:** 1 unit

This course provides basic career information in public safety including corrections, emergency and fire management, security and protection, law enforcement, and legal services. Additionally, students will develop a personal plan for a career in public safety. The course includes skills in each area, using resources from the community to help deliver instruction to the students. English language arts are reinforced. Work-based learning strategies appropriate for this course include job shadowing. Apprenticeship and cooperative education are not available for this course. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## PUBLIC SAFETY II - HONORS

**Prerequisite:** Public Safety I

**Credit:** 1 Unit

This course provides a deeper level of understanding of career information in public safety by focusing on the Community Emergency Response Team (C.E.R.T.) Certification. CERT is a Federal Emergency Management Administration (FEMA) developed certification that incorporates all areas of public safety. Additionally, FEMA ICS300 Intermediate Incident Command System is covered in this course.

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## TECHNOLOGICAL DESIGN

**Prerequisite:** TE11 Technology Engineering and Design **Recommended Maximum Enrollment:** 20\*

**Credit:** 1 Unit

This course continues to apply the skills, concepts, and principles of design. The design fields of graphics, industrial design, and architecture receive major emphasis. Engineering content and professional practices are presented through practical application. Working in design teams, students apply technology, science, and mathematics concepts and skills to solve engineering and design problems. Students research, develop, test, and analyze engineering designs using criteria such as design effectiveness, public safety, human factors, and ethics. Art, English, Language Arts, Mathematics and science are required. \* Due to potentially hazardous processes and equipment, a maximum enrollment of 20 is recommended.

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## TECHNOLOGY ENGINEERING AND DESIGN

**Recommended Maximum Enrollment:** 20

**Prerequisite:** None

**Credit:** 1 unit

This course focuses on the nature and core concepts of technology, engineering, and design. Through engaging activities and hands-on project-based activities, students are introduced to the following concepts: elements and principles of design, basic engineering, problem solving, and teaming. Students apply research and development skills and produce physical and virtual models. Activities are structured to integrate physical and social sciences, mathematics, English, language arts, and art. \* Due to potentially hazardous processes and equipment, a maximum enrollment of 20 is recommended.

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## WOODWORKING I

**Prerequisite:** None

**Credit:** 1 unit

This course introduces career information, employment opportunities, and skills required for work in the furniture and cabinetmaking industry. Topics include tools and equipment, theory and practice, types of woods, finishes, styles, bonds, and fasteners. English language arts and mathematics are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Geometry is recommended as preparation for this course.

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## WOODWORKING II

**NC Math II recommended for this course.**

**Prerequisite:** Woodworking I

**Credit:** 1 unit

This course teaches the development of knowledge and skills in the furniture and cabinet making industry. Emphasis is placed on construction principles applied to mass production and the construction and installation of cabinet drawers and doors. English language arts and mathematics are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## CTE ADVANCED STUDIES-Trade, Tech, Engin, and Industrial

**Prerequisite:** Two technical credits in one Career Cluster **Credit:** 1 unit

This culminating course is for seniors who have earned two technical credits, one of which is a completer course, in one Career Cluster. The Advanced Studies course must augment the content of the completer course and prepare students for success in transitioning to postsecondary education and future careers. Students work under the guidance of a teacher with expertise in the content of the completer course in collaboration with community members, business representatives, and other school-based personnel. The four parts of the course include writing a research paper, producing a product, developing a portfolio, and delivering a presentation. Students demonstrate their abilities to use 21st century skills. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## Physical Education

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### FUNDAMENTALS OF ATHLETIC TRAINING

**Grade Level:** 10, 11, 12

**Prerequisite:** None

**Credit:** 1 unit

This course covers the development of Athletic Training as an allied health profession in the modern-day explosion of sports and physically active people. Students will be able to care for common injuries to joints, bones and muscles, as well as recognize catastrophic injuries and specific illnesses, including HIV and Hepatitis B. Also, OSHA guidelines, negligence, and proper administration of medical records will be studied. Students will apply classroom knowledge and taping skills by working after school with one of the school's athletic teams. A Certified Athletic Trainer will teach the course, and students may become certified in First Aid and CPR.

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### HEALTH EDUCATION I/PHYSICAL EDUCATION I

**Grade Level:** 9

**Prerequisite:** None

**Credit:** 1 unit

The course will enable students to gain knowledge and skills about healthful living topics important to their age levels. The following strands are the focus of instruction: health-related fitness, motor skills, movement concepts, personal and social responsibility, nutrition and physical activity, alcohol, tobacco and other drugs, mental and emotional health, interpersonal communications and relationships, personal, and consumer health.

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## PHYSICAL EDUCATION II

**Grade Level:** 10

**Prerequisite:** Health Education/Physical Education I      **Credit:** 1 unit

This course is designed to develop attitudes and techniques, which will enable the student to take part in lifetime sports with an increased degree of knowledge, skill and satisfaction. Emphasis is placed on the development of specific skills, acquiring knowledge of activity and its history, participation, physical development, and student leadership. Students are provided with opportunities in the following areas: warm-up and conditioning activities; individual and dual activities-golf, tennis, weight training, wrestling, jogging, recreational games and gymnastics; fitness testing; team games-basketball, softball, volleyball, soccer; rhythms; and folk, social, and modern dancing.

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## PHYSICAL EDUCATION III

**Grade Level:** 11, 12

**Prerequisite:** Physical Education II      **Credit:** 1 unit

This course is designed to allow the students to concentrate in areas of interest developed in PE II. The course will be team-taught with each unit being presented in greater detail. Emphasis will be placed on skill development, knowledge of the activity, and physical fitness, as well as learning how to set up various programs, officiate various sports, and conduct research in areas of conditioning and weight training. Emphasis will be placed on routines on selected pieces of apparatus and on knowledge of routines and scoring methods for each specific routine.

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## PHYSICAL EDUCATION IV

**Grade Level:** 12

**Prerequisite:** Physical Education III      **Credit:** 1 unit

This course is completely coeducational and covers a wide variety of advanced physical education activities as developed in PE II and PE III.

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## PHYSICAL EDUCATION PUPIL INSTRUCTORS (PEPI-I)

**Grade Level:** 10,11, 12

**Credit:** 1 unit

**Prerequisites:** Physical Education I and Teacher Approval

This course is designed for students interested in serving as a physical education assistant to elementary physical education specialist. Leadership training will be provided to each student prior to being assigned to a physical education site. Students interested in pursuing a career in teaching and assisting younger students will find this course beneficial.

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## PHYSICAL EDUCATION PUPIL INSTRUCTORS (PEPI-II)

**Grade Level:** 11, 12

**Prerequisites:** PEPI-I and Teacher Approval      **Credit:** 1 unit

The second year is a peer-tutoring program for rising juniors and seniors. They may assist elementary classroom teachers, elementary physical education specialists, or middle and high school physical education teachers in teaching physical education. Content and experience provided through this course assist students in developing leadership skills in working with the very young as well as their own peer group.

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## PHYSICAL EDUCATION PUPIL INSTRUCTORS (PEPI-III)

**Grade Level:** 12

**Prerequisites:** PEPI-II and Teacher Approval      **Credit:** 1 unit

The third year is a continuation of the core materials and experiences of the PEPI-11 program. The course is designed to expose students to various educational opportunities associated with physical education.

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## Military Science (JROTC)

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### AFJROTC I-(AFJROTC I-A, AFJROTC I-B)

**Grade Level:** 9, 10, 11, 12

**Prerequisite:** None      **Credit:** 1 unit

The first year is a history course designed to acquaint the student with the historical development of flight and the role of the military in history. Over half of the available classroom hours are spent reviewing the development of flight from ancient legends to the space shuttle with an emphasis throughout on the role of the military. Leadership Education during the first year includes instruction on the wear of the uniform, Air Force customs, and courtesies, basic drill and ceremonies, and fellowship skills. Wellness is instrumental in developing citizens of character dedicated to serving our nation and communicates. Wellness is an official part of the AFJROTC program. It is an exercise program focused upon individual baseline improvements with the goal of achieving a national standard as calculated with age and gender. All AFJROTC courses in CCS include one day of wellness each week.

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### AFJROTC II-(AFJROTC II-A, AFJROTC II-B)

**Grade Level:** 10, 11, 12

**Prerequisite:** AFJROTC I      **Credit:** 1 unit

The second year is a science course designed to acquaint the student with the aerospace environment, the principles of flight and navigation, and human limitations of flight. Leadership Education during the second-year stresses communication skills and cadet corps activities. Written and oral reports compliment academic materials. Wellness is instrumental in developing citizens of character dedicated to serving our nation and communicates. Wellness is an official part of the AFJROTC program. It is an exercise program focused upon individual baseline improvements with the goal of achieving a national standard as calculated with age and gender. All AFJROTC courses in CCS include one day of wellness each week. An alternative offering includes a new course that is designed to provide cadets knowledge of the rapidly changing world in which they live. It is designed to introduce cadets to the study of world affairs, regional studies, and cultural awareness. Additionally, the course looks into history, geography, language, culture, human rights, and social issues on a global scale. The world is divided into specific regional areas for study.

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### AFJROTC III-(AFJROTC III-A, AFJROTC III-B)

**Grade Level:** 11, 12

**Prerequisite:** AFJROTC II      **Credit:** 1 unit

The third year is a science course, which discusses the principles of propulsion systems, fundamentals of rocketry and its application to spacecraft, principles underlying space travel, and various aspects of space exploration. This year's materials are perhaps the most technical. Leadership Education for third year cadets' places emphasis on the management process. Cadets are introduced to various management theories and are taught principles and techniques of stress and financial management. Wellness is instrumental in developing citizens of character dedicated to serving our nation and communicates. Wellness is an official part of the AFJROTC program. It is an exercise program focused upon individual baseline improvements with the goal of achieving a national standard as calculated with age and gender. All FJROTC courses in CCS include one day of wellness each week.



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## AFJROTC III HONORS (AFJROTC III-A HONORS, AFJROTC III- B HONORS)

Grade Level: 11, 12

Prerequisites: AFJROTC II

Credit: 1 unit

This course is designed for students who assume the additional responsibilities required in leadership positions as well as the regular course requirements of AFJROTC III. Students promoted to Wing/Group Commander and other senior staff positions are eligible for this honors level. Wellness is instrumental in developing citizens of character dedicated to serving our nation and communicates. Wellness is an official part of the AFJROTC program. It is an exercise program focused upon individual baseline improvements with the goal of achieving a national standard as calculated with age and gender. All AFJROTC courses in CCS include one day of wellness each week.

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## AFJROTC IV-(AFJROTC IV-A, AFJROTC IV-B)

Grade Level: 12

Prerequisite: AFJROTC III

Credit: 1 unit

The fourth year of AFJROTC requires the cadets to demonstrate their leadership and managerial skills. This hands-on experience affords the cadets the opportunity to put the theories of previous leadership courses into practice. All the planning, organizing, coordinating, directing, controlling, and decision making will be done by the cadets. They practice their communication, decision making, personal interaction, managerial, and organizational skills. Wellness is instrumental in developing citizens of character dedicated to serving our nation and communicates. Wellness is an official part of the AFJROTC program. It is an exercise program focused upon individual baseline improvements with the goal of achieving a national standard as calculated with age and gender. All AFJROTC courses in CCS include one day of wellness each week.

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## AFJROTC IV HONORS (AFJROTC IV- A HONORS, AFJROTC IV-B HONORS)

Grade Level: 11, 12

Prerequisites: AFJROTC III

Credit: 1 unit

This course is designed for students who assume the additional responsibilities required in leadership positions as well as the regular course requirements of AFJROTC IV. Students promoted to Wing/Group Commander and other senior staff positions are eligible for this honors level. Wellness is instrumental in developing citizens of character dedicated to serving our nation and communicates. Wellness is an official part of the AFJROTC program. It is an exercise program focused upon individual baseline improvements with the goal of achieving a national standard as calculated with age and gender. All AFJROTC courses in CCS include one day of wellness each week.

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## JUNIOR ROTC I (JR ROTC I-A, JR ROTC I-B)

Grade Level: 9, 10, 11, 12

Prerequisite: None

Credit: 1 unit

This course is a military oriented academic program supported jointly by the U.S. Army, Air Force, Navy, and the public school system. This course stresses the development of good citizenship, leadership, self-reliance, initiative, responsibility, effective communications, and physical conditioning. The following areas are covered in this course: Organization of the Armed Forces and ROTC, American Military history, weapon safety and marksmanship, leadership development, drill and ceremony, hygiene and first aid.

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## JUNIOR ROTC II (JR ROTC II –A, JR ROTC II-B)

Grade Level: 10, 11, 12

Prerequisite: JR ROTC I

Credit: 1 unit

This course is a continuation of ROTC I with emphasis on leadership development, drill, and weapons.

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## JUNIOR ROTC III

Grade Level: 11, 12

Prerequisite: JR ROTC II

Credit: 1 unit

This course is a continuation of ROTC II with emphasis on leadership, small unit leader problems, psychology of leadership, marksmanship, leadership development, and drill.

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## JUNIOR ROTC III HONORS (JR ROTC III-A HONORS, JR ROTC III-B HONORS)

Grade Level: 11, 12

Prerequisites: JR ROTC II

Credit: 1 unit

This course is designed for students who assume the additional responsibilities required in leadership positions as well as the regular course requirements of Junior ROTC III. Students promoted to Battalion Commander and other executive and staff positions are eligible for this honors level.

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## JUNIOR ROTC IV (JR ROTC IV-A, JR ROTC IV-B)

Grade Level: 12

Prerequisite: JR ROTC III

Credit: 1 unit

This course is a continuation of ROTC III with emphasis on the cadets demonstrating the ability to study self-paced and to complete exercises, case studies, and vignettes in the Programmed Text within the time constraints established by the instructor staff. Leadership, techniques of communication, drill and ceremonies, command and staff procedures, and drug abuse prevention are stressed during this course.

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## JUNIOR ROTC IV HONORS (JR ROTC IV – A HONORS, JR ROTC IV – B HONORS)

Grade Level: 11, 12

Prerequisites: JR ROTC III

Credit: 1 unit

This course is designed for students who assume the additional responsibilities required in leadership positions as well as the regular course requirements of Junior ROTC IV. Students promoted to Battalion Commander and other executive and staff positions are eligible for this honors level.

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## JUNIOR ROTC DRILL LAB

Grade Level: 10, 11, 12

Prerequisite: JROTC I

Co-requisite: JR ROTC II, III, or IV

Credit: 1 unit

This lab course will cover all basic drill procedures. Procedures for honors and ceremonies that would apply to both military and civilian protocol are included. In addition to standard military drill under arms, fancy drill will be taught to enhance the cadet drill team's skills and capabilities.

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## NJROTC I

Grade Level: 9, 10, 11, 12

Prerequisite: None

Credit: 1 unit

This course is a military-oriented academic program supported jointly by the U.S. Navy and public school system. This course, as all other NJROTC courses, stresses development of good citizenship skills leadership, self-reliance, initiative, responsibility, effective communications, and physical conditioning. Class time is normally split between academic study and drill techniques or physical conditioning, as well as application of leadership theory. Extracurricular activities are available for enrolled students in Drill, Color Guard, Rifle Team, NJROTC Academics, and NJ ROTC Athletics.

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## NJROTC II

**Grade Level: 10, 11, 12**

**Prerequisite: NJROTC I**

**Credit: 1 unit**

This course is a continuation of the core materials in the NJROTC program. Additional areas covered include Naval History (1860- World War II), Shipboard Organization, Meteorology, Navigation Fundamentals and Rules of the Nautical Road, Naval Weapons, and Survival Training. Additional emphasis is placed on development of leadership skills, cadet planning, and community and civic support. Extracurricular offerings are the same as NJROTC I.

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## NJROTC III

**Grade Level: 11, 12**

**Prerequisite: NJROTC II**

**Credit: 1 unit**

This course is a continuation of the NJROTC program. Additional areas covered include Military Justice, Astronomy, International Law, Sea Power and National Security, Naval History (Post World War II to Bosnia), Naval Operations and communications, and Fundamentals of Electricity and Electronics. Additional emphasis is placed on development of leadership skills, cadet staff officer planning, and community and civic support. Extracurricular activities are the same as NJROTC I & II.

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## NJROTC III HONORS

**Grade Level: 11, 12**

**Prerequisites: NJROTC II**

**Credit: 1 unit**

This course is designed for students who assume the additional responsibilities required in leadership positions as well as the regular course requirements of NJROTC III. Students promoted or advanced to Cadet Commander and other officer and petty officer positions are eligible for this honors level. Additional course requirements will include preparation of independent research papers.

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## NJROTC IV

**Grade Level: 12**

**Prerequisite: NJROTC III**

**Credit: 1 unit**

This course is a continuation of the NJROTC program. Additional areas covered include Cadets Staff Officer Organization and Implementation, Intelligence and National Security, Health Education, and Current Events. Additional emphasis is placed on demonstration of cadet leadership skills and techniques. Extracurricular offerings are the same as previous NJROTC courses.

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## NJROTC IV HONORS

**Grade Level: 11, 12**

**Prerequisites: NJROTC III**

**Credit: 1 unit**

This course is designed for students who assume the additional responsibilities required in leadership positions as well as the regular course requirements of NJROTC IV. Additional course requirements will include presentation of oral reports and the preparation of independent research papers.

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## NJROTC DRILL AND CEREMONIES LABORATORY

**Grade Level: 10, 11, 12**

**Prerequisites: Successful completion of NJROTC I and Teacher Approval**

**Credit: 1 unit**

Co-requisite: Enrollment in NJROTC II, III, IV/Teacher Approval This lab course will cover all basic drill procedures. Procedures for honors and ceremonies that would apply to both military and civilian protocol are included. In addition to standard military drill under arms, exhibition drill will be taught to enhance the cadet drill team's skills and capabilities.

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## Library Science

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### LIBRARY/MEDIA ASSISTANT SCIENCE

**Grade Level: 9, 10, 11, 12**

**Credit: 1 unit**

This course is open to all students who are interested in working in the media center one class period a day. The library/media assistant course includes instruction in information skills and efficient use of digital databases, care and operation of technological devices, multimedia production, and media service delivery to students and school staff. Students will show increased proficiency when working with technological devices. Students also gather, organize, and combine information from print, visual, auditory, and electronic references.

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## Miscellaneous Electives

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### FRESHMAN SEMINAR

**Grade Level: 9**

**Prerequisite: None**

**Credit: 1 unit**

This course is designed to foster the academic and social development of students for the transition from middle to high school Freshman Seminar is coupled with the English I class. Topics include but are not limited to the following: organizational skills, time management, reinforcement of English skills, and career planning. Students in this course read Sean Covey's Seven Habits of Highly Effective Teens.

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### PRACTICAL EDUCATION TRAINING I (PET)

**Grade Level: 11, 12**

**Prerequisite: By Application**

**Credit: 1 unit**

Practical Education Training I is a course designed to provide high school students an opportunity to work with students at an elementary school. After a training period, PET students enter the elementary classroom to provide tutorial help to students.

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### PRACTICAL EDUCATION TRAINING II (PET)

**Grade Level: 11, 12**

**Prerequisite: By Application**

**Credit: 1 unit**

Practical Education Training II program is twofold: 1) to allow high school students the opportunity to tutor elementary, middle, or other high school students; 2) to afford academically successful students the experience of working with students and hopefully encouraging them to make teaching a career choice.

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### PEER HELPING

**Grade Level: 10, 11, 12**

**Prerequisite: By Application**

**Credit: 1 unit**

Peer Helping is a class for those students interested in helping fellow students with problem solving, tutoring, or areas in which the peer might have problems. Peer helpers may also assist teachers in various tasks. Training includes skills in listening, questioning, communication, problem solving, and tutoring. A selection process is used to determine entry into this course. The curriculum must be approved by Secondary Education.

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### SAT/ACT PREPARATION

**Grade Level: 10, 11, 12**

**Prerequisite: NC Math II**

**Credit: 1 unit**

SAT/ACT Preparation is a semester long course designed to improve student performance on the SAT or ACT exams. The course is divided into four nine-week segments covering: 1) verbal skills and strategies, 2) math skills and strategies, 3) technology applications including computer research skills, and 4) general test taking skills and skills required for transition from high school to college.

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## STAFF ASSISTANT

**Grade Level: 10, 11, 12**

**Prerequisite: By Application**

**Credit: 0 unit**

Staff Assistant is a class for those students interested in providing assistance to school staff members. Students may be asked to answer phone calls, run errands within the school, file miscellaneous materials, or assist in other areas pertinent to the job of the person to whom the student is providing assistance. According to State Board Policy: Each local superintendent shall ensure that all required and elective courses have sufficient rigor, breadth, and depth to be awarded high school credit. Credit may not be awarded for school bus driving, office assistance, teacher assistance, or laboratory assistance. Students enrolled in this course will receive a grade of pass or fail.

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## SUCCESS 101

**Grade Level: 9**

**Prerequisite: None**

**Credit: 1 unit**

Success 101 focuses on providing new high school students with the skills necessary to be successful during secondary and post-secondary educational careers. Course content emphasis is placed on the acquisition of study, note-taking, interview, and test-taking skills. Other skills include conducting research, utilizing technology, media, and problem-solving strategies.

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## TEACHER CADET

**Grade Level: 11, 12**

**Credit: 1 unit**

The Teacher Cadet course is considered an introduction and orientation to the teaching profession. The curriculum includes simulations and other "hands-on" activities designed to promote interest in the teaching field. All students are required to observe and participate in classrooms at the elementary, middle school, and/or high school levels.

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## TEACHER CADET II

**Credit: 1 unit**

The Teacher Cadet II course is a more in-depth study with longer field experience. The curriculum includes simulations and other "hands-on" activities designed to promote interest in the teaching field. All students are required to observe and participate in classrooms at the elementary, middle, and/or high school levels.

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# Exceptional Children

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## CURRICULUM ASSISTANCE

**Grade Level: 9, 10, 11, 12**

**Prerequisite: None**

**Credit: 1 unit**

This course is designed to help students integrate study and social skills into subject areas by helping them acquire more efficient learning methods and interpersonal skills. It assists students in specific areas such as studying effectively, interpersonal communication, social skills, anger management, and listening. Areas of concentration will be individualized based on student IEP goals and objectives.

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## SPECIAL TOPICS IN READING-I

**Prerequisite: None**

**Credit: 1 unit**

This course is an interactive, multisensory, remedial reading program designed for students with specific deficits in reading. The program develops the students' phoneme awareness, word decoding, encoding skills, writing, and related problems with language use.

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## SPECIAL TOPICS IN READING-II

**Prerequisite: Special Topics in Reading-I**

**Credit: 1 unit**

This course is a continuation of Special Topics in Reading I.

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## SPECIAL TOPICS IN READING-III

**Prerequisite: Special Topics in Reading- II**

**Credit: 1 unit**

This course is a continuation of Special Topics in Reading II.

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## SPECIAL TOPICS IN READING-IV

**Prerequisite: Special Topics in Reading-III**

**Credit: 1 unit**

This course is a continuation of Special Topics in Reading III.

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## SPECIAL TOPICS IN LANGUAGE AND VOCABULARY

**Grade Level: 9, 10, 11, 12**

**Credit: 1 unit**

This course provides students with hearing impairments individualized instruction in the development of language (English) and vocabulary. Instruction will focus on oral/signed academic and social language development, writing, literacy, grade-specific needs and strategies. Students will learn to implement strategies to repair identified communication breakdowns. Students will use language skills to effectively advocate for his/her academic and social needs within the school and community.

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## SPECIAL TOPICS IN MATHEMATICS-I

**Grade Level: 9, 10, 11, 12**

**Prerequisite: None**

**Credit: 1 unit**

This course is designed for and restricted to Exceptional Children's students with specific deficits in mathematics. Instructions will be designed for each student to adhere to the specifications contained in their Individual Education Plan (IEP)

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## SPECIAL TOPICS IN MATHEMATICS-II

**Grade Level: 10,11, 12**

**Prerequisite: None**

**Credit: 1 unit**

This course is a continuation of Special Topics in Mathematics I. The course is designed for and restricted to Exceptional Children's students with specific deficits in mathematics. Instruction will be designed for each student to adhere to the specifications contained in their Individual Educational Plan (IEP).

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## SPECIAL TOPICS IN MATHEMATICS-III

**Grade Level: 11, 12**

**Prerequisite: None**

**Credit: 1 unit**

This course is a continuation of Special Topics in Mathematics II. The course is designed for and restricted to Exceptional Children's students with specific deficits in mathematics. Instruction will be designed for each student to adhere to the specifications contained in their Individual Educational Plan (IEP).

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## SPECIAL TOPICS IN MATHEMATICS-IV

**Grade Level: 12**

**Prerequisite: None**

**Credit: 1 unit**

This course is a continuation of Special Topics in Mathematics III. The course is designed for and restricted to Exceptional Children's students with specific deficits in mathematics. Instruction will be designed for each student to adhere to the specifications contained in their Individual Educational Plan (IEP).

# Extended Content Standards-Electives

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## HEALTHY, SAFETY & INDEPENDENT LIVING

Grade Level: 10, 11, 12

Credit: 1 unit

This course pathway is designed to assist students in developing competencies in the following areas: money management, purchasing, cooking, laundry, cleaning, proper eating habits, appropriate manners, grooming, transportation, and mobility. The coursework concentrates on work related behaviors such as assuming the roles associated with the development of acceptable manners, recognition and respect for authority, development of self-responsibility, and appropriate expression of emotions. Activities are related to actual experiences, and real-world connections. Concepts lead to the student's recognition of himself/ herself as a valuable asset to society. The purpose of leisure education is to assist students in developing the skills necessary to enjoy leisure time with opportunities for learning about leisure, developing leisure skills, and practicing the skills.

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## VOCATIONAL PREPARATION

Grade Level: 10, 11, 12

Credit: 1 unit

This course is designed to help students develop entry-level job skills and competencies. Students participate in activities and experiences that facilitate career exploration and assess their vocational skills. They develop work related interpersonal and communication skills and learn to advocate for supports that promote career success. Students will develop independent functioning skills needed to meet the demands of employment. These competencies will foster employability skill development.

# Occupational Course of Study

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## PREPARATION – I

Credit: 1 unit

This course is designed to introduce students to the fundamental attitudes, behaviors, and habits needed to obtain and maintain employment in their career choice and make career advancements. Students will participate in school-based learning activities including work ethic development, job-seeking skills, decision-making skills, and self-management. Students will be involved in on-campus vocational training activities such as school factories, work-based enterprises, hands-on-vocational training in Career and Technical Education courses, and the operation of small businesses. Formal career planning and development of knowledge regarding transition planning begins in this course and continues throughout the strand of Occupational Preparation courses.

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## PREPARATION-II

Credit: 2 units (Year-Long)

This course emphasizes the development of skills generic to all career majors. This course content is focused on providing students with a repertoire of basic skills that will serve as a foundation for future career application. Students will expand their school-based learning activities to include on-campus jobs and begin some work-based learning activities. Job seeking skills will also continue to be refined.

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## PREPARATION-III

Credit: 2 units (Year-Long)

This course is designed to allow students to continue the development and begin the application of skills learned in Occupational Preparation I and II. Work-based learning activities are provided including community-based training, job shadowing, job sampling, internships, situational assessment, cooperative education, and apprenticeships. These work-based activities allow students to apply employability skills to competitive employment settings and demonstrate the effectiveness of their work personality.

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## PREPARATION – IV

Credit: 1 unit

This course is designed to introduce students to the fundamental attitudes, behaviors, and habits needed to obtain and maintain employment in their career choice and make career advancements. Students will participate in school-based learning activities including work ethic development, job-seeking skills, decision-making skills, and self-management. Students will be involved in on-campus vocational training activities such as school factories, work-based enterprises, hands-on-vocational training in Career and Technical Education courses, and the operation of small businesses. Formal career planning and development of knowledge regarding transition planning begins in this course and continues throughout the strand of Occupational Preparation courses.

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---

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## PREPARATION – IV

Credit: 1 unit

This course gives students the opportunity to synthesize all the skills acquired in previous Occupational Preparation courses. This course will allow students to solve work-related problems experienced in competitive employment, practice self-advocacy, and master the theoretical and practical aspects of their career choice. Students will complete the 360 hours of integrated competitive employment in a community setting required for successful completion of the Occupational Course of Study. Students will also develop a job placement portfolio that provides an educational and vocational record of their high school experience.

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## PREP LAB

Credit: 1 unit

Occupational Prep Lab continues from Occupational Preparation I, II, III and IV. The course is designed to provide additional opportunities for student to further develop and refine the fundamental attitudes, behaviors, and habits needed to obtain and maintain employment. Students will participate in school-based learning activities such as school factories, work-based enterprises, hands-on vocational training and the operation of small businesses. Community-based training activities will include job shadowing, job sampling, internships, situational assessment, cooperative education, and apprenticeships. These work-based activities allow students to develop, refine and apply employability skills to competitive employment settings and demonstrate the effectiveness of their work personality and skills. Multiple opportunities for leadership development and self-determination are provided.

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## ENGLISH I

**Credit: 1 unit**

This course is designed to provide students with an introduction to a variety of communication modes and develop an understanding of the importance that each play. Students apply a writing process to develop a product and develop an understanding of appropriate presentation skills. They apply reading and writing skills to comprehend various texts. There is an emphasis on the understanding of basic conventions of standard English and the recognition of appropriate examples of basic convention based on audience, purpose, and context. Students apply reading and writing skills to understand relationships in literature, societies, and cultures. They apply research tools and techniques to selected topics.

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## ENGLISH II

**Credit: 1 unit**

Occupational English II focuses on the exploration and examination of a variety of communication modes and the importance each plays. Students create increasingly complex written responses for various audiences, purpose, and contexts. They apply reading and writing skills to analyze and evaluate relationships in real life situations, current events, and from global perspectives. They design and create oral, written, and visual products using 21st century technologies.

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## ENGLISH III

**Credit: 1 unit**

Occupational English III focuses on the exploration and examination of a variety of communication modes and the importance each plays in real life situations and employment settings. Students apply reading and comprehension strategies to informational text found in employment, post-secondary education/training, and independent living domains. They apply knowledge of cause-and-effect relationships to problem-solve personal life situations and critique informational products for use in employment and at home.

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## ENGLISH IV

**Credit: 1 unit**

Occupational English IV continues the focus on the exploration and examination of a variety of communication modes and the importance each plays in real life situations and employment settings. Students apply information from literary and informational texts to carry out adult living tasks. They produce plans to solve problems that occur in various domains of adult life and form opinions based on the analysis of current events, written texts, and/or personal life experiences. Students complete, present, and critique their Career Portfolio.

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## INTRODUCTORY MATHEMATICS

**Credit 1 unit**

Occupational Introduction to Mathematics is the study of a) Rational Numbers: comparing, identifying, ordering, and the mathematical skills using integers, decimals, fractions, percentages, ratios, proportions and probability; b) Geometry: calculating perimeter, area, and volume of two- and three-dimensional figures; c) Time and Measurement; d) Algebraic Structures; e) Patterns; and f) Data analysis. Students will acquire these skills through hands-on approaches and cooperative learning within the classroom and community. Application of these skills is necessary for independent living and successful employment.

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## NC MATH I

**Credit: 1 unit**

Occupational NC Math I continues from Occupational Introductory Mathematics, the study of rational numbers and the application of these skills for independent living and successful employment. More emphasis is placed on algebraic and geometric reasoning, statistics, probability, and applying formulas. Application of these math skills is rooted in the understanding of functions based on mathematical and real-world phenomena.

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## FINANCIAL MANAGEMENT

**Credit: 1 unit**

Occupational Financial Management is the study of math skills to gain independent living and successful employment. Emphasis is placed on financial planning, financial services, taxes, and wages. Students will apply appropriate methods to establish and maintain checking and savings accounts, loans, credit cards, and debit cards for personal financial management and independent living. They will compare methods of paying bills, debt versus credit, consumer spending, and insurance types. Application of these skills is necessary for independent living and successful employment.

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## AMERICAN HISTORY I

**Credit: 1 unit**

This course guides students as they study the establishment of political parties, America's westward expansion, the growth of sectional conflict, how that sectional conflict led to the Civil War, and the consequences of the Civil War, including Reconstruction. Students will examine the historical and intellectual origins of the United States from European exploration and colonial settlement to the Revolutionary and Constitutional eras. Students will learn about the important political and economic factors that contributed to the development of colonial America and the outbreak of the American Revolution as well as the consequences of the Revolution, including the writing and key ideas of the U.S. Constitution.

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## AMERICAN HISTORY II

**Credit: 1 unit**

This course guides students from the late nineteenth century time period through the early 21st century. Students will examine the political, economic, social and cultural development of the United States from the end of the Reconstruction era to present times. The essential standards of American History Course II will trace the change in the ethnic composition of American society; the movement toward equal rights for racial minorities and women; and the role of the United States as a major world power. An emphasis is placed on the expanding role of the federal government and federal courts as well as the continuing tension between the individual and the state. The desired outcome of this course is for students to develop an understanding of the cause-and-effect relationship between past and present events, recognize patterns of interactions, and understand the impact of events in the United States in an interconnected world.

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## APPLIED SCIENCE

**Credit: 1 unit**

Occupational Applied Science is designed to provide students with the knowledge necessary to understand and identify the basic principles of physics, physical science, and life science. Students will receive instruction on the concepts of energy, force, motion, electricity, matter and the body systems. Students will have opportunities to apply skills in the area of healthy living and safety to various situations within the home, community and workplace.

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## BIOLOGY I

**Credit: 1 unit**

Occupational Biology I emphasizes basic, functional knowledge of science concepts in the areas of living organisms, molecular biology, evolution, genetics, and ecology. Students will have the opportunity to apply science-based concepts to daily living situations at home, in the community, and the workplace.

# Academy Specific Course Descriptions

*Enrollment in these courses is limited to students accepted in the specific academy.*

## FFA Academy of Agriculture and Natural Sciences-Cape Fear High School

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### AGRICULTURAL MECHANICS I

**Prerequisite:** Agriscience Applications and Enrollment in the FFA Academy of Agriculture and Natural Sciences **Credit: 1 unit**

This course develops knowledge and technical skills in the broad field of agricultural machinery, equipment, and structures. The primary purpose of this course is to prepare students to handle the day-to-day problems and repair needs they will encounter in their chosen agricultural career. Topics include agricultural mechanics safety, agricultural engineering career opportunities, hand/power tool use and selection, electrical wiring, basic metal working, basic agricultural construction skills related to plumbing, concrete, carpentry, basic welding, and leadership development. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, mentorship, school-based enterprise, job shadowing, and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Note: Course enrollment limited to 20 to ensure safety in laboratory settings.

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### AGRICULTURAL MECHANICS II - HONORS

**Prerequisite:** Agricultural Mechanics I **Credit: 1 unit**

In this course, the topics of instruction emphasized are non-metallic agricultural fabrication techniques, metal fabrication technology, safe tool and equipment use, human resource development, hot/cold metalworking skills and technology, advanced welding and metal cutting skills, working with plastics, and advanced career exploration/decision making. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course are apprenticeship, cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, job shadowing, and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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### ANIMAL SCIENCE II-HONORS

**Prerequisite:** Animal Science I **Credit: 1 unit**

This course includes more advanced scientific principles and communication skills and includes animal waste management, animal science economics, decision making, and global concerns in the industry, genetics, and breeding. English language arts, mathematics, and science are reinforced in this class. This honors course extends the standard course to a higher, more challenging level. Work-based learning strategies appropriate for this course are apprenticeship, cooperative education, entrepreneurship, internship, mentorship, school-based enterprise, service learning, job shadowing, and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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### SUSTAINABLE AGRICULTURAL PRODUCTION I

**Prerequisite:** None

**Credit: 1 unit**

This course focuses on the increasingly complex world of producing enough food and fiber to meet the growing world demand and at the same time maintain ecological balance and conserve our natural resources. Students will explore implementing environmentally sound practices in agricultural production to satisfy the needs of a growing population for today and tomorrow. A breadth of topics including: crop and animal production, natural resource management, agroforestry, food safety, and the farm to fork continuum will set the educational stage for this course. English language arts, mathematics, and science are reinforced.

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### SUSTAINABLE AGRICULTURAL PRODUCTION II

**Prerequisite:** Sustainable Agricultural Production I

**Credit: 1 unit**

This course expands on the complexity of producing enough food and fiber to meet the world demand and at the same time maintain an economical balance and conserve our natural resources. Students will explore the U.S. food system and how agriculture impacts the quality of life at all levels as well as the energy resources necessary to meet these needs. Twenty-first century topics such as precision agriculture, biotechnology, bioinformatics, plant and animal breeding, apiculture, aquaponics, hydroponics, vermicomposting and food safety will be explored as to their role in a sustainable society. Students will discuss marketing strategies for agricultural products and develop a business plan for a sustainable grower. English language arts, mathematics, and science are reinforced.

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### VETERINARY ASSISTING I HONORS

**Recommended Maximum Enrollment: 15**

**Prerequisite:** Animal Science II or Animal Science II-Small Animals (Designed for 11th or 12th grade students with an interest in animal medicine) **Credit: 1 Unit**

This course provides instruction for students desiring a career in animal medicine. Topics include proper veterinary practice management and client relations, pharmacy and laboratory procedure, advanced animal care, and surgical/radiological procedures. Applied mathematics, science and writing are integrated throughout the curriculum. Advanced FFA leadership will be infused throughout the curriculum to develop the student's ability to work with the public. All aspects of this course will feature hands-on skill sets designed to enhance experiential learning. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course are cooperative education, internship, mentorship, service-learning job shadowing and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skill through authentic experiences. Students who wish to take the Veterinary Assisting Exam developed by Texas Veterinary Medical Association to be a Certified Veterinary Assistant (CVA) Level 1 should complete an additional 500 hours of supervised agricultural experience (SAE) during their three animal science courses. Two hundred SAE hours focus on the care and management of animals; will be substantiated by records and conducted under the direct supervision of the agricultural teacher. Hours may be earned any time during the year including summer months. An additional 300 hours of supervised agricultural experience (worked based learning) will be conducted as licensed veterinarian or certified veterinary technician who will attest that participating students have mastered a standard set of skills used in animal medicine as identified by the cooperating teacher. Hours may be earned any time during the year including summer months.

# Academy of Arts Education-Seventy-First High School

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## BALLET I (Dance Specialization-Beginning)

**Grade Level:** 9, 10, 11, 12      **Credit:** 1 unit **Prerequisite:** Dance I

This course provides instruction in ballet technique and choreographic principles and is aligned to the Essential Standards dance curriculum at the beginning level. While emphasis will be placed on the development of ballet technique, students will also study ballet history, contemporary styles, and noted performers. Students present the skills they have learned through performances for selected audiences.

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## BALLET II (Dance Specialization-Intermediate)

**Grade Level:** 10, 11, 12      **Credit:** 1 unit  
**Prerequisite:** Ballet I and Audition

This course continues the study of ballet and is aligned to the Essential Standards dance curriculum at the intermediate level. While the emphasis will continue to be on the development of ballet technique, students will also participate in choreographic design. Students will also study ballet history, contemporary and classical styles, as well as the lives of significant artists. Students perform a variety of works for selected audiences.

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## BALLET III (Dance Specialization-Proficient)

**Grade Level:** 10, 11, 12      **Credit:** 1 unit **Prerequisite:** Ballet II and Audition

Ballet III is aligned to the Essential Standards dance curriculum at the proficient level. Students continue to develop as ballet artists and choreographers and study contemporary and historical ballet styles. Students perform a variety of works for selected audiences.

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## PERFORMANCE COMPANY (Dance Specialization-Proficient)

**Grade Level:** 10, 11, 12      **Credit:** 1 unit  
**Prerequisite:** Successful completion of an intermediate level dance course and audition

This is an auditioned dance performing group aligned to the Essential Standards dance curriculum at the proficient level. Students will compile a portfolio that shows evidence of in-depth study in the areas of dance production, dance performance, criticism/aesthetics, history/research, and choreography.

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## CHOREOGRAPHIC LAB (Dance Specialization-Advanced)

**Grade Level:** 10, 11, 12      **Credit:** 1 unit  
**Prerequisite:** Successful completion of a proficient level dance course and placement audition

Choreographic Lab provides students with choreographic and production techniques necessary for creating and staging a choreographic work (including costuming, music, lighting, set, sound, make-up, publicity, etc.). Students develop a senior project, which must be presented in formal concert. This course is aligned to the Essential Standards dance curriculum at the advanced level. Students will compile a portfolio reflecting evidence of in-depth study.

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## CHAMBER CHOIR (Vocal Music-Advanced)

**Grade Level:** 9, 10, 11, 12      **Credit:** 1 unit  
**Prerequisite:** Successful completion of a proficient level choral music course and audition

This is an auditioned performing group of advanced soprano, alto, tenor and bass voices. Repertory for performance and study focuses on music of the renaissance, baroque, classical, and romantic periods. Through the analysis and study of history, appropriate musical vocabulary, symbols, and literature (Grades V-VI), this course provides an appreciation and understanding of music in relation to selected styles, periods, composers, and cultures. Students create and maintain portfolios containing a combination of written, audio and visual examples of their work. Performance is an integral part of this course and all rehearsals and performances are required.

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## ART APPRECIATION (Visual Art Specialization-Beginning)

**Grade Level:** 9, 10, 11, 12      **Credit:** 1 unit  
**Prerequisite:** None

This course introduces the origins and historical development of visual arts. Emphasis is placed on the elements and principles of art as seen in selected artworks from various art periods.

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## DRAWING & PAINTING (Visual Arts Specialization-Intermediate)

**Grade Level:** 9, 10, 11, 12      **Credit:** 1 unit  
**Prerequisite:** Art I

This course focuses on a variety of drawing and painting techniques and media with emphasis on landscapes, portraits, and still life and is aligned to the Essential Standards visual arts curriculum at the intermediate level. Students receive instruction in matting and framing works of arts and are required to mat and frame selected art created in the class. Students must provide some art supplies.

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## SCULPTURE (Visual Arts Specialization-Intermediate)

**Grade Level:** 9, 10, 11, 12      **Credit:** 1 unit  
**Prerequisite:** Art I

Students explore a variety of styles of and materials used to make sculpture. Special emphasis will be placed on the dimensionality of sculpture and the interplay of light and shadow. This course is aligned to the Essential Standards visual arts curriculum at the intermediate level. Student must provide some art supplies.

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## PHOTOGRAPHY

**Grade Level:** 10, 11, 12      **Credit:** 1 unit  
**Prerequisite:** None

This course offers an introduction to the art of Photography. Students will learn about camera operation, artistic composition, creative effects, film (black and white), developing and prints.

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## FILMMAKING

**Grade Level:** 9, 10, 11, 12      **Credit:** 1 unit  
**Prerequisite:** None

Students will learn about the creative and technical processes involved in the production of a film or video. Students will creatively collaborate with other academic or arts disciplines in the production of films or videos.

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## HISTORICAL CRAFTS OF THE WORLD (Visual Arts Specialization-Intermediate)

Grade Level: 9, 10, 11, 12

Prerequisite: Art I

Credit: 1 unit

Students will learn about the origins and historic developments of fine arts and crafts from various countries and historical periods and analyze their influence on current society. This course will focus on a variety of art and craft techniques such as (but not limited to) weaving, pottery making, jewelry making, and batik. This course is aligned to the Essential Standards visual art curriculum at the intermediate level. Students must provide some selected art supplies.

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## MUSICAL THEATRE (Theatre Arts Specialization-Intermediate)

Grade Level: 9, 10, 11, 12

Prerequisites: Theatre Arts I and Audition

Credit: 1 unit

This is an auditioned theatre arts company for students interested in the production of musical plays that teach, inform, and entertain audiences. This course is aligned to the Essential Standards theatre arts curriculum at the intermediate level. Rehearsals and performances may require after-school and evening participation.

Musical Theatre students will be involved in all aspects of artistic, creative, and technical activities required for a theatrical production.

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## ACTING & DIRECTING (Theatre Arts Specialization- Proficient)

Grade Level: 10, 11, 12

Prerequisite: Theatre Arts II and audition

Credit: 1 unit

This course focuses on selected techniques and approaches to acting and directing. Students research, study, and implement acting elements and a variety of acting techniques, methods, and styles. Students are required to perform in a variety of roles. Students study the creative role of a director in both historical and contemporary theatre. Students are required to direct a play from start to finish including, casting, rehearsals, and production. This course is aligned to the Essential Standards curriculum at the proficient level.

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## LEARNING ART THROUGH HISTORY

Grade Level: 11, 12

Prerequisite: U.S. History

Credit: 1 unit

This course will be offered to enhance U.S. History and embrace an artistic opportunity while complementing the Arts Education Academy. This course offers a more relevant and meaningful approach to appreciating art and history at the same time.

## Academy of Emergency Medical Science-Pine Forest High School

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## FOUNDATIONS OF HEALTH SCIENCE CAREERS I

Recommended Prerequisite: Enrollment in the Academy of Emergency Medical Science, NC Math I

Credit: 1 unit

This introductory course is designed by Paxton/Patterson and consists of a computer-based, modular, hands-on exploration of various health careers to include: Clinical Lab Practices, Veterinary Medicine, EMT, Pharmacology, Speech Therapy, Nursing, and Mental Health.

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## FOUNDATIONS OF HEALTH SCIENCE CAREERS II

Prerequisite: Foundations of Health Science Careers I Credit: 1 unit

This introductory course is designed by Paxton/Patterson and consists of a computer-based, modular, hands-on exploration of various health careers to include: Biomedical Engineering, Sports Medicine, Forensics, Medical Imaging, Dentistry, Therapeutic Services, and Ophthalmology.

## Academy of Engineering Technology-Westover High School

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## PLTW CIVIL ENGINEERING AND ARCHITECTURE

Prerequisite: PLTW Foundation Courses

Credit: 1 unit

In this specialization Project Lead the Way (PLTW) Pathway to Engineering (PTE) course, students apply what they learn about various aspects of civil engineering and architecture to the design and development of a property. Working in teams, students explore hands-on activities and projects to learn the characteristics of civil engineering and architecture. In addition, students use 3D design software to help them design solutions to solve major course projects. Students learn about documenting their project, solving problems, and communicating their solutions to their peers and members of the professional community of civil engineering and architecture. Work-based learning strategies appropriate for this course include mentorship, school-based enterprise, service learning, and job shadowing, Technology Student Association (TSA) competitive events, FIRST Robotics Competition (FRC), community service, and leadership readiness skills through authentic experiences. This course is eligible for Advanced Placement weighting.

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## PLTW DIGITAL ELECTRONICS

Prerequisite: Math II and Introduction to Engineering Design

Credit: 1 unit

In this foundation Project Lead the Way (PLTW) Pathway to Engineering (PTE) course, students focus on the process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation. Digital electronics is the foundation of all modern electronic devices such as cellular phones, MP3 players, laptop computers, digital cameras, and high-definition televisions. Art, English language arts, mathematics and science are reinforced. Work-based learning strategies appropriate for this course include mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship and cooperative education are not available for this course. Technology Student Association (TSA) competitive events, FIRST Robotics Competition (FRC), community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. This course is eligible for Advanced Placement weighting.



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## PLTW COMPUTER INTEGRATED MANUFACTURING

**Prerequisite:** Math II, and IED, DE and POE

**Credit:** 1 unit

In this specialization Project Lead the Way (PLTW) Pathway to Engineering (PTE) course, students answer the questions: How are things made? What processes go into creating products? Is the process for making a water bottle the same as it is for a musical instrument? How do assembly lines work? How has automation changed the face of manufacturing? As students find the answers to these questions, they learn about the history of manufacturing, a sampling of manufacturing processes, robotics and automation.

The course is built around several key concepts: computer modeling, Computer Numeric Control (CNC) equipment, Computer Aided Manufacturing (CAM) software, robotics, and flexible manufacturing systems. Art, English language arts, mathematics and science are reinforced. Work-based learning strategies appropriate for this course include mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship and cooperative education are not available for this course. Technology Student Association (TSA) competitive events, community service, FIRST Robotics Competition (FRC) and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. This course is eligible for Advanced Placement weighting.

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## PLTW ENGINEERING DESIGN AND DEVELOPMENT HONORS

**Prerequisite:** IED, DE, AND POE and Enrollment in the Academy of Engineering Technology

**Credit:** 1 unit

In this capstone Project Lead the Way (PLTW) Pathway to Engineering (PTE) course, students will work in teams to research, design, test and construct a solution to an open-ended engineering problem. The product development life cycle and a design process are used to guide and help the team to reach a solution to the problem. The team presents and defends their solution to a panel of outside reviewers at the conclusion of the course. The EDD course allows students to apply all the skills and knowledge learned in previous Project Lead the Way courses. The use of 3D design software helps students design solutions to the problem their team has chosen. This course also engages students in time management and teamwork skills, a valuable skill set for students in the future. Work-based learning strategies appropriate for this course include mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship and cooperative education are not available for this course. Technology Student Association (TSA) competitive events, FIRST Robotics Competition (FRC), community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## PLTW INTRODUCTION TO ENGINEERING DESIGN

**Prerequisite:** Math I and Enrollment in the Academy of Engineering Technology

**Credit:** 1 unit

In this foundation Project Lead the Way (PLTW) Pathway to Engineering (PTE) course, students are exposed to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. Students use 3D solid modeling design software to help them design solutions to solve proposed problems and learn how to document their work and communicate solutions to peers and members of the professional community. Art, English language arts, mathematics and science are reinforced. Work-based learning strategies appropriate for this course include mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship and cooperative education are not available for this course. Technology Student Association (TSA) competitive events, FIRST Robotics Competition (FRC), community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. This course is eligible for Advanced Placement weighting.

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## PLTW PRINCIPLES OF ENGINEERING

**Prerequisite:** Math II and Introduction to Engineering Design

**Credit:** 1 unit

In this foundation Project Lead the Way (PLTW) Pathway to Engineering (PTE) course, students' survey engineering and are exposed to major concepts they will encounter in a postsecondary engineering course of study. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, documenting their work and communicating solutions to peers and members of the professional community. Art, English language arts, mathematics and science are reinforced. Work-based learning strategies appropriate for this course include mentorship, school-based enterprise, service learning, and job shadowing. Apprenticeship and cooperative education are not available for this course. Technology Student Association (TSA) competitive events, FIRST Robotics Competition (FRC), community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. This course is eligible for Advanced Placement weighting.

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## Academy of Finance-Douglas Byrd High School

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### AOF FINANCIAL SERVICES

**Prerequisite:** Enrollment in the Academy of Finance

**Credit:** 0.5 unit

This course gives students an overview of banks and other financial services companies. It introduces students to the origins of money and banking and examines the early history of banking in the United States. Students study the financial services industry and the types of companies it includes in depth. They learn about the services offered by such companies and analyze the ways these companies earn profits. Finally, students examine careers in financial services.

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### AOF PRINCIPLES OF FINANCE

**Prerequisite:** Enrollment in the Academy of Finance

**Credit:** 0.5 unit

This is the first course students take in the Academy of Finance and introduces students to the financial world. Students develop financial literacy as they learn about the function of finance in society. They study income and wealth; examine financial institutions; learn how businesses raise capital and study key investment-related terms and concepts. They also research how innovations have changed the financial services field. Finally, students explore careers that exist in finance today.

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## CCS Fire Academy-E. E. Smith High School

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### FIREFIGHTER TECHNOLOGY I

**Prerequisite:** None

**Credit:** 1 unit

This course covers part of the NC Firefighter I-II combination certification modules required for all firefighters in North Carolina. The modules include: Fire Department Orientation and Safety; Fire Prevention, Education, and Cause; Fire Alarms and Communications; Fire Behavior; Personal Protective Equipment; Portable Fire Extinguishers; and Fire Hose, Streams, and Appliances. English language arts are reinforced. Work-based learning strategies appropriate for this course including job shadowing. Apprenticeship and cooperative education are not available for this course. This course prepares students for the North Carolina Firefighter 1/11 certification modules. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## FIREFIGHTER TECHNOLOGY II

**Prerequisite:** Firefighter Technology I

**Credit:** 1 unit

This course covers additional NC Firefighter I-II combination certification modules required for all firefighters in North Carolina. The modules include: Ropes; Ladders; Forcible Entry; Ventilation; Water Supply; Sprinklers; and Foam Fire Stream. English language arts are reinforced. Work-based learning strategies appropriate for this course including job shadowing. Apprenticeship and cooperative education are not available for this course. This course prepares students for the North Carolina Firefighter 1/11 certification modules. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## FIREFIGHTER TECHNOLOGY III - HONORS

**Prerequisite:** Firefighter Technology II

**Credit:** 1 unit

In this course, students select one specific occupation in the Career Cluster and conduct research to include the nature of the work, work environment, training, education, and advancement, and job prospects. Work-based learning strategies appropriate for this course including job shadowing and internship. Apprenticeship and cooperative training are not available for this course. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## Academy of Green Technology-Douglas Byrd High School

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## WORKING TOWARD SUSTAINABILITY

**Prerequisite:** Enrollment in the Academy of Green Technology

**Credit:** 1 unit

The modules in Working toward Sustainability engage students in investigating the importance of sustainability for businesses and for people around the globe. The modules explore changes businesses are making to have their products and processes more sustainable, as well as the shift toward fuel sources and technologies that can serve as alternative to fossil fuels. Students learn why people around the globe are looking at alternative energy sources and the importance of current research into stable and practical sources of energy. Given concerns over the impact people are having on our planet, individuals, governments, and companies around the world are seeking alternative ways of meeting their energy needs- alternatives that are cost-effective and sustainable and will not further damage the environment or unduly impact one group of people more than another.

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## GENERATING CLEAN ELECTRONS

**Prerequisite:** Working Toward Sustainability

**Credit:** 1 unit

This course introduces students to alternative energy generation sources. Students will participate in hands-on lab procedures in solar, wind turbine, and hydrogen fuel cell energy generation combined with a solid foundation in science, technology, engineering, and mathematics. The electric grid, focusing on infrastructure and the impact of issues like climate change, energy policy, and renewables on grid resiliency are introduced in this course.

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## DC/AC ELECTRICITY – ELC 112

**Prerequisite:** Previous required academy courses

**Credit:** 1 unit

This FTCC course introduces the fundamental concepts and computation 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.

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## APPLICATIONS PROJECT – ELC 229

**Prerequisite:** Previous required academy and FTCC Courses **Credit:** 1 unit

This FTCC course provides an individual and/or integrated team approach to a practical project as approved by the instructor. Topics include project selection and planning implementation and testing, and a final presentation. Upon completion, students should be able to plan and implement an application project.

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## PHOTOVOLTAIC SYS TECH – ELC 220

**Credit:** 1 unit

This course introduces the concepts, tools, techniques, and materials needed to understand systems that convert solar energy into electricity with photovoltaic (PV) technologies. Topics include site analysis for system integration, building codes, and advances in photovoltaic technology. Upon completion, students should be able to demonstrate an understanding of the principles of photovoltaic technology and current applications.

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## ADVANCED PV SYS DESIGNS – ELC 221

**Prerequisite:** ELC 220

**Credit:** 1 unit

This course introduces specific elements in Photovoltaic (PV) systems technologies including efficiency, modules, inverters, charge controllers, batteries, and system installation. Topics include National Electrical Code (NEC), electrical specifications, photovoltaic system components, array design and power integration requirements that combine to form a unified structure. Upon completion, students should be able to demonstrate an understanding of various photovoltaic designs and proper installation of NEC compliant solar electric power systems.

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## ELC 118 NATIONAL ELECTRICAL CODE

**Credit:** 1 unit

This course covers the use of the current National Electrical Code. Topics include the NEC history, wiring methods, overcurrent protection, materials, and other related topics. Upon completion, students should be able to effectively use the NEC.

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## Academy of Global Studies-Terry Sanford High School

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## FOUNDATIONS OF KNOWLEDGE HONORS

**Grade Level:** 9, 10, 11

**Prerequisite:** None

**Credit:** 1 unit

This is a required interdisciplinary course for students in the School of Global Studies. The class includes basic information about time management, organization, study skills, and modes of learning. Throughout the year, students will increase their vocabulary through an intensive study of Latin and Greek prefixes, roots, and suffixes. They will be introduced to MLA style papers. Students will research the college application and admissions process. Throughout the course, emphasis is placed on reading and listening critically, writing, and speaking effectively, and using higher level thinking skills. This course is designated as an honors level class.

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## AP SEMINAR

**Grade Level:** 10 (elective)

**Prerequisite:** None

**Credit:** 1 unit

AP Seminar is a yearlong, foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics. Students will understand unique perspectives by reading and analyzing articles, research studies, and various texts.

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## AP RESEARCH

Grade level: 11 (elective)

Prerequisite: AP Seminar

Credit: 1 unit

AP Research is a yearlong course, which allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through the inquiry, they further the skills acquired in AP Seminar by learning research methodology.

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## HUMANITIES HONORS

Grade Level: 12

Prerequisite: None

Credit: 1 unit

The Humanities course, a required course for The School of Global Studies seniors, investigates the various disciplines of the humanities as defined by the National Endowment for the Humanities. These areas include history, psychology, literature, archaeology, the history and criticism of art and music, ethics, comparative religion, architecture, and film. The senior project, a requirement for graduation from the School of Global Studies, is a component of the Humanities curriculum. The course is designated as an honors course.

# Academy of Health Sciences and Technology- Westover High School

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## PLTW PRINCIPLES OF BIOMEDICAL SCIENCE- HONORS

Prerequisite: Enrollment in the Academy of Health Sciences and Technology

Credit: 1 unit

This course is designed for students to investigate the human body systems and various health conditions. They determine factors that lead to the death of a fictional person and investigate lifestyle choices. English language arts and science are reinforced in this course. Work-based learning strategies appropriate for this course include service learning and job shadowing. Apprenticeship and cooperative education are not available for this course. Health Occupations Students of America (HOSA) competitive events, community service and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## PLTW HUMAN BODY SYSTEMS-HONORS

Prerequisite: PLTW Principles of Biomedical Sciences

Credit: 1 unit

In this course students examine the human body systems, design experiments and use data acquisition software to monitor body functions and often play the role of the biomedical professional. English language arts and science are reinforced in this course.

Work-based learning strategies appropriate for this course include service learning and job shadowing. Apprenticeship and cooperative education are not available for this course. Health Occupations Students of America (HOSA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## PLTW MEDICAL INTERVENTIONS-HONORS

Prerequisite: PLTW Human Body Systems

Credit: 1 unit

This course allows students to investigate the interventions involved in the prevention, diagnosis and treatment of disease. It is a "How-To" manual for maintaining overall health. English language arts and science are reinforced in this course. Work-based learning strategies appropriate for this course include service learning and job shadowing. Apprenticeship and cooperative education are not available for this course. Health Occupations Students of America (HOSA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## PLTW BIOMEDICAL INNOVATIONS-HONORS

Prerequisite: PLTW Medical Interventions

Credit: 1 unit

This course allows students to apply their knowledge and skills to answer questions or solve problems related to biomedical sciences. Students design innovative solutions to the health care challenges of the 21<sup>st</sup> century. Students work on independent projects and may work with a mentor in the healthcare industry. English language arts and science are reinforced in this course. Work-based learning strategies appropriate for this course include internship, mentorship, service learning, and job shadowing. Health Occupations Students of America (HOSA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

# Academy of Information Technology-Pine Forest High School & Gray's Creek High School

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## AOIT PROFESSIONAL ETHICS

Prerequisite: Enrollment in the Academy of Information Technology

Credit: 0.5 Unit

This course provides a solid understanding of why ethics is important in every profession. After an introduction to several philosophies that inform ethics today, students explore the characteristics of an ethical professional. Students consider the range of dilemmas faced by managers and employees in the workplace. They learn about the qualities of effective leaders and the tools modern professionals use to instill an ethical workplace culture. Throughout the course, students have opportunities to refine their personal sense of ethics as they begin to build an ethical foundation for their professional future.

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## AOIT WEB DESIGN

Prerequisite: Enrollment in the Academy of Information Technology

Credit: 0.5 Unit

Web Design is a hands-on introduction to designing, building, and launching websites. Students learn the basics of HTML coding, explore various web development tools, and get practice creating websites using Adobe Dreamweaver. They learn how to make their websites more effective by applying the principles of design as well as usability and accessibility criteria. Finally, students take a look at various career opportunities in web design.

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## COMPTIA IT FUNDAMENTALS

**Prerequisite:** Enrollment in the Academy of Information Technology

**Credit:** 1 Unit

This introductory course provides students with the foundation to pursue further study in information technology. Emphasis is on activities and hands-on experiences to help students with understanding computing basics and hardware, types of software, setting up a basic workstation, an introduction to networking, configuring wireless devices, and securing computing devices. Work-based learning strategies appropriate for this course include service learning, and job shadowing. Future Business Leaders of America (FBLA) and SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## HARDWARE/SOFTWARE SUPPORT- CTS 120

**Prerequisite:** CIS 110 or Articulated Credit for Microsoft Word, PowerPoint & Publisher

**Credit:** 1 Unit

This FTCC course covers the basic hardware of a personal computer, including operations and interactions with software. Topics include component identification, the memory system, peripheral installation and configuration, preventative maintenance, and diagnostics and repair. Upon completion, students should be able to select appropriate computer equipment, upgrade and maintain existing equipment, and troubleshoot and repair non-functioning personal computers.

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## ADVANCED HARDWARE/SOFTWARE SUPPORT – CTS 220

**Prerequisite:** Hardware/Software Support CTS 120

**Credit:** 1 unit

This FTCC course introduces the installation and troubleshooting aspects of personal computer software. Emphasis is placed on initial installation and optimization of system software, commercial programs, system configuration files, and device drivers. Upon completion, students should be able to install, upgrade, uninstall, optimize, and troubleshoot personal computer software.

# Integrated Systems Technology Academy of Engineering-Jack Britt High School

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## DRAFTING III- ENGINEERING-HONORS

**Recommended Maximum Enrollment:** 25  
**Prerequisite:** IV22 Drafting II- Engineering

**Credit:** 1 Unit

This course teaches the development of knowledge and advanced skills in Engineering Drafting and Design. An understanding of 3D CAD concepts and terms, and the use of 3D CAD software such as INVENTOR or SolidWorks, are essential to this course, and the required method of producing finished drawings. Topics include cover advanced levels of Engineering Drafting and Design, Employment Requirements, Engineering Design Concepts and Principles, Advanced Manufacturing Processes, Advanced Parametric-Solid Modeling, Geometric Dimensioning and Tolerancing, Work Drawings and Assemblies, 3D Modeling, Sheet Metal Parts, and Professional Portfolio. English language arts and mathematics are reinforced. This course carries inherently honors weight.

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## INTRODUCTION TO INTEGRATED SYSTEMS TECHNOLOGY

**Prerequisite:** Enrollment in the Academy

**Credit:** 1 unit

This course provides instructions and practice in the skills needed to be successful in the Integrated Systems Technology program. Topics include design and problem solving, machine processes, and basic mechanical, fluidal and electrical concepts. Reading and critical thinking skills are used throughout the instruction. The course integrates STEM (science, technology, engineering, and math) throughout this course.

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## INTEGRATED SYSTEMS TECHNOLOGY I-HONORS

**Prerequisite:** NC Math I

**Credit:** 1 unit

Integrated Systems Technology (IST) I is a technical skill-based course that teaches modern employability competencies that meet international skills standards. Topics covered in IST I are fluid power, quality assurance, machine processes, robotics, programmable logic and electrical systems, the creation of a product from inception, modeling and the use of a formal design process. This course reinforces mathematical, communication, and problem-solving skills. This honors course extends the standard course to a higher, more challenging level.

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## INTEGRATED SYSTEMS TECHNOLOGY II HONORS

**Prerequisite:** Integrated Systems Technology I

**Credit:** 1 unit

Integrated Systems Technology (IST) 2 Honors is a technical course designed to expand students' knowledge in specific principles and processes introduced in IST I. IST 2 Honors is a rigorous continuation of laboratory and classroom-based experiences including field research and technical writing. The IST 2 Honors course reinforces mathematical, communication, problem solving skills and prepares students for postsecondary coursework in engineering and technology. This course is approved for honors weighting.

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## INTEGRATED SYSTEMS TECHNOLOGY III HONORS

**Prerequisite:** Integrated Systems Technology II

**Credit:** 1 unit

Integrate Systems Technology (IST) III Honors is a technical course designed to expand students' knowledge in specific principles and processes introduced in IST I and IST II Honors. IST III Honors is a rigorous continuation of laboratory and classroom-based experiences including mass producing a manufactured product from inception, modeling, technical writing, a real-world engineering problem and the organizing and hosting of a community event for the IST Academy of Engineering. The IST 3 Honors class reinforces mathematical, communication, problem solving skills and prepares students for a postsecondary coursework in engineering and technology. This course is approved for honors weighting.

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## PRINCIPLES OF TECHNOLOGY I-HONORS

**Prerequisite:** NC Math I

**Credit:** 1 unit

This course provides a project-based learning approach to understanding the fundamental principles and concepts of physics and associated mathematics. Emphasis is placed on understanding mechanical, electrical, fluid, and thermal systems as they relate to workforce, rate, resistance, energy, and power. Art, English language arts, mathematics and science are reinforced. This honors course extends the standard course to a higher, more challenging level. Work-based learning strategies appropriate for this course include mentorship, school-based enterprise, service learning, and job shadowing. Cooperative education is not available for this course. Apprenticeship is not available for this course. Technology Student Association (TSA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## PRINCIPLES OF TECHNOLOGY II-HONORS

**Prerequisite:** Principles of Technology I

**Credit:** 1 unit

This course is a continuation of project-based learning experiences where students focus on mechanical, electrical, fluid and thermal systems as they relate to force transformers, momentum, waves and vibrations, energy convertors, transducers, radiation theory, optical systems, and time constants. Art, English language arts, mathematics and science are reinforced. This honors course extends the standard course to a higher, more challenging level. Students can expect to complete focused assignments and create a portfolio. Work-based learning strategies appropriate for this course include mentorship, school-based enterprise, service learning, and job shadowing. Cooperative education is not available for this course. Apprenticeship is not available for this course. Technology Student Association (TSA) competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

## Academy of Math and Science-E.E. Smith High School

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### ASTRONOMY HONORS

**Grade Level:** 11, 12

**Co-requisite:** Physics or Chemistry

**Credit:** 1 unit

This is an introductory course where the students survey the solar system. Topics include the history of astronomy, space probes, and the motions of the moon, stars, and planets in the night sky. Other topics include celestial coordinate systems, astronomical instruments, the natural light, and Kepler and Newton's laws of motion. Students will participate in two-night labs while learning to use the school's telescopes. Students will also use Internet controlled telescopes to obtain images for several astronomy projects.

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### BIOTECHNOLOGY HONORS

**Grade Level:** 11, 12

**Prerequisite:** Biology I and Chemistry I

**Credit:** 1 unit

This course introduces students to the tools and techniques of biotechnology. Information and investigations covering the fundamentals of DNA based technologies are the main focus. Everyday application, societal issues, and careers in biotechnology are also integrated into this course.

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### METEOROLOGY HONORS

**Grade Level:** 11, 12

**Prerequisite:** Chemistry

**Credit:** 1 unit

Meteorology is an introductory course focusing on the application of scientific concepts and principles dealing with atmospheric, oceanic, and hydrologic sciences.

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### RESEARCH IN SCIENCE HONORS

**Grade Level:** 11, 12

**Prerequisite:** Biology, Chemistry, Environmental Science or Earth/Environmental

**Credit:** 1 unit

This course is designed to allow students to pursue individual research problems in Biology, Chemistry, Physics, or Earth Science. Students learn to use resources, gain experience in scientific writing, receive supervised training in techniques commonly used in research, and receive instruction in laboratory safety and proper experimental design. Each student designs and carries out a research project under the supervision of the instructor.

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## ZOOLOGY HONORS

**Grade Level:** 11, 12

**Prerequisite:** Biology

**Co-requisite:** Chemistry

**Credit:** 1 unit

This course is designed to give the student a more challenging and in-depth experience of Invertebrate and Vertebrate Zoology. Students will be expected to: design and carry out several investigations of biological concepts, distinguish between and identify various animals by their calls and physical characteristics. Students will also be expected to conduct field investigative studies and conduct comparative gross anatomy labs, which features selected representatives from various animal phyla.

## Academy of Natural Science-Cape Fear High School

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### ASTRONOMY HONORS

**Grade Level:** 11, 12

**Co-requisite:** Physics or Chemistry

**Credit:** 1 unit

This is an introductory course where the students survey the solar system. Topics include the history of astronomy, space probes, and the motions of the moon, stars, and planets in the night sky. Other topics include celestial coordinate systems, astronomical instruments, the natural light, and Kepler and Newton's laws of motion. Students will participate in two-night labs while learning to use the school's telescopes. Students will also use Internet controlled telescopes to obtain images for several astronomy projects.

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### BOTANY HONORS

**Grade Level:** 10, 11, 12

**Prerequisite:** Biology

**Co-requisite:** Chemistry

**Credit:** 1 unit

This class offers an introduction to the structure, processes, and reproduction of higher plants, including the diversity of the plant kingdom and principles of inheritance and ecology. Fieldwork in a Carolina Bay will introduce students to vascular plant structures, field identification of plant species, population dynamics, biological communities, and energy flow in ecosystems.

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### GEOLOGY HONORS

**Grade Level:** 11, 12

**Prerequisite:** Earth/Environmental Science and Biology

**Co-requisite:** Chemistry

**Credit:** 1 unit

Studies include the composition of earth materials and the major processes that have produced and continue to modify the modern Earth such as plate tectonics, volcanoes, and glaciation. Areas of special emphasis include the geology of North Carolina, the Eastern Coastal Plain, and the Carolina Bays.

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### MARINE SCIENCE HONORS

**Grade Level:** 10, 11, 12

**Prerequisite:** Biology

**Co-requisite:** Chemistry

**Credit:** 1 unit

This course is designed to introduce students to organisms living in the marine environment, study the entry of elements and compounds into marine waters, study coastal features such as beaches and inlet, study the history of the global ocean basins, and examine the factors related to human development and human interactions with coastal ecosystems. Students will be involved with lab activities and field trips to the coast of North Carolina.

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## RESEARCH IN SCIENCE HONORS

**Grade Level: 11, 12**

**Prerequisite: Biology, Chemistry, Environmental Science or Earth/Environmental** **Credit: 1 unit**

This course is designed to allow students to pursue individual research problems in Biology, Chemistry, Physics, or Earth Science. Students learn to use resources, gain experience in scientific writing, receive supervised training in techniques commonly used in research, and receive instruction in laboratory safety and proper experimental design. Each student designs and carries out a research project under the supervision of the instructor.

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## ZOOLOGY HONORS

**Grade Level: 11, 12**

**Prerequisite: Biology** **Credit: 1 unit**  
**Co-requisite: Chemistry**

This course is designed to give the student a more challenging and in-depth experience of Invertebrate and Vertebrate Zoology. Students will be expected to: design and carry out several investigations of biological concepts, distinguish between and identify various animals by their calls and physical characteristics. Students will also be expected to conduct field investigative studies and conduct comparative gross anatomy labs, which features selected representatives from various animal phyla.

# Academy of Public Safety and Security-South View High School

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## LAW & JUSTICE I

**Prerequisite: Public Safety I Strongly Recommended** **Credit: 1 unit**

This course examines the basic concepts of law related to citizens' rights and officers' responsibilities to maintain a safe society. This course begins with a study of various careers in public safety. The course will explore the history and development of law enforcement in the United States. Students will then examine the components of the criminal justice system, including the roles and responsibilities of the police, courts, and corrections. Additionally, students will learn the classification and elements of crimes. Students will receive instruction in critical areas including communicating with diverse groups, conflict resolution, the use of force continuum, report writing, operation of police and emergency equipment, and courtroom testimony. Career planning and employability skills will be emphasized. English language arts are reinforced. Work-based learning strategies appropriate for this course include job shadowing. Apprenticeship and cooperative education are not possible for this course. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## LAW & JUSTICE II

**Prerequisite: Law and Justice I** **Credit: 1 unit**

This course emphasizes "need-to-know" information for protection officers throughout the security industry and is aligned to the International Federation of Protection Officers (IFPO) certification as a Certified Protection Officer (CPO). Course content includes: Foundations in Law Enforcement and Protective Services. Communications in Law Enforcement and Protective Services, Protection Officers Functions, Crime Prevention and Physical Security, Safety and Fire Protection, Information Protection, Deviance Crime and Violence, Risk and Threat Management, Procedures in Investigations, Legal Aspects of Security, Procedures for Officer Safety and Use of Force, Procedures for Relations with Others, and AHA First Aid Certification. English language arts are reinforced.

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## PUBLIC SAFETY I

**Prerequisite: None**

**Credit: 1 unit**

This course provides basic career information in public safety including corrections, emergency and fire management, security and protection, law enforcement, and legal services. Additionally, students will develop a personal plan for a career in public safety.

The course includes skills in each area, using resources from the community to help deliver instruction to the students. English language arts are reinforced. Work-based learning strategies appropriate for this course include job shadowing. Apprenticeship and cooperative education are not available for this course. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences.

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## PUBLIC SAFETY II

**Prerequisite: Public Safety I**

**Credit: 1 unit**

This course provides a deeper level of understanding of career information in public safety by focusing on the Community Emergency Response Team (C.E.R.T.) Certification. CERT is a Federal Emergency Management Administration (FEMA) developed certification that incorporates all areas of public safety. Additionally, FEMA ICS300 Intermediate Incident Command System is covered in this course.

# International Baccalaureate Academy-South View High School

Available to the students attending the International Baccalaureate Academy at South View High School.

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## Arts Education

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### IB MUSIC I (SL)

### AP MUSIC THEORY

**Grade Level: 11, 12**

**Prerequisite: Enrollment in IB Academy, Music Theory**

**IB**

**Credit: 1 unit**

**AP**

**Credit: 2 units**

This course builds on a student's prior rigorous study in music and includes the study of Western and Non-Western music and societies. History, aural skills, sight-reading, performance, analysis and composition (manuscript and computer assisted) are stressed. A portfolio of original compositions, arrangements, improvisations, and performances must be maintained. Private lessons in the student's major instrument (voice, keyboard, and band/orchestral) and membership in a performance ensemble are strongly recommended.

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### IB THEATRE ARTS (SL)

**Grade Level: 10, 11, 12**

**Prerequisite: Theatre Arts I & II**

**Credit: 1 unit**

IB Theatre Arts is a continuation of Theatre Arts I and II and offers advanced assignments in seminar style with in-depth research, analysis, application, and production. The IB Internal Assessment involves performance and a portfolio.

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### THEATRE ARTS HONORS/IB THEATRE ARTS (HL)

**Grade Level: 10, 11, 12**

**Prerequisite: Theatre Arts I & II**

**Credit: 2 units**

This course is an in-depth study of practical play analysis. The Internal Assessment requires an audio recording of each candidate's practical play analysis.

## English/Language Arts

### **PRE-IB ENGLISH I**

**Grade Level: 9**

**Prerequisite: Must be enrolled in the IB Academy** **Credit: 1 unit**

This course is designed to develop a global awareness through exposure to literature representing a variety of cultures.

### **PRE-IB ENGLISH II**

**Grade Level: 10**

**Prerequisite: Pre-IB English I** **Credit: 1 unit**

This course uses literature as the basis for developing higher level thinking skills through written and oral communication.

### **PRE-IB ENGLISH II**

**Grade Level: 10**

**Credit: 1 unit**

This course uses literature as the basis for developing higher level thinking skills through written and oral communication.

### **IB ENGLISH III (HL)**

**Grade Level: 11**

**Prerequisite: Enrollment in the IB Academy. Pre-IB English I and Pre-IB English II** **Credit: 1 unit**

This course requires students to use close reading to evaluate the inter-relatedness of patterns of rhetorical and stylistic devices that result in the student's sophisticated understanding of selected world literature of poetry, drama, and novels. Students will develop a critical vocabulary in both oral and written work for internal and external assessments.

### **IB LANGUAGE A: LITERATURE HL**

**Prerequisites: English I Honors, English II Honors**

The Language A: Literature HL course aims at exploring the various manifestations of literature across cultures and throughout history. The course aims at developing an understanding of factors that contribute to the production and reception of literature—the creativity of writers and readers, the nature of their interaction with their respective contexts and with literary tradition, the ways in which language can give rise to meaning and/or effect, and the performative and transformative potential of literary creation and response. Through close analysis of a range of literary texts in a number of literary forms and differing times and places, students will consider their own interpretations as well as the critical perspectives of others, in exploring how the meanings of such texts are shaped by their respective cultural belief systems.

### **IB ENGLISH IV (HL)**

**Grade Level: 12**

**Prerequisite: Enrollment in the IB Academy and completion of IB English III** **Credit: 1 unit**

This course is the second year of a required two-year sequence. Students complete the requirement for Higher Level English while engaging in an in-depth study of British and world literature. Diploma candidates take the HL oral exam in March and the written exam in May.

## **IB DP LITERATURE AND PERFORMANCE SL**

**Prerequisites: 1 year of IB Literature HL (seniors only)**

The IB DP Literature and Performance course is an interdisciplinary synthesis of language A and theater. It incorporates essential elements of literature and performance in exploring the dynamic relationship between the two. It examines the interaction between the conventional literary emphasis on close reading, critical writing and discussion, and the practical, aesthetic, and symbolic elements of performance. A distinctive outcome of this synthesis is the creation and performance of a piece transformed from poetry or prose. In this exciting, creative process, text is viewed from different angles in a way that goes beyond what is characteristic of either literary or theater studies as single disciplines. The course as whole examines literary and dramatic texts and seeks to develop intellect, imagination, and creativity. It encourages intercultural awareness through a study of texts from varying cultures.

### **World Language**

Living languages include French, German, and Spanish. All languages are taught in the following sequence.

**PRE-IB I & II**

**IB III & IV**

**IB V**

**Standard Credit**

**Honors Credit**

**AP Credit**

### **PRE-IB FOREIGN LANGUAGE I**

**Grade Level: 9, 10**

**Prerequisite: Enrollment in IB Academy**

**Credit: 1 unit**

This course introduces the fundamental elements of the language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading and writing skills.

### **PRE-IB FOREIGN LANGUAGE II**

**Grade Level: 9, 10**

**Prerequisite: Enrollment in IB Academy and completion of level I**

**Credit: 1 unit**

In level II, students expand their knowledge of vocabulary and grammar and increase their fluency in the language.

### **IB FOREIGN LANGUAGE III**

**Grade Level: 10, 11, 12**

**Prerequisite: Enrollment in the IB Academy and Completion of levels I and II** **Credit: 1 unit**

Level III increases integration of the four language skills with emphasis on oral proficiency, written composition, and reading in preparation for the IB Language B examination.

### **IB FOREIGN LANGUAGE IV**

**Grade Level: 10, 11, 12**

**Prerequisite: Enrollment in the IB Academy and Completion of level III** **Credit: 1 unit**

Level IV expands student knowledge of diction, syntax, writing skills and oral proficiency. Students do advanced studies in literature and culture in preparation of the IB Language B examination.

### **IB FOREIGN LANGUAGE V**

**Grade Level: 11, 12**

**Prerequisite: Enrollment in the IB Academy, completion of Level IV** **Credit: 1 unit**

Students at this level demonstrate advanced use of language skills as the course is taught by stressing literature, history and culture. The College Board Advanced Placement Test and IB curriculum outline form the basis of study for this course and prepare the student for the IB Foreign Language B examination.

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## IB LANGUAGE ACQUISITION ab initio (Spanish, Mandarin)

Language Acquisition ab initio is designed to provide students with the necessary skills and intercultural understanding in order to communicate successfully in an environment where the language studied is spoken. Language ab initio students develop their receptive, productive, and interactive skills while learning to communicate in the target language in familiar and unfamiliar contexts. Students develop the ability to communicate through the study of language, themes, and texts.

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## IB LANGUAGE ACQUISITION ab initio (Spanish, Mandarin)

**Prerequisites:** Level I, Level II of chosen language.

There are five prescribed themes: identities, experiences, human ingenuity, social organization and sharing the planet.

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## Mathematics

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### IB MATHEMATICS (SL)

**Grade Level:** 11, 12

**Prerequisite:** Enrollment in the IB Academy, B or better in Precalculus, or IB Math Studies (SL) **Credit:** 2 units  
**Requires Enrollment in AP Calculus to complete the units in a second semester.**

The aim of Mathematical Methods is to provide students who will continue to study mathematics at university with a background of mathematical thought and a reasonable level of technical ability. The course will require two semesters to complete since the course encompasses Calculus as well as other topics. Both semesters are to be scheduled in the same year. Course topics include logarithms; sequences and series; linear and quadratic functions and equations; the binomial theorem; arcs and sectors; trigonometry; calculus, vectors and matrices; and probability and statistics.

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### IB MATH STUDIES (SL)

**Grade Level:** 11, 12

**Prerequisite:** Enrollment in the IB Academy, B or better in Pre- IB Algebra II Honors **Credit:** 2 units

Designed for students of varied backgrounds and abilities who wish to major in an area that does not require significant involvement with mathematics. The course will develop the skills needed to cope with the mathematical demands of a technological society with an emphasis on the application of mathematics to real-life, everyday situations. Course topics include linear, quadratic, and exponential functions; approximations and error; algorithms; probability and statistics; sets and logic; simple sequences and finance; linear programming; vectors, matrices; and trigonometry. A personal research project involving the collection, analysis, and evaluation of data is a requirement of the course.

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### IB DP MATHEMATICS: APPLICATIONS AND INTERPRETATIONS SL

**Prerequisite:** Math III Honors and/or Pre-calculus

The IB DP Mathematics: Applications and Interpretation course recognizes the increasing role that mathematics and technology play in a diverse range of fields in a data-rich world. As such, it emphasizes the meaning of mathematics in context by focusing on topics that are often used as applications or in mathematical modelling. To give this understanding a firm base, this course includes topics that are traditionally part of a pre-university mathematics course such as calculus and statistics. Students are encouraged to solve real-world problems, construct, and communicate this mathematically and interpret the conclusions or generalizations. Students should expect to develop strong technology skills and will be intellectually equipped to appreciate the links between the theoretical and the practical concepts in mathematics.

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## Miscellaneous

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### CAS

**Grade Level:** 11, 12

**Prerequisite:** Enrollment in the IB Academy **Credit:** 0 unit

This course fulfills the requirement of Creativity, Action, and Service (CAS) for the IB diploma. Students must complete 150 hours divided equally among these three areas. This requirement begins the summer after the sophomore year and is noted on the transcript upon completion of the requirement in the senior year.

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### COMPUTER SCIENCE SL

**Prerequisites:** Math III

The IB DP Computer science SL course requires an understanding of the fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate. The course, underpinned by conceptual thinking, draws on a wide spectrum of knowledge, and enables and empowers innovation, exploration, and the acquisition of further knowledge. Students study how computer science interacts with and influences cultures, society and how individuals and societies behave, and the ethical issues involved. During the course, the student will develop computational solutions.

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### CREATIVITY, ACTIVITY, SERVICE (CAS)

Creativity, Activity, Service (CAS) is at the heart of the DP. With its holistic approach, CAS is designed to strengthen and extend students' personal and interpersonal. CAS is organized around the three strands of creativity, activity, Av and service. A CAS experience is a specific event in which the student engages with one or more of the three CAS strands. It can be a single event or an extended series of events. A CAS project is a collaborative series of sequential CAS experiences lasting at least one month. Typically, a student's CAS program combines planned/unplanned singular and ongoing experiences. All are valuable and may lead to personal development. However, a meaningful CAS program must be more than just a series of unplanned/singular experiences. Students must be involved in at least one CAS project during the program. *This component is a requirement for all IB students.*

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### IB DANCE SL

**Prerequisites:** Intermediate/Advanced Dance

The IB DP Dance course takes a holistic approach to dance and embraces a variety of dance traditions and dance cultures from the past, the present and looking towards the future. Performance, creative and analytical skills are mutually developed and valued whether the students are writing papers or creating/performing dances. The curriculum provides students with a liberal arts orientation to dance. This orientation facilitates the development of students who may become choreographers, dance scholars, performers, or those, more broadly, who seek life enrichment through dance.

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### IB EXTENDED ESSAY

**Grade Level:** 11, 12

**Prerequisite:** Enrollment in the IB Academy

The Extended Essay is a compulsory, externally assessed piece of independent research into a topic chosen by the student and presented as a formal piece of academic writing. The extended essay is intended to promote high-level research and writing skills, intellectual discovery and creativity while engaging students in personal research. This leads to a major piece of formally presented, structured writing of up to 4,000 words in which ideas and findings are communicated in a reasoned, coherent, and appropriate manner. Students are guided through the process of research and writing by an assigned supervisor (a teacher in the school). All students undertake three mandatory reflection sessions with their supervisor, including a short interview, or viva voce, following the completion of the extended essay.



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## IB MUSIC SL

**Prerequisites:** Intermediate/Advance Vocal Music

The IB DP Music course has been designed to prepare the 21st century music student for a world in which global musical cultures and industries are rapidly changing. The course is grounded in the knowledge, skills and processes associated with the study of music and offers a strengthened approach to student creativity through practical, informed, and purposeful explorations of diverse musical forms, practices and contexts. The course also ensures a holistic approach to learning, with the roles of performer, creator and researcher afforded equal importance in all course components.

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## IB THEORY OF KNOWLEDGE (TOK) (SL)

**Grade Level:** 11

**Prerequisite:** Enrollment in the IB Academy

**Credit:** 1 unit

The IB Theory of Knowledge (TOK) course plays a special role in the DP by providing an opportunity for students to reflect on the nature, scope and limitations of knowledge and the process of knowing. In this way, the main focus of TOK is not on students acquiring new knowledge but on helping students to reflect on, and put into perspective, what they already know. TOK underpins and helps to unite the subjects that students encounter in the rest of their DP studies. It engages students in explicit reflection on how knowledge is arrived at in different disciplines and areas of knowledge, on what these areas have in common and the differences between them. *This course is required for all IB students.*

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## IB VISUAL ARTS SL

**Prerequisites:** Intermediate/Advanced Visual Arts

The IB DP Visual Arts course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media. The course is designed for students who want to go on to study visual arts in higher education as well as for those who are seeking lifelong enrichment through visual arts.

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## INFORMATION TECHNOLOGY IN A GLOBAL SOCIETY (ITGS) (SL)

**Grade Level:** 11, 12

**Prerequisite:** Be enrolled in the IB Academy, Microsoft Word, Excel & Publisher; Microsoft Excel & Access; Multimedia & Webpage Design

**Credit:** 1 unit

The main focus of ITGS course of study is to consider how two aspects, the social significance of Information Technology (IT) and the ethical considerations arising from IT, influence individuals, communities (including nations), institutions and organizations. ITGS is a standard level course that aims to prepare students to meet the following challenges:

1. Understanding the uses of Information Systems
2. Evaluating the consequences of those technologies on society
3. Determining, evaluating and discussing the social significance of these technologies
4. Discussing ethical considerations that arise from using information technologies.
5. Predicting the changes most likely to emerge in the future.

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## SPORTS, EXERCISE AND HEALTH SCIENCE SL

**Prerequisites:** Math III Honors, Anatomy Honors

Sports, exercise, and health science (SEHS) is an experimental science course combining academic study with practical and investigative skills. SEHS explores the science underpinning physical performance and provides the opportunity to apply these principles. The course incorporates the disciplines of anatomy and physiology, biomechanics, psychology, and nutrition. Students cover a range of core and option topics and carry out practical (experimental) investigations in both laboratory and field settings. The course offers a deeper understanding of the issues related to sports, exercise and health in the 21st century and addresses the international dimension and ethics related to both the individual and global context. Apart from being worthy of study in its own right, SEHS is good preparation for courses in higher or further education related to sports fitness and health and serves as useful preparation for employment in sports and leisure industries.

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## Science

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### IB BIOLOGY (HL)

**Grade Level:** 11, 12

**Prerequisites:** Biology Honors, Anatomy Honors (recommended)

This course will provide an in-depth study of biological principles. Advanced topics will include biochemistry, genetic concepts and applications, ecological diversity, human health and physiology, neurobiology and behavior, evolution, cellular mechanics, and classification and diversity. Advanced laboratory investigations will constitute a major portion of the course. All students will participate in a required interdisciplinary science research project.

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### IB ENVIRONMENTAL SCIENCE (SL)

**Grade Level:** 11, 12

**Prerequisite:** Enrollment in the IB Academy Biology and Chemistry

**Credit:** 1 unit

IB Environmental Science is a rigorous course that examines the fundamental structure and functioning of natural systems and the broad impacts of human activities, with a balance of local and global material. Emphasis is placed on lab and fieldwork. Students will evaluate scientific, political, and ethical aspects of environmental issues.

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## Social Studies

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### PRE-IB WORLD HUMANITIES

**Grade Level:** 10

**Prerequisite:** Concurrent enrollment in Pre-IB English II **Credit:** 1 unit

This is an interdisciplinary curriculum that incorporates knowledge, skills and processes from literature, the social studies, and the English performance standards. Students who successfully complete this course satisfy the 10th grade World History requirement.

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### IB PSYCHOLOGY (SL)

**Grade Level:** 11, 12

**Prerequisite:** Enrollment in the IB Academy

**Credit:** 1 unit

This course will introduce the learner to the scientific study of human behavior. The student will be allowed to explore human behavior from the behavioral, humanistic, biological, and phenomenological perspectives. Through hands on activities and internal assessments, the learner will have a better understanding of the psychological make-up of human beings.

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## IB HISTORY OF THE AMERICAS

Grade Level: 11

Prerequisite: Enrollment in IB Academy, Pre-IB World Humanities

Credit: 1 unit

IB History of the Americas 1 is a study of the Americas with focus on United States, Mexico, and Canada from colonialism through 1900.

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## IB 20th CENTURY WORLD TOPICS

Grade Level: 12

Prerequisite: Enrollment in IB Academy, Pre-IB World Humanities, IB History of the Americas

Credit: 1 unit

IB History of the Americas 2 is a study of the Americas with focus on United States, Mexico, and Canada from 1900 through today.

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## IB HISTORY HL

Prerequisites: American History: Found. Prin., Civics, & Econ Honors, Economics & Personal Finance

The DP History course is based on a comparative and multi-perspective approach to world history. It involves the study of a variety of types of history, including political, economic, social and cultural, and provides a balance of structure and flexibility. The course encourages students to think historically in addition to gaining factual knowledge. It puts a premium on developing the skills of critical thinking, and on developing an understanding of multiple interpretations of history. In this way, the course involves a challenging and demanding critical exploration of the past. Empathizing the use of thinking and research skills such as comprehension, text analysis, and use of primary sources. There are six key concepts that have particular prominence throughout the DP history course: change, continuity, causation, consequence, significance, and perspectives.

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## IB PSYCHOLOGY SL

Prerequisites: Psychology Honors

At the core of the DP Psychology course is an introduction to the biological, cognitive and sociocultural approaches to understanding behavior. Students study and critically evaluate the knowledge, concepts, theories, and research that have developed the understanding in these fields. The interaction of these approaches to studying psychology forms the basis of a holistic and integrated approach to understanding mental processes and behavior as a complex, dynamic phenomenon, allowing students to appreciate the diversity as well as the commonality between their own behavior and that of others. The contribution and the interaction of the three approaches is understood through the four options of applied psychology: abnormal psychology, developmental psychology, health psychology, and the psychology of relationships. The options provide an opportunity to take what is learned from the study of the approaches to psychology and apply it to specific lines of inquiry.

## FTCC/High School Connections

Not all college courses may be listed. The complete FTCC course catalogue may be found using the link:

[FTCC Course Descriptions](#)

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## ACA 122 COLLEGE TRANSFER SUCCESS

H.S. unit: N/A

This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college policies and 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.

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## ACC 120 PRINCIPLES OF FINANCIAL ACCOUNTING

H.S. unit: 1

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.

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## ACC 121 PRINCIPLES OF MANAGERIAL ACCOUNTING

Prerequisite: ACC 120 Principles of Financial Accounting H.S. unit: 1

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.

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## AHR 110 INTRO TO REFRIGERATION

H.S. units: 2

This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components; refrigeration cycle; and tools and instrumentation used in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instrumentation of the trade.

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## AHR 112 HEATING TECHNOLOGY

Prerequisite: AHR 110 Intro to Refrigeration

H.S. unit: 1

This course covers the fundamentals of heating including oil, gas, and electric heating systems. Topics include safety, tools and instrumentation, system operating characteristics, installation techniques, efficiency testing, electrical power, and control systems. Upon completion, students should be able to explain the basic oil, gas, and electrical heating systems and describe the major components of a heating system.

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## AHR 113 COMFORT COOLING

H.S. unit: 1

This course covers the installation procedures, system operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to use psychometrics, manufacturer specifications, and test instruments to determine proper system operation.

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## AHR 114 HEAT PUMP TECHNOLOGY

Prerequisites: AHR 110 Intro to Refrigeration and AHR 113 Comfort

Cooling

H.S. unit: 1

This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures.

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## ARC 111 INTRO TO ARCHITECTURAL TECHNOLOGY

H.S. unit: 1

This course introduces basic architectural drafting techniques, lettering, use of architectural and engineer scales, and sketching. Topics include orthographic, axonometric, and oblique drawing techniques using architectural plans, elevations, sections, and details; reprographic techniques; and other related topics. Upon completion, students should be able to prepare and print scaled drawings within minimum architectural standards.

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## ARC 112 CONSTRUCTION MATERIALS & METHODS

H.S. unit: 1

This course introduces construction materials and their methodologies. Topics include construction terminology, materials and their properties, manufacturing processes, construction techniques, and other related topics. Upon completion, students should be able to detail construction assemblies and identify construction materials and properties.

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## ARC 114 ARCHITECTURAL CAD

H.S. unit: N/A

This course introduces basic architectural CAD techniques. Topics include basic commands and system hardware and software. Upon completion, students should be able to prepare and plot architectural drawings to scale within accepted architectural standards.

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## ART 114 ART HISTORY SURVEY I

H.S. unit: 1

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 and historical understanding of art as a product reflective of human social development.

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## ART 131 DRAWING I

H.S. unit: 1

This course introduces the language of drawing and the use of various drawing materials. Emphasis is placed on drawing techniques, media, and graphic principles. Upon completion, students should be able to demonstrate competence in the use of graphic form and various drawing processes.

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## ASL 111 American Sign Language I

H.S. unit 1

This course introduces the fundamental elements of American Sign Language within a cultural context. Emphasis is placed on the development of basic expressive and receptive skills. Upon completion, students will be able to comprehend and respond with grammatical accuracy to expressive American Sign Language and demonstrate cultural awareness.

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## ASL 112 American Sign Language II

Prerequisite: ASL 111 American Sign Language I

H. S. unit 1

This course is a continuation of ASL 111 focusing on the fundamental elements of American Sign Language in a cultural context. Emphasis is placed on the progressive development of expressive and receptive skills. Upon completion, the students should be able to comprehend and respond with increasing accuracy to expressive American Sign Language and demonstrate cultural awareness.

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## AUB 111 PAINTING AND REFINISHING

H.S. unit: 1

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 following accepted industry standards.

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## AUB 121 NON-STRUCTURAL DAMAGE I

H.S. unit: 1

This course introduces safety, tools, and the basic fundamentals of body repair. Topics include shop safety, damage analysis, tools and equipment, repair techniques, materials selection, materials usage, and other related topics. Upon completion, students should be able to identify and repair minor direct and indirect damage including removal/repairing/replacing of body panels to accepted standards.

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## AUM 112 EMERGING TRENDS-AUTO IND

H.S. unit: 1

This course will cover emerging trends in the automotive industry. Topics will include an overview of management styles, manufacturing processes, technological advances, and current and future trends affecting the automotive industry. Upon completion, students should be able to discuss and analyze the current and future trends affecting the automotive industry.

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## AUT 141/A SUSPENSION & STEERING AND LAB

H.S. Unit: 1

This course covers principles of operation, types, and diagnosis/repair of suspension and steering systems to include steering geometry. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

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## AUT 151/A BRAKE SYSTEMS AND LAB

H.S. unit: 1

This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

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## BIO 111 GENERAL BIOLOGY I

H.S. unit: 1

This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, molecular and cellular biology, metabolism and energy transformation, genetics, evolution, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels.

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## BIO 168 ANATOMY & PHYSIOLOGY I

H.S. unit: 1

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, and nervous systems and special senses. Upon completion, students should be able to demonstrate and in-depth understanding of principles of anatomy and physiology and their interrelationships.

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## BIO 169 ANATOMY & PHYSIOLOGY II

Prerequisite: BIO 168 Anatomy & Physiology I

H.S. unit: 1

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships.

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## BPR 130 BLUEPRINT READING

H.S. unit: 1

This course covers the interpretation of blueprints and specifications that are associated with the construction trades. Emphasis is placed on interpretation of details for foundations, floor plans, elevations, and schedules. Upon completion, students should be able to read and interpret a set of construction blueprints.

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## BUS 110 INTRODUCTION TO BUSINESS

H.S. unit: 1

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 to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.

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## BUS 115 BUSINESS LAW I

H.S. unit: 1

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 to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).

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## BUS 137 PRINCIPLES OF MANAGEMENT

H.S. unit: 1

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 to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

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## CAR 111/AA & CAR 111/BB CARPENTRY I

H.S. units: 2

This course introduces the theory and construction methods associated with the building industry, including framing, materials, tools, and equipment. Topics include safety, hand/power tool use, site preparation, measurement and layout, footings, and foundations, construction framing, and other related topics. Upon completion, students should be able to safely lay out and perform basic framing skills with supervision.

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## CCT 250 NETWORK VULNERABILITIES I

H.S. unit: 1

This course introduces students to penetration testing, network vulnerabilities, and hacking. Topics include an overview of traditional network security, system hardening, and known weaknesses. Upon completion, students should be able to evaluate weaknesses of traditional and wireless network for the purpose of incident response, reconstruction, and forensic investigation.

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## CEG 111 INTRO TO GIS AND GNSS

H.S. unit: 1

This course introduces the methods and techniques used in the Geographic Information Systems (GIS) and Global Navigation Satellite Systems (GNSS) professions. Emphasis is placed on data collection and mapping using GIS software. Upon completion, students should be able to use GNSS technologies to collect field data and create GIS maps.

---

## CEG 151 CAD FOR ENGINEERING TECHNOLOGY

H.S. unit: 1

This course introduces computer-aided drafting (CAD) software. Topics include file and data management, drawing, editing, dimensioning commands, plotting, and related topics. Upon completion, students should be able to create and plot basic drawings and maps using CAD software.

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## CHM 151 GENERAL CHEMISTRY I

Prerequisite: MAT 171 Precalculus Algebra

H.S. unit: 1

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.

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## CHM 152 GENERAL CHEMISTRY II

Prerequisite: CHM 151 General Chemistry

H.S. unit: 1

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 and understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields.

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## CIS 110 INTRODUCTION TO COMPUTERS

H.S. unit: 1

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.

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## CIS 115 INTRO TO PROGRAMMING & LOGIC

H.S. unit: 1

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.

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## CJC 111 INTRODUCTION TO CRIMINAL JUSTICE

H.S. unit: 1

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.

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## CJC 115 INVESTIGATIVE PHOTOGRAPHY

H.S. Unit: 1

This course covers the operation of various photographic equipment and its application to criminal justice. Topics include using various cameras, proper exposure of film, developing film/prints, and preparing photographic evidence. Upon completion, students should be able to demonstrate and explain the role of photography and proper film exposure and development techniques.

---

## CJC 120 INTERVIEWS/INTERROGATIONS

H.S. unit: N/A

This course covers basic and special techniques employed in criminal justice interviews and interrogations. Emphasis is placed on the interview/interrogation process, including interpretation of verbal and physical behavior and legal perspectives. Upon completion, students should be able to conduct interviews/interrogations in a legal, efficient, and professional manner and obtain the truth from suspects, witnesses, and victims.

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## CJC 131 CRIMINAL LAW

H.S. Unit: 1

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

H.S. unit: 1

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.

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## CJC 151 INTRO TO LOSS PREVENTION

H.S. unit: 1

This course introduces the concepts and methods related to commercial and private security systems. Topics include the historical, philosophical, and legal basis of security, with emphasis on security surveys, risk analysis, and associated functions. Upon completion, students should be able to demonstrate and understand security systems, risk management, and the laws relative to loss prevention.

---

## CJC 221 INVESTIGATIVE PRINCIPLES

H.S. unit: 1

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

H.S. unit: 1

This 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.

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## CJC 260 THREAT ASSESSMENT

H.S. unit: N/A

This course prepares students to perform extensive security audits for private corporations and for local and state government, identifying weaknesses in their overall security programs. Emphasis will be placed on risk analysis studies that examine the methods, procedures, and systems for security gaps and vulnerabilities. Upon completion, students should be able to evaluate all facets of a protective program from corporate disaster response planning to security teams guarding local/state officials.

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## CJC 262 HIGH-RISK EVENT PLANNING

H.S. unit: N/A

This course introduces students to the principles of high-risk executive protection and the planning associated with security during visits from government officials and other dignitaries. Emphasis will be placed on conducting advance surveys, residential security, restaurant and banquet security, surveillance detection, and counter surveillance operations. Upon completion, students should be able to demonstrate the ability to write security plans for high-risk events.

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## CMT 120 CODES AND INSPECTIONS

H.S. unit: 1

This course covers building codes and the code inspections process used in the design and construction of residential and commercial buildings. Emphasis is placed on commercial, residential, and accessibility (handicapped) building codes. Upon completion, students should be able to understand the building code inspections process and apply building code principles and requirements to construction projects.

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## COM 231 PUBLIC SPEAKING

H.S. unit: 1

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.

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## COS 121 MANICURE/NAIL TECHNOLOGY I

H.S. units: 2

This course covers techniques of nail technology, hand and arm massage, and recognition of nail diseases and disorders. Topics include OSHA/safety, sanitation, bacteriology, product knowledge, salesmanship, manicures, artificial applications, pedicures, massage, and other related topics. Upon completion, students should be able to perform nail care, including manicures, pedicures, massage, decorating, and artificial applications safely and competently in a salon setting.

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## COS 222 MANICURE/NAIL TECHNOLOGY II

Prerequisite: COS 121 Manicure/Nail Technology I H.S. units: 2

This course covers advanced techniques of nail technology and hand and arm massage. Topics include OSHA/safety, product knowledge, customer service, salesmanship, artificial applications, nail art, and other related topics. Upon completion, students should be able to demonstrate competence necessary for the licensing examination, including advanced nail care, artificial enhancements, and decorations.

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## CSC 118 SWIFT PROGRAMMING I

H.S. unit: 1

This course introduces the development of iOS applications and Apple applications using Swift programming language. Emphasis is placed on syntax, object-oriented principles, memory management, and functional concepts of Swift programming. Upon completion, students should be able to develop fully functional iOS and Apple applications using Swift programming language.

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## CSC 121 PYTHON PROGRAMMING

Prerequisite: CTI 110 H.S. unit: 1

This course introduces computer programming using the Python programming language. Emphasis is placed on common algorithms and programming principles utilizing the standard library distributed with Python. Upon completion, students should be able to design, code, test, and debug Python language programs.

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## CSC 152 SAS

H.S. unit: 1

This course introduces the fundamentals of SAS programming. Emphasis is placed on learning basic SAS commands and statements for solving a variety of data processing applications. Upon completion, students should be able to use SAS data and procedure steps to create SAS data sets, do statistical analysis, and general customized reports.

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## CSC 218 Swift Programming II

H.S. Unit: 1

This course introduces advanced iOS application development using the Swift programming language. Emphasis is placed on navigation, data manipulation, web services, prototyping, debugging, and project planning. Upon completion, students should be able to develop advanced multi-functional iOS and Apple applications using the Swift programming language.

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## CSC 221 ADVANCED PYTHON PROGRAMMING

Prerequisite: CSC 121 H.S. unit: 1

This course introduces advanced computer programming using the Python programming language. Emphasis is placed on the advanced programming concepts including advanced algorithms and programming principles utilizing standard and third-party library tools. Upon completion, students should be able to design, code, test, and debug advanced Python language programs.

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## CST 131 OSHA/SAFETY/CERTIFICATION

H.S. unit: 1

This course covers the concepts of work site safety. Topics include OSHA regulations, tool safety, and certifications which relate to the construction industry. Upon completion, students should be able to identify and maintain a safe working environment based on OSHA regulations and maintain proper records and certifications.

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## CTI 110 WEB, PGM, DB FOUNDATION

H.S. unit: 1

This course covers the introduction of the tools and resources available to students in programming, markup language and services on the Internet. Topics include standard markup 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 website with markup tools, and create a simple database table.

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## CTS 120 HARDWARE/SOFTWARE SUPPORT

Prerequisite: CIS 110 Introduction to Computers H.S. unit: 1

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.

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## CTS 220 ADVANCED HARDWARE/SOFTWARE SUPPORT

Prerequisite: CTS 120 Hardware/Software Support H.S. unit: 1

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.

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## CUL 110 SANITATION & SAFETY

H.S. unit: N/A

This course introduces the basic principles of sanitation and safety and their relationship 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 sanitation and safety procedures in the hospitality industry.

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## CUL 140 BASIC CULINARY SKILLS

H.S. units: 2

This course introduces the fundamental concepts, skills, and techniques involved in basic cookery. Emphasis is placed on recipe conversion, measurements, terminology, knife skills, safe food handling, cooking methods, flavorings, seasonings, stocks/sauces/soups, and other related topics. Upon completion, students should be able to exhibit the basic cooking skills used in the food service industry.

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## CUL 160 BAKING I

H.S. units: 1

This course covers basic ingredients, techniques, weights and measures, baking terminology and formula calculations. Topics include yeast/chemically leavened products, laminated doughs, pastry dough batter, pies/tarts, meringue, custard, cakes and cookies, icings, glazes and basic sauces. Upon completion, students should be able to demonstrate proper scaling and measurement techniques and prepare and evaluate a variety of bakery products.

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## CUL 170 GARDE-MANAGER I

Prerequisite: CUL 110 Sanitation & Safety

H.S. unit: 1

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 lay out a basic cold food display and exhibit an understanding of the cold kitchen and its related terminology.

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## DBA 120 DATABASE PROGRAMMING I

Prerequisite: DBA 110

H.S. unit: 1

This course is designed to develop SQL programming proficiency. Emphasis is placed on data definition, data manipulation, and data control statements as well as on report generation. Upon completion, students should be able to write programs which create, update, and produce reports.

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## DBA 224 SAS DB PROGRAMMING II

Prerequisite: DBA 120

H.S. unit: 1

This course is designed to enhance programming skills developed in DBA 120. Topics include application development with GUI front-ends and embedded programming. Upon completion, students should be able to develop a SAS DBMS application which includes a GUI front-end and report generation.

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## DFT 170 ENGINEERING GRAPHICS

H.S. unit: 1

This course introduces basic engineering graphics skills and applications. Topics include sketching, selection and use of current methods and tools, and the use of engineering graphics applications. Upon completion, students should be able to demonstrate an understanding of basic engineering graphics principles and practices.

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## DME 120 INTRO TO MULTIMEDIA APP

H.S. unit: 1

This course introduces storyboarding and multimedia application design. Topics include vector and bit-mapped graphics, interactive multimedia interfaces, layering techniques, image and animation libraries, and scripting. Upon completion, students should be able to produce basic high-quality interactive multimedia applications.

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## DME 140 INTRO TO AUDIO/VIDEO MEDIA

H.S. unit: 1

This course is designed to teach students how to manipulate digital and audio content for multimedia applications. Topics include format conversion and a review of current technologies and digital formats. Upon completion, students should be able to modify existing audio and video content to meet a range of production requirements associated with digital media applications.

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## ECO 251 PRINCIPLES OF MICROECONOMICS

H.S. unit: 1

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.

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## EDU 119 INTRO TO EARLY CHILDHOOD

H.S. unit: 1

This course covers the foundations of the education profession, types of programs, professionalism, and planning quality programs for children. Topics include historical foundations, career options, types of programs, professionalism, observational skills, and planning developmentally appropriate schedules, environments, and activities for children. Upon completion, students should be able to demonstrate observational skills, identify appropriate schedules and environments, develop activity plans, and describe influences on the profession. This course is also available through the Virtual Learning Community (VLC).

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## EDU 131 CHILD, FAMILY & COMMUNICATIONS

H.S. unit: 1

This course covers the development of partnerships between families, inclusive programs for children/schools that serve young children with and without disabilities, and the community. Emphasis is placed on requisite skills and benefits for successfully establishing, supporting, and maintaining respectful collaborative relationships between today's diverse families, centers/schools, and community resources. Upon completion, students should be able to describe appropriate relationships with parents/caretakers, enter/school colleagues, and community agencies that enhance the educational experiences/wellbeing of all children. This course is also available through the Virtual Learning Community (VLC).

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## EDU 145 CHILD DEVELOPMENT II

H.S. unit: 1

This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from preschool through middle childhood. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse.

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## EDU 146 CHILD GUIDANCE

H.S. unit: 1

This course introduces evidence-based strategies to build nurturing relationships with each child by applying principles and practical techniques to facilitate developmentally appropriate guidance. Topics include designing responsive/supportive learning environments, cultural, linguistic and socio-economic influences on behavior, appropriate expectations, the importance of communication with children/families including using technology and the use of formative assessments in establishing intentional strategies for children with unique needs. Upon completion, students should be able to demonstrate direct/indirect strategies to encourage social skills, self-regulation, emotional expression and positive behaviors while recognizing the relationship between children's social, emotional and cognitive development.

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## EDU 153 HEALTH, SAFETY, & NUTRITION

H.S. unit: 1

This course focuses on promoting and maintaining the health and wellbeing 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, implement safe learning environments, and adhere to state regulations.

---

## EGR 115 INTRODUCTION TO TECHNOLOGY

H.S. unit: 1

This course introduces the basic skills and career fields for technicians. Topics include career options, technical vocabulary, dimensional analysis, measurement systems, engineering graphics, calculator applications, professional ethics, safety practices, and other related topics. Upon completion, students should be able to demonstrate an understanding of the basic technologies, prepare drawings and sketches, and perform computations using a scientific calculator.

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## EGR 150 INTRO TO ENGINEERING

H.S. unit: N/A

This course is an overview of the engineering profession. Topics include goal setting and career assessment, ethics, public safety, the engineering method and design process, written and oral communication, interpersonal skills and team building, and computer applications. Upon completion, students should be able to understand the engineering process, the engineering profession, and utilize college resources to meet their educational goals.

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## ELC 112 DC/AC ELECTRICITY

H.S. units: 2

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.

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## ELC 117 MOTORS AND CONTROLS

H.S. unit: 1

This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contactors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits.

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## ELC 118 NATIONAL ELECTRICAL CODE

H.S. unit: N/A

This course covers the use of the current National Electrical Code. Topics include the NEC history, wiring methods, overcurrent protection, materials, and other related topics. Upon completion, students should be able to effectively use the NEC.

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## ELC 128 INTRO TO PLC

H.S. unit: 1

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 understand basic PLC systems and create simple programs.

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## ELC 131 CIRCUIT ANALYSIS I/CIRCUIT ANALYSIS LAB LAB COREQUISITE: ELC 131/ELC 131A LAB

H.S. unit: 1

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. Laboratory assignments are 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.

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## ELC 220 PHOTOVOLTAIC SYSTEMS TECHNOLOGY

H.S. unit: 1

This course introduces the concepts, tools, techniques, and materials needed to understand systems that convert solar energy into electricity with photovoltaic (PV) technologies. Topics include site analysis for system integration, building codes, and advances in photovoltaic technology. Upon completion, students should be able to demonstrate an understanding of the principles of photovoltaic technology and current applications.

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## ELC 221 ADVANCED PHOTOVOLTAIC SYSTEMS DESIGN

Prerequisite: ELC 220 Photovoltaic Systems Technology H.S. unit: 1

This course introduces specific elements in Photovoltaic (PV) systems technologies including efficiency, modules, inverters, charge controllers, batteries, and system installation. Topics include National Electrical Code (NEC), electrical specifications, photovoltaic system components, array design and power integration requirements that combine to form a unified structure. Upon completion, students should be able to demonstrate an understanding of various photovoltaic designs and proper installation of NEC compliant solar electric power systems.

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## ELC 229 APPLICATIONS PROJECT

H.S. unit: N/A

This course provides an individual and/or integrated team approach to a practical project as approved by the instructor. Topics include project selection and planning, implementation and testing, and a final presentation. Upon completion, students should be able to plan and implement an applications-oriented project.

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## ELN 131 ANALOG ELECTRONICS I

Prerequisite: ELC 131

H.S. unit: 1

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.

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## ELN 133 DIGITAL ELECTRONICS

Prerequisite: ELC 131

H.S. unit: 1

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.



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## ENG 111 WRITING & INQUIRY

H.S. unit: 1

This course is designed to develop the ability to produce clear writing in a variety of genres and formats using a recursive process. Emphasis includes inquiry, analysis, and effective use of rhetorical strategies, thesis development, audience awareness, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English.

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## ENG 112 WRITING/RESEARCH IN THE DISCIPLINES

Prerequisite: ENG 111 Writing & Inquiry

H.S. unit: 1

This course, the second in a series of two, introduces research techniques, documentation styles, and writing strategies. Emphasis is placed on analyzing information and ideas and incorporating research findings into documented writing and research projects. Upon completion, students should be able to evaluate and synthesize information from primary and secondary sources using documentation appropriate to various disciplines.

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## EPT 120 SOCIOLOGY OF DISASTER

H.S. unit: 1

This course is designed to overview sociological disaster research, disaster systems, and alternative research approaches. Topics include human and organizational behaviors, long disaster impact on communities, disaster warning, and evacuation considerations. Upon completion, students should be able to assess and predict the impact of disaster-related human behavior.

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## EPT 130 MITIGATION & PREPAREDNESS

H.S. unit: 1

This course introduces the mitigation and preparation techniques and methods necessary to minimize the impact of natural, technological, and man-made disasters. Topics include hazard identification and mapping, design and construction applications, financial incentives, insurance, structural controls, preparation, planning, assessment, implementation, and exercises. Upon completion students should be able to develop a mitigation and preparedness plan.

---

## EPT 210 RESPONSE & RECOVERY

H.S. unit: 1

This course introduces the basic concepts, operational procedures, and authorities involved in response and recovery efforts to major disasters. Topics include federal, state, and local roles and responsibilities in major disaster, response, and recovery work, with an emphasis on governmental coordination. Upon completion, students should be able to implement a disaster response plan and assess the needs of those involved in a major disaster.

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## EPT 220 TERRORISM AND EMER. MGMT.

H.S. unit: 1

This course covers preparing for, responding to, and safely mitigating terrorism incidents. Topics include the history of terrorism, scene hazards, evidence preservation, risk assessment, roles and responsibilities, explosive recognition, and terrorism planning. Upon completion, students should be able to recognize the threat of terrorism and operate within the emergency management framework at a terrorism incident.

---

## FIP 120 INTRODUCTION TO FIRE PROTECTION

H.S. unit: 1

This course provides an overview of the development, methods, systems and regulations that apply to the fire protection field. Topics include history, evolution, statistics, suppression, organizations, careers, curriculum, and related subjects. Upon completion, students should be able to demonstrate a broad understanding of the fire protection field.

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## FIP 124 FIRE PREVENTION & PUBLIC ED

H.S. unit: 1

This course introduces fire prevention concepts as they relate to community and industrial operations referenced in NFPA standard 101. Topics include the development and maintenance of fire prevention programs, educational programs, and inspection programs. Upon completion, students should be able to research, develop, and present a fire safety program to a citizens or industrial group.

---

## FIP 132 BUILDING CONSTRUCTION

H.S. unit: 1

This course covers the principles and practices referenced in NFPA standard 220 related to various types of building construction, including residential and commercial, as impacted by fire conditions. Topics include types of construction and related elements, fire resistive aspects of construction materials, building codes, collapse, and other related topics. Upon completion, student should be able to understand and recognize various types of construction and their positive or negative aspects as related to fire conditions.

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## FIP 220 FIREFIGHTING STRATEGIES

H.S. unit: 1

This course provides preparation for command of initial incident operations involving emergencies within both the public and private sector referenced in NFPA standards 1561, 1710, and 1720. Topics include incident management, fire-ground tactics and strategies, incident safety, and command/control of emergency operations. Upon completion, students should be able to describe the initial incident system as it relates to operations involving various emergencies in fire and non-fire situations.

---

## FRE 111 ELEMENTARY FRENCH I

H.S. unit: 1

This course introduces the fundamental elements of the French 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 French and demonstrate cultural awareness.

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## FRE 112 ELEMENTARY FRENCH II

Prerequisite: FRE 111 Elementary French I

H.S. unit: 1

This course is a continuation of FRE 111 focusing on the fundamental elements of the French 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 French and demonstrate further cultural awareness.

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## GRD 121 DRAWING FUNDAMENTALS I

H.S. unit: N/A

This course increases observation skills using basic drawing techniques and media in graphic design. Emphasis is placed on developing the use of graphic design principles, media applications, spatial considerations, drawing styles, and approaches. Upon completion, students should be able to show competence and proficiency in finished works.

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## GRD 131 ILLUSTRATION I

Prerequisites: ART 131, DES 25, or GRD 121

H.S. unit: N/A

This course introduces the application of rendering techniques to create illustrations. Emphasis is placed on controlling various media, methods, surfaces, design problems, and the appropriate media selection process. Upon completion, students should be able to produce quality illustrations from conception through finished artwork.

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## GRD 132 ILLUSTRATION II

Prerequisites: GRD 131

H.S. unit: N/A

This course is a continuation of GRD 131. Topics include editorial, product, fashion, and advertising illustrations. Upon completion, students should be able to demonstrate increased proficiency in creating quality illustrations from conceptualization through finished artwork.

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## GRD 141 GRAPHIC DESIGN I

H.S. unit: 1

This course introduces the conceptualization process used in visual problem solving. Emphasis is placed on learning the principles of design and on the manipulation and organization of elements. Upon completion, students should be able to apply design principles and visual elements to projects.

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## GRD 151 COMPUTER DESIGN BASICS

H.S. unit: 1

This course covers designing and drawing with various types of software applications for advertising and graphic design. Emphasis is placed on creative and imaginative use of space, shapes, value, texture, color, and typography to provide effective solutions to advertising and graphic design problems. Upon completion, students should be able to use the computer as a creative tool.

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## GRD 152 COMPUTER DESIGN TECH I

Prerequisite: GRD 151 Computer Design Basics

H.S. unit: 1

This course covers complex design problems utilizing various design and drawing software applications. Topics include the expressive use of typography, image, and organization to communicate a message. Upon completion, students should be able to use appropriate computer software to professionally present their work.

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## HFS 110 EXERCISE SCIENCE

H.S. unit: 1

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.

---

## HFS 111 FITNESS & EXERCISE TESTING I

H.S. unit: 1

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.

---

## HIS 131 AMERICAN HISTORY I

H.S. unit: 1

This course is a survey of American history from prehistory 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.

---

## HIS 132 AMERICAN HISTORY II

H.S. unit: 1

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.

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## HOR 134 GREENHOUSE OPERATIONS

H.S. unit: 1

This course covers the principles and procedures involved in the operation and maintenance of greenhouse facilities. Emphasis is placed on the operation of greenhouse systems, including the environmental control, record keeping, scheduling, and production practices. Upon completion, students should be able to demonstrate the ability to operate greenhouse systems and facilities to produce greenhouse crops.

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## HOR 162 APPLIED PLANT SCIENCE

H.S. unit: 1

This course introduces the basic concepts of botany as they apply to horticulture. Topics include nomenclature, physiology, morphology, and anatomy as they apply to plant culture. Upon completion, students should be able to apply the basic principles of botany to horticulture.

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## HOR 168 PLANT PROPAGATION

H.S. unit: 1

This course is a study of sexual and asexual reproduction of plants. Emphasis is placed on seed propagation, grafting, stem and root propagation, micro-propagation, and other propagation techniques. Upon completion, students should be able to successfully propagate ornamental plants.

---

## LOG 110 INTRODUCTION TO LOGISTICS

H.S. unit: 1

This course provides an overview of logistics. Topics include traffic management, warehousing, inventory control, material handling, global logistics, and the movement and storage of goods from raw materials sources to end consumers. Upon completion, students should be able to identify the different segments of logistics and use the terminology of the industry.

---

## LOG 125 TRANSPORTATION LOGISTICS

Prerequisite: LOG 110 Introduction to Logistics

H.S. unit: 1

This course covers the role and importance of the transportation industry. This is an overview of transportation emphasizing its environmental and sociological aspects, economic impact, services, regulatory guidelines, policies, and its future. Upon completion, students should be able to identify modes of transportation, interpret governing regulations, and describe the principles and terminology used in the transportation industry.

---

## LOG 211 DISTRIBUTION MANAGEMENT

Prerequisite: LOG 110 Introduction to Logistics

H.S. unit: 1

This course covers the functions, techniques, and tools utilized in warehousing and distribution centers and their role in business and logistics. Emphasis is placed on warehouse and distribution center management, operations, productivity, software systems, picking, automation, cross docking, safety, security, material handling, benchmarking, and cost. Upon completion, students should be able to describe the role of warehouses and distribution centers, apply industry principles and terminology, and understand distribution productivity measures.

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## LOG 215 SUPPLY CHAIN MANAGEMENT

Prerequisite: LOG 110 Introduction to Logistics

H.S. unit: 1

This course covers all activities involved in the flow of products and information between the suppliers, customers, producers, and service providers. Topics include acquiring, purchasing, manufacturing, assembling, and distributing goods and services throughout the supply chain organizations. Upon completion, students should be able to identify the supply chain units, describe the materials management processes, and prepare for the APICS CPIM examination.

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## MAC 111 MACHINING TECHNOLOGY I

H.S. units: 2

This course introduces machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, drilling machines, saws, milling machines, bench grinders, and layout instruments. Upon completion, students should be able to safely perform the basic operations of measuring, layout, drilling, sawing, turning, and milling.

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## MAC 131 BLUEPRINT READING/MACH I

H.S. unit: N/A

This course covers the basic principles of blueprint reading and sketching. Topics include multi-view drawings; interpretation of conventional lines; and dimensions, notes, and thread notations.

Upon completion, students should be able to interpret basic drawings, visualize parts, and make pictorial sketches.

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## MAC 151 MACHINING CALCULATIONS

H.S. unit: N/A

This course introduces basic calculations as they relate to machining occupations. Emphasis is placed on basic calculations and their applications in the machine shop. Upon completion, students should be able to perform basic shop calculations.

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## MAT 152 STATISTICAL METHODS

H.S. unit: 1

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

H.S. unit: 1

This course is designed to develop topics which are fundamental to the study of Calculus. Emphasis is placed on solving equations and inequalities, solving systems of equations and inequalities, and analysis of functions (absolute value, radical, polynomial, rational, exponential, and logarithmic) in multiple representations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to algebra-related problems with and without technology.

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## MAT 172 PRECALCULUS TRIGONOMETRY

Prerequisite: MAT 171 Precalculus Algebra

H.S. unit: 1

This course is designed to develop an understanding of topics which are fundamental to the study of Calculus. Emphasis is placed on the analysis of trigonometric functions in multiple representations, right and oblique triangles, vectors, polar coordinates, conic sections, and parametric equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to trigonometry-related problems with and without technology.

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## MAT 271 CALCULUS I

Prerequisite: MAT 172

H.S. unit: 1

This course is designed to develop the topics of differential and integral calculus. Emphasis is placed on limits, continuity, derivatives and integrals of algebraic and transcendental functions of one variable. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to derivative-related problems with and without technology.

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## MAT 272 CALCULUS II

Prerequisite: MAT 271

H.S. unit: 1

This course is designed to develop advanced topics of differential and integral calculus. Emphasis is placed on the applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to integral-related problems with and without technology.

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## MED 120 SURVEY OF MED TERMINOLOGY

H.S. unit: N/A

This course introduces the vocabulary, abbreviations, and symbols used in the language of medicine. Emphasis is placed on building medical terms using prefixes, suffixes, and word roots. Upon completion, students should be able to pronounce, spell, and define accepted medical terms.

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## MKT 120 PRINCIPLES OF MARKETING

H.S. unit: 1

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.

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## MIT 115 INTRO TO VIDEO CONCEPTS

H.S. unit: 1

This course provides an opportunity to gain a basic level of competence integration of digital and analog video. Emphasis is placed on understanding integration of basic video resources such as AVI, FLI, MPEG, M-JPEG, and digital/analog video. Upon completion, students should be able to use basic video integration techniques and applications for stand-alone personal computers, networks, and integrated room systems.

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## MIT 120 INTRO TO AUDIO CONCEPTS

H.S. unit: 1

This course provides an opportunity to gain a basic level of competence in the integration of digital and analog audio. Emphasis is placed on understanding integration of audio resources such as MIDI, WAV, Real-audio, and Redbook Resources. Upon completion, students should be able to demonstrate familiarity with basic audio integration techniques and applications for stand-alone personal computers, networks, and integrated room systems.

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## MUS 110 MUSIC APPRECIATION

H.S. unit: 1

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.

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## NAS 101 NURSE AIDE I

H.S. unit: 2

This course introduces basic nursing skills required to provide personal care for patients, residents, or clients in a health care 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 a Nurse Aide I with the North Carolina Nurse Aide I Registry. This is a certificate-level course.

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## NAS 102 NURSE AIDE II

Prerequisite: NAS 101 Nurse Aide I

H.S. unit: 2

This course provides training in selected advanced nursing assistant procedures. Emphasis is placed on sterile techniques, respiratory procedures, catheterizations, wound and trachea care, irrigations, and ostomy care. Upon completion, students should be able to demonstrate skills necessary to qualify as a Nurse Aide II with the North Carolina Board of Nursing. This is a certificate-level course.

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## NET 110 NETWORKING CONCEPTS

H.S. unit: 1

This course introduces students to the networking field. Topics include 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. This course is also available through the Virtual Learning Community (VLC).

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## NET 125 NETWORKING BASICS

H.S. unit: 1

This course introduces the architecture, structure, functions, components, and models of the Internet and computer networks. Topics include introduction to the principles of IP addressing and fundamentals of Ethernet concepts, media, and operations. Upon completion, students should be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

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## NET 126 ROUTING BASICS

Prerequisite: NET 125

H.S. unit: 1

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.

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## NOS 110 OPERATING SYSTEMS CONCEPTS

H.S. unit: 1

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.

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## NOS 120 LINUX SINGLE USER

H.S. unit: 1

This course develops the necessary skills for students to develop both GUI and command line skills for using and customizing a Linux workstation. Topics include Linux file system and access permissions, GNOME Interface, VI editor, X Window System expression pattern matching, I/O redirection, network and printing utilities. Upon completion, students should be able to customize and use Linux systems for command line requirements and desktop productivity roles.

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## OST 137 OFFICE APPLICATIONS I

H.S. unit: 1

This course introduces the concepts and functions of software that meets the changing needs of the community. Emphasis is placed on the terminology and use of software through a hands-on approach. Upon completion, students should be able to use software in a business environment.

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## OST 141 MEDICAL TERMS I - MED OFFICE

H.S. unit: 1

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.

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## OST 142 MEDICAL TERMS II - MED OFFICE

Prerequisite: OST 141 Medical Terms I - Medical Office

H.S. unit: 1

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.

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## OST 148 MEDICAL CODING, BILLING & INSURANCE

Prerequisite: OST 141 Medical Terms I – Medical Office H.S. unit: 1

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 the and accurately complete a medical insurance claim. This course is also available through the Virtual Learning Community (VLC).

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## OST 149 MEDICAL LEGAL ISSUES

H.S. unit: 1

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.

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## OST 155 LEGAL TERMINOLOGY

H.S. unit: 1

This course covers the terminology appropriate to the legal profession. Topics include legal research, court systems, litigation, civil and criminal law, probate, real and personal property, contracts and leases, domestic relations, equity, and corporations. Upon completion, students should be able to spell, pronounce, define, and accurately use legal terms.

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## OST 181 OFFICE PROCEDURES

H.S. unit: 1

This course introduces the skills and abilities needed in today's office. Topics include effectively interacting with co-workers and the public, processing simple financial and informational documents, and performing functions typical of today's offices. Upon completion, students should be able to display skills and decision-making abilities essential for functioning in the total office context.

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## OST 247 PROCEDURE CODING

Prerequisites: OST 141 Medical Terms I and OST 148 Medical Coding, Billing & Insurance H.S. unit: 1

This course provides in-depth coverage of procedural coding. Emphasis is placed on CPT and HCPCS coding systems. Upon completion, students should be able to properly code procedures and services performed in a medical facility.

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## OST 263 HEALTHCARE CUSTOMER RELATIONS

Prerequisite: OST 148 Medical Billing and Insurance H.S. unit: 1

This course provides the soft skills necessary for effective communication and maintaining customer satisfaction in healthcare. Emphasis is placed on the importance of positive attitudes, techniques for handling difficult/angry customers, rephrasing blunt communication for better results, and the communication skills required to discuss topics such as insurance and billing issues with the patient and other medical personnel. Upon completion, students should be able to communicate information in a professional manner.

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## PHI 240 INTRODUCTION TO ETHICS

Prerequisite: ENG 111 Writing & Inquiry H.S. unit: 1

This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on moral theories such as consequentialism, deontology, and virtue ethics. Upon completion, students should be able to apply various ethical theories to moral issues such as abortion, capital punishment, poverty, war, terrorism, the treatment of animals, and issues arising from new technologies.

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## PHY 251 GENERAL PHYSICS I

Prerequisite: MAT 271

H.S. unit: 1

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.

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## PHY 252 GENERAL PHYSICS II

Prerequisite: MAT 272 and PHY 251

H.S. unit: 1

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.

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## PLU 110 MODERN PLUMBING

H.S. units: 3

This course introduces the tools, equipment, and materials associated with the plumbing industry. Topics include safety, use and care of tools, recognition and assembly of fittings and pipes, and other related topics. Upon completion, students should be able to safely assemble various pipes and fittings in accordance with state code requirements.

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## PLU 140 INTRO TO PLUMBING CODES

H.S. unit: 1

This course covers plumbing industry codes and regulations. Emphasis is placed on North Carolina regulations and the minimum requirements for plumbing materials and design. Upon completion, students should be able to research and interpret North Carolina plumbing codes.

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## PLU 150 PLUMBING DIAGRAMMS

Prerequisite: PLU 110 Modern Plumbing

H.S. unit: 1

This course introduces sketching diagrams and interpretation of blueprints applicable to the plumbing trades. Emphasis is placed on plumbing plans for domestic and/or commercial buildings. Upon completion, students should be able to sketch plumbing diagrams applicable to the plumbing trades.

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## POL 120 AMERICAN GOVERNMENT

H.S. unit: 1

This course is a study of the origins, development, structure, and functions of American 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 process. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system.

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## PSY 150 GENERAL PSYCHOLOGY

H.S. unit: 1

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.

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## SEC 110 SECURITY CONCEPTS

H.S. unit: 1

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.

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## SGD 111 INTRODUCTION TO SGD

H.S. unit: 1

This course provides students with an introduction to simulation and game development. Topics include setting, storytelling, narrative, character design, interface design, game play, internal economy, care mechanics, game genres, AI, the psychology of game design and professionalism. Upon completion, students should be able to demonstrate knowledge of the major aspects of simulation and game design and development.

---

## SGD 112 SGD DESIGN

H.S. unit: 1

This course introduces the fundamentals of simulation and game design. Topics include industry standards and design elements for simulations and games. Upon completion, students should be able to design simple simulations and/or games.

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## SGD 113 SGD PROGRAMMING

H.S. units: 1

This course introduces the fundamentals of programming languages and tools employed in simulation and game development. Emphasis is placed on programming concepts used to create simulations and games. Upon completion, students should be able to program simple games and/or simulations.

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## SGD 114 3D MODELING

H.S. units: 1

This course introduces the tools required to create three dimensional (3D) models. Emphasis is placed on exploring tools used to create 3D models. Upon completion, students should be able to create and animate 3D models using 3D modeling tools.

---

## SGD 116 GRAPHIC DESIGN TOOLS

H.S. unit: 1

This course introduces students to computer-based graphic design tools and their use within the context of simulation and game design. Topics include texture creation, map creation, and introduction to advanced level graphic design techniques. Upon completion, students should be able to competently use and explain industry- standard graphic design software.

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## SGD 117 ART FOR GAMES

H.S. unit: 1

This course introduces students to the basic principles of art and how they apply to simulations and games. Emphasis is placed on learning to develop industry quality concept art for characters and other assets, as well as techniques needed to create such art. Upon completion, students should be able to create their own industry standard concept art for use in SGD projects.

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## SGD 162 SG 3D ANIMATION

Prerequisite: SGD 114 3D Modeling

H.S. unit: 1

This course introduces the fundamental principles of 3D animation used in simulation and game development. Emphasis is placed on a historical survey of 3D animation, aspects of the 3D animation techniques. Upon completion, students should be able to produce 3D character sketches, morph simple objects, create walk and run cycles and develop professional storyboards.

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## SGD 262 SG 3D ANIMATION II

Prerequisite: SGD 162 3D Animation

H.S. unit: 1

This course is designed to further a student's knowledge of 3D animation used in simulation and game development. Emphasis is placed on advanced character, weapons, vehicles, prop and effects animations for video game design. Upon completion, students should be able to develop industry caliber animations for simulation or video game integration.

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## SOC 210 INTRODUCTION TO SOCIOLOGY

H.S. unit: 1

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.

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## SPA 111 ELEMENTARY SPANISH I

H.S. unit: 1

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.

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## SPA 112 ELEMENTARY SPANISH II

Prerequisite: SPA 111 Elementary Spanish I

H.S. unit: 1

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.

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## SST 140 GREEN BLDG & DESIGN CONCEPTS

H.S. unit: 1

This course is designed to introduce the student to sustainable building design and construction principles and practices. Topics include sustainable building rating systems and certifications, energy efficiency, indoor environmental quality, sustainable building materials and water use. Upon completion, students should be able to identify the principles and practices of sustainable building design and construction.

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## SRV 110 SURVEYING I

Co-requisite: MAT 171 PRECALCULUS ALGEBRA

H.S. unit: 1

This course introduces the theory and practice of plane surveying. Topics include the precise measurement of distances, angles, and elevations; bearing, azimuth and traverse computations; topography and mapping. Upon completion, students should be able to use/care for surveying equipment, collect field survey data, perform traverse computations and create a contour map.

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## STP 101 INTRO TO STERILE PROCESSING

H.S. unit: 2

This course is designed to introduce the primary responsibilities of a central sterile technician. Emphasis is placed on preparation, storage, and distribution of instruments, supplies and equipment, quality assurance, and inventory management. Upon completion, students should be able to demonstrate competence in sterile processing techniques.

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## STP 102 STP CLINICAL PRACTICE

H.S. unit: 1

This course provides supervised experience in sterile processing techniques in a clinical facility. Emphasis is placed on preparation, storage, and distribution of instruments, supplies and equipment, quality assurance, and inventory management. Upon completion, students should be able to demonstrate competence in sterile processing techniques.

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## STP 103 PROF SUCCESS PREP

H.S. unit: N/A

This course provides job-seeking skills and an overview of theoretical knowledge in preparation for certification. Topics include test taking strategies, résumé preparation, and interviewing techniques. Upon completion, students should be able to prepare a résumé, demonstrate appropriate interview techniques, and identify strengths and weaknesses in preparation for certification.

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## TRF 110 INTRO TURFGRASS CULT & ID

H.S. unit: 1

This course provides an in-depth study of turfgrass. Topics include principles of reproduction, growth development, species characteristics, establishment and maintenance of golf courses and sports fields, and lawn applications. Upon completion, students should be able to identify turfgrass species through characteristics and reproductive stages and develop an establishment and maintenance plan for high quality turf areas.

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## TRN 110 INTRO TO TRANSPORT TECH

H.S. unit: N/A

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.

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## TRN 120 BASIC TRANSP ELECTRICITY

H.S. units: 2

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.

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## TRN 170 PC SKILLS FOR TRANSP

H.S. unit: N/A

This course introduces students to personal computer literacy and Internet literacy with an emphasis on the transportation service industry. Topics include service information systems, management systems, computer-based systems, and PC-based diagnostic equipment. Upon completion, students should be able to access information pertaining to transportation technology and perform word processing.

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## WLD 110 CUTTING PROCESSES

H.S. unit: 1

This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thickness. WLD 112

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## WLD 112 BASIC WELDING PROCESSES

H.S. unit: 1

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.

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## WLD 115 SMAW (Stick) PLATE

H.S. units: 2

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.

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## WLD 121 GMAW (MIG) FCAW/PLATE

H.S. unit: 1

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.

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## WLD 131 GTAW (TIG) PLATE

H.S. unit: 1

This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials.





# NOTES

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## Career Pathways

[www.ccs.k12.nc.us](http://www.ccs.k12.nc.us)