

# 2019-2020 PROGRAM OF STUDIES



**UCPS**  
UNION COUNTY PUBLIC SCHOOLS

Growing Possibilities.

[www.ucps.k12.nc.us](http://www.ucps.k12.nc.us)



**Dear Parents and Students:**

Welcome to high school! Students, as you prepare for your last four years in Union County Public Schools, we want to provide the best academic options for you and your family. Our school system has a wide range of courses and curricula that will prepare you to be college and career ready.

I encourage you and your family to review this high school guide thoroughly and explore the course offerings and descriptions for each pathway.

In recent years there have been significant changes to the state graduation requirements. It is imperative for each of you to understand the requirements that are associated with your graduating class.

If you have questions or need assistance, connect with a counselor or an administrator at your school to help you determine the best path for your high school career. The four-year academic plan worksheet in the back of this booklet is a great resource to help you track your progress through high school.

Parents, I would like to thank you for your partnership with Union County Public Schools. It is our goal to provide each student with a quality education that will lead to life-long learners and productive citizens.

We are Team UCPS and it will take the work of our entire community, families and staff to ensure that all students are equipped for a promising future.

Sincerely,

**Andrew G. Houlihan, Ed.D**  
Superintendent

# CONTENTS

2019 - 2020 Program of Studies	6
High Schools Settings	6
Traditional High Schools	6
Non-Traditional High Schools	7
Instructional Settings	9
Diploma Pathways & Graduation Requirements	10
Diploma Enhancements	14
Academic Course Levels & Settings	16
Student Daily Life, Processes and Procedures	22
Scheduling	24
Driver Education	27
Course Offerings & Course Descriptions	29
Future Ready Course of Study	29
English	29
Math	33
Science	37
Social Studies	40
Elective Courses	44
Fine and Performing Arts Education	44
Band	44
Theater Arts	45
Visual Arts	46
Vocal Music	48
Health and Physical Education	49
JROTC	51
Air Force Junior ROTC	51
Marine Corps Junior ROTC	53
Navy Junior ROTC	54
Miscellaneous Courses	56
World Languages	58
French	58
German	59
Latin	59
Mandarin Chinese	60
Spanish	60

Special Program Courses	62
Future Ready Occupational Course of Study	62
English	62
Math	62
Science	63
Social Studies	63
Other Courses	63
International Baccalaureate (IB) Program	64
Union County Virtual	69
Career and Technical Education	73
Academies	73
Academies at Central Academy of Technology and Arts	73
Academies at Other High Schools	74
Program Areas	79
Credentials & Certifications	80
Agricultural Education	80
Business, Finance, and Information Technology Education	80
Family and Consumer Science Education	81
Health Science Education	81
Marketing and Entrepreneurship Education	81
Technology Engineering and Design Education	81
Trade and Industrial Education	82
Course Offerings & Descriptions	84
Agricultural Education	84
Business, Finance, and Information Technology Education	86
Family and Consumer Science Education	91
Health Science	92
Marketing Education	94
Technology Education	95
Trade and Industrial Education	99
Work Based Learning	106
Appendix I	108
Appendix II	109
Appendix III	110
Index	112
High School Directory	114





# 2019-2020 Program of Studies

A new Program of Studies is developed each year for incoming freshmen. The Program of Studies a student receives his or her freshman year contains the high school graduation requirements as directed by the North Carolina Department of Public Instruction and will follow the student throughout his or her high school career. Since portions of the Program of Studies are subject to change, the most up-to-date version of this year's Program, as well as copies of the Programs for previous years, can be found on the Union County Public Schools (UCPS) Secondary Education webpage (<https://www.ucps.k12.nc.us/domain/2922>). It is our hope that both this Program of Studies, as well as online resources, will assist students with making course selections and progressing through the high school education programs.

The UCPS High School Student Handbook can also be found on this site (<https://www.ucps.k12.nc.us/Page/3182>). Details describing parental involvement opportunities, as outlined in Policy 5-8 (<https://www.ucps.k12.nc.us/domain/3182>), can be found in the UCPS High School Students Handbook. If parents would like a printed copy of the handbook, a request should be made directly to the school. Parents and students are reminded that they are responsible for familiarizing themselves with the UCPS High School Student Handbook as well as their own school's student handbook.

## High School Settings

Union County Public Schools (UCPS) offers thirteen different high school settings. A student's high school assignment will be based on residence or choice as described in School Assignment Policy 4-13 (<https://www.ucps.k12.nc.us/domain/130>). Attendance at a non-traditional high school will be based on application/acceptance or individualized assignment.

### Traditional High Schools

Cuthbertson High, Forest Hills High, Marvin Ridge High, Monroe High, Parkwood High, Piedmont High, Porter Ridge High, Sun Valley High and Weddington High are traditional high schools. Each of these schools offers a full complement of core courses (English, Math, Science, and Social Studies) as well as an extensive offering of electives. In addition to offering electives in the areas of Health/ PE and the Fine and Performing Arts, traditional high schools offer a full complement of Career and Technical Education (CTE) courses which includes such topics as Agriculture, Business, Technology, Health Services and Family and Consumer Sciences. (Participating in CTE programs and/or academies allows students to earn CTE credentials and/or certifications.) Several of the traditional schools also offer opportunities for participation in a JROTC Program. Please note that all students have the opportunity to apply or register for courses or programs not offered at their school (e.g. JROTC).





## Non-Traditional High Schools

UCPS has five schools for high school students that offer a form of specialized instruction and course/program offerings.

### Central Academy of Technology and Arts (CATA)

CATA is a public magnet high school program offering the following Academy Pathways:

Performing Arts (Theatre, Dance, and Music Production and Recording Arts pathways), Information Systems (Software and Game Design, Computer Engineering, Cyber Security pathways), Pre-Engineering (a Project Lead the Way curriculum), Medical Sciences (a Project Lead the Way curriculum), Transportation Systems (Automotive and Collision Repair pathway).

Students are accepted from all areas of the school system and must meet minimum entrance requirements in order to be considered for admission. Transportation is provided for CATA students.

Theatre, Dance, and Music Production and Recording Arts pathways require an audition based entry. All other academy pathways have a lottery based entry. Students are enrolled in their selected academy pathways and provided with a rigorous education geared to prepare the student for both college and career. While students complete their required academy course offerings, they also complete all graduation requirements that students in traditional high schools complete (English, Math, Science, Social Studies, Health/PE, and electives). This rigorous academy approach results in students who are critical thinkers and problem solvers. If openings remain in an academy after all students that qualify are enrolled, the school may consider applicants who did not meet minimum requirements.

### International Baccalaureate (IB) Diploma Programme and IB Pathways Program at Marvin Ridge High School

In addition to the traditional high school course offerings, Marvin Ridge also offers an International Baccalaureate (IB) Diploma Programme and an IB Pathways Program. Transportation is provided for both IB and IB Pathway students.

The IB Diploma Programme is a comprehensive and challenging pre-university course of study that demands the best from both motivated students and teachers. Students completing this program will meet the Future Ready Core graduation requirements. The availability of all courses will depend on meeting the minimum class size requirements. Most IB courses will follow an A/B day schedule over a two-year period to meet the required program hours. Any rising 11th grade UCPS high school student is eligible to apply to the Marvin Ridge High School IB Diploma Programme.

Over the course of the two-year program, students will:

- study six subjects chosen from the six subject groups
- complete an extended essay
- follow a theory of knowledge course (TOK)
- participate in creativity, action, service (CAS)

A complete listing of IB courses can be found on pages 64-67.

Beginning with the 2019-2020 school year, any rising 9th grade UCPS high school student interested in pursuing the IB Diploma Programme later in high school is eligible to apply for the IB Pathways Program.

For additional information on both programs, visit the College Readiness webpage at <https://www.ucps.k12.nc.us/Domain/2916>

### South Providence School (SPS)

South Providence School is an alternative school serving students in grades 6 through 12 who need a more individualized educational setting and a smaller school environment. SPS utilizes Positive Behavioral Interventions and Supports (PBIS) to reinforce positive behavior and instill expectations of RISE; Respect, Integrity, Safety and Excellence for all students. Students are referred to South Providence School through their home school. The home school principal along with the counselors, parents and teachers consider South Providence School when a student is having difficulty managing academics and behavior in their home school. Transportation is provided for SPS students.

Career Academy of South Providence (CASP): CASP offers a select number of students, who display a significant hardship that will impede graduation or are at risk for dropping out of school, a highly structured and limited opportunity to complete the requirements for high school graduation in this non-traditional setting. Referral to the CASP program is initiated by the home school, approved by the district office and coordinated in conjunction with South Providence. Only students who demonstrate a high degree of motivation and cooperation will be accepted into the program.

**Guidelines:**

- Students should have attended three semesters and be 16 years old before admission to the program. Students entering high school for the first time at the age of 16 will be considered for the Career Academy. The school counselor and the principal will determine the appropriateness of placement into the program prior to the end of the third semester of high school.
- A plan for graduation will be developed for every student admitted to the program by the Student Support Counselor.
- The home school principal will have the authority to dismiss any student from the diploma program who is disruptive, uncooperative, or not making progress toward graduation.
- The home school principal and the Student Support Committee reserve the right to deny admission to any student who does not meet the set criteria.
- Students participating in the Career Academy of South Providence program must earn 22 required and elective credits for graduation to receive a diploma from the North Carolina Department of Public Instruction.

Students who are enrolled in South Providence High School or in the Career Academy of South Providence will adhere to the following promotion standards:

<b>Grade Level</b>	<b>4 x 4 Block</b>
Grade 9	Promoted from 8th Grade
Grade 10	5 units including English I
Grade 11	10 units including English II
Grade 12	16 units including English III

### **Union County Early College (UCEC)**

UCEC is a Cooperative Innovative High School which offers a program of support for students to earn a high school diploma and an associated degree, or up to two years of credit toward a bachelor's degree, in five years. It is a small school with a bold approach, based on the principle that academic rigor, combined with the opportunity to save time and money, is a powerful motivator for students to work hard and meet serious intellectual challenges.

UCEC is located on the campus of South Piedmont Community College on Old Charlotte Highway. Approximately 100 rising ninth grade students from around the school district enter in August each school year. Transportation is provided for UCEC students. Students apply to Union County Early College during their 8th grade year. Early College does not have athletic teams, cheerleading, band, chorus or ROTC.

The students at UCEC focus on high school and college courses. The goal is to prepare all students for high-skill careers by engaging them in a rigorous, college level curriculum while compressing the number of years required to earn a college degree.

### **Wolfe School**

Wolfe School provides services and educational support to meet the challenges of students with global delays, functional needs and behavioral and communication needs related to severe Autism and moderate to severe cognitive disabilities. A team of professionals provide instruction, therapy and services through direct and collaborative consultation in a program designed to address the needs of each student. Transportation is provided for Wolfe students.



# Instructional Settings

When the traditional instructional setting, students in a face-to-face setting with a teacher in a physical classroom on the school campus, is not available, UCPS also offers students the opportunity to take courses and/or earn credit through a variety of methods.

## Union County Virtual (UCV)

UCPS has developed a number of online courses in order to meet the needs of students. Union County Virtual (UCV) courses are taught by UCPS licensed teachers and can be taken online during the instructional day, when a comparable course is not available in a face-to-face setting. If a course is offered by both UCV and NCVPS, students must take the course through UCV. Students take exams at the school during designated exam periods. The UCV enrollment allotments for each high school are limited. Rising 9th graders are not allowed to enroll in summer virtual courses. Students should consult their school counselor for the availability of courses. UCV course listings can be found at (<https://www.ucps.k12.nc.us/Page/2903>) and on pages 69-72.

## North Carolina Virtual Public School (NCVPS)

The North Carolina Department of Public Instruction offers online courses through NCVPS. Advanced Placement, Honors, and College Prep courses are taught by North Carolina licensed teachers and can be taken online during the instructional day, when a comparable course is not available in a face-to-face setting. The NCVPS enrollment allotments for each high school are limited. Rising 9th graders are not allowed to enroll in summer virtual courses.

Students shall consult a school counselor for a list of available courses. The school staff will make every effort to place students in a face-to-face course prior to using NCVPS. NCVPS course listings, descriptions, and the prerequisites necessary for taking NCVPS courses can be found at [www.ncvps.org](http://www.ncvps.org). These prerequisites are not determined by UCPS and are subject to change by the North Carolina Department of Public Instruction.

## Career & College Promise (CCP)

The Career & College Promise program allows eligible high school students, who have consulted with their school counselor or Career Development Coordinator and planned a post-secondary pathway, to enroll in community college pathway courses while still attending their home school. Students who successfully complete college courses earn college credit they can take with them after graduation and transfer towards an associate's degree or as a plan to meet general education requirements in the college or university setting. For the most up to date information on the Career & College Promise guidelines for Union County Public Schools, please visit the UCPS Secondary Education webpage at <https://www.ucps.k12.nc.us/domain/2922>.

## Credit by Demonstrated Mastery

North Carolina State BOE Policy GCS-M-001 Section 8 Credit by Demonstrated Mastery (CDM) is the process by which LEAs shall, based upon a body-of-evidence, award a student credit in a particular course without requiring the student to complete classroom instruction. "Mastery" is defined as a student's command of course material at a level that demonstrates a deep understanding of the content standards and the ability to apply his or her knowledge of the material. Students shall demonstrate mastery through a multi-phase assessment, consisting of (1) a standard examination, which shall be the End of Course exam where applicable, or a final exam (provided by the state or developed locally) and (2) an artifact which requires the student to apply knowledge and skills relevant to the content standards. LEAs may require additional requirements, such as performance tasks.

Students who demonstrate mastery, through the process as determined and allowed by the North Carolina Department of Public Instruction, shall receive credit for the course toward graduation requirements. Credit shall be indicated on the student's transcript as a Level 3 (College Preparatory) course with a grade of "CDM". The school shall not grant a numeric or letter grade for the course and shall not include the grade in the student's grade point average (GPA) calculation. UCPS provides students with an opportunity to earn credit through the CDM process one time a year during the spring semester.

The following courses are excluded from Credit by Demonstrated Mastery:

- CTE work-based learning courses (co-op, internship, apprenticeship)
- CTE courses that have a clinical setting as a requirement of the course, such as Early Childhood Education I / II and Nursing Fundamentals
- CTE Advanced Studies courses
- English Language Learner (ELL) courses
- Healthful Living courses
- Advanced Placement or International Baccalaureate courses
- Occupational Course of Study (OCS) Occupational Preparation I, II, III, and IV courses.

Middle school students may participate in the CDM process for those high school courses which are allowed to be taught in middle school, as listed in the North Carolina State Board of Education Policy: GCS-M-001: English I, Math I, II, III, or a 4th level math, World History, Civics and Economics, American History I and II, Biology, a Physical Science course, Earth/Environmental Science, and Level I and II World Language courses.

### Independent Study

A student may request permission to take a course on an independent study basis if all possible means of registering for the course at the regular high school have been exhausted. Only courses that have been included in the Program of Studies may be considered for independent study. The proposed course must meet state Basic Education Plan guidelines for course content and must be under the direction of an appropriately certified teacher. All requests for independent study must be approved by the school principal and the Chief Academic Officer and must be made within the first 10 school days of each semester. Advanced Placement courses may be taken as independent study only through an application process.

### Non-UCPS Courses

All requests for course completion through a setting outside of UCPS, including private colleges, require prior approval from the school principal and the Chief Academic Officer. A student considering this option shall consult with his or her school counselor.

## Diploma Pathways & Graduation Requirements

There have been significant changes in the high school course of study and graduation requirements over the past several years. New requirements are assigned by the year a student enters the ninth grade for the first time. It is imperative that parents and students know and understand the graduation requirements associated with that class of students. The most up-to-date copy of the 2019-2020 Program of Studies, as well as previous years' versions, can be found on the Union County Public Schools Secondary Education website (<http://www.ucps.k12.nc.us/Domain/120>).

Every UCPS high school student must:

- meet the course and credit requirements based on when they entered high school as a ninth grader for the first time (see Future Ready Core and Future Ready Occupational course/credit requirements tables)
- earn passing scores on three essential end-of-course tests: NC Math 1 or NC Math 3, Biology, and English II per UCPS Board of Education Policy
- successfully complete Cardiopulmonary Resuscitation (CPR) training
- meet any additional requirements adopted by the local board of education

There are two courses of study that students may follow to meet graduation requirements. Students will be placed in the Future Ready Core Course of Study as a default option.



CONTENT AREA	FUTURE-READY CORE	FUTURE-READY OCCUPATIONAL
English	4 Credits <ul style="list-style-type: none"> <li>English I*</li> <li>English II*</li> <li>English III*</li> <li>English IV*</li> </ul>	4 credits AND one local course recommended <ul style="list-style-type: none"> <li>English I*</li> <li>Modular English (local course – prerequisite to English II - recommended but not required)</li> <li>English II*</li> <li>English III*</li> <li>English IV*</li> </ul>
Mathematics	4 Credits <ul style="list-style-type: none"> <li>NC Math 1*</li> <li>NC Math 2*</li> <li>NC Math 3*</li> <li>AND an additional math course*</li> </ul>	3 credits AND one local course recommended <ul style="list-style-type: none"> <li>Introduction to Mathematics*</li> <li>Foundations of NC Math 1 (local course - prerequisite to NC Math I - recommended but not required)</li> <li>NC Math 1*</li> <li>Financial Management OR Personal Finance*</li> </ul>
Science	3 Credits <ul style="list-style-type: none"> <li>Earth Science OR AP Environmental Science*</li> <li>Biology*</li> <li>Physical Science OR Chemistry OR Physics*</li> </ul>	2 credits AND one local course recommended <ul style="list-style-type: none"> <li>Applied Science</li> <li>General Science (local course – prerequisite to Biology - recommended but not required)</li> <li>Biology</li> </ul>
Social Studies	4 Credits <ul style="list-style-type: none"> <li>World History*</li> <li>Civics and Economics*</li> <li>American History I and II* OR AP U.S. History*</li> </ul>	2 credits - students entering before 2017-2018 <ul style="list-style-type: none"> <li>American History I*</li> <li>American History II*</li> </ul> 2 credits - students entering 2017-2018 and after <ul style="list-style-type: none"> <li>Civics &amp; Economics*</li> <li>American History I or American History II*</li> </ul>
Health / Physical Education	1 Credit <ul style="list-style-type: none"> <li>Health/Physical Education* and Cardiopulmonary Resuscitation (CPR) training*</li> </ul>	1 Credit <ul style="list-style-type: none"> <li>Health/Physical Education* and Cardiopulmonary Resuscitation (CPR) training*</li> </ul>
World Languages	Not required for graduation <ul style="list-style-type: none"> <li>Two world language courses of the same language are required to meet the minimum University of North Carolina application requirements.</li> </ul>	Not required for graduation

Academic Electives	<p>6 Credits</p> <ul style="list-style-type: none"> <li>2 = any combination from: a. Career and Technical Education (CTE), b. Arts Education or c. World Languages</li> </ul> <p>Note: For clarification, possible elective combinations may include 2 World Language credits; or 1 CTE credit and 1 Arts Education credit; or 2 CTE credits; or 1 Arts Education credit and 1 World Language credit; or other combinations from a., b. and c.</p> <ul style="list-style-type: none"> <li>4 = four-course concentration from one of the following recommended: a. CTE, b. JROTC, c. Arts Education (e.g. dance, music, theater arts, visual arts), or d. other academic subject area (e.g. mathematics, science, social studies, English and dual enrollment courses)</li> </ul>	
--------------------	--	--

- Both Future Ready Courses of Study outline a 32-credit course of study.
- A student's maximum potential equals the total number of credits for which a student could register during the normal school day. A 4x4 block schedule allows 32 credits in 4 years.
- Graduation requirement is calculated by subtracting four from the maximum potential for a student.
- 32 credits – 4 courses = 28 courses to fulfill the graduation.

\*Course is required for graduation, regardless of maximum potential.

### Requirements for a High School Certificate of Achievement/Graduation Certificate

Occupational Course of Study students who have completed all graduation requirements of the Future Ready Occupational Course of Study, except the competitive hours of employment, may exit school with a Certificate of Achievement and transcript. Upon completion of the competitive hours of employment requirements, the student would then receive a high school diploma.

Students in the Exceptional Children's Program as defined by G.S. 115C-106.3(1) who do not meet the requirements for a high school diploma will receive a graduation certificate and shall be allowed to participate in graduation exercises if they have successfully completed 22 course units by general subject area (4 English, 3 Math, 2 Science, 2 Social Studies, 1 Health and Physical Education, 6 local electives and 4 Career and Technical Education electives).

### Courses for Credit (Face-to-face or online courses)

A credit course, one for which credit toward high school graduation is awarded and which qualifies as part of the instructional day, must follow content guidelines in the locally developed North Carolina Standard Course of Study curriculum guides, Advanced Placement or International Baccalaureate syllabi in which high school students are enrolled. Outside of CDM, all courses have an attendance requirement (Union County Public Schools Attendance Policy 4-1c) that may impact whether or not course credit is awarded.



Courses taken to complete high school graduation requirements are allowed via Career & College Promise (CCP); however, if the high school course requires an end-of-course test, that test must be taken in order to get credit for the course. The Superintendent may grant a waiver to allow students to take courses not listed in the Career & College Promise program at a public university, community college, or private college, if these courses are not available to the student at his or her local high school. Outside of CCP or Superintendent/designee approval, all courses must be taken at the high school.

### Minimum Course Requirements

Students in schools with block scheduling must enroll in four course credits per semester or eight courses per school year. The Superintendent or designee must approve any exceptions to these requirements for the individual student.

In order for a student to be excused from school for employment, he/she must be at least sixteen years old, be registered for at least three courses per semester, and meet one of the criteria listed below. In addition, the Superintendent or designee must approve each individual case.

1. The student must be actively enrolled in a Cooperative Work Experience Program and must remain at school until a designated time to allow adequate and reasonable travel time to his respective job training station. Second level Marketing Education students who are juniors or seniors may be permitted to leave after the third instructional block.
2. The student must demonstrate a financial hardship. All hardship requests must be submitted to the Superintendent or designee. The principal will review hardship approvals at the end of each semester in order to assure that satisfactory employment and grades are maintained by the student. The student may be required to enroll in a full load of courses if these conditions are not met.

### Online Coursework

If a student enrolls in an online course as one of the four instructional blocks, the student will complete the course in a computer lab at the home school site. Students will not be given early release to work on an online course at home. The only exceptions will involve homebound services and students participating in the Alternative to Long-term Suspension (ALTS) or Career Academy of South Providence (CASP) programs. Specific course offerings from the online learning programs are constantly evolving. For the most current course offerings please visit the Online Learning website <http://www.ucps.k12.nc.us/Page/3027>.

Online courses are rigorous academic classes which require good time management skills and self-motivation. Students should carefully consider this method of instruction before enrolling. It is suggested that students are limited to two online courses per semester, but permission for additional courses may be requested through the school counselor.

If the course being taken has a state-mandated End-of-Course test or NC Final Exam, the student will be required to take this test during the normal testing window. Final exams, whether an End-of-Course test, NC Final Exam, or teacher-made test will count as 25% of the overall grade for an online course and will have an impact on determining if a student earns credit for a course.

### UNC Requirements

The University of North Carolina is a multi-campus university composed of 16 public senior institutions of higher learning. Each campus is unique in its program offerings, admission requirements, student body make-up, campus life, and historical background. A wide variety of information on the UNC System can be found at <https://www.northcarolina.unc.edu>. This site also includes links to each of the 16 universities. Another useful website for college information is [www.cfnc.org](http://www.cfnc.org).

# Diploma Enhancements

## North Carolina Academic Scholars Program

The North Carolina Academic Scholars Endorsement indicates that a student has completed a balanced and academically rigorous high school program preparing them for post-secondary education. In addition to fulfilling the course requirements listed below, students must earn an unweighted grade point average of at least 3.5 and cannot enroll in any of the classes required for this program on a pass-fail basis. All courses taken by North Carolina Academic Scholars Program participants must be Academic Level 3 or above. It is recommended that students work with their guidance counselors and begin planning for this program as they enter the ninth grade to ensure they get the most flexibility in their courses.

Students must complete all requirements listed below to receive the North Carolina Academic Scholar Endorsement and must meet local graduation credit requirements. Students earning this endorsement will receive a seal of recognition with their diploma and may use this special recognition in applying to post-secondary institutions.

CONTENT AREA	FUTURE-READY CORE	COURSES
English	4 Credits	English I English II English III English IV
Mathematics	4 Credits	NC Math 1 NC Math 2 NC Math 3 AND an additional math course that requires NC Math 3 as a prerequisite.
Science	3 Credits	Earth Science OR AP Environmental Science Biology Chemistry OR Physics
Social Studies	4 Credits	World History Civics and Economics American History I & II OR AP U.S. History
World Language	2 Credits	Two World Language courses of the same language
Health/Physical Education	1 Credit	Health / Physical Education and Cardiopulmonary Resuscitation (CPR) Training
Academic Electives	4 Credits	Recommended (four course concentration from one of the following): Career and Technical Education (CTE) JROTC Arts Education (e.g. dance, music, theater arts, visual arts) Other academic subject area (e.g. mathematics, science, social studies or English)
Additional Electives	3 Credits	Higher level courses taken during junior and/or senior years which carry 5 quality points such as: AP / IB / Career & College Promise Courses/Advanced CTE/CTE credentialing courses



## UCPS Global Scholars Program

Students participating in the UCPS Global Scholars Program are required to complete a Service Learning Project with a global theme in addition to fulfilling the course requirements listed below. Students should submit a proposal to their school's Graduation/Scholarship Committee outlining their plans for completing the Service Learning Project that will allow them to contribute to the local, national, or world community. Once approved, students must complete the Service Learning Project and present a written artifact (e.g. project, portfolio, presentation) to the committee.

Students must complete all requirements listed below or complete the International Baccalaureate Program. Global Scholars recipients will be identified by a seal affixed to their diploma, a Global Scholar cord and recognition during Commencement.

CREDITS	PROGRAM AREA
1	Global Social Studies course in addition to the World History requirement. (ex. Global Awareness, Global Citizen, Global Experience, Multi-Cultural Women's Studies, Global Politics, HIS-111, HIS 112 – World Civilizations I and II)
2	Two credits of the same World Language
6	<p>Elective credits to include at least two second-level or advanced courses.</p> <p>Examples of electives include AP World History, AP World Geography, AP Gov. &amp; Politics Comparative, AP Art History, AP Environmental Science, AP European History, AP World Languages, AP Human Geography, AP Computer Science, HUM 120 – Cultural Studies, HUM 220 – Human Values and Meaning, HUM 130 – Myth in Human Culture, COM 140 – Intercultural Communications,</p> <p>Leadership, Leadership Exploration, MROTC Leadership Education (5), Global Citizen, Global Experience, IB - Information Technology in a Global Society - HL1(2), IB - Information Technology in a Global Society HL2(2), GIS Technologies,</p> <p>Hospitality and Tourism, Twentieth Century America, Mythology, Remember the Holocaust, Computer Programming I, Art III, Environmental and Nat. Resources I, Environmental and Nat. Resources II, Networking Engineering Technology II (1).</p> <p>Biomedical Technology I, Computer Programming II, JROTC 2B Global Studies of the Middle East, Asia and Africa(3), JROTC 2C Global Studies of Russia and the former Soviet Republic, Latin America and Europe (3), Nautical Sciences(4), World Languages levels III-IV, and all IB courses(2).</p>
<p>Courses are available at all UCPS High Schools unless otherwise indicated:</p> <ul style="list-style-type: none"> <li>· (1) Offered only at CATA</li> <li>· (2) Offered only at MRHS</li> <li>· (3) Offered only at MHS, PKHS, PMHS, PRHS</li> <li>· (4) Offered only at FHHS, SVHS</li> </ul>	

## AP Capstone Diploma Recognition

The AP Capstone Diploma Recognition program is available at Monroe High School and Sun Valley High School. AP Capstone is an innovative diploma program that provides students with an opportunity to engage in rigorous scholarly practice of the core academic skills necessary for successful college completion. AP Capstone is built on the foundation of two courses – AP Seminar and AP Research – and is designed to complement and enhance the in-depth, discipline-specific study provided through AP courses. Students who earn scores of 3 or higher in both of the AP Capstone courses and on four additional AP Exams will receive the AP Capstone Diploma™. Alternatively, students who earn scores of 3 or higher in AP Seminar and AP Research will receive the AP Seminar and Research Certificate™ signifying their attainment of college-level academic and research skills.

## Commercial Recognition Programs

In accordance with the following statement issued by a National Association of Secondary Schools Principals' Committee, commercial recognition programs are not promoted or sanctioned by UCPS.

The Committee does not list organizations or programs that claim to honor outstanding students through publication of student names in volumes usually titled "Who's Who," "Outstanding," "Distinguished," etc., and that derive their revenue from the sale of these publications to students. UCPS views any recognition accorded to students through mere inclusion in such a publication as of little or no tangible value. Furthermore, such recognition is unlikely to provide any future educational or personal benefit to students. The selection criteria used by most commercial recognition programs are often ambiguous and flimsy. Even when stated the organization is unlikely to be able to verify that students actually measure up to the selection criteria, since nominations ordinarily come from a number of sources. These may include staff members associated with a school or individuals in the community at large. Most of the organizations sponsoring these programs and known to UCPS are profit motivated and are not related to educational, philanthropic, or professional associations. The organizations often solicit students and their families to purchase the publication or some other type of "award."

It is also worth noting though that some universities and colleges may use recognition in commercial programs as one of the criteria for determining student admission status. Therefore, students who receive such nominations are encouraged to consult their school guidance counselor or principal in order to determine the source of the nomination and its relative value.

# Academic Course Levels & Settings

## Classification/Promotion Standards

A student's grade classification is determined by his or her English credit earned, the total number of credits earned, as well as maximum potential and the number of semesters completed in a high school setting. Maximum potential is the total number of credits that can be earned during the regular school day. This does not include courses take outside of regular school hours for extra credit. Please note that these promotion standards apply to all students and are used in determining athletic eligibility. Any student who has completed the required, criteria may be classified as follows:

Grade Level	4 x 4 Block	Other
Grade 9	Promoted from 8th Grade	Promoted from 8th Grade
Grade 10	6 units including English I	Maximum potential minus 2 including English I and 2 semesters* in a high school setting
Grade 11	13 units including English II	Maximum potential minus 3 including English II and 4 semesters* in high school setting
Grade 12	20 units including English III	Maximum potential minus 4 including English III and six semesters* in a high school setting

**\*Summer sessions are not considered a semester.**

## Additional standards are:

- Students who have transferred into UCPS must meet the graduation requirements for Union County and North Carolina prior to graduation.
- North Carolina high school students are required to successfully complete CPR training before earning their diplomas. This training may be given in middle school but must be designated on the transcript as completed before final graduation requirements are met.
- Students must successfully complete all graduation requirements prior to the day of graduation to participate in graduation exercises.

## High School End of Course Tests - UCPS Local Standards

The NC Math 1 or NC Math 3, English II, Biology, and CTE End-Of-Course (EOC) test results, as well as NC Final Exam test results will count as 25 percent of a student's final grade. According to state testing guidelines, students may not withdraw from a course that has an End-of-Course (EOC) test or NC Final Exam test after the first 10 days of instruction.

Students enrolled in the EOC courses of NC Math 1 or NC Math 3, English II, and Biology will be required to perform at Achievement Level III, IV or V. If a Level III, IV or V is not achieved, the student's performance would be reviewed by a school-based committee to determine if the exit standard has been met.

Students who score a Level III, IV or V on an End-of-Course Test and/or its alternate assessments, but fail to earn credit for the course, will have the option to retake the test at the conclusion of retaking the course if the student/parent requests the opportunity. This option is available to provide students an opportunity to demonstrate the new knowledge and skills learned.

## Exam Exemptions

High School students will not be required to take a teacher-made final exam in a course in the following situations:

- The student has an average of 90 or above the week prior to the administration of the exam and has no more than 3 absences, excused or unexcused, in the class; OR
- The student has an average of 80 or above the week prior to the administration of the exam and has no more than 2 absences, excused or unexcused, in the class.

## Academic Difficulty of Courses

Future Ready Core courses are taught at different levels of academic difficulty. Recommendations are made by subject area teachers for students prior to registration. A waiver form is available for students who wish to enroll in a higher level course than recommended; please consider carefully the use of academic difficulty waivers.

**Level 3:** College Prep (CP) and most Career and College Promise CTE pathway courses- Course content, pace, and academic rigor follow the North Carolina Standard Course of Study guidelines with content enrichment where appropriate.

**Level 4:** Honors (H) - Course content, pace, and academic rigor place high expectations on the student and surpass standards specified by the North Carolina Standard Course of Study Guidelines. These courses demand greater independence and responsibility than Level 3 courses. This level or higher is suggested for competitive college admission.

**Level 5:** Advanced Placement (AP), Career and College Promise College Transfer Pathway (CCP CTP), some Project Lead the Way (PLTW) and International Baccalaureate (IB) - Course content, pace, and academic rigor are college-level as adopted by the College Board and International Baccalaureate Organization.

## Suggested Courses for Academically and Intellectually Gifted (AIG) Students

It is recommended that (AIG) students take level four courses (honors) throughout their freshman and sophomore years and begin taking Advanced Placement (AP) or Career and College Promise courses when feasible. Because of the national testing associated with AP courses, strong grades and AP exam scores can improve a student's standing as it relates to college admissions.

## Honors Courses

UCPS requires documentation of the rigor of honors level courses. UCPS has developed extensive guidelines which include course pacing, enrichment topics and higher levels of assessment in order to meet the requirement. Students enrolling in an Honors Level course must understand and be prepared to meet these academics standards.



## Advanced Placement Courses

Advanced Placement (AP) courses are college-level courses that follow curricula determined by The College Board. Course content, pace, and academic rigor are geared to prepare students to take the AP test. Nearly all colleges and universities in the nation offer college credit to students who score at certain levels on the individual AP examinations. Students enrolling in AP courses should be prepared to devote adequate time to college-level homework, reading, and independent study. Most AP courses are taught year-long with honors credit awarded the first semester and AP credit awarded the second semester. Because AP courses carry extra quality points, students are expected to take the AP exam and complete the portfolio component (if applicable) for each course in which they are enrolled. Should a student elect not to take the AP exam or finalize the portfolio (if applicable), the final course grade will drop to the next lowest letter grade. For example, a student earning a grade of A (5 weighted quality points) in the AP class, but not taking the appropriate AP exam or finalizing the portfolio (if applicable), will earn a grade of B (4 weighted quality points).

The AP exams are given at each high school in the spring semester for courses taught at the specific school. AP exam dates are determined by The College Board and are published well in advance. Students enrolling in AP courses will be tested on the dates established by The College Board. A student that fails to take the AP exam on the scheduled date will incur a \$45 fee if they take the exam on an alternative/make-up date. For more information on AP exams and fees, please visit <https://apstudent.collegeboard.org>.

## Weighting of Grades and Class Rank

Union County Public Schools utilizes a system of weighting courses (also known as quality points) when determining class rank. This system indicates the degree of difficulty of the courses. Class rank will be calculated with the PowerSchool computer system using grade point averages based on the Weighting of Grades scale below. Class rank will be calculated with the PowerSchool computer system using grade point averages based on the Weighting of Grades scale below:

**Table 1: Grading Scale**

Grade	Numerical Value
A	90-100
B	80 - 89
C	70 - 79
D	60 - 69
F	0 - 59

**Table 2: Weighting of Grades (Quality Points)**

Grade	College Prep/ most CCP CTE Pathways	Honors	AP/IB/CCP College Transfer Pathways//PLTW (some but not all CCP and PLTW)
A	4	4.5	5
B	3	3.5	4
C	2	2.5	3
D	1	1.5	2
F	0	0	0

Please note that final marks of FF (Failure Due to Attendance) and WF (Withdrawn Failing) will be computed in the grade point average and the student ranking process as a course attempted and failed. These courses will also be included in a student's maximum potential for graduation requirements. The following marks will not be computed in the grade point average and the student ranking process:

WP	Withdrawn Passing
P	In a Pass/Fail Course
CDM	Credit by Demonstrated Mastery
AUD	Audited Course

### Incomplete Grades

Incomplete grades are assigned at the principal's discretion when students have not completed all assignments and/or have an insufficient number of grades to determine a final grade. Students have until the end of the next grading period to complete all work.

### Courses Awarded Pass-Fail Credit

Students will be permitted to enroll in one (1) elective course per school year on a Pass/Fail basis. The course may be in addition to courses that use only a Pass/Fail grading system, i.e. Credit by Demonstrated Mastery. However, the student must decide within the first ten days if the course is to be taken on a Pass/Fail basis. Should a student earn a mark of F in a Pass/Fail course, the grade will be calculated in the student's GPA, class rank and maximum potential. North Carolina Academic Scholars may not enroll in a required course on Pass/Fail basis.

### Retaking Courses Previously Failed

The term "repeating a course for credit" refers to a high school course repeated via any delivery method or academic level when the entire Standard Course of Study for that course is being taught to the student for a second time. (NCSBE Policy GCS-M-001, GS 115C-81) A student wishing to "repeat a course for credit" will receive a grade and take the associated End-of-Course (EOC) test, NC Final Exam, or local final exam. Those students who have already made a Level III, IV or V on the associated EOC test may elect to either retake the EOC or use the previous passing EOC score as 25% of their final grade. If the student retakes the EOC, the higher of the two scores will be used in the calculation of the final grade. Upon completion of the repeated course, the original grade earned shall be replaced by the new grade. The new grade, rather than the original grade, will then be factored in when computing GPA. All EOC tests administered for a repeating course must be administered during the NCDPI specified testing window.

### Retaking Courses Previously Passed for Grade Suppression

When repeating a previously passed course, students will only earn credit toward graduation, and graduation requirements, once. A student may only repeat one course per academic year and must complete the entire course as well as take the associated EOC test, NC Final Exam, or local final exam. The course may be retaken via any delivery method, but the academic level must remain the same. Summer is considered part of the previous school year. A student must request permission from the school administration to grade suppress by the 10th day of the course. Once this approval is given, the original course cannot be used as a prerequisite for the next course in the sequence. Courses cannot be retaken out of sequence and should be retaken at the next available opportunity. Upon completion of the repeated course, the original grade earned shall be replaced by the new grade. The new grade, rather than the original grade, will then be factored in when computing GPA. Students shall consult their school counselor if considering retaking a course.

### Credit Recovery

The term "credit recovery" refers to a block of instruction that is less than the entirety of the Standard Course of Study for that course. The length of a credit recovery course shall be dictated by the skills and knowledge the student needs to recover and not be a fixed length of seat time. The original record of the course being completed and failed will remain on

the transcript. The student will receive a grade of Pass or Fail for each credit recovery course. The P/F earned through credit recovery will not affect the student's GPA. Any EOC test associated with the credit recovery course may be administered no later than 30 days upon the completion of the credit recovery course. (GCS-M-001).

### Summer Credit Recovery

Summer Credit Recovery classes are offered at UCPS High Schools using online instruction. High school students who have not successfully complete the number of units in core courses (English, Math, Science, Social Studies) required for promotion to the next grade level or for graduation are eligible for summer credit recovery at their home school. The exact courses to be taught will depend upon student need and computer access. Students shall consult their school counselor for more information..

### Graduation Honors

These honors designations will be used for all graduating seniors in Union County Public Schools. Note: The remainder of the top 10% of graduates, if not accounted for in the categories below, may be designated as "honor graduates".

Weighted GPA	Designation
4.25 and higher	summa cum laude
4.0 to 4.24	magna cum laude
3.75 to 3.99	cum laude

### Academic Letter Guidelines

Students who meet the following qualifications will be awarded a letter equal to those given for outstanding athletic performance, except that these letters will be embossed with a gold-colored lamp of learning. Letters will be awarded at the conclusion of each academic semester. The letters will be purchased with Central Services funds approved by the Board of Education. Students who meet the qualifications more than once will be awarded a gold bar to pin on the letter for each semester during which they meet the qualifications. Students who are awarded letters will have an opportunity to purchase jackets and sweaters on which to wear the letters.

Requirements for earning an Academic Letter:

- The student must be in the 9th, 10th, 11th, or 12th grade.
- The student must have an overall semester average of 90, computed by averaging the grades received in all courses in which the student is enrolled. The student may earn no semester grade less than "85" to be considered.
- In determining overall average and minimum grade requirements for students taking AP courses, five (5) points should be added to the numerical grade received for the semester for each AP Course.

### Academic Recognition

- Academic recognition is given to students with outstanding school records.
- Honor Rolls - listings may be published in local newspapers at publisher's discretion. Honor rolls at the high school level include the A Honor Roll which is made up of students that receive an A for each class receiving a grade during the six week period\*, and an A/B Honor Roll which is made up of students who receive only As and/or Bs in each class receiving a grade during the six week period\*.
- Honor Society - organization for students meeting certain achievement, leadership, and character standards.
- Junior Class Marshals - participate in graduation activities. Five percent of the junior class or a minimum of ten students will be selected to serve as marshals (whichever is greater). The students will be chosen from those having the highest grade point average. For example, class rank will be determined using the 4.0 quality point weighted scale at the end of the fifth grading period, and marshals will be those students with the highest grade point average. In case of a tie for the last marshal, all students involved in the tie will be selected.
- Rank in Class - used for college transcripts, scholarship applications, and determining junior class marshals
- Grade Point Average - determined by procedures required by the North Carolina State Board of Education; used for



college transcripts and for calculating rank in class, eligibility for high school athletics, etc.

- Valedictorian and Salutatorian – Beginning with the graduating class of 2022-2023, a valedictorian and a salutatorian will be recognized by each high school.

\*Students taking North Carolina Virtual Public School courses may not receive a grade for the first six weeks marking period.

### Transfer Credit

Students transferring courses from grades nine through twelve will receive the units of credit listed on their transcript. Transfer credit will be weighted according to what is offered in Union County Public Schools. Guidelines are listed below to assist in determining appropriate transfer credit for students.

The guidelines for students transferring from Traditional to Block scheduling at the **end** of the first semester are as follows:

1. The principal of the receiving school may approve  $\frac{1}{2}$  unit of credit for every 1-unit course passed first semester. Traditionally, the state of North Carolina does not issue  $\frac{1}{2}$  units. In order not to harm the student's GPA, these incoming  $\frac{1}{2}$  units may be entered on a pass/fail basis. When possible, every attempt shall be made to award full credits.
2. Transfer credits should be recorded as one of the following:
  - Special Interest English (S)
  - Special Interest Math (S)
  - Special Interest Science (S)
  - Special Interest Social Studies (S)
  - Health/PE Elective (S)
  - Exploratory Foreign Language (S)
  - Arts, Career/Technical, and Miscellaneous electives
3. Any courses taken and failed at the end of the first semester at the previous school will receive no credit and no penalty at the receiving school as the student might have passed by the end of the year on a traditional schedule. The course and the grade will be recorded on the transcript, but will not count against the student's GPA or class rank. Students shall consult their school counselor for additional clarification.

The guidelines for students transferring from Traditional to Block scheduling in the middle of a semester are handled on a case-by-case basis in the best interest of each student with principal approval. This could range from audit only to partial credits, depending on the status of student and courses available.

### Assignment of Home School Credit

A parent/legal guardian desiring to enroll a student in a Union County school who has previously been enrolled in a home school shall provide the following written documentation to the principal of the school in the attendance area where the student is domiciled:

- Attendance Record
- Immunization Record
- Results of the most recent nationally standardized test administered by the home school. The test must include the subject areas of English grammar, reading, spelling, and mathematics.
- A description for each course completed while enrolled in the home school
- Homeschool Transcript

The principal shall use the above information to determine grade placement and which courses taken in the home school will fulfill requirements necessary to earn credit for a high school course. To assist the high school principal in determining if credit can be awarded for certain courses, he/she may require students to take appropriate end-of-course tests. A summary of the basis for the grade placement or course credit should be placed in the student's record.

The following guidelines should be considered in awarding high school credit for home school credits:

- Must meet same standards other students have to meet
- May require EOC or teacher-made test for credit
- Level 4 (Honors) credit will not be awarded
- Require numerical grades
- Award no more than eight units of credit for one year

# Student Daily Life, Processes & Procedures

## Attendance

Credit will not be granted for classes when student absences exceed 7 days for a semester course (14 days for a year course). The maximum number of absences will include lawful, unlawful and out-of-school suspension absences. In certain cases of extended illness, family death or court appearances, the principal may waive absences and allow a student to receive credit. Online courses taken during the school day as part of the student's block schedule will be taken at the school. (This includes but is not limited to: UCV, CCP, APEX, Credit Recovery and NCVPS.) Attendance will be taken in all classes.

## College visits

Students are urged to use teacher workdays and other school holidays as an opportunity to visit college campuses. In the event a student uses a regular school day as a college visit, it will count as a lawful (excused) absence. A maximum of two days can be excused to use for college visits and any additional days will be considered unlawful.

## Attendance Recovery

Students who have a chance to pass academically but are in danger of failing due to absences will be the target population for attendance recovery. Schools will have the flexibility to conduct recovery opportunities as needed and students should contact the principal for more information. Policy 4-1C can be found at <https://www.ucps.k12.nc.us/domain/130>.

## Attendance for Extra-Curricular Activities

Students are expected to attend school consistently to fully participate in all aspects of high school life. Extra-curricular activities are an important part of the high school experience. In order for students to participate in these activities attendance in school is expected. The following daily attendance requirements must be met for a student to be able to participate in extra-curricular activities:

- Must be in attendance at least 75 minutes of each class period to be counted present
- Must be counted present in no less than 2 classes on the day of the activity
- Co-curricular (activities that are part of the curriculum requirements) activities will be handled through principal discretion.

## Athletic Eligibility Requirements

Students must meet the following requirements in order to be eligible to participate in high school athletics:

- Meet the UCPS attendance policy
- Meet all UCPS high school promotion standards
- Earn passing grades for at least three course credits per semester with block scheduling

A student who is promoted from the eighth grade automatically meets course requirements for the first semester of the ninth grade.

## Progress Reports

Communication with parents during the grading period in addition to the formal report cards is encouraged for all students and expected for students not working at a "C" level or above. Such contact may include one or more of the following: scheduled parent-teacher conferences; written notes/letters to parents; telephone calls; progress reports; and samples of students' work. Teachers should maintain a written record of pertinent conferences and other significant communications with parents. Please contact your individual high school to determine the procedures for home-school communication.

It is recommended that parents access their student's grades in the PowerSchool Parent Portal. Please contact the school's data manager if assistance is needed in accessing the PowerSchool Parent Portal.

## Guidance and Counseling Services

School counselors recognize their primary obligation for confidentiality is to the student but balance that obligation with an understanding of the family or guardians' legal and inherent rights to be the guiding voice in their children's lives (ASCA Code of Ethics).

- The role of the school counselor in regards to confidentiality is:
- To support the student's right to privacy and protect confidential information received from students, the family, guardian and staff members
- To explain the meaning and limits of confidentiality to students in developmentally appropriate terms
- To provide appropriate disclosure and informed consent regarding the counseling relationship and confidentiality
- To inform students and the family of the limits to confidentiality when: student poses a danger to self or others, court ordered disclosure, consultation with other professionals in support of the student, i.e. colleagues, supervisors, treatment teams, and other support personnel
- To keep personal notes separate from educational records and not disclose their contents except when privacy exceptions exist
- To seek guidance from supervisors and appropriate legal advice when their records are subpoenaed
- To assert their belief that information shared by a student is "confidential" and should not be revealed without the student's consent
- To adhere to all laws protecting student records, health information, and special services (i.e., HIPAA, FERPA, IDEA).

The guidance program is a service in which all school personnel participate in varying degrees to assist students in developing effective educational, vocational, and social/personal goals as mature and responsible citizens. Guidance has been defined as "the effort of the faculty, counselors, and school administration to help students help themselves." Guidance provides students and others with opportunities to openly and honestly communicate needs, evaluate self, receive feedback, explore alternatives, establish values, and make decisions. School counselors are individuals who should not be expected to act as judges or evaluators. They differ from teachers and administrators as well as parents in this respect. They are not responsible, as are teachers, for seeing that students meet standards of achievement in given areas, but they assist in providing growth-producing climates that help all students reach their potential. Counselors are asked to maintain a confidential relationship with each student and with parents, teachers, or community resource personnel as they work to enhance the guidance program as an integral part of the total education program. The counselors will be more useful to students for such help if the students get to know their counselor early in their school career.

The counselor may be contacted in:

- Seeking information regarding educational or career development, offerings and requirements that lead to economic independence
- Exploring individual interests, skills, and needs that contribute to career satisfaction
- Developing personal values, decision-making skills and an appreciation of individual differences

## Class Size

Generally, academic classes may not be taught with fewer than 15 students and career/technical classes may not be taught with fewer than 12 students. Exceptions may be considered based on the nature or level of the courses, the total daily contacts for the teacher, and impact on other class sizes. Special permission may be given to principals by the Superintendent or designee to operate classes with less than the stated minimum.

## Class Adjustment Procedure

If more students register for a class than can be enrolled due to maximum class size limitations then a random method of selection will be used to determine class assignments. In these cases, the upperclassmen will be given first priority, except in cases where specific grades or class levels should be given priority due to the nature of the class.



# Scheduling

## High School Courses Taken at the Middle School

Students in grades 6-8 who pass English I and/or mathematics, science, social studies, or world language courses that are described in and aligned to the North Carolina Standard Course of Study for grades 9-12 may use the course(s) to meet high school graduation requirements. Such course(s) shall count toward meeting graduation requirements and the number of credits required to graduate, and shall appear on the high school transcript. These courses shall not be included in the calculation of student's high school Grade Point Average (GPA). Student GPA shall be computed only with courses taken during the high school years.

Students transferring to UCPS from an out-of-state middle school with high school credit listed on their transcripts will be given credit for the high school courses meeting North Carolina graduation requirements and North Carolina State Board of Education Policy.

## Changing or Withdrawing from Courses

Students are expected to choose courses carefully at the time of registration to minimize the need to request schedule changes. Students may request a schedule change before the start of school or within the first 5 days of the semester by completing the appropriate forms available through the guidance office. All schedule changes are subject to approval by parents and school staff and are dependent on the rationale for the change and the available space in other classes. Teachers and guidance counselors may request a schedule change for a student within the first 10 days of a semester. All schedule changes, including work-based learning experiences, made after the first 5 days (or 10 days for teacher/counselor recommended changes) will be designated as a WP (withdrew passing) or a WF (withdrew failing) in the student's record for the class being dropped. A course dropped before its completion will receive no credit.

## Auditing Classes

At the time of registration and with a guidance counselor's approval, students may request to audit a specific course. The decision to take a course as an audit must be made within first 10 days of the semester. No credit will be awarded to a student auditing a course, but the course will count in the maximum potential calculation for graduation purposes. In special circumstances, students transferring into the school system may audit courses without having the courses count toward their maximum potential. Principals will review a transfer student's transcript for approval. The grade will be reported as an "audit" and will not be computed in the grade point average or class rank.

## Early Graduation - At the End of the Junior Year

Students and parents will meet with the student's school counselor prior to beginning the application process for early graduation. Students applying for early graduation will meet the standard of maximum potential minus four as required of all high school graduates and must follow the guidelines outlined below:

- The application with parent signature must be filed with the school principal no later than the first 10 days of school in the junior year. The application can be downloaded from the UCPS Secondary Education website.
- The school principal will appoint a standing committee each year to examine all requests for accelerated graduation and make a final recommendation as to the validity of the request. School level recommendations for early graduation are subject to Superintendent level approval.

Factors to be considered in judging requests include:

- The stated reason(s) why permission for accelerated graduation is being requested.
- The recommendation of two of the student's current or former high school teachers. It is the applicant's responsibility to secure these recommendations.
- The academic qualifications of the applicant. It is recommended the student have a "B" average. Eighth grade test data and high school end-of-course test data should reflect an achievement rate at or above grade level.

The committee established, as stated above, shall render its recommendation on the request no later than 20 days after the submission date. If denied, the committee will justify the decision in writing to the parent or guardian of the student, with a copy provided to the school principal. In the event of a negative ruling, the parties making the request will have the right to appeal the decision by first meeting with the high school principal and then submitting an appeal in writing to the Chief Academic Officer within 10 school days of the committee's decision.

### Mid-Year Graduation for Seniors

Students may be eligible to complete graduation requirements by the end of the first term of the senior year:

- The application with parent signature must be filed with the school principal no later than the first 10 days of school in the senior year. The application can be downloaded from the UCPS Secondary Education website.
- The school principal will appoint a standing committee each year to examine all requests for accelerated graduation and make a final recommendation as to the validity of the request. School level recommendations for early graduation are subject to Superintendent level approval.

Factors to be considered and conditions of Mid-Year Graduation requests include:

- Student must have a clear academic plan.
- Plan must be reviewed and approved by school administrators.
- Required credits for graduation will be based on maximum potential for the entire four years minus four.
- Student will not be eligible to participate in any year-round extracurricular appointments or offices.
- Student will not be eligible to participate in any extracurricular activities during the second term excluding the Senior Prom and Graduation.
- Diploma will be awarded in June.
- Any exceptions will be determined on a case-by-case basis with the approval of the counselor, principal, and Superintendent or designee.

The committee established, as stated above, shall render its recommendation on the request no later than 20 days after the submission date. If denied, the committee will justify the decision in writing to the parent or guardian of the student, with a copy provided to the school principal. In the event of a negative ruling, the parties making the request will have the right to appeal the decision by first meeting with the high school principal and then submitting an appeal in writing to the Chief Academic Officer within 10 school days of the committee's decision.

### Senior Flex Day Program

A senior who is in good standing, is on track for graduation and needs less than 8 credits to graduate may opt to apply for flex day. This would apply for students meeting the UCPS Graduation Requirement (maximum potential minus 4). Because the CASP program contains a flex component, these students do not have to be considered for a flexible day schedule.

If a student enters his/her Senior Year with a minimum of 24 credits, the principal is granted the flexibility to offer the remaining credits during both the fall and spring semesters. Principals are advised to offer courses required for graduation during the fall semester.

- Application for and approval of flex day must be made within the first 5 days of the semester.
- Necessary courses must be completed in sequential order during the day (Periods 1, 2, 3 or 2, 3, 4). For example, students may not leave midday and return for 4th block class.
- Student must provide his/her own transportation.
- If a student wishes to return to school grounds after the end of the school day for after-school activities, principal approval is necessary. This does not apply to night events.

Flex day is available for school-sponsored athletic participants during the second semester. It will be the principals' discretion as to whether an athlete may be offered flex scheduling during the first semester.

Students considering applying to a four-year college shall discuss with their school counselor how a flex schedule could impact potential college admissions.

### **Fifth Year Seniors and Returning Students**

A student who has completed four years of high school, but has not completed the required number of courses for a certificate or a diploma, may return to high school as a full-time student up to the age of twenty-one (21). A fifth year senior will have the same maximum potential as a fourth year senior taking the normal course load each year. The principal and Superintendent for Teaching and Learning must approve any exceptions. Any student who has received a certificate may return to high school for a diploma as described above. A fifth year senior may take a modified schedule of less than four classes.

OCS students who have completed all graduation requirements of the Future Ready Occupational Course of Study except the competitive hours of employment may choose not to exit high school and instead return in the fall semester to complete the competitive hours of employment requirement with the assistance of school personnel. This option is available to OCS students who have not yet reached their 22nd birthday.

### **Student Assistants**

Seniors may apply to serve as assistants to teachers. No academic credit will be awarded and this will count in the maximum potential calculation for graduation purposes. The principal may assign additional student assistants to the principal's office and to the guidance department. While enrolled as a student assistant, failing one class will result in the loss of a driver's license for the student.

### **International Exchange Students**

Union County Public Schools encourages global connections through recognized student exchange programs. In order to best serve the visiting international student, a high school can accept a maximum of five students. Exceptions occur only under unusual circumstances and with the approval of the principal and superintendent or designee. International students attending during their senior year will be allowed to participate in senior activities, excluding graduation, and will not receive a North Carolina diploma. The exchange student is eligible to participate in athletics provided they meet the eligibility guidelines. They may also participate in Driver Education but are not eligible to receive a North Carolina Driver's License.

The placement of international exchange students is coordinated through the student assignment office in collaboration with the principals and will only be considered by traditional high schools.

### **Pregnant and Parenting Students**

Pregnant and parenting students shall receive the same educational instruction or its equivalent as other students. School administrators and/or counselors may provide programs to meet the special scheduling and curriculum needs of pregnant and parenting students.

To be better able to serve the needs of pregnant and parenting students, students are encouraged to discuss their situation with the school nurse, counselor and the principal on a confidential basis so that an educational plan can be established for the student. A pregnant student may remain in the regular school setting as long as they are physically able and desire to do so. Pregnant students are encouraged to continue their education through counseling and provision of regular or alternative programs as needed. The principal and/or counselor will discuss instructional alternatives with the student. Students are responsible for making up missed work under the same attendance guidelines as other students, but are encouraged to work with their individual teachers and/or other school personnel as necessary to be able to complete the work and keep high school graduation plans on track.



# Driver Education

The UCPS Driver Education course involves 30 hours of online classroom work via Canvas modules and a minimum of 12 hours of Behind the Wheel instruction in the vehicle (6 hours driving and 6 hours observing).

Enrollment is open to any student who attends high school\* within the UCPS school district and meets the eligibility requirements. All students who attend high school\* whether private, public, charter, or home school in Union County are also eligible for the UCPS Driver Education Program. (Union Academy will train charter, private, and homeschool students.)

In order to be eligible to enroll in the UCPS Driver Education program, an individual must meet the following requirements:

- Attending a high school\* whether public, private, charter, or home school within Union County.
- Be 14 ½ on the first day of class. A student over 18 who attends school in Union County is eligible for the classroom portion but must secure a Learner's Permit from DMV before they are eligible to complete the driving portion of the class.
- Have not previously enrolled in the UCPS Driver Education program. Students who have dropped out of school or who have enrolled in driver education previously or did not take the class for which they were enrolled are not eligible for these classes without special consideration and permission from the UCPS Driver Education Coordinator.

If the student lives in Union County, but attends school outside the county, the student is NOT eligible to receive Driver Education instructional (classroom and behind-the-wheel) training in Union County Public Schools. This includes public (high school and middle school), private, charter, and home schools.

\*Middle School students **ARE** eligible to take Driver Education as long as they are the legal age (14 ½ on the first day of class).

Families/students may also contact and utilize a private company at their own expense.

The UCPS Driver Education Course Registration is completed online and is a two-step process. **There is a \$65 registration fee that is due when registering for UCPS Driver Education class. Please read all online registration directions completely. There are registration date parameters and capacity restrictions.** Enrollment in the online course may be limited due to the number of students waiting to for the Behind the Wheel portion of Driver Ed. Students that attend a Union County Public School may only register for the Driver Education course for the school they are enrolled and attend (Ex. A student enrolled at SVHS may only register and take Driver Ed through SVHS). Students that attend a private, charter, and home school in Union County may only register for "Other" or "Union Academy" if applicable. If any school/site has reached registration-capacity, another school/site cannot be chosen.

Certificates of Completion are issued by the Driver Education instructor when a student has successfully completed the minimum of 30 hours of classroom instruction, minimum of 6 hours BTW/driving and 6 hours of observation. Students will be given the white copy. A student may then take this certificate to their school's guidance office to request a Driving Eligibility Certificate. (A student must be accompanied by a parent when requesting a Driving Eligibility Certificate.)

## What is a Driving Eligibility Certificate?

A Driving Eligibility Certificate is used to verify that a student is meeting academic and enrollment expectations for the state of North Carolina and therefore in combination with the other requirements outlined in (§ 20-11 (d) (1), (2), and (3) may obtain either a limited driver's learner permit or a provisional (limited or full) driver's license.

## How long is a Driving Eligibility Certificate valid?

The Driving Eligibility Certificate is valid for 30 days (§ 20-11(n3)).

## Who needs a Driving Eligibility Certificate?

A person under age 18 seeking a driver's learner permit or provisional driver's license needs a Driving Eligibility Certificate. A person over age 18 may also need a Driving Eligibility Certificate if the Driving Eligibility Certificate was revoked prior to age 18 due to disciplinary action during high school or community college. (§ 20-11(n1))

**Why would a Driving Eligibility Certificate be revoked?**

There are three reasons why a Driver Eligibility Certificate could be revoked:

- Dropping out of school Prior to age 18--As of August 1, 1998, any public, private, federal, home-schooled, or community college student under age 18 who does not make adequate academic progress or drops out of school will have their driving permit or provisional license revoked (§ 20-11). Under the Dropout Prevention Guidelines, a dropout student is one who has withdrawn from school before the end of the academic term and whose enrollment in an educational setting cannot be verified for 30 days. Parents should be notified in writing that the student's Driver Eligibility Certificate will be revoked. Parents may submit a hardship request to the principal or designee to maintain the student's Driving Eligibility status.
- Disciplinary action--Disciplinary action includes an expulsion, a suspension for more than 10 consecutive days, or an assignment to an alternative educational setting for more than 10 consecutive days. (§ 20-11(n1)) Under the Lose Control/Lose License guidelines, the Driving Eligibility Certificate is revoked for one year. Unlike the Dropout Prevention guidelines that end when a student turns age 18, the revocation of a Driving Eligibility Certificate for disciplinary action can extend beyond age 18 if the disciplinary action took place during the time the student was age 17.
- Not making adequate academic progress--At the end of each semester, students not passing 70% of the maximum possible courses are identified. Parents are notified that the student is not making adequate academic progress and have the option of submitting a hardship request to the principal or principal's designee to maintain the student's Driving Eligibility status. Once a student's license is revoked for failure to make adequate academic progress; the student's academic record will be evaluated at the end of the next grading period for possible reinstatement of the driving license.

More information on the Driver Education Program is available at:

<https://sites.google.com/a/ucps.k12.nc.us/driver-education/home>

# Course Offerings & Descriptions

Students should carefully select courses to be taken. While UCPS will help support and guide students, it is the responsibility of students and parents to make sure they have the correct number and composition of units needed to graduate. If unsure, students should contact their school counselor for assistance. A worksheet to help keep track of courses taken is provided in Appendix II.

Individual courses are listed under major content area headings. Some courses or programs require specialized facilities or personnel and are available only at certain locations. Though most subject areas do have courses that are to be taken in a progressive sequence (e.g. English I should be taken before English II), program area courses are listed alphabetically for ease of use.

Courses are listed indicating the course title, the level, and the duration. For example, English I (3) S, indicates the English I course is taught at the college prep level (3), one semester long (S) and one unit of credit will be awarded upon successful completion. English I (4) S, indicates the English I course is taught at the honors level (4), one semester long (S) and one unit of credit will be issued upon successful completion. Courses that are one year in duration are designated with a "Y".

## Future Ready Course of Study

### English

In order to graduate from a Union County high school, a student must earn 4 units of English. These four units are English I, II, III, & IV. The intent of the Standard Course of Study for English Language Arts is to equip students with the level of literacy skills necessary to participate as informed and effective citizens in a democratic society, to experience success in higher education, to function effectively in the world of work, and to realize personal fulfillment.

#### Advanced Inquiry and Research - Honors (4) S

This course serves as a basis for upper-level English courses and AP Language and AP Literature. It is designed to enhance close reading comprehension with increasing text complexity, hone synthesis writing along with documented research skills, build on interdisciplinary informational and literary texts, and prepare students for multimodal presentation skills. With the intention of challenging students to expand their knowledge and skills, this course will prepare students for higher intellectual engagement by starting the development of skills and acquisition of knowledge as early as possible.

#### AP English Language & Composition (5) S

##### Prerequisite: English III Honors (AP Companion Course)

Advanced Placement English is college-level coursework. Students will become skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts and skilled writers who compose for a variety of purposes. Both their writing and their reading will make students aware of the interactions among a writer's purpose, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing. Students will be eligible to take the Language and Composition AP Exam at the end of the junior year.

#### AP English Literature and Composition (5) S

##### Prerequisite: English IV Honors (AP Companion Course)

Advanced Placement Literature and Composition is a college-level course. Students will engage in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students will deepen their understanding of the ways writers use language to provide both meaning and pleasure to their readers. This course is for students who have attained the reading and writing skills generally expected in introductory college courses in composition and literature. Students will be eligible to take the Literature and Composition AP Exam at the end of the senior year.

#### AP Research (5) Y (MHS & SVHS)

##### Prerequisite: AP Seminar

AP Research, the second course in the AP Capstone experience, allows students to deeply explore the academic topic, problem, issue, or idea of individual interest. Students design, plan and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices and accessing, analyzing, and synthesizing information. Students reflect on their skill development,

document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of approximately 4000-5000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.

### **AP Seminar (5) Y (MHS & SVHS)**

#### **Prerequisite: Admission to the AP Capstone Diploma Program**

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

### **Bible as Literature (3) S**

The Bible will be studied as literature. Course content will include selections from both the Old and the New Testament.

### **Creative Writing (3) S**

#### **Creative Writing – Honors (4) S**

Emphasis is placed on creative writing for those students with a desire to refine these skills and work with others to improve their creative writing. Students will expand on their powers of observation, imagination, and language and will be exposed to various forms of creative writing in the fields of prose, fiction and nonfiction (i.e. poems, fiction, drama, etc.).

### **English I (3) S**

#### **English I – Honors (4) S**

The English I course provides a foundational study of literary genres (novels, short stories, poetry, drama, literary nonfiction), which may include influential U.S. documents and one Shakespearean play. Interdisciplinary informational writing as well as documented research and speaking and listening skills will be included along with multimodal presentations.

### **English II (3) S**

#### **English II – Honors (4) S**

#### **Prerequisite: English I or English I Honors**

English II introduces literary global perspectives focusing on literature from the Americas (Caribbean, Central, South, and North), Africa, Eastern Europe, Asia, Oceania, and the Middle East. Influential U.S. documents and a Shakespearean play may be included. Documented research based on interdisciplinary informational texts and literature will comprise the writing, speaking, and listening components of the course along with multimodal presentations. An End-Of-Course test will be administered in English II.

### **English II Exit Standard (3) S**

This course is designed to assist students in meeting the English II Exit Standard. The student can take the course first semester as a preparation for the EOC course second semester. The course may also be used after the student completes the EOC course but has not met the exit standard. A student may take this course a maximum of two times for elective credit.

### **English III (3) S**

#### **English III – Honors (4) S**

#### **Prerequisite: English II or English II Honors**

English III is an in-depth study of U.S. literature and U.S. literary nonfiction, especially foundational works and documents from the 17th century through the early 20th century. At least one Shakespearean play may be included along with interdisciplinary informational writing and multimodal presentations focusing on speaking and listening skills.

### **English III–Honors (AP Companion Course) (4) S**

#### **Prerequisite: English II Honors**

English III is an in-depth study of U.S. literature and U.S. literary nonfiction, especially foundational works and documents from the 17th century through the early 20th century. At least one Shakespearean play may be included along with interdisciplinary informational writing and multimodal presentations focusing on speaking and listening skills.



**English IV (3) S****English IV – Honors (4) S****Prerequisite: English III or English III Honors**

English IV completes the global perspective initiated in English II. Though its focus is on European (Western, Southern, Northern) literature, this course may include important U.S. documents and literature (texts influenced by European philosophy or action). At least one Shakespearean play may be included. Interdisciplinary informational text and multimodal presentations will encompass the writing, speaking and listening skills.

**English IV - Honors (AP Companion Course) (4) S****Prerequisite: English III Honors**

English IV completes the global perspective initiated in English II. Though its focus is on European (Western, Southern, Northern) literature, this course may include important U.S. documents and literature (texts influenced by European philosophy or action). At least one Shakespearean play may be included. Interdisciplinary informational text and multimodal presentations will encompass the writing, speaking and listening skills.

**Introduction to Shakespeare - Honors (4) S****Prerequisite: English II**

This course is designed to move beyond an introduction to the works of William Shakespeare, including his plays and sonnets. Shakespearean plays are timeless representations of the conflicts, aspirations and struggles of human beings. It is hoped that students' appreciation of the plays both as texts to be read and performances to be enjoyed will increase.

**Journalism I (3) S****Journalism I – Honors (4) S****Prerequisite: Application and Sponsor Approval**

Course topics include journalistic techniques, styles of reporting, printing methods, paper layouts, history of newspapers, and studies of outstanding journalists. Class is responsible for the publication of the school paper.

**Journalism II (3) S****Journalism II – Honors (4) S****Prerequisite: Journalism I, Application and Sponsor Approval**

The student will master advanced layout and design of desktop publishing, digital imagery, and photo placement. In

addition, the student will take on a leadership role with the newspaper.

**Journalism III – Honors (4) S****Prerequisite: 2 previous semesters of Journalism, Application and Sponsor Approval**

Students will be required to publish one article outside the school newspaper and to participate in one writing contest. In addition, the student will take on a leadership role with the newspaper. This course may be taken only once for Honors credit.

**Journalism IV - Honors (4) S****Prerequisite: 2 previous semesters of Journalism, Application and Sponsor Approval**

Students will be required to publish one article outside the school newspaper and to participate in one writing contest. In addition, the student will take on a leadership role with the newspaper. This course may be taken only once for Honors credit.

**Modular English (3) S**

This course is designed to better prepare students for English I and II. The focus of the course is grammar, reading comprehension, and vocabulary. The course is offered first semester to be followed by English I or II second semester. Students scoring below a level 4 on the 8th grade EOG will benefit from enrolling in this course. It may be taken twice for elective credit.

**Mythology (3) S****Mythology - Honors (4) S****Prerequisite: English I**

This course will promote cultural awareness in classical mythologies to include ancient civilizations. Students will engage in cultural research, creative presentation, and frequent writing activities.

**Speech (3) S**

The course covers voice projection, articulation, and control through interpretation of literary pieces, political speeches and documents, and media excerpts.

**Speech and Debate – Honors (4) S**

This course is designed to provide opportunities for development of thinking, writing and speaking skills. The curriculum also addresses reading comprehension, vocabulary development and effective oral communication.

**Yearbook (3) S****Yearbook - Honors (4) S****Prerequisite: Application and Sponsor Approval**

This course includes planning and production of the school yearbook. Students develop skills in gathering information, writing copy and captions, understanding components of quality photography, copy editing skills, and techniques of headlines. This course can be taken twice for credit.

**Yearbook II (3) S****Yearbook II - Honors (4) S**

This course includes planning and production of the school yearbook. Students increase their skills in gathering information, writing copy, headlines, captions, taking photographs, and copy editing. Students also develop leadership skills. This course can be taken twice for credit.

**Yearbook III - Honors (4) S****Prerequisite: 2 previous semesters of Yearbook, Application and Sponsor Approval**

Students master advanced layout and design of desktop publishing, digital imagery, and photo placement. Students will be expected to attend a publisher-sponsored workshop and participate in a leadership role on the yearbook staff. This course may be taken only once for Honors credit.

**Yearbook IV - Honors (4) S****Prerequisite: 2 previous semesters of Yearbook, Application and Sponsor Approval**

Students develop advanced computer skills in the designing and editing of all spreads and encouraged to assume a leadership role. Students will be expected to attend a publisher-sponsored workshop and participate in a leadership role on the yearbook staff. This course may be taken only once for Honors credit.



# Math

North Carolina Future Ready Core Mathematics Graduation Requirements:

NC Math 1 + NC Math 2 + NC Math 3 + a 4th Math (see recommendations below)

4th Math Recommendations for Students Planning to Attend UNC System Institutions::

Advanced Functions and Modeling (AFM)	AP Calculus AB
Discrete Mathematics	AP Calculus BC
Pre-Calculus	AP Statistics
	Other CCP Math Course

4th Math Recommendations for Students Planning to Attend Other College/Community College/Tech School:

CTE – Single Courses that Equal 1 Full Math Credit:

AP Computer Science	PLTW Computer Integrated Manufacturing
Accounting I	PLTW Principles of Engineering
Accounting II	PLTW Digital Electronics
Principles of Business & Finance	PLTW Engineering Design & Development
Drafting I	Apparel & Textile Production I
Drafting II Engineering	Apparel & Textile Production II
Drafting II Architectural	Interior Design I
Carpentry I	Interior Design II
Metals Manufacturing Technology I	Culinary Arts & Hospitality II
Metals Manufacturing II	Principles of Technology I
PLTW Biotechnical Engineering	Principles of Technology II
PLTW Aerospace Engineering	Computer Programming I
PLTW Civil Engineering & Architecture	Computer Programming II
PLTW Introduction to Engineering Design	

CTE – Pairs of Courses that Equal 1 Full Math Credit:

SAS I AND SAS II
Electronics I AND Electronics II
Personal Finance AND Entrepreneurship I
Masonry I AND Masonry II
Carpentry II AND Carpentry III
Electrical Trades I AND Electrical Trades II
Intro to Culinary Arts & Hospitality AND Culinary Arts & Hospitality I
Game Art & Design AND Advanced Game Art & Design
Scientific and Technical Visualization I AND Scientific and Technical Visualization II

For Students NOT Planning to Attend College/Community College:

Introductory Mathematics	Foundations of NC Math 1
Foundations of NC Math 2	Foundations of NC Math 3

Occasionally, there may be cause for a student to request exemption from the Future Ready Core Mathematics requirements. A committee review team with principal approval may exempt a student from the Future Ready Core sequence. The decision requires the student to complete NC Math 1 and NC Math 2, plus two other math credits from the options listed above.

**Advanced Calculus Topics AB - Honors (4) (AP Companion Course)****Prerequisite: Pre-Calculus - Honors**

This course is an AP companion course to be taken with AP Calculus AB in order to prepare students for the AP Calculus test. Students will explore such topics as functions, integration, applications of differentiation, limits and analytic geometry. NOTE: This course does not count as a fourth math course to enter the university system.

**Advanced Calculus Topics BC - Honors (4) S (AP Companion Course)****Prerequisite: Pre-Calculus - Honors**

This course is an AP companion course to be taken with AP Calculus BC in order to prepare students for the AP Calculus test. Students will explore such topics as analysis of graphs, limits, derivatives, series of constants and parametric, polar, vector functions. NOTE: This course does not count as a fourth math course to enter the university system.

**Advanced Functions & Modeling (3) S****Prerequisite: NC Math 3 or Geometry AND Algebra II**

This course provides an in-depth study of modeling and applying functions learned in previous math courses. It extends trigonometric content, uses probability to make decisions, and reinforces algebraic skills through the use of application problems, technology, mathematical modeling, and the use of manipulatives.

**Advanced Statistics Topics - Honors (4) S (AP Companion Course)****Prerequisite: Advanced Functions and Modeling or NC Math 3 Honors**

This course is an AP companion course designed to be paired with AP Statistics in order to prepare students for the Advanced Placement Statistics test. Students will explore such themes as probability, exploratory analysis and statistical inferences. NOTE: This course does not count as a fourth math course to enter the university system.

**AP Calculus AB (5) S****Prerequisite: Advanced Calculus Topic AB**

Emphasis of the course is on functions, elements of analytic geometry, limits, differentiation of algebraic functions, applications of differentiation, integration, and trigonometric and exponential functions. This course follows the outline of AB level of AP Calculus. Students enrolled are expected to take the AP Calculus Test.

**AP Calculus BC (5) S****Prerequisite: Advanced Calculus Topics BC or AP Calculus AB**

This course follows the outline of BC level of AP Calculus. Students are expected to take the AP Calculus Test.

**AP Statistics (5) S****Prerequisite: Advanced Statistics Topics**

This course introduces the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students observe patterns and departures from patterns, produce and confirm models using probability and simulation.

Students enrolled are expected to take the AP exam. Students may receive credit and/or advanced placement for a one-semester introductory college statistics course.

**Discrete Math (3) S****Discrete Math – Honors (4) S****Prerequisite: NC Math 3 or Geometry AND Algebra II**

Discrete Mathematics introduces students to the mathematics of networks, social choice, and decision making. The course extends students' application of matrix arithmetic and probability. Applications and modeling are central to this course of study. Appropriate technology, from manipulatives to calculators and application software should be used regularly for instruction and assessment.

**Foundations of NC Math 1 (3) S**

Foundations of NC Math 1 is a preparation course to NC Math 1. Students should enroll in NC Math 1 the following semester. The curriculum includes studying mathematics in the context of the real world, including statistics, solving equations, linear functions, and systems of linear functions.

**Foundations of NC Math 2 (3) S****Prerequisite: NC Math 1 or Algebra I**

This course includes the study of polynomials, congruence and similarity of figures, trigonometry with triangles, modeling with geometry, probability, making inferences and justifying conclusions. The pace will be slower than regular NC Math 2.



**Foundations of NC Math 3 (3) S****Prerequisite: NC Math 2**

Foundations of NC Math 3 is a preparation course for NC Math 3. Students should enroll in NC Math 3 the following semester. The curriculum introduces advanced functions and algebraic concepts such as: the complex number system, inverse functions, trigonometric functions and the unit circle.

**Introductory Mathematics (3) S**

The Introductory Mathematics course provides students a survey of preparatory topics for high school mathematics, including study skills and problem solving techniques, simplifying numerical expressions, integer operations, graphs, concepts of variables, concepts of equations and inequalities, pattern recognition, proportional reasoning, and rational numbers. The student's level of mastery of concepts in this course determines the course selection of either NC Math 1 or Foundations of NC Math 1.

**NC Math 1 (3) S****NC Math 1 - Honors (4) S**

NC Math 1 is the study of algebraic concepts designed to engage students in a variety of mathematical experiences that include the use of reasoning and problem-solving skills, which may be applied to life situations beyond the classroom setting. This course serves as the cornerstone for all high school mathematics courses; therefore, all subsequent mathematics courses require student mastery of the NC Math 1 content standards. Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

**NC Math 1 Exit Standard (3) S**

This elective course is designed to assist students who have completed the EOC course but did not meet the exit standard.

**NC Math 2 (3) S****NC Math 2 – Honors (4) S****Prerequisite: NC Math 1 or Algebra I**

NC Math 2 continues a progression of the standards established in NC Math 1. In addition to these standards, NC Math 2 includes: quadratics, congruence and similarity of figures, trigonometry with triangles, modeling with geometry, probability, making inferences and justifying conclusions.

**NC Math 3 (3) S****NC Math 3 – Honors (4) S****Prerequisite: NC Math 2**

NC Math 3 progresses from the standards learned in NC Math 1 and NC Math 2. In addition to these standards, NC Math 3 extends to include advanced functions and algebraic concepts such as: the complex number system, inverse functions, piecewise functions, polynomials, rational functions, trigonometric functions. NC Math 3 also includes the geometric concepts of parallelograms, triangles and circles.

**Pre-Calculus - Honors (4) S****Prerequisite: Advanced Functions and Modeling or NC Math 3 – Honors**

Pre-Calculus should be taken by students who intend to continue their study of mathematics and/or science beyond the high school level. It is a prerequisite for AP Calculus. This course provides students an honors-level study of trigonometry, advanced functions, analytic geometry, sequences and series, and data analysis in preparation for calculus. Appropriate technology, from manipulatives to calculators and application software, should be used regularly for instruction and assessment.





# Science

Our goal within science education mirrors the goal outlined in the North Carolina Essential Standards which is to ensure that UCPS produces scientifically literate students. Scientific literacy implies an understanding of the scientific concepts and processes needed for personal decision-making, participation in civic affairs and economic productivity. Scientifically literate individuals have a substantial understanding of scientific concepts and inquiry skills which enable them to continue to learn and think logically.

Three units of science are required for graduation: a physical science (Chemistry, Physics or Physical Science), Biology and Earth/Environmental Science. AP Environmental Science may be taken in lieu of Earth/Environmental Science to meet graduation requirements.

## **Advanced Biology Topics - Honors (4) S (AP Companion Course)**

### **Prerequisite: Biology I Honors and Chemistry Honors**

This course is paired with AP Biology to help students design and carry out laboratory experiments and to understand the conceptual framework, factual knowledge and analytical skills necessary for the AP Biology Exam.

## **Advanced Chemistry Topics - Honors (4) S (AP Companion Course)**

### **Prerequisite: Chemistry – Honors**

This course is paired with AP Chemistry to help students design and carry out laboratory experiments and to understand the conceptual framework, factual knowledge and analytical skills necessary for the AP Chemistry Exam.

## **Advanced Environmental Science Topics - Honors (4) S (AP Companion Course)**

### **Prerequisite: Biology I Honors and a physical science course**

This course is paired with AP Environmental Science to help students design and carry out laboratory experiments and to understand the conceptual framework, factual knowledge and analytical skills necessary for the AP Environmental Science Exam.

## **Advanced Physics Topics - Honors (4) S (AP Companion Course)**

### **Prerequisite: A 4th level math course which requires NC Math 3 as a prerequisite**

This course is paired with AP Physics to help students design and carry out laboratory experiments and to understand the conceptual framework, factual knowledge and analytical skills necessary for the AP Physics Exam.

## **Anatomy/Physiology (3) S**

### **Anatomy/Physiology – Honors (4) S**

### **Prerequisite (CP): Biology I, Earth Science and a physical science course**

### **Prerequisite (H): Biology I Honors, Earth Science Honors and a physical science course**

### **Prerequisite (SVHS Sports Medicine Pathway): Biology I**

This course enables students to develop a comprehensive understanding of human anatomical design and function. A variety of lab activities, including dissection, will be utilized to reinforce classroom discussion.

## **Astronomy and Cosmology (3) S**

### **Astronomy and Cosmology – Honors (4) S**

### **Prerequisite: Strong background in mathematics recommended**

This course entails an exploration of our solar system, galaxy, and the universe in which we live, including investigation of our universe through its history, our future in it, and the laws that govern it. Topics include star life cycles, current research of cosmology and calculations of orbits and gravity.

## **AP Biology (5) S**

### **Prerequisite: Advanced Biology Topics or Biology I Honors and Chemistry Honors**

Together the Advanced Biology Topics and the AP Biology courses are designed to be the equivalent of a two-semester college introductory biology. AP Biology concentrates on three general areas: molecules and cells; heredity and evolution; and organisms and populations.



**AP Chemistry (5) S****Prerequisite: Advanced Chemistry Topics**

Together the Advanced Chemistry Topics and the AP Chemistry courses are designed to be the equivalent of a two-semester college introductory chemistry. AP Chemistry concentrates on the following areas: structure of matter; states of matter; reactions; and descriptive chemistry.

**AP Environmental Science (5) S****Prerequisite: Biology I Honors and physical science course, or Advanced Environmental Science Topics where offered**

The AP Environmental Science course is designed to be the equivalent of a one-semester college introductory environmental science. Topics include: earth systems; population dynamics; natural resources; and global changes.

**AP Physics I (5) S****Prerequisite: Advanced Physics Topics and/or 4th level math course which requires NC Math 3 as a prerequisite**

AP Physics I is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics, (including rotational motion); work, energy and power; mechanical waves and sound; and introductory, simple circuits.

**AP Physics II (5) S****Prerequisite: AP Physics I or Advanced Physics Topics**

AP Physics 2 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics.

**Biology I (3) S****Biology I – Honors (4) S**

The curriculum standards focus on inquiry-based instruction in the structures and functions of living organisms, ecosystems, evolution and genetics, and molecular biology. This is a High School Exit Standard Course.

**Biology Exit Standard (3) S**

This course is designed to assist students in meeting the Biology Exit Standard. The student can take the course first semester as a preparation for the EOC course second semester. The course may also be used after the student completes the EOC course but has not met the exit standard. A student may take this course a maximum of two times for elective credit.

**Biology II (3) S****Biology II – Honors (4) S****Prerequisite: Biology I, Earth/Environmental Science and a physical science course**

Biology II is designed for students who wish to receive additional preparation for college biology. Topics covered include ecology, taxonomy, microbiology, biochemistry, anatomy, physiology, behavior and genetics.

**Chemistry (3) S****Chemistry – Honors (4) S****Prerequisite/Co-requisite (CP): NC Math 2, Physical Science recommended****Prerequisite/Co-requisite (H): NC Math 2 Honors or NC Math 2 with teacher recommendation**

This laboratory course in inorganic chemistry includes inquiry-based instruction related to the properties and changes of matter, conservation and transfer of energy, and interactions of energy and matter.

**Current Topics in Science (3) S****Prerequisites: Biology I, Earth/Environmental Science and a physical science course**

This course is an opportunity to give students more choices in science electives. They will be able to learn about the practical and applicable aspects of various disciplines in science as currently used around the world today.

**Earth/Environmental Science (3) S****Earth/Environmental Science - Honors (4) S**

The curriculum standards for this course focus on the Earth: systems, geologic processes, weather, climate and astronomy. Ecological impact, sustainability and stewardship are also key elements in this course.



**Forensic Science I (3) S****Forensic Science I – Honors (4) S**

**Prerequisite (CP):** Biology I, Earth/Environmental Science and a physical science course

**Prerequisite (H):** Biology I Honors, Earth/Environmental Science Honors or AP Environmental Science and physical science course

This course centers around the evidence found at crime scenes and the role of forensic scientists in using this information to solve crimes. Major topics include the history and organization of crime labs, physical evidence, organic and inorganic analysis, toxicology, arson and explosive investigation.

**Forensic Science II – Honors (4) S**

**Prerequisite:** Chemistry and Forensic Science I

This lab-based course is centered on analytical techniques. Students will also perform career explorations researching the training required and job opportunities available for the forensic scientist. They will also analyze current events and the laws governing investigation and trial. Labs include DNA analysis, crime scene reconstruction, blood spatter analysis and preparing and studying casts and molds.

**General Science (3) S**

**Prerequisite:** Teacher recommendation

This course is for ninth grade students who are enrolled in Foundations of NC Math 1. The major objective is to provide a science elective that will help students improve higher order thinking skills, science process skills, and math competencies such as graphs and formulas before attempting the required high school courses.

**Human Biochemistry – Honors (4) S**

**Prerequisite:** Biology and Chemistry

This course allows students to study the interrelated concepts of biology and chemistry as they relate to how the human body works. Topics and areas of study include but not are not limited to protein synthesis and functions, intrinsic and extrinsic immune response, biomaterials, metabolism, genetics and their manipulations, biomolecules, medicine in the body and other chemically controlled biomechanisms. This course may be of particular interest to students wanting to pursue a medical degree of some form.

**Marine Science (3) S****Marine Science – Honors (4) S**

**Prerequisites (CP):** Biology I, Earth/Environmental Science and a physical science course

**Prerequisites (H):** Biology I Honors, Earth/Environmental Science Honors and a physical science course

This course is designed to provide an overview of oceanography and marine biology in a lecture and lab format. Topics include properties of water, marine ecology and the importance of aquatic organisms.

**Physical Science (3) S**

**Prerequisite/Co-requisite:** NC Math 1

The Physical Science curriculum standards integrate topics from both physics and chemistry in an inquiry-based instructional setting. Topics include: properties and changes of matter, motion and forces, and conservation and transfer of energy.

**Physics (3) S****Physics – Honors (4) S**

**Prerequisite:** NC Math 3, with NC Math 3 Honors strongly recommended for Physics Honors

This is an inquiry-based laboratory course covering topics in mechanics, kinematics, dynamics, energy, work, power, waves and electromagnetism. Physics is an essential course for students planning to pursue a science or mathematics-related major or minor in college.

# Social Studies

Students must have four units of social studies; World History, American History: Foundations, Civics & Economics, American History I, and either American History II or AP U.S. History to meet North Carolina high school graduation requirements. The North Carolina Social Studies Essential Standards offer a sound, thoughtful and defensible curricular framework that is designed to enable all students to acquire the essential knowledge, understanding, and skills needed to be informed, active citizens in the 21st century.

## **African-American History (3) S**

### **African-American History – Honors (4) S**

This course places emphasis on African-American history from 1865 to the present. Students will focus on the legal, political, demographic, and economic struggles as well as the contributions that African-Americans have made to society.

## **American Civil War (3) S**

### **American Civil War – Honors (4) S**

This course examines the time period 1850-1877. Students will focus on political, social, and economic issues as seen from both the Northern and Southern perspectives.

## **American History I (3) S**

### **American History I – Honors (4) S**

#### **Prerequisite: Civics and Economics**

This course begins with European exploration of the new world and concludes with 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. The course will guide students as they study the establishment of political parties, America's westward expansion, the growth of sectional conflict, how sectional conflict led to the Civil War, and the consequences of the Civil War, including Reconstruction.

## **American History II (3) S**

### **American History II – Honors (4) S**

#### **Prerequisite: American History I**

This course examines the political, economic, social and cultural development of the United States from the end of the Reconstruction era to present times. The Essential Standards for this course 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 on the United States in an interconnected world.

## **American Revolution (3) S**

### **American Revolution – Honors (4) S**

This course focuses on the time period from colonialism through the American Revolution. Students will examine the founding and shaping of the United States. This course is an excellent introduction into U.S. History.

## **AP European History (5) S**

#### **Prerequisite: World History**

This course surveys European history from approximately 1450 until the present. Students will investigate economic, social, cultural, intellectual, political and diplomatic themes and develop analytical thinking and persuasive writing skills. Students are expected to take the AP Exam following the completion of the course.

## **AP Government and Politics – Comparative (5) S**

#### **Prerequisite: Civics and Economics**

This course focuses on various governments throughout the world. Students will investigate a variety of governing philosophies and political relationships. Students are expected to take the AP Exam following the completion of the course.

## **AP Government and Politics – U.S. (5) S**

#### **Prerequisite: Civics and Economics**

This course presents an analytical view of government and politics in the United States. Students will learn general concepts used to interpret U.S. politics in order to analyze specific examples within our government. Students are expected to take the AP Exam following the completion of the course.

**AP Human Geography (5) S**

This course focuses on the study of geography as a social science by emphasizing the relevance of geographic concepts to human problems. Students are expected to take the AP Exam following the completion of the course.

**AP Macroeconomics (5) S****Prerequisite: Civics and Economics**

This course is designed to give students a thorough understanding of the principles of economics that apply to an economic system as a whole. Such a course places particular emphasis on the study of national income and price determination, and also develops familiarity with economic performance measures, economic growth, and international economics. Students are expected to take the AP Exam following the completion of the course.

**AP Microeconomics (5) S****Prerequisite: Civics and Economics**

This course provides students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the larger economic system. It places primary emphasis on the nature and functions of product markets and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. Students are expected to take the AP Exam following the completion of the course.

**AP Psychology (5) S**

This course introduces the systemic and scientific study of the behavior and mental processes of human beings and other animals. Included is a consideration of the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students are expected to take the AP Exam following the completion of the course.

**AP U.S. History (5) S****Prerequisite: American History I Honors**

This course surveys American history from the colonial period to the present with emphasis on the 19th and 20th centuries. Students will investigate social, cultural, political, and economic trends and how these have impacted the development of the United States. Students are expected to take the AP Exam following the completion of the course. This course will also serve to fulfill the American History II requirement.

**AP Modern World History (5) S**

This course helps students develop a greater understanding of the evolution of global processes and contacts in interaction with different types of human societies from the year 1200 CE to the present. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. Students are expected to take the AP Exam following the completion of the course.

**Bible as History (3) S****Bible as History – Honors (4) S**

This course is designed to give students a historical perspective of the Bible. Students will explore Hebrew history and discuss various topics in light of that history including the founding of the United States government and judicial system.

**Civics and Economics (3) S****Civics and Economics – Honors (4) S**

This course provides a framework for understanding the basic tenets of American democracy, practices of American government as established by the United States Constitution, basic concepts of American politics and citizenship and concepts in macro and micro economics and personal finance. The Essential Standards for this course are organized under three strands – Civics and Government, Personal Financial Literacy and Economics.

**Global Awareness (3) S****Global Awareness – Honors (4) S**

This course is a combination of geography, current events and globalization. Students will study current issues facing different countries and brainstorm sustainable solutions throughout the course. A critical component is to have students correspond and do joint projects with students in other countries through a variety of mediums.

**Global Citizen – Honors (4) S****Prerequisite: World History**

This course offers students the opportunity to become more globally aware of issues around the world and offers the opportunity to help solve them. This course will address some of the world's greatest challenges: extreme poverty and hunger, universal education, gender equality, child mortality, maternal health, HIV/AIDS and other diseases, environmental sustainability, sustainable local economies, armed conflict, and natural disasters, to name a few. Students will familiarize themselves with local leaders and

build communication, writing, technological, and political skills. The Honors level of this course will include a 20-hour community service requirement and an oral presentation.

### **Global Experience (3) S**

#### **Global Experience - Honors (4) S**

This course is designed to prepare high school students to engage in an analysis of cultural issues as they develop a broader global awareness. The purpose is to enable students to achieve personal and professional success and is intended to serve students participating in travel-abroad programs. This is an interdisciplinary course intended to help students synthesize experiences and information from many disciplines into an understanding of the world, its peoples and the challenges of the future. Global Experience students will also develop their written and oral communication skills and creativity through a myriad of online collaborative tools. In the event that Global Experience credit is to be awarded for completion of a program outside of the school setting, prior approval must be obtained. Documentation must be provided after the experience showing that approximately 135 hours of seat time occurred and that curriculum standards have been met.

### **Multicultural Women's Studies (3) S**

#### **Multicultural Women's Studies – Honors (4) S**

This course is an introduction to the study of women's issues around the globe. The course compares social, cultural, political, economic, and family issues on a global scale. The course also focuses on the role of women in the workplace, relationships between women and men, the historical basis of female subordination, and movements for social change. Intersections of ethnicity, class, and gender will also be explored.

### **Psychology/Sociology (3) S**

#### **Psychology/Sociology – Honors (4) S**

This is a combination course where students will study both psychological and sociological issues. During the first half of this course the focus will be on psychological concepts and theories including contemporary issues in the field. The course focuses on the systemic and scientific study of the behavior and mental processes of human beings. During the second half of the course students will focus on sociological concepts and current issues. Students will develop a core body of knowledge about human social activity and interaction.

### **Remember the Holocaust (3) S**

#### **Remember the Holocaust – Honors (4) S**

This course explores the origins and consequences of the Holocaust. Students will investigate this topic through examining primary source documents and analyzing the foundations and results of genocide situations. Readings, research projects, essays and class speakers will also be utilized in this class.

### **The Cold War (3) S**

#### **The Cold War – Honors (4) S**

This course studies the direct and indirect battles associated with the post-World War II ideological conflict between the former Soviet Union and the United States and how this has impacted U.S. relations with the global community. The course also looks at other countries, networks and regions such as Iran, Al Qaeda, North Korea, Afghanistan, Latin America, and Iraq who had connections to the Cold War. Relevant lessons of the Cold War are also addressed and a focus is placed on how these lessons can help promote informed judgments by contemporary American citizens.

### **Turning Points in American History (3) S**

#### **Turning Points in American History – Honors (4) S**

This course emphasizes 10-15 key turning points in American History. These turning points are "hinge" events in our nation's history, caused by, and subsequently contributing to, major social, cultural, political, and/or economic events. Turning points chosen for this course will not need to be events that have been popularly discussed in the standard U.S. History survey course. They will be "off-centered" to allow students an opportunity to study, in depth, a potentially fresh topic in United States history.

### **Twentieth Century America (3) S**

#### **Twentieth Century America – Honors (4) S**

This course investigates the development of 20th Century America. Students will survey the economic, political, social, diplomatic and military developments of America in a modern age.



**World History (3) S****World History – Honors (4) S**

This course addresses the six periods in the study of World History, with a key focus of study from the mid-15th century to present and focuses around a basic core of chronologically-organized events in history. Students will study major turning points that shaped the modern world as well as focusing on recurring concepts such as civilization, revolution, government, economics, war, stability, movement, technology, etc.





## Elective Courses

### Fine and Performing Arts

There are twelve arts education courses that may have honors versions. Since honors courses were designed as comprehensive courses which embrace diverse knowledge and skills, they should be built upon introductory courses. Therefore, only the level III and IV courses of dance, band, vocal music, orchestra, theatre arts and visual arts will be considered as honors level courses.

### Band

#### AP Music Theory (5) S

##### Prerequisite: Music Theory

This course introduces the student to musicianship, theory, musical materials, and procedures. It integrates aspects of melody, harmony, texture, rhythm, form, musical analysis, elementary composition, and, to some extent, history and style. Musicianship skills such as dictation and other listening skills, sight-singing, and keyboard harmony are considered an important part of the theory course, although they may be taught as separate classes. The student's ability to read and write musical notation is fundamental. It is also strongly recommended that the student will have previously acquired at least basic performance skills in voice or on an instrument.

#### Band I Beginner Level (3) S

##### Prerequisite: Audition or at least one year of previous band experience

Band I is designed to give all participants knowledge of their instrument, knowledge of the fundamentals of music theory, and a working knowledge of band literature. Credit is given for each semester the student is enrolled.

#### Band II Intermediate Level (3) S

##### Prerequisite: Audition or at least one year of previous band experience

This course continues to build on the content learned in Band I. Students will be provided with opportunities to develop and demonstrate appropriate instrumental practices to include the playing of instrumental literature which may include changes in tempo, keys, and meters. Credit is given for each semester the student is enrolled.

#### Band III Proficient Level - Honors (4) S

##### Prerequisite: Band II or Band Director recommendation

This course will provide students with an understanding of music in relation to styles of music, music periods, composers, and various cultures. Performance difficulty will be at Levels IV - V for honors. Credit is given for each semester the student is enrolled.

#### Band IV Advanced Level - Honors (4) S

##### Prerequisite: Band III or Band Director recommendation

This course involves the development of highly advanced proficiencies, including sight reading. Honors students will be at a performance difficulty of Level VI music. Credit is given for each semester the student is enrolled.

**Class Piano (3) S****Class Piano II (3) S****Class Piano III Honors (4) S****Prerequisite: Teacher recommendation**

These courses provide students the opportunity to study and develop skills in music reading, rhythm, chords, basic theory, and technical pianistic skills.

**Jazz Ensemble I (3) S****Jazz Ensemble II (3) S****Jazz Ensemble III - Honors (4) S****Jazz Ensemble IV – Honors (4) S****Prerequisite: Demonstrated ability/Band Director recommendation**

This course provides students the opportunity to study and perform various styles and periods of jazz. Emphasis is on the development of performance skills and the techniques of improvisation.

**Music Theory (3) S****Music Theory – Honors (4)**

This course will develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score.

**Symphonic Band I (3) S****Symphonic Band II (3) S****Symphonic Band III – Honors (4) S****Symphonic Band IV – Honors (4) S****Prerequisite: Demonstrated ability/Band Director recommendation**

Level 5 performance standards are achieved through the study and performance of Grade 5 and 6 band literatures. Opportunity for solo and small ensemble experience is included. Students develop individual musicianship as well as group performing skills. Marching may be included.

**World Music Drumming (3) S****World Music Drumming – Honors (4) S**

World Music Drumming develops students' listening skills. Students must not only listen for directions but also tones and intonation of the instrument and the part, so as to create a well-balanced, well-blended ensemble. Students also develop improvisational and drumming skills.

## Theatre Arts

Students in grades 9-12 are encouraged to develop an understanding of theatre in relationship to themselves, their community, and other communication media. Students will also explore theatre as an art form, as a career possibility, and as entertainment. Critical thinking and collaboration are key elements of Theatre Arts.

**Independent Study in Theatre Arts (3) S****Prerequisite: Teacher recommendation**

This course is designed for students with a career interest in theatre. Students will spend time researching a specific area of interest and then produce an appropriate product that incorporates areas studied. Refer to guidelines regarding any independent study course.

**Musical Theatre (3) S****Prerequisite: Audition and interview**

This course prepares students for post-secondary instruction and/or a career in musical theatre. Students will review the history of musical theatre, assess different career options, and receive training in audition techniques. The course will also provide instruction on the three elements of musical theatre - song, drama, and dance - and create a framework in which these are blended seamlessly into an individualized performance style.

**Play Production (3) S****Prerequisite: Theatre Arts II**

This course will introduce students to all of the components involved in the production of a play.

**Technical Theatre I (3) S**

Designed to develop knowledge and skills in the technical elements of play production, including theatre management, stagecraft, scene design, theatrical lighting, and music and sound effects.

**Technical Theatre II (3) S****Prerequisite: Technical Theatre I**

This course is designed for students interested in pursuing further study in theatre management.



**Theatre Arts I (3) S**

This course teaches students an appreciation for theatre through academic and practical experience. Students will be exposed to various areas of the theatre.

**Theatre Arts II (3) S****Grades: 10-12****Prerequisite: Theatre Arts I or teacher recommendation**

This course is designed to develop the student's working knowledge of acting, set design, make-up, costume, and directing. The student will build upon fundamental skills and apply them through actual performance opportunities.

**Theatre Arts III – Honors (4) Y****Grades: 11-12****Prerequisite: Theatre Arts II or Technical Theatre II and teacher recommendation**

This course consists of advanced individualized work in a seminar style course with an emphasis on in-depth research, analysis, application, and production.

**Theatre Arts IV – Honors (4) Y****Grades: 11-12****Prerequisite: Theatre Arts III Honors and teacher recommendation**

Course builds on Honors Theatre Arts III and includes student collaboration with directors and designers to develop unified production concepts for informal and formal theatre, film, television, or electronic media productions.

## Visual Arts

**Advanced Studio Art 2D - Honors (4) (AP Studio Art: 2-Dimensional Design Companion Course)****Prerequisite: Visual Arts II or an approved portfolio**

This course is an AP companion to be taken with AP Studio Art 2D in order to prepare students for the AP Visual Arts exam. Students will explore a variety of media and art processes. The work produced in this class will fulfill the breadth section of the AP art portfolios.

**Advanced Studio Art 3D - Honors (4) (AP Studio Art: 3-Dimensional Design Companion Course)****Prerequisite: Visual Arts II or an approved portfolio**

This course is an AP companion to be taken with AP Studio Art 3D in order to prepare students for the AP Visual Arts exam. Students will explore a variety of media and art

processes. The work produced in this class will fulfill the breadth section of the AP art portfolios.

**Advanced Studio Art: Drawing - Honors (4) (AP Studio Art: Drawing)****Prerequisite: Visual Arts II or an approved portfolio**

This course is an AP companion to be taken with AP Studio: Drawing in order to prepare students for the AP Visual Arts exam. Students will explore a variety of media and art processes. The work produced in this class will fulfill the breadth section of the AP art portfolios.

**AP Art History (5) S****Prerequisite: Art I or teacher recommendation**

The AP Program in Art History is intended for highly motivated students who are interested in the study of art history. All students will be expected to participate in the AP Art History Exam.

**AP Studio Art: 2-Dimensional Design (5) S****Prerequisite: Visual Arts II or an approved portfolio**

This course involves two-dimensional design that involves purposeful decision-making about how to use art elements and principles. It is intended for highly motivated students interested in the study of art. Students submit actual works and digital images of works for 2D Design Portfolios.

**AP Studio Art: 3-Dimensional Design (5) S****Prerequisite: Visual Arts II or an approved portfolio**

This course involves three-dimensional design that is intended to address a broad interpretation of sculptural issues in depth and space. It is intended for highly motivated students interested in the study of art. Students submit digital images of the art works they created as well as an artist statement in which they describe ideas investigated and explain how the ideas evolved as they created their body of work.

**AP Studio Art: Drawing (5) S****Prerequisite: Visual Arts II or an approved portfolio**

The AP Program in Studio Art is intended for highly motivated students who are seriously interested in the study of art. The three main areas of focus are quality of students' work, concentration on a particular visual interest or problem, and breadth of experience in the formal, technical, and expressive means of the artist. Students submit actual works and digital images of works for the Drawing Portfolio.



**Computer Art (3) S****Prerequisite: Visual Arts II and an approved portfolio**

Students will explore digital art, 3D-animation and design using electronic media. Students will develop personal imagery focusing on the computer and relevant graphics software to resolve assigned problems.

**Independent Study in Visual Arts (3) S****Prerequisite: Teacher recommendation**

Students will spend time researching a specific area of interest and then produce an appropriate product that incorporates all areas studied. Refer to guidelines regarding any independent study course.

**Photography I (3) S****Prerequisite: Art I or teacher recommendation**

This course provides academic credit for students in the area of photography (for example, students who take and develop pictures for the newspaper and the yearbook). It is also designed for those who want to pursue photography as an art form.

**Photography II (3) S****Prerequisite: Photography I and Art I**

Students learn and study the basics of photography composition in Photography I plus some manipulation on computer. Photography II would enable interested students to hone their skills using software for photo manipulation.

**Pottery/Ceramics I (3) S****Prerequisite: Art I**

This course offers an introduction to clay involving hand-building and wheel techniques. Glazing procedures and their decorative quality will be studied as well as the history of clay with an emphasis on North Carolina pottery.

**Pottery/Ceramics II (3) S****Prerequisite: Pottery/Ceramics I**

This course is a more advanced study of hand-building and wheel techniques. The student will demonstrate a greater mastery of clay. Students will also research the common characteristics of world cultural/ethnic groups.

**Printmaking I (3) S****Prerequisite: Art I**

Printmaking explores various printing methods including relief, lithography, monoprinting, embossing, and screen printing. History of printmaking and numerous printmakers will be studied.

**Printmaking II (3) S****Prerequisite: Printmaking I**

Printmaking II allows students to demonstrate advanced knowledge of the subject. Students will study various printmaking techniques and cultural groups.

**Visual Arts I (3) S**

This is the foundation level for art study.

**Visual Arts II (3) S****Prerequisite: Visual Arts I or teacher recommendation**

This course builds on the foundation of knowledge developed in Visual Arts I. Students research art and artists to gain knowledge and understanding of past and present art forms.

**Visual Arts III – Honors (4) S****Prerequisite: Any second level visual arts course and teacher recommendation**

This course provides knowledge of the arts in relation to culture, history, other disciplines and careers. Art history, criticism, and aesthetics will be studied in order for students to develop a personal art philosophy.

**Visual Arts IV – Honors (4) S****Prerequisite: Visual Arts III Honors and teacher recommendation**

Students will develop, clarify, and apply their philosophy of art through in-depth, independent, and advanced explorations with media, techniques, processes, and aesthetics. A portfolio evidencing high quality and understanding of personal art forms is developed and refined.

## Vocal Music

Students participating in the vocal music program will have the varied course options listed below. Honors credit is available for the third and fourth level in each of the courses.

### Concert Chorus I (3) S

### Concert Chorus II (3) S

### Concert Chorus III – Honors (4) S

### Concert Chorus IV – Honors (4) S

**Prerequisite:** Audition, application or teacher recommendation

This is an advanced choral performance group with emphasis on advanced choral technique and performance in concerts, contests, and choral festivals. Standards include the following: technique, theory, sight reading, and mandatory practices and performances.

### Ladies Chorus I (3) S

### Ladies Chorus II (3) S

### Ladies Chorus III – Honors (4) S

### Ladies Chorus IV – Honors (4) S

**Prerequisite:** Audition, application or teacher recommendation

This is a performing choral class composed of soprano and alto singers.

### Men's Chorus I (3) S

### Men's Chorus II (3) S

### Men's Chorus III – Honors (4) S

### Men's Chorus IV – Honors (4) S

**Prerequisite:** Audition, application or teacher recommendation

This is a performing choral class composed of tenor and bass singers, preferably with prior experience in mixed chorus.

### Mixed Chorus I (3) S

### Mixed Chorus II (3) S

### Mixed Chorus III – Honors (4) S

### Mixed Chorus IV – Honors (4) S

**Prerequisite:** Audition, application or teacher recommendation

This course is designed for a mixed choral group whose purpose will be to learn and perform a variety of vocal music. Emphasis is given to developing the skills of choral singing, developing a working knowledge of basic theory, and understanding musical style.



# Health and Physical Education

The Health & Physical Education program promotes behaviors that contribute to a healthful lifestyle and improved quality of life for all students. Recent studies in brain research reveal that physical activity promotes higher levels of learning by providing oxygen-rich blood needed by the brain. Courses are designed to develop skills and strategies in the specific activities, to enhance the student's appreciation of physical fitness to meet the demands of wholesome living, and to give students the opportunity to develop interest and proficiency in activities that have carry-over value in recreational activities throughout life. One unit of Health & Physical Education is required for graduation.

If a student has a physical disability that might restrict regular participation in Physical Education (PE) activities, it is the responsibility of the parent/guardian to have a letter from the student's physician indicating types of activities in which the student can and cannot participate. The PE teacher will modify the physical activities indicated by the student's physician.

## Advanced Physical Education (3) S

### Prerequisite: Health and Physical Education

This course is a co-educational elective open to students in upper grades. It includes daily rigorous physical activity as well as classroom instruction. A maximum of two units of Advanced Physical Education may be used toward graduation requirements.

## Fit for Life (3) S

### Prerequisite/Co-requisite: Health and Physical Education

This course is designed to instruct and educate students on lifestyle wellness. Students participate in activities that improve cardiovascular endurance and strength. This course prepares students to be able to enroll in a fitness facility and take classes such as aerobics, strength conditioning, kickboxing, boot camp, etc.

## Fitness and Nutrition - Honors (4) S

### Prerequisite/Co-requisite: Health and Physical Education

This course is designed to inform students on how to create fitness programs for healthy individuals and for those who have medical disabilities. Students will learn how to conduct fitness assessments and how to interpret results. By using heart rate monitors students will gain instant feedback on their own personal exercise intensity. This course will educate students how to motivate individuals to adopt or maintain a personal fitness program.

## Health and Physical Education (3) S

This healthful living course incorporates topics from the areas of both health education and physical education: motor skills development, movement concepts, health-related fitness, personal/social responsibility, mental & emotional health, personal & consumer health, interpersonal communication & relationships, nutrition & physical activity, and alcohol, tobacco & other drugs. Health and Physical Education is a graduation requirement.

## Lifetime Sports (3) S

### Prerequisite/Co-requisite: Health and Physical Education

This course is designed to promote participation in fitness activities that may be appropriate for an entire lifetime like running, walking, tennis, or golf.

## Physical Fitness/Weight Lifting (3) S

### Physical Fitness/Weight Lifting – Honors (4) S

### Prerequisite/Co-requisite: Health and Physical Education

This course is designed to improve student proficiency in many areas of physical fitness. This course may be taken a maximum of four times during the four years of high school.

## Speed and Agility (3) S

### Prerequisite: Health and Physical Education

This course is designed to increase coordination, agility, quickness and endurance through a variety of effective training techniques that can show measurable results.

## Sports Medicine I (3) S

### Sports Medicine I – Honors (4) S

### Prerequisite: Either Biology/Anatomy or Physiology/Health Sciences I recommended

The course consists of an in-depth study of the human anatomy plus first aid, injury prevention, and injury rehabilitation. The class will consist of lectures, labs, and on-the-job training with the sports teams of the school.

## Sports Medicine II (3) S

### Sports Medicine II – Honors (4) S

### Prerequisite: Sports Medicine I

This course is designed for students interested in pursuing a career in athletic training, physical therapy, medical science, nutrition or other related fields.



**Sports Medicine III – Honors (4) S**

**Prerequisite:** Sports Medicine II, Biology, and either Anatomy & Physiology or Health Sciences I

Students will learn about specific injuries as well as nutrition in sport and exercise. Students will have the opportunity to work with the school's athletic trainer.

**Team Sports (3) S**

**Prerequisite/Co-requisite:** Health and Physical Education  
Rules, skills, and sportsmanship are emphasized.





# Junior Reserve Officers' Training Corps (JROTC)

## Air Force Junior ROTC (AFJROTC)

(CATA, Monroe, Parkwood, Piedmont and Porter Ridge)

The Air Force Junior ROTC program is a character-building program which seeks to develop an informed citizen with a strong sense of self-reliance and awareness of citizenship responsibilities in today's global society. This is reflected in the AFJROTC mission to: "Develop citizens of character dedicated to serving their nation and community." AFJROTC is designed as a four-year program. Although participation in the entire program is encouraged, students may take one to four years if desired.

Aerospace Science and Leadership Education classes are fun, active and challenging. Classes meet with the same frequency as other full-credit classes. Regulation Air Force uniforms are issued free of charge and are worn once each week and for appropriate cadet functions. Appropriate military protocol is followed in the classrooms. Field trips to various military facilities are taken throughout the year to observe military operations first hand. Supervised orientation flights aboard military aircraft are offered when available from supporting military bases. The cadet corps color guard and drill teams compete against other JROTC units throughout the state and perform at school and community events. Cadets may be offered opportunities to attend Summer Leadership Schools and Summer Honors Programs. Corps' activities and class work are designed to build camaraderie among the cadets and students are given the opportunity to build on their social and leadership skills in a variety of challenging and enjoyable activities. In the Wellness component, cadets will be given the opportunity to put into practice the wellness concepts that are taught in Leadership Education. It consists of two exercise programs focused upon individual base line improvements with the goal of achieving national standards as calculated by age and gender.

Students must be recommended by the Senior Aerospace Science Instructor (SASI) to enroll in Honors courses. If selected, they will complete standard curriculum requirements and a three-part Honors Project as indicated in the AFJROTC Honors Guide.

Students do not incur any military obligation with Junior ROTC. Further, the AFJROTC program is not a recruiting platform for the military services. Eligible students that complete a minimum of two years in AFJROTC can qualify for ROTC college scholarships, service academy appointments, and enlistment in advanced pay grades should they desire to pursue those options. ROTC college scholarships typically pay for tuition, fees and books. In addition, scholarship recipients each receive a tax-free monthly stipend (spending allowance) of \$300 to \$500.

### JROTC Aviation History I (3) S

#### JROTC Aviation History I – Honors (4) S

This is a history course designed to acquaint the students with historical development and roles of the U.S. military and flight through WWII. The leadership studies portion focuses on Air Force customs and courtesies, uniform wear, attitude and discipline, time and stress management, good study and test-taking skills, basic drill and wellness/physical fitness.

### JROTC Aviation History II (3) S

#### JROTC Aviation History II – Honors (4) S

This is a history course designed to acquaint the students with the historical development and role of the U.S. military and flight from post WWII through military operations occurring today. The leadership studies portion focuses on health care, nutrition, wellness/physical fitness, drill, body image, drugs, alcohol, tobacco and U.S. citizenship.

### JROTC Science of Flight (3) S

#### JROTC Science of Flight – Honors (4) S

This course is designed to acquaint the student with the aerospace environment, the human requirements of flight, and the basic principles of aircraft flight, flight power, types of aircraft, and the principles of navigation. The leadership studies portion focuses on effective communication skills, basic leadership concepts, understanding individuals and group behavior, drill and wellness/physical fitness.

### JROTC Global Studies I (3) S

#### JROTC Global Studies I – Honors (4) S

The course introduces students to various regions of the world from geographic, historical and cultural perspective to increase international awareness. The leadership studies portion focuses on effective communication skills, basic leadership concepts, drill and wellness/physical fitness.

**JROTC Global Studies II (3) S****JROTC Global Studies II – Honors (4) S**

The course introduces students to various regions of the world from geographic, historical and cultural perspective to increase international awareness. The leadership studies portion focuses on understanding individuals and group behavior, drill and wellness/physical fitness.

**JROTC Space I (Astronomy) (3) S****JROTC Space I (Astronomy) – Honors (4) S**

This course is designed to introduce the student to the history of astronomy, the Earth, the Moon, the solar system and planets. The leadership studies portion focuses on career choices after high school and succeeding in job search, wellness/physical fitness and drill/staff functions.

**JROTC Space II (Exploration) (3) S****JROTC Space II (Exploration) – Honors (4) S**

This course is designed to introduce students to space exploration, orbits, spacecraft and launch vehicles and space mission operations and management. The leadership studies portion focuses on financial planning, banking, credit, investing, real life issues, wellness/physical fitness and drill/staff functions.

**JROTC Cadet Management (3) S****JROTC Cadet Management – Honors (4) S**

The cadet management portion affords the cadets additional opportunities to put the theories of previous leadership courses into practice. The leadership studies portion focuses on additional fundamentals of management and leadership, wellness/physical fitness and drill/staff functions.

**JROTC Cadet Management & Survival (3) S****JROTC Cadet Management & Survival – Honors (4) S**

The cadet management portion affords the cadets the opportunity to put the theories of previous leadership courses into practices. The survival instruction will provide instruction in the skills, knowledge, and attitudes necessary to successfully perform fundamental tasks needed for survival. The leadership studies portion focuses on understanding the fundamentals of management, managing yourself, and others. It also includes wellness/physical fitness and drill/skill functions.

**JROTC Aviation Ground School – Honors (4) S**

This course is the foundation for students interested in receiving a private pilot's license. When the course is completed the students should be prepared to take and pass the Federal Aviation Administration (FAA) written examination. The leadership studies portion focuses on leadership theory and leadership styles. It also includes wellness/physical fitness and drill/staff functions.

**JROTC Drill and Ceremonies (3) S****JROTC Drill and Ceremonies - Honors (4) S**

**Prerequisite: Must take second JROTC course concurrently or in the fall.**

The Drill and Ceremonies course concentrates on the elements of military drill, and describes individual and group precision movements, procedures for saluting, drill, ceremonies, reviews, parades, and development of command voice. Students are provided detailed instruction on ceremonial performances and protocol for civilian and military events and have the opportunity to personally learn Air Force drill concepts and procedures at the appropriate level commensurate with their enrollment experience. It also includes a wellness/physical fitness component.



# Marine Corps Junior ROTC (MJROTC)

(Weddington only)

Marine Corps JROTC (MJROTC) Leadership Education is based upon the tenants of Marine Corps leadership: to teach and develop a sense of citizenship, responsibility, discipline and character. Throughout the program, the Leadership Education curriculum is presented by way of five different categories of instruction. Those categories are: 1. Leadership, 2. Citizenship, 3. Personal Growth and Responsibility, 4. Public Service and Career Exploration, and 5. General Military Subjects. The curriculum reflects two fundamental aspects: Leadership Studies which teach leadership and citizenship; and the Leadership Labs which allow the student to apply that knowledge. Students do not incur any military obligation with Junior ROTC. Further, the MJROTC program is not a recruiting platform for the U.S. Military Services. Eligible students that complete a minimum of two years in MJROTC can qualify for ROTC college scholarships, service academy appointments, and enlistment in advanced pay grades should they desire to pursue those options. ROTC college scholarships typically pay for tuition, fees and books. In addition, scholarship recipients each receive a tax-free monthly stipend (spending allowance) of \$300 to \$500.

## **ROTC-1 Leadership Education I (LE-IA) (3) S**

**Grades 9-12**

### **ROTC-1 Leadership Education I (LE-IA) – Honors (4) S**

The first unit of the Leadership Education program provides an introduction to both leadership and citizenship. It also exposes new cadets to personal growth and responsibility and establishes a foundation in military structure and tradition. Additionally, cadets participate in a healthy physical education program and are first exposed to the team work required in organized drill. (Fall Semester)

## **ROTC-1 Leadership Education I (LE-IB) (3) S**

### **ROTC-1 Leadership Education I (LE-IB) – Honors (4) S**

This course is a continuation and enrichment of the activities/concepts introduced in LE-1A. (Spring Semester Only)

## **ROTC-2 Leadership Education II (LE-IIA) (3) S**

**Grades 10-12**

### **ROTC-2 Leadership Education II (LE-IIA) – Honors (4) S**

**Prerequisites: LE-IA or LE-IB or approval from the Senior Marine Instructor**

Leadership Education II continues the leadership and citizenship classes of LE-I. During LE-II students receive instruction in General Military Subjects with more structure and tradition than in LE-I. Additionally, cadets explore such topics as motivational techniques, listening skills and orienteering training with map and compass. This unit also provides additional learning experiences in personal growth and responsibility, as well as citizenship. (Fall Semester Only)

## **ROTC-2 Leadership Education II (LE-IIB) (3) S**

### **ROTC-2 Leadership Education II (LE-IIB) – Honors (4) S**

**Prerequisites: LE-IA or LE-IB or approval from the Senior Marine Instructor**

This course is a continuation and enrichment of the activities/concepts introduced in LE-IIA. (Spring Semester Only)

## **ROTC-3 Leadership Education III (LE-IIIA) (3) S**

**Grades 11-12**

### **ROTC-3 Leadership Education III (LE-IIIA) – Honors (4) S**

**Prerequisites: LE-IA or LE-IB and LE-IIA or LE-IIB or approval from the Senior Marine Instructor**

In LE-III, cadets resume building upon the subjects studied in LE-I and LE-II, including various career options by beginning to learn more about public service and other possible careers for life after high school. LE-III, cadets learn about job seeking and the interview process as well as receiving instruction in personal finances. (Fall Semester Only)

## **ROTC-3 Leadership Education III (LE-IIIB) (3) S**

### **ROTC-3 Leadership Education III (LE-IIIB) – Honors (4) S**

**Prerequisites: LE-IA or LE-IB and LE-IIA or LE-IIB or approval from the Senior Marine Instructor**

This course is a continuation and enrichment of the activities/concepts introduced in LE-IIIA. (Spring Semester Only)



**ROTC-4 Leadership Education IV (LE-IVA) (3) S**  
**Grade: 12**

**ROTC-4 Leadership Education IV (LE-IVA) – Honors (4) S**

**Prerequisites:** LE-IA or LE-IB and LE-IIA or LE-IIB and LE-IIIA or LE-IIIB, or approval from the Senior Marine Instructor

LE-IV is the culmination of a cadet's Leadership Education studies. Cadets are expected to keep up with and be able to discuss current events. Social and cultural topics such as equal opportunity and sexual harassment are studied, and writing assignments are required on subjects approved by the instructor. Finally, cadets create a personal resume for their future use after high school. (Fall Semester Only)

**ROTC-4 Leadership Education IV (LE-IVB) (3) S**

**ROTC-4 Leadership Education IV (LE-IVB) – Honors (4) S**

**Prerequisites:** LE-IA or LE-IB and LE-IIA or LE-IIB and LE-IIIA or LE-IIIB or approval from the Senior Marine Instructor

This course is a continuation and enrichment of the activities/concepts introduced in LE-IVA. (Spring Semester Only)



## Navy Junior ROTC (NJROTC)

(Forest Hills, Sun Valley only)

The Naval Junior Reserve Officer Training Corps (NJROTC) accredited curriculum emphasizes citizenship and leadership development, as well as maritime heritage, the significance of sea power, and naval topics such as the fundamentals of naval operations, seamanship, navigation and meteorology. Classroom instruction is augmented throughout the year by extra-curricular activities of community service, academic, athletic, drill and orienteering competitions, field meets, flights, visits to naval or other activities, marksmanship sports training, and physical fitness training. Electronic classroom equipment, textbooks, uniforms, educational training aids, travel allowance, and a cost-share of instructors' salaries are provided by the Navy.

The NJROTC Program promotes patriotism, develops informed and responsible citizens, increases respect for constructed authority, and leadership potential. NJROTC promotes high school completion, higher education and community service.

The purpose of the NJROTC Program is to develop a high degree of personal honor, self-reliance, individual discipline and leadership skills.

NJROTC promotes an understanding of the basic elements and the need for national security while providing information on the military services as a possible career.

Students do not incur any military obligation with Junior ROTC. Further, the NJROTC program is not a recruiting platform for the U.S. Military Services. Eligible students that complete a minimum of two years in NJROTC can qualify for ROTC college scholarships, service academy appointments, and enlistment in advanced pay grades should they desire to pursue those options. ROTC college scholarships typically pay for tuition, fees and books. In addition, scholarship recipients each receive a tax-free monthly stipend (spending allowance) of \$300 to \$500.



**Naval Science 1 (NS-1) - Introduction to the Navy Junior Reserve Officer Training Corps (3) S****Prerequisites:** None**NS1-Introduction to the Navy Junior Reserve Officer Training Corps Honors (4) S****Prerequisites:** Approval of the Senior Naval Science Instructor

This course instructs cadets on the proper wearing of the Navy uniform, military customs, courtesies, introduction to military drill, the history of NJROTC's mission goals, policies, Navy Core Values and Program benefits, citizenship, laws, authority and responsibility.

**Naval Science 2 (NS-2)-Maritime History, Leadership and Nautical Sciences for the NJROTC Student (3) S****Prerequisites:** NS1 Introduction to the Navy Junior Officer Training Corps Naval Science.

This course teaches Maritime History, Leadership, and Nautical Science including Maritime Geography, Oceanography, Meteorology, Astronomy and Physical Science.

**Naval Science 2 (NS-2) -Maritime History, Leadership and Nautical Sciences for the NJROTC Student Honors (4) S****Prerequisites:** NS-1 Introduction to the Navy Junior Officer Training Corps AND approval of the Senior Naval Science Instructor.

This course teaches Maritime History, Leadership, and Nautical Science including Maritime Geography, Oceanography, Meteorology, Astronomy and Physical Science. This course may be completed as a science elective and must be approved by the Senior Naval Science Instructor.

**Naval Science 3 (NS-3) Naval Knowledge, Leadership and Nautical Skills for the NJROTC Student (3) S****Prerequisites:** NS-1- Introduction to the Navy Junior Reserve Officer Training Corps and Naval Science 2 (NS-2) Maritime History, Leadership and Nautical Sciences for the NJROTC Student**Naval Science 3 (NS-3) Naval Knowledge, Leadership and Nautical Skills for the NJROTC Student Honors (4) S****Prerequisites:** NS-1- Introduction to the Navy Junior Reserve Officer Training Corps and Naval Science 2 (NS-2) Maritime History, Leadership and Nautical Sciences for the NJROTC Student AND approval of the Senior Naval Science Instructor.

This course teaches the importance of Sea Power, Naval Operations and Support Functions, Military Law, International Law and the Seas, Ship Construction and Damage Control, Shipboard Organization, Basic Seamanship, Marine Navigation, and Naval Ships, Weapons and Aircraft.

**Naval Science 4 (NS-4) Leadership Theory, Ethics and Responsibility (3) S****Prerequisites:** NS-1- Introduction to the Navy Junior Reserve Officer Training Corps, AND Naval Science 2 (NS-2) Maritime History, Leadership and Nautical Sciences for the NJROTC Student AND Naval Science 3 (NS-3) Naval Knowledge, Leadership and Nautical Skills for the NJROTC Student**Naval Science 4 (NS-4) Leadership Theory, Ethics and Responsibility Honors (4)****Prerequisites:** NS-1- Introduction to the Navy Junior Reserve Officer Training Corps AND Naval Science 2 (NS-2) Maritime History, Leadership and Nautical Sciences for the NJROTC Student AND Naval Science 3 (NS-3) Naval Knowledge, Leadership and Nautical Skills for the NJROTC Student. This Course MUST also be approved by the Senior Naval Science Instructor.

This is an advanced course that teaches cadets about ethics, morals, real life case studies concerning these issues and being in positions of authority and their responsibilities for others.

# Miscellaneous Courses

## Academic Competition (3) S

### Prerequisite: Teacher recommendation

This course will allow students involved in academic competitions like Odyssey of the Mind, Science Olympiad and Quiz Bowl to prepare for competition. Students may earn elective credit for each time the course is taken.

## Academic Orientation (3) S

This course is designed to provide additional academic support for ninth grade students. The focus of this class will be to improve the student's fundamental skills in the areas of Math and English. This class will involve critical fundamental pieces of the curricula from both Fundamentals of NC Math 1 and Modular English.

## ACT Test Prep (3) S

### Prerequisite: NC Math 2

This course is strongly recommended for students planning to attend community colleges or four-year universities. Test taking strategies, vocabulary study, reading comprehension, mathematics, and science skills review will be the primary focus with emphasis on the PLAN, ACT and Accuplacer tests.

## Freshman Focus (3) S

Academic planning and support topics such as study skills, social skills, citizenship, and college planning are covered. Schools may focus on specific topics to address identified student needs.

## Leadership Skills I (3) S

## Leadership Skills II (3) S\*

## Leadership Skills III (3) S\*

## Leadership Skills III - Honors (4) S\*

## Leadership Skills IV (3) S\*

## Leadership Skills IV - Honors (4) S\*

### Prerequisite: None for level I, all others require the previous level

Designed to develop leadership potential in students, this course includes studies of effective leadership styles and character values. It also provides first-hand experience in organizing, promoting, and implementing projects.

## Library Media Information Skills (3) S

### Prerequisite: Application and Media Coordinator Approval

Student will explore and evaluate a variety of print and non-print resources to interact with ideas in an information-intensive environment. Topics include research strategies, ethical behavior, and the use of technologies for information retrieval and automation of media center functions. Credit will be given for each semester the student is enrolled in the course.

## Media Literacy (3) S

### Prerequisite: Application and Media Coordinator/ Instructor approval

Students will apply production techniques while creating multimedia projects and/or school news broadcast over closed circuit networks. Topics include scriptwriting, identification of media bias, graphics production, visual advertising, and digital/video editing. Credit will be given for each semester the student is enrolled in the course.

## Peer Tutoring (3) S

Grades 11-12

## Peer Tutoring – Honors (4) S

Grades 11-12

### Prerequisite: Principal selection

This course is designed to involve students in maintaining a positive climate in the schools. Students are selected for the program on the basis of leadership and helping ability. Students who demonstrate effective helping skills in the classroom may apply to take Peer Tutoring more than once based on teacher evaluation and recommendation.

## Pre-College Reading (3) S

This course deals with improving comprehension and study skills including critical reading and thinking skills, mastery of the dictionary and library reference skills. This course can be taken twice for credit.

## Principles of Learning (3) S

This course is designed to provide additional support for students being served in the Exceptional Children's Department. In addition to providing support for IEP goals, including academics, organization, study skills, self-regulation and social skills to fit the needs of individual students.

**Reading Across the Curriculum (3) S**

This course is designed to enhance and support students' reading in all subject areas. Vocabulary development will be a major part of this course. This course can be taken twice for credit.

**SAT Test Prep (3) S****Prerequisite: NC Math 2**

This course is strongly recommended for students planning to attend community colleges or four-year universities. Test-taking strategies, vocabulary study, reading comprehension, and mathematics review will be the primary focus with emphasis on the PSAT and SAT tests.

**Specialized Literacy (3) S**

This course is designed to serve the unique academic needs of students as they improve overall literacy skills. This course can be taken twice for credit.

**Student Help Desk (3) S****Prerequisite: Approval through an application process**

This course is designed to train students to assist with minor repairs to student computers and to assist teachers with the implementation of technology tools in instruction. Students will work out of the media center under the supervision of the media coordinator. Desktop engineers and other technology services personnel will conduct the training.

**Study Skills Support Lab (3) S**

This course is designed to provide additional academic support for students being served in the Exceptional Children's Department. In addition to providing support for regular class work, teachers will also teach study skills and academic skills to fit the individual students.

**Teacher Cadet I (3) S****Teacher Cadet I - Honors (4) S**

This course introduces students to the profession of teaching. Along with various instructional practices and activities, the students are involved in a classroom experience at the elementary or middle school level. (With the approval of the instructor, students may complete the experience at the high school level.)

**Teacher Cadet II (3) S****Teacher Cadet II – Honors (4) S****Prerequisite: Teacher Cadet I**

This course continues to introduce students to the profession of teaching. Students learn to prepare lessons and are involved in a classroom experience at the elementary or middle school level. (With the approval of the instructor, students may complete the experience at the high school level.)

**Teacher Cadet III – Honors (4) S****Prerequisite: Teacher Cadet II**

This course is recommended for rising seniors who have a desire to become future educators. It provides the opportunity to explore the field of education through an internship with a mentoring teacher in an elementary or middle school setting. This course requires the student to participate in the state level North Carolina Teacher Cadet Program.

**Teacher Cadet IV – Honors (4) S****Prerequisite: Teacher Cadet III**

This course will allow rising seniors who have a desire to become future educators and who have completed the Teacher Cadet I, II and III courses, the opportunity to explore the field of education through an internship with a mentoring teacher in an elementary or middle school setting. This course requires the student to participate in the state level North Carolina Teacher Cadet Program.



# World Languages

World Language skills are key to global competence, national security, career advantages and travel. World language skills also improve first language skills. World language courses focus on developing communication skills and proficiency in the language of study. This includes conversing with others, comprehending written and spoken language, and presenting to others through speaking and writing. Students compare their own culture to the culture of study.

North Carolina's state colleges and universities entrance requirements include a minimum of two credits of world language study of the same language. Selective colleges and universities recommend four or more credits of world language study. It is best to study a world language without lapses between courses, particularly Levels I and II. Honors credit is awarded for Levels III, IV and V.

The availability of languages may vary per school. See North Carolina Virtual Public Schools <http://www.ncvps.org/index.php/courses/catalogue> for languages or levels available, in particular for Arabic, Chinese, French, German, Japanese, Latin and Russian that may not be available at each school. Native-speakers and students who qualify to be placed in a world language course for which the student has not completed the prerequisite may request to take the final exam or placement exam. A score of 80% or above can qualify for placement purposes but does not award credit.

## French

### **Advanced Survey of French Language and Culture - Honors (4) S**

#### **Prerequisite: French IV and teacher recommendation**

This is an advanced survey of language and culture through film, art, literature, history, conversation and current events. This class will be conducted in the target language using culturally authentic materials in the French Language. A major focus of this course is to further enable students to communicate in writing and in extended conversations on a variety of topics. Students will continue to narrate, discuss, and support fairly complex ideas and concepts using concrete facts and topics. Classes are conducted solely in French.

### **AP French Language (5) S**

#### **Prerequisite: French IV or teacher recommendation**

AP French Language emphasizes the use of language for active communication. Students develop language skills (reading, writing, listening, and speaking) at a college level. The course follows the curriculum set forth by the College Board. Students are expected to take the AP exam. Courses are conducted solely in French.

### **French I (3) S**

French I is an introduction to the study of a second language through the communication skills of listening, speaking, reading, and writing. Culture, geography, vocabulary and grammar are integrated into the course goals of communicating in French.

### **French II (3) S**

#### **Prerequisite: French I**

Students continue the development of their ability to communicate using their listening, speaking, reading, and writing skills as they study past, present and future time. The integration of culture, geography, vocabulary and grammar for the purpose of communicating in French are studied in greater depth.

### **French III - Honors (4) S**

#### **Prerequisite: French II**

**Students expand their listening, speaking, reading, and writing skills as they study more diverse topics, grammar and language functions. Art, music, informational text, history and literature of the culture are presented. Classes are conducted solely in French.**

### **French IV - Honors (4) S**

#### **Prerequisite: French III**

This course teaches students to communicate in writing and in extended conversations on a variety of topics. Students study authentic oral and written resources. They narrate, discuss, and examine more complex ideas and concepts. Classes are conducted solely in French.

### **French V Advanced French Language and Composition - Honors (4) S (AP Companion Course)**

#### **Prerequisite: French IV or teacher recommendation**

In addition to developing advanced speaking and listening skills, students focus on reading, translation, interpretation of literature, and writing skills. Students will be introduced to the AP College Board format. Students are expected to enroll in AP French Language and take the AP exam.



## German

### AP German Language (5) S

#### Prerequisite: German IV and teacher recommendation

AP German emphasizes the use of language for active communication. Students develop language skills (reading, writing, listening, and speaking) at a college level. The course follows the curriculum set forth by the College Board. Students are expected to take the AP exam.

### German I (3) S

German I is an introduction to the study of a second language through the four communication skills of listening, speaking, reading, and writing. Culture, geography, vocabulary and grammar are integrated into the course goals of communicating in German.

### German II (3) S

#### Prerequisite: German I

Students continue the development of their listening, speaking, reading, and writing skills as they study past, present and future time. The integration of culture, geography, vocabulary and grammar for the purpose of communicating in German are studied in greater depth.

### German III - Honors (4) S

#### Prerequisite: German II

Students expand their listening, speaking, reading, and writing skills as they study more diverse topics, grammar and language functions. Art, music, informational text, history and literature of the culture are presented. Classes are conducted primarily in German.

### German IV - Honors (4) S

#### Prerequisite: German III

This course teaches students to communicate in writing and in extended conversations on a variety of topics. Students study authentic oral and written resources. They narrate, discuss, and examine more complex ideas and concepts. Classes are conducted primarily in German.

### German V Advanced German Language - Honors (4) S (AP Companion Course)

#### Prerequisite: German IV and teacher recommendation

In addition to developing advanced speaking and listening skills, students focus on reading, translation, interpretation of literature, and writing skills. Students will be introduced to the AP College Board format. Students are expected to enroll in AP German Language and take the AP exam.

## Latin

### Latin I (3) S

Latin I is an introduction to the study of the Latin language and Greco-Roman culture. Students learn basic functions of the language, become familiar with some elements of its culture and increase their understanding of English. Emphasis is placed on the development of skills in reading and comprehension of adapted Latin texts.

### Latin II (3) S

#### Prerequisite: Latin I

This course continues the study of the Latin language and Greco-Roman culture. Students learn increasingly complex functions of the language, become familiar with an increasing number of elements of the culture, and increase their understanding of English.

### Latin III - Honors (4) S

#### Prerequisite: Latin II

In Latin III, grammar, vocabulary, word derivations and oral work are reinforced but the focus is on reading about the lives and works of famous authors and the culture of the ancient world.

## Mandarin Chinese

### AP Mandarin Chinese Language (5) S

**Prerequisite:** Mandarin Chinese IV and teacher recommendation

AP Chinese Language emphasizes the use of language for active communication. Students develop language skills (reading, writing, listening, and speaking) at a college level. The course follows the curriculum set forth by the College Board. Students are expected to take the AP exam.

### Mandarin Chinese I (3) S

Mandarin Chinese I is an introduction to the study of second language through the communication skills of listening and speaking, while learning to read and write “Simplified” characters and pinyin. Culture, geography, vocabulary and grammar studies are integrated into the course goals of communicating in Mandarin Chinese.

### Mandarin Chinese II (3) S

**Prerequisite:** Mandarin Chinese I

Students continue to develop their ability to communicate using Mandarin Chinese for listening and speaking, while improving their ability to read and write “Simplified” characters and pinyin. The integration of culture, geography, vocabulary and grammar for the purpose of communicating in Mandarin Chinese are studied in greater depth.

### Mandarin Chinese III - Honors (4) S

**Prerequisite:** Mandarin Chinese II

Students expand their listening and speaking abilities as well as reading and writing skills using “Simplified” characters as they study more diverse topics, grammar and language functions. Art, music, informational text, history and literature of the culture are presented. Classes are conducted primarily in Mandarin Chinese.

### Mandarin Chinese IV - Honors (4) S

**Prerequisite:** Mandarin Chinese III

This course teaches students to communicate in writing and in extended conversations on a variety of topics. Students study authentic oral and written resources. They narrate, discuss, and examine more complex ideas and concepts. Classes are conducted primarily in Mandarin Chinese.

### Mandarin Chinese V Advanced Chinese Language and Composition - Honors (4) S

**Prerequisite:** Mandarin Chinese IV and teacher recommendation

In addition to developing advanced speaking and listening skills, students focus on reading, translation, interpretation of literature, and writing skills. Students will be introduced to the AP College Board format. Students are expected to enroll in AP Chinese Language and take the AP exam.

## Spanish

### Advanced Survey of Spanish Language and Culture (4) S

**Prerequisite:** Spanish IV and teacher recommendation

This is an advanced survey of language and culture through film, art, literature, history, conversation and current events. This class will be conducted in the target language using culturally-authentic materials in the Spanish Language. A major focus of this course is to further enable students to communicate in writing and in extended conversations on a variety of topics. Students will continue to narrate, discuss, and support fairly complex ideas and concepts using concrete facts and topics. Classes are primarily conducted in Spanish.

### AP Spanish Language (5) S

**Prerequisite:** Spanish IV and teacher recommendation

AP Spanish emphasizes the use of language for active communication. Students develop language skills (reading, writing, listening, and speaking) at a college level. The course follows the curriculum set forth by the College Board. Students are expected to take the AP exam. Classes are conducted in Spanish.

### Medical Spanish I (3) S

Medical Spanish I is an introductory course for students with no prior knowledge of the Spanish language. The course introduces the students to the basics of Spanish grammar, pronunciation, speaking, and writing for proficiency in the context of basic phrases and language needed in the medical profession. This course is ideal for anyone going into the medical profession. It is advisable that students take both Medical Spanish I and Medical Spanish II, but a student may enter Spanish II after successful completion of Medical Spanish I.

### Medical Spanish II (3) S

**Prerequisite:** Medical Spanish I or Spanish I

This is a second course in an introductory series for students

going into the medical profession. The course expects that students have been introduced to the basics of Spanish grammar, pronunciation, speaking, and writing for proficiency in the context of basic phrases and language needed in the medical professions. This course includes more complicated grammar, more specialized medical language and medical interactions. It is advisable that students take both Medical Spanish I and Medical Spanish II, but a student may enter Medical Spanish II after Spanish I.

### **Spanish Heritage I (3) S**

A student would take this course in lieu of Spanish I, II or III. This course is for those whose primary language is Spanish to improve their reading and writing skills. This course builds on existing Spanish skills and introduces the student to the formal and informal aspects of oral and literary Spanish. The differences between standard and non-standard Spanish are explored.

### **Spanish Heritage II - Honors (4) S**

**Prerequisite:** Spanish Heritage I or teacher recommendation

In this course the student whose primary language is Spanish is exposed to more advanced literature and writing opportunities. Speaking practice includes formal presentations, debate and dramatic mini-performances. The course focuses on personal and social issues facing Latinos in the United States.

### **Spanish I (3) S**

Spanish I is an introduction to the study of a second language through the skills of listening, speaking, reading, and writing. Culture, geography, vocabulary and grammar are integrated into the course goals of communicating in Spanish.

### **Spanish II (3) S**

**Prerequisite:** Spanish I

Students continue the development of their listening, speaking, reading, and writing skills as they study present, past and progressive tense. The integration of Culture, geography, vocabulary and grammar for the purpose of communicating in Spanish are studied in greater depth.

### **Spanish III – Honors (4) S**

**Prerequisite:** Spanish II or Spanish Heritage I

Students expand their listening, speaking, reading, and writing skills as they study more diverse topics, grammar and language functions. Art, music and literature of the culture are presented. In-depth grammatical study begins. Classes are conducted primarily in Spanish.

### **Spanish IV - Honors (4) S**

**Prerequisite:** Spanish III or Spanish Heritage II

This course teaches students to communicate in writing and in extended conversations on a variety of topics. Students study authentic oral and written resources. They narrate, discuss and examine more complex ideas and concepts. Classes are primarily conducted in Spanish.

### **Spanish V Advanced Spanish Language and Composition – Honors (4) S (AP Companion Course)**

**Prerequisite:** Spanish IV or teacher recommendation

In addition to developing advanced speaking and listening skills, students focus on reading, translation, interpretation of literature, and writing skills. Students will be introduced to the AP College Board format. Students are expected to enroll in AP Spanish Language and take the AP exam. Classes are conducted in Spanish.



# Special Program Courses

## Future Ready Occupational Course of Study

The Future Ready Occupational Course of Study (OCS) curriculum is one of two courses of study through which a student may earn a high school diploma. Students eligible for this curriculum must have an Individualized Education Program (IEP) and a recommendation of consideration from the student's IEP team. Inclusive in this consideration are the student's post-secondary goals. The student and parent are responsible for the decision of the OCS course of study. All OCS students enter the program in the ninth grade.

### English

#### English I (S)

The English I course provides a foundational study of literary genres (novels, short stories, poetry, drama, literary nonfiction), including narrative and informational writing, speaking and listening skills, and language and grammar usage.

#### English II (S)

English II introduces literary global perspectives focusing on literature from the Americas (Caribbean, Central, South, and North), Africa, Eastern Europe, Asia, Oceania, and the Middle East. Students will continue reading literature and literary non-fiction, informational writing based on research, and incorporate presentation skills. This course requires the English II EOC upon completion of the course.

#### English III (S)

Students will gain mastery of curricular concepts through a survey of American literature. Through the examination of grammatical concepts including parts of speech, punctuation, sentence and paragraph structure as well as various literary genres including Oral folklore, drama, poetry, short stories, and various persuasive texts, including the development of a comprehensive research-based persuasive essay, the student will explore, examine, and evaluate a wide variety of modes of expression. The student will apply language expression for life-skills writing, speaking, and listening skills.

#### English IV (S)

Students will gain mastery of curricular concepts through a survey of Western European, primarily British, literature. Through the examination of grammatical concepts including parts of speech, punctuation, sentence and paragraph structure as well as various literary genres including Oral folklore, drama, poetry, short stories, and various persuasive texts, including the development of a comprehensive research-based persuasive essay, the student will explore, examine, and evaluate a wide variety of modes of expression. The student will apply language expression for life-skills writing, speaking, and listening skills.

#### Modular English (local recommendation) (S)

This course is designed to better prepare students for English I and II. The focus of the course is grammar, reading comprehension, and vocabulary. The course is offered first semester to be followed by English I or II second semester. Students scoring below a level 4 on the 8th grade EOG may benefit from enrolling in this course. It may be taken twice for elective credit.

### Mathematics

#### Financial Management (S)

Students will understand personal finance, appropriate methods of personal financial management and independent living, state and federal taxes, wages and compensation, and the use of credit. Students will understand different types of insurance in terms of their ability to meet personal needs and apply math skills to consumer spending.

#### Foundations of NC Math 1 (local recommendation) (S)

This course teaches Common Core Standards for math and prepares students for the subsequent course. Successful completion of both Locally Developed Math Elective Course and NC Math 1 will fulfill the NC Math 1 requirement. Students will receive two credits: Locally Developed Math Elective as an elective credit and NC Math 1 as the NC Math 1 Credit.

#### Introduction to Mathematics I (S)

Students will understand rational numbers, apply mathematical operations with rational numbers, apply ratios, proportions and percentages, use properties of two-and three dimensional figures, apply time and measurement skills, and algebraic properties to solve problems. Students will understand patterns and relationships, data in terms of graphical displays, and measures of center and range.

#### NC Math 1 (S)

Students will begin to develop skills to be able to perform basic algebraic equations. This course requires the NC Math 1 EOC upon completion of the course.



## Science

### Applied Science (S)

Students will focus on the study of Forces and Motion, Energy, Electricity and Magnetism, Matter, Chemicals, the Environment and Body Systems.

### Biology (S)

Students will focus on the Structure and Functions of Living Organisms, Ecosystems, Evolution and Genetics, and Molecular Biology. This course requires the Biology EOC upon completion.

### General Science (local recommendation) (S)

Students will begin to develop vocabulary and concepts necessary for successful transition to OCS Biology.

## Social Studies

### American History I (S)

The course follows the Founding Principles Act and begins with the European Exploration and Colonization of the New World and follows chronologically through Post-Civil War Reconstruction. Students will learn about the important political, social, and economic factors that contributed to the development of colonial America, the onset of the American Revolution, and the results of the Revolution including the founding of the United States government and the drafting of founding documents including the Constitution and the Bill of Rights. Students will also learn about early domestic and foreign policy, westward expansion, reform, immigration, and the cultural variances that have both united and divided America.

### American History II (S)

This is a sequel course to American History I. The course is strategically aligned with the North Carolina Essential Standards for American History II. The course follows the Founding Principles Act and begins with late 19th century American History to the 21st century. Students will learn about the important political, social and economic factors that transformed the ethnic composition of America and America's dependence on evolving technologies. Students will also learn about 19th – 21st century domestic and foreign policy, westward expansion, reform movements, immigration and the cultural variances that have both united and divided America.

### Civics & Economics (S)

This course provides a framework for understanding the basic tenets of American democracy, practices of American government as established by the United States Constitution, basic concepts of American politics and citizenship and concepts in macro and micro economics and personal finance. The Essential Standards for this course are organized under three strands – Civics and Government, Personal Financial Literacy and Economics.

## Other Courses

Occupational Course of Studies students must successfully complete 6 credits of Occupational Preparation. Occupational Preparational II and Occupational Preparational III must be taken twice for a total of four credits.

### Applied Art Production Class (S)

This course is designed to teach skills related to the creation of arts and crafts that will allow students the chance to explore, design, and produce visually appealing products for marketing and exhibition. Topics to be included are: jewelry making, fashion, fiber arts, textiles, book and paper arts, and clay works.

### Career Training (S)

#### Prerequisite: Occupational Preparation I

This course provides students in the OCS pathway the opportunity to participate in off-campus vocational training that is aligned with their post-school employment goal. The course allows release time for students to be involved in work-based learning activities including but not limited to: internships, apprenticeships, job shadowing, community service projects, vocational job coach services, individual competitive employment placements, or supported employment. This course may be repeated more than one time for credit based on the student's need for work-based vocational training.

### Occupational Preparation I (S)

This course introduces students to the fundamental attitudes, behaviors, and habits needed to obtain and maintain employment in their career choice as well as how to 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 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.

### **Occupational Preparation II (S)**

This course is designed to allow students to develop 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 work-based learning activities. Job seeking skills also will be refined.

### **Occupational Preparation III (S)**

This course is designed to allow students to develop 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 work-based learning activities. Job seeking skills also will be refined.

### **Occupational Preparation IV (S)**

This course allows students to solve work-related problems experienced in competitive employment, practice self-advocacy skills and master the theoretical and practical aspects of their career choice. Students finish completing the 360 hours of integrated competitive employment in a community setting required for successful completion of the Occupational Course of Study. Students also will develop a job placement portfolio that provides an educational and vocational record of their high school experience. Students will complete 150 hours of school-based training, 225 hours of community-based training, and 225 hours of competitive employment and complete an OCS Career Portfolio.

### **Study Skills Support Lab (S)**

This course is designed to provide IGP goal support for students served through the Exceptional Children's Department. As part of this course, EC teachers will also teach study and academic skills according to the individual student needs. The student may complete the Study Skills Course and may receive up to four "other" academic elective credits as required for high school graduation. Students are recommended by their counselor or academic teachers for this course.

### **Career/Technical Education Electives**

Students in the Occupational Course of Study must complete 4 credits of Career/Technical Education.

## **International Baccalaureate (IB) Program**

**Biology - SL1 (5) Y**

**Grade: 11**

**Biology - SL2 (5) Y**

**Grade: 12**

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

Biology at the Standard Level is designed for those students who will study the core syllabus without a strong or knowledgeable background in Biology. The major themes of Biology (structure and function, universality and diversity, evolution, and systems homeostasis) will help unite the specific topics and assessment statement to develop a broad understanding of the nature of life. Assessment will follow the UCPS grading policy; however, students will also be scored using the IB mark schemes. The course also meets the Group 4 requirements for the IB Diploma.

**Biology - HL1 (5) Y**

**Grade: 11**

**Biology - HL2 (5) Y**

**Grade: 12**

**Prerequisites: Earth Science, Biology I Honors and Chemistry Honors**

Higher Level Biology will be taught as a rigorous two-year program that will prepare students for the International Baccalaureate Diploma. Students will focus on the knowledge base and develop inquiry skills and critical thinking processes. The two-year experience will provide students with a background that will allow them to make educated decisions affecting themselves, their community, and others on an international level. This will include societal issues such as cloning, genetic engineering, and stem cell research, and global issues such as climate change, biodiversity, human population, and global warming.

**Chemistry - SL1 (5) Y**

**Grade: 11**

**Chemistry - SL2 (5) Y**

**Grade: 12**

**Prerequisites: Biology I Honors, Earth Science, Chemistry Honors and recommended Pre-Calculus**

Standard level chemistry is a two year course that develops a student's understanding of chemistry through practical laboratory work, analytical tools, and a collaborative learning environment. Students will cover topics such as kinetics, equilibrium, thermodynamics, atomic & molecular structure, acids & bases, redox, and organic chemistry. During senior year the class will vote on one of four options (such as biochemistry or medicinal chemistry) for further study. Students are expected to design, conduct, and analyze results and present them in a scientific paper.

**Chemistry - HL1 (5) Y** **Grade: 11**

**Chemistry - HL2 (5) Y** **Grade: 12**

**Prerequisites: Biology I Honors, Earth Science, Chemistry Honors and recommended Pre-Calculus**

Higher level chemistry is a two year course that develops a student's understanding of chemistry through practical laboratory work, analytical tools, and a collaborative learning environment. Students will cover all topics learned at Standard Level with deeper and more complex additions for each (See IB Chemistry-Standard Level description for a sample of topics). During senior year the class will vote on one of four options (such as biochemistry or medicinal chemistry) for further study. Students are expected to design, conduct, and analyze results and present them in a scientific paper. Students who are considering a STEM major in college will be best suited for this course.

**English A I - HL1 (5) Y** **Grade 11**

**English A I – HL2 (5) Y** **Grade 12**

**Prerequisites: English I Honors and English II Honors**

This is a two-year higher level course in which students will study several literary works which represent a variety of genres, time periods and cultures. The focus of this course will be to examine literary style and structure, to analyze themes and ideas, and to identify connections between and among the readers and the various works studied. Translations (works first written and published in a language other than English) are required for study. Essays, personal reactions, original research ideas and papers, as well as projects are required assessments for this course. The purpose is to develop students who are critical readers capable of demonstrating their appreciation and understanding of a writer's style and their own worldviews as well as the views of others.

**History of the Americas - HL1 (5) Y** **Grade: 11**

**History of the Americas - HL2 (5) Y** **Grade: 12**

**Prerequisites: World History, Civics and Economics**

IB History is a two-year course taught at Higher Level. The first year concentrates on the history of the Americas with some emphasis on American relations with Europe and Latin America. The course will incorporate the Common Core Standards of American History in addition to IB requirements. The second year of the course explores themes in World History through an in-depth study of an individual prescribed subject and the selection of two topics in the twentieth century. In addition to external exams, students will be internally assessed through demonstrating evidence of research skills, organization, and referencing through an individual historical investigation.

**IB Chinese Language B - SL1 (5) Y** **Grade: 11**

**Prerequisite: Chinese I, II and III**

As the first course of a two-year sequence, this course is designed to prepare students for the IB Chinese Language B Standard Level examination as one component of the IB Diploma. Students will begin to develop advanced communicative proficiency in the integrated core areas of listening, speaking, reading and writing in Chinese using authentic written and audio resources from countries where Chinese is the dominant language. The class will be conducted entirely in Chinese.

**IB Chinese Language B - SL 2 (5) Y** **Grade: 12**

This course is designed to prepare students for the IB Chinese Language B Standard Level examination in order to earn the IB Diploma. As the second course in this two-year sequence, this course will develop advanced communicative proficiency in listening and speaking while reading and writing in Chinese using authentic written and audio resources from countries where Chinese is the dominant language. The class will be conducted entirely in Chinese.

**IB Computer Science SL1 (5) Y** **Grade: 11**

**IB Computer Science SL2 (5) Y** **Grade: 12**

The purpose of this course is to develop an understanding of the range and organization of computer systems and the use of computers in a variety of disciplines, applications and contexts. Students will develop an understanding of the fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate.

Candidates will learn programming skills as a critical element of developing higher-level knowledge, skills and abilities applicable to virtually all fields of study. Collaborative working will be emphasized through the solving of a series of programming labs, as well as through the completion of a larger coding-based internal assessment.

**IB French ab initio - SL 1 (4) Y** **Grade: 11**

**Prerequisite: 0-1 credits in French**

French ab initio means "French from the beginning." This class is designed for students who have not taken the three or four units of foreign language necessary for other IB Language B courses. Students who have taken two or more units of French cannot take this course. The French ab initio course focuses on communication. The goal is for IB students to acquire the skills necessary to interact in everyday situations in reading, writing, listening and speaking, and to develop cultural awareness.

**IB French ab initio - SL 2 (4) Y****Grade: 12**

This course prepares IB students for the IB French ab initio exam. The goal is for students to deepen their communication skills necessary to interact in everyday situations in conversation, reading, writing, listening, and speaking while showing awareness of some elements of the culture of French speakers.

**IB French Language B - SL 1 (5) Y****Grade: 11****Prerequisites: French I, II and III**

As the first course of this two-year sequence, this course is designed to prepare students for the IB French Language B Standard Level examination as one component of the IB Diploma. Students will begin to develop advanced communicative proficiency in the integrated core areas of conversation, listening, speaking, reading, and writing in French using authentic written and audio resources from countries where French is the dominant language. The class will be conducted entirely in French.

**IB French Language B - SL 2 (5) Y****Grade: 12****Prerequisite: IB French Language B**

This course is designed to prepare students for the IB French Language B Standard Level examination in order to earn the IB Diploma. As the second course in this two-year sequence, this course will develop advanced communicative proficiency in conversation, listening and speaking while reading and writing in French using authentic written and audio resources from countries where French is the dominant language. The class will be conducted entirely in French.

**IB German Language B - SL 1 (5) Y****Grade: 11****Prerequisite: German I, II and III**

As the first course of this two-year sequence, this course is designed to prepare students for the IB German Language B Standard Level examination as one component of the IB Diploma. Students will begin to develop advanced communicative proficiency in the integrated core areas of conversation, listening, speaking, reading, and writing in German using authentic written and audio resources from countries where German is the dominant language. The class will be conducted entirely in German.

**IB German Language B - SL 2 (5) Y****Grade: 12****Prerequisite: IB German Language B**

This course is designed to prepare students for the IB German Language B Standard Level examination in order to earn the IB Diploma. As the second course in this two-year

sequence, this course will develop advanced communicative proficiency in listening and speaking while conversation, reading and writing in German using authentic written and audio resources from countries where German is the dominant language. The class will be conducted entirely in German.

**IB Physics - SL1 (5) Y****Grade: 11****IB Physics - SL2 (5) Y****Grade: 12****Prerequisite: Pre-Calculus**

IB Physics is a two-year course offered at the Standard Level that focuses on the study of natural physical phenomena of the interaction of light, matter, and energy in a conceptual as well as quantitative manner. Laboratory work is emphasized and requires structured labs, research papers and experimental projects. Instruction is student-centered with cooperative learning as well as teacher direction, thus offering the student a college-level physics experience. An interdisciplinary group project helps students realize that all scientific disciplines share the common goal of understanding how the world works and that scientists can work together on problems to discover solutions to a common goal.

**IB Spanish Language B SL 1 (5) Y****Grade: 11****Prerequisites: Spanish I, II and III**

As the first course of this two-year sequence, this course is designed to prepare students for the IB Spanish Language B Standard Level examination as one component of the IB Diploma. Students will begin to develop advanced communicative proficiency in the integrated core areas of conversation, listening, speaking, reading, and writing in Spanish using authentic written and audio from countries where Spanish is the dominant language. The class will be conducted entirely in Spanish.

**IB Spanish Language B SL 2 (5) Y****Grade: 12****Prerequisite: IB Spanish Language B SL 1**

This course is designed to prepare students for the IB Spanish Language B Standard Level examination in order to earn the IB Diploma. As the second course in this two-year sequence, this course will develop advanced communicative proficiency in conversation, listening and speaking while reading and writing in Spanish using authentic written and audio resources from countries where Spanish is the dominant language. The class will be conducted entirely in Spanish.



**Information Technology in a Global Society - HL1 (5) Y**  
**Grade: 11**

**Information Technology in a Global Society – HL2 (5) Y**  
**Grade: 12**

ITGS is a two-year course offered at the Higher Level and is designed to help students understand and evaluate the impact of technology, as well as information systems, on society. The course is administered with a student-centered focus involving individual projects, cooperative learning, and structured labs. The course will also improve student understanding of technology through the use of multimedia applications, programming software, and the completion of a technology project. Topics include privacy, security, and reliability of systems, as well as the impact of artificial intelligence and robotics on society.

**Mathematics - SL1 (5) Y**  
**Grade: 11**

**Mathematics – SL2 (5) Y**  
**Grade: 12**

**Prerequisites: NC Math 1, 2, 3, and Pre-Calculus**

This course will develop the student's understanding of mathematics while preparing them for the International Baccalaureate Diploma. This two-year course includes all seven math content areas including Pre-Calculus in the first year with topics of algebra, functions and equations, trigonometry, matrices, vectors and probability and statistics. The second year includes Calculus with AP AB Calculus imbedded.

**Math Studies - SL1 (5) Y**  
**Grade: 11**

**Math Studies – SL2 (5) Y**  
**Grade: 12**

**Prerequisites: NC Math 1 and NC Math 2**

IB Math Studies is a two-year course available at the Standard Level (SL). It is designed for students with varied backgrounds and abilities. Students taking this course need to possess fundamental skills and knowledge of processes of algebra and geometry. Inquiry is part of the class formation and class content will be linked to other content areas.

**Theory of Knowledge 1 (5) Semester 2 only**  
**Grade 11**

**Theory of Knowledge 2 (5) Semester 1 only**  
**Grade 12**

**Prerequisite: IB candidate status**

This course centers on the questions "What do you know?" and "How do you know it?" To help IB candidates answer the questions, the course fosters the development of critical thinking skills involving asking good questions, using language effectively, supporting ideas with evidence and developing logic, unity, and coherence in argument and writing expression. IB candidates will be encouraged to seek the inner connectedness among the disciplines in the Diploma Programme, analyzing and challenging what they have always accepted as conventional wisdom.

**Visual Arts - SL1 (5) Y**  
**Grade: 11**

**Visual Arts - SL2 (5) Y**  
**Grade: 12**

**Prerequisite: Art I**

IB students will focus on investigations of a self-directed topic in the arts and express themselves visually through the creation of art, orally through presentations of their work, and organizationally through a research/reflection journal. The number of studio hours and work generated is about 10% less than in Visual Arts, Higher Level.

**Visual Arts - HL1 (5) Y**  
**Grade: 11**

**Visual Arts – HL2 (5) Y**  
**Grade: 12**

**Prerequisite: Art I and Teacher / IB Coordinator Approval**

IB Visual Arts is a two-year course in which IB students will focus on investigation of a self-directed topic in the arts, leading to qualifying for the IB Diploma. Students will express themselves visually through creation of art, orally through presentations of their work, and organizationally through writing in a research journal. Students will complete extensive studio work and keep an investigative workbook.





# Union County Virtual (UCV)

The mission of Union County Virtual is to provide a positive, interactive, and nurturing environment that facilitates learning in an online setting. UCV incorporates three core values — Rigor, Relevance, and Relationships — into all courses, focuses on teacher student communication, and is dedicated to the highest caliber educational experience in a virtual environment.

## **ACT/SAT Test Preparation (3) S**

### **ACT/SAT Test Preparation - Honors (4) S**

#### **Prerequisite: NC Math 2**

This course is strongly recommended for students planning to attend community colleges or four-year universities. Test taking strategies, vocabulary study, literary reading comprehension, mathematics, and content reading strategies skills will be the primary focus with emphasis on the PLAN, ACT, PSAT, and SAT tests.

## **Advanced Environmental Science Topics – Honors (AP Companion Course) (4) S**

### **Prerequisites: Biology I Honors and a physical science course**

This course is paired with AP Environmental Science to help students design and carry out laboratory experiments and to understand the conceptual framework, factual knowledge and analytical skills necessary for the AP Environmental Science Exam.

## **American History I (3) S**

### **American History I – Honors (4) S**

#### **Prerequisite: Civics and Economics**

This course begins with European exploration of the new world and concludes with 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. The course will guide students as they study the establishment of political parties, America's westward expansion, the growth of sectional conflict, how sectional conflict led to the Civil War, and the consequences of the Civil War, including Reconstruction.

## **American History II (3) S**

### **American History II – Honors (4) S**

#### **Prerequisite: American History I**

This course examines the political, economic, social and cultural development of the United States from the end of the Reconstruction era to present times. The Essential Standards for this course 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 on the United States in an interconnected world.

## **AP Environmental Science (5) S**

### **Prerequisites: Biology I Honors and a physical science course, or Advanced Environmental Science Topics where offered**

The AP Environmental Science course is designed to be the equivalent of a one-semester college introductory environmental science course. Topics include: earth systems; population dynamics; natural resources; and global changes.

## **AP World History (5) S**

This course helps students develop a greater understanding of the evolution of global processes and contacts in interaction with different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. Students are expected to take the AP Exam following the completion of the course.



**Arts Appreciation (3) S****Arts Appreciation – Honors (4) S**

This course examines the visual arts, music and other performing arts through a globally inclusive historical study. Emphasis is placed on the interconnectivity of world events, social practices, and cultural values and the arts. Various time periods are explored through looking at the history, art, music, and theater of the day. This course will provide students with an overlying synthesis of each time period, and help them to develop a more globally comprehensive view of visual and performing arts throughout history.

**Biomedical Technology (3) S****Prerequisite/Co-Requisite: Biology**

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.

**Business Law - Honors (4)****Prerequisite: Principles of Business and Finance**

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.

**Career Management (3) S**

Designed to develop the fundamental attitudes and behaviors needed to secure employment and advance in a career. Skills are generic to all occupations, and emphasize proficiency in the workplace, problem solving, teamwork, and self-management. In addition, skills are developed which are specific to investigating, securing, and maintaining appropriate employment.

**Civics and Economics (3) S****Civics and Economics – Honors (4) S**

This course provides a framework for understanding the basic tenets of American democracy, practices of American government as established by the United States Constitution, basic concepts of American politics and citizenship and concepts in macro and micro economics and personal finance. The Essential Standards for this course

are organized under three strands – Civics and Government, Personal Financial Literacy and Economics.

**Creative Writing (3) S****Creative Writing – Honors (4) S**

Emphasis is placed on creative writing for those students with a desire to refine these skills and work with others to improve their creative writing. Students will expand on their powers of observation, imagination, and language and will be exposed to various forms of creative writing in the fields of prose, fiction and nonfiction (i.e. poems, fiction, drama, etc.).

**Earth/Environmental Science (3) S****Earth/Environmental Science - Honors (4) S**

The curriculum standards for this course focus on the Earth: systems, geologic processes, weather, climate and astronomy. Ecological impact, sustainability and stewardship are also key elements in this course.

**English II (3) S****English II – Honors (4) S****Prerequisite: English I or English I Honors**

English II introduces literary global perspectives focusing on literature from the Americas (Caribbean, Central, South, and North), Africa, Eastern Europe, Asia, Oceania, and the Middle East. Influential U.S. documents and a Shakespearean play will be included. Documented research based on interdisciplinary informational texts and literature will comprise the writing, speaking, and listening components of the course along with multimodal presentations. An End-Of-Course test will be administered in English II.

**English III (3) S****English III - Honors (4) S****Prerequisite: English II or English II Honors**

English III is an in-depth study of U.S. literature and U.S. literary nonfiction especially foundational works and documents from the 17th century through the early 20th century. At least one Shakespearean play will be included along with interdisciplinary informational writing and multimodal presentations focusing on speaking and listening skills.



**English IV (3) S****English IV - Honors (4) S****Prerequisite: English III or English III Honors**

English IV completes the global perspective initiated in English II. Though its focus is on European (Western, Southern, Northern) literature, this course includes important U.S. documents and literature (texts influenced by European philosophy or action). At least one Shakespearean play will be included. Interdisciplinary informational text and multimodal presentations will encompass the writing, speaking and listening skills.

**Global Awareness (3) S****Global Awareness - Honors (4) S**

This course is a combination of geography and globalization. Students will study current issues facing different countries and brainstorm sustainable solutions throughout the course. Although this course is offered in the traditional face-to-face environment as well as online, the online version is markedly different. The online course approaches global issues in a regional manner and has a daily focus on current events.

**Leadership Exploration (3) S****Leadership Exploration – Honors (4) S**

This course allows students to define leadership and explore the many facets of leadership—styles, theories, and levels. Students will learn about team building, communication strategies, and decision making. Historical and contemporary examples of both effective and ineffective leadership will also be explored. This course is only offered online.

**NC Math 1 (3) S****NC Math 1 - Honors (4) S**

NC Math 1 is the study of algebraic concepts designed to engage students in a variety of mathematical experiences that include the use of reasoning and problem-solving skills, which may be applied to life situations beyond the classroom setting. This course serves as the cornerstone for all high school mathematics courses; therefore, all subsequent mathematics courses require student mastery of the NC Math 1 content standards. Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

**NC Math 2 (3) S****NC Math 2 – Honors (4) S****Prerequisite: NC Math 1**

NC Math 2 continues a progression of the standards established in NC Math 1. In addition to these standards, NC Math 2 includes: polynomials, congruence and similarity of figures, trigonometry with triangles, modeling with geometry, probability, making inferences and justifying conclusions.

**NC Math 3 (3) S****NC Math 3 – Honors (4) S****Prerequisite: NC Math 2**

NC Math 3 progresses from the standards learned in NC Math 1 and NC Math 2. In addition to these standards, NC Math 3 extends to include algebraic concepts such as: the complex number system, inverse functions, trigonometric functions and the unit circle. NC Math 3 also includes the geometric concepts of conics and circles.

**Multicultural Women's Studies (3) S****Multicultural Women's Studies – Honors (4) S**

This course is an introduction to the study of women's issues around the globe. The course compares social, cultural, political, economic, and family issues on a global scale. The course also focuses on the role of women in the workplace, relationships between women and men, the historical basis of female subordination, and movements for social change. Intersections of ethnicity, class, and gender will also be explored.

**Mythology (3) S****Mythology – Honors (4) S****Prerequisite: English I**

This course will promote cultural awareness in classical mythologies to include ancient civilizations. Students will engage in cultural research, creative presentation, and incorporate writing strategies.

**Personal Finance (3) S**

The course prepares students to understand economic activities and challenges of individuals and families, the role of lifestyle goals and education and career choices, procedures in a successful job search, financial forms used in independent living, and shopping options and practices for meeting consumer needs. The course also prepares students to understand consumer rights, responsibilities and information, protect personal and family resources, and apply procedures for managing personal finances.

**Principles of Business and Finance (3) S**

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.

**Psychology/Sociology (3) S****Psychology/Sociology – Honors (4) S**

This is a combination course where students will study both psychological and sociological issues. During the first half of this course the focus will be on psychological concepts and theories including contemporary issues in the field. The course focuses on the systemic and scientific study of the behavior and mental processes of human beings. During the second half of the course students will focus on sociological concepts and current issues. Students will develop a core body of knowledge about human social activity and interaction.

**Spanish I (3) S**

Spanish I is an introduction to the study of a second language through the four skills of listening, speaking, reading, and writing. Culture, geography, and grammar are integrated into the course. Students have limited or no prior study of the language.

**Success 2.0 (3) S**

This course is designed to give students a basic understanding of success—in an online course, in high school, and in life. Students will utilize Google Apps for education and a variety of Web 2.0 tools while learning about digital literacy. Students will also explore more traditional elements of success including time management, academic integrity, decision making, goals setting, and career possibilities. This course is only offered online.



# Career and Technical Education

## Academies

### Academies at Central Academy of Technology & Arts

#### Information Systems Computer Engineering Academy

The goal of Central Academy's Information Systems program is to develop skills in specific areas of computer technology. Students will develop networking and internet skills using tools and hardware common to home and small business environments. Training is conducted using the Cisco CCNA Discovery curriculum. Students will become proficient in home and small business networking, in addition to routing and switching.

#### Information Systems Software Development and Game Design Academy

The goal of Central Academy's Information Systems program is to develop skills in specific areas of computer technology. Students will be introduced to the concepts of programming, application development, and writing software solutions. Utilizing programming, students will learn how to plan and write programs to solve common data analysis problems. Students will progress to using complex 2D graphics, animation, editing, and image analysis to better understand, illustrate, explain and present technical mathematical and/or scientific concepts. Students will apply skills through the development of XNA Game Studio computer games. At the conclusion of the pathway students will work in collaborative teams to develop a final 3D game project.

#### Information Systems Cyber Security Academy

The goal of Central Academy's Information Systems program is to develop skills in specific areas of computer technology. Students will be introduced to networking and computer programming during the first two years of the program. Students, in their last two years, will take courses in network security, as well as high-level courses in networking. Students will be able to practice their security skills in a safe way while learning skills that will be beneficial to technology careers. A strong emphasis on ethical computing will be present in this pathway.

#### Medical Sciences Academy

The goal of the Medical Sciences Program is to provide a sequence of courses, including Project Lead the Way biomedical courses, all aligned with appropriate national learning standards, which follows a proven hands-on, real-world, problem-solving approach to learning. Students explore the concepts of human medicine and are introduced to topics such as physiology, genetics, microbiology, and public health. Through activities such as dissections and experimentation, students examine the processes, structures, and interactions of the human body. They also explore the prevention, diagnosis, and treatment of disease. Students work collaboratively to investigate and design innovative solutions to health challenges like fighting cancer with nanotechnology. In addition to PLTW courses, students participate in Health Science and other high-level science courses.

#### Performing Arts Academy - Theatre Arts, Dance, and Music Production and Recording Arts Pathways

The goal of Central Academy's Performing Arts program is to further prepare serious, career-focused students for the expectations of a professional lifestyle in the performing arts. Students will be able to hone their current skills through a variety of program-specific courses that will lead to a well-rounded candidate. Gaining insight into the many facets of performance will enable the successful student to feel more comfortable on stage, behind the scenes, or in a studio. Students will select from one of three pathways in the performing arts field; Theatre Arts, Dance, or Music Production and Recording Arts. Auditions will be held prior to acceptance to the Theatre Arts and Dance pathways, emphasizing not only talent but creativity through expression. Music Production and Recording Arts students must meet minimum music experience in order to be eligible for entry into the pathway. While in the program, students will focus on instrumental or voice instruction and music theory, integrated with the technology of the recording business. During all four years of high school, the dedicated student will be able to perfect and continue to master the skills of their chosen profession.

**Pre-Engineering Academy**

The goal of the four-year program of study is to provide an overview of engineering and engineering technology. Students use problem-solving skills to tackle real-world engineering problems. Hands-on opportunities with computers and project simulations help students to understand technical concepts. Project Lead the Way (PLTW) is an engaging and thought-provoking curriculum through which students develop critical thinking skills through hands-on project-based learning, preparing them to take on real-world challenges. Students also participate in coursework in Drafting and Electronics.

**Transportation Systems Automotive Repair Academy**

The goal of the four-year program is to provide in-depth study into a chosen field of Transportation Technology. This academy develops automotive knowledge and skills in performing scheduled automotive maintenance, servicing and testing of brakes, electrical systems, drivetrain, engine, HVAC and steering and suspension systems, emphasizing hands-on experience. As part of the NATEF accreditation, topics are aligned to the Maintenance and Light Repair (MLR) and Automobile Service Technician (AST) requirements.

**Transportation Systems Collision Repair Academy**

The goal of the four-year program is to provide in-depth study into a chosen field of Transportation Technology. The Collision Repair Academy will provide high-tech training in collision repair. The I-CAR curriculum, which is an industry recognized professional curriculum that has been customized to meet the needs of high school students, is designed to prepare students for various entry-level employment positions that may lead to experienced technician positions with excellent job security and high-income potential. Students have the opportunity to graduate with a Platinum™ designation that makes them highly employable.

## Academies at Other High Schools

**Automotive Repair Academy**

This academy develops automotive knowledge and skills in performing scheduled automotive maintenance, servicing and testing of 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) and Automobile Service Technician (AST) requirements.

**Aviation Academy**

The aviation academy will expose students to various aspects of aviation from avionics, to aerospace engineering through instruction that is project oriented and has a student focus. The avionics program will offer electronics labs, aircraft visits, and projects. State-of-the-art electronics training equipment will be utilized for this program. Avionics systems are an integral part of aircraft design and have vastly increased aircraft capability. The Aerospace Engineering program will allow students to explore the designing, building, testing and analyzing the science behind the forces and physical properties of planes, rockets, and unmanned vehicles.

**Clean & Renewable Engineering Energy Academy**

The Clean Energy Technology program enables students to apply fundamental science and operating principles of clean energy systems to authentic problems. Such problems involve motors and generators, photovoltaic systems, water and energy conservation, wind turbines, biofuel generation, bioreactors, water power, energy harvesting, fuel cells and nuclear power. Students use an engineering design process to develop solutions to these authentic problems. Students master industry-standard simulation and modeling software sourced from the U.S. Department of Energy and related national laboratories as well as National Instruments (NI). Students completing the program may become an NI Certified LabVIEW Associate Developer (CLAD) and may be prepared for earning other relevant industry certifications.



### **Collision Repair Academy**

The Collision Repair Academy will provide high-tech training in collision repair. The I-CAR curriculum, which is an industry recognized professional curriculum that has been customized to meet the needs of high school students, is designed to prepare students for various entry level employment positions that may lead to experienced technician positions with excellent job security and high income potential. Students have the opportunity to graduate with a Platinum™ designation that makes them highly employable.

### **Construction Trades Carpentry Academy**

Carpenters make up the largest building trades occupation in the industry and those with all-around skills are in high demand. Carpenters are involved in many different kinds of construction activities, from building highways and bridges to installing kitchen cabinets. Carpenters construct, erect, install, and repair structures and fixtures made from wood and other materials. This four-level curriculum covers content such as Building Materials, and Advanced Wall Systems.

### **Construction Trades Electrical Trades Academy**

Electricians install electrical systems in structures; they install wiring and other electrical components, such as circuit breaker panels, switches, and light fixtures, and they follow blueprints, the National Electrical Code® and state and local codes. To prepare trainees a career in the electrical field, NCCER offers a comprehensive, Electrical curriculum that complies with DOL time-based standards for apprenticeship. The new sixth edition of Electrical has also been fully updated to the 2011 NEC® and includes revisions to the module examinations. The workbook questions, now Supplemental Exercises, have been incorporated into the textbook so that they're contained in one convenient location for easy reference.

### **Construction Trades Heating, Ventilation, and Air Conditioning Academy**

This program prepares students to install, repair, and maintain the operating conditions of heating, air conditioning, and refrigeration systems. Students work with piping and tubing, study heat and electricity, install duct systems, and comply with EPA regulations. This instructional program prepares students to install, repair, and maintain the operating conditions of heating systems. Students also learn blueprint and specification reading, ductwork design and fabrication, materials selection, job cost calculation, mechanical codes, heat load calculations, and installation procedures.

### **Construction Trades Masonry Academy**

The study of masonry is one of the world's oldest and most respected crafts. Masonry construction has existed for thousands of years. The remains of stone buildings date back 15,000 years, and the earliest manufactured bricks unearthed by archaeologists are more than 10,000 years old. These bricks were made of hand-shaped, dried mud. Among the most well-known works of masons are the pyramids of ancient Egypt and Notre Dame Cathedral in Paris. NCCER's curriculum encompasses modules such as Mortar, Metalwork in Masonry, and Estimating.

### **Construction Trades Welding Technology Academy**

Welding is a high-tech industry that is used in places all over the world. From ladders to aircraft carriers, from NASCAR to national defense, and from the laboratory to sales and repair, the varied welding industry impacts virtually every industry. Technology is creating more uses for welding in the workplace. For example, new ways are being developed to bond dissimilar materials and non-metallic materials, such as plastics, composites, and new alloys. Also, advances in laser beam and electron beam welding, new fluxes, and other new technologies and techniques all point to an increasing need for highly trained and skilled workers.

### **Cosmetic Arts & Science Academy**

There are tremendous career opportunities for students in cosmetology. Skin care, nail care and other specialties are areas of interest today. Students enrolled in the Cosmetic Arts & Sciences Academy Program receive specialized training in many of today's most sought after career fields. While enrolled in the Cosmetology Program, students are awarded the opportunity of preparing for the Board of Cosmetology License.



### **Culinary Arts Academy**

The Culinary Arts Academy will allow students to master techniques through hands-on learning and practice. The program is designed to provide students with the technical knowledge that they can apply the first day on the job, to be a lifelong career training tool, and to increase the chances of a student continuing their training in a post-secondary school. The culinary program will provide the fundamentals of safety and sanitation practices, basic knife skills, menu planning, and food production skills. Additional skills such as the management of the front and back of the house and guest relations are also included in the curriculum.

### **Drafting Academy - Engineering or Architecture**

The Drafting Academy gives students the basics of architectural drafting by challenging them with technology and classroom based curriculum that promotes the use of critical thinking and computer technology skills. Students will learn to use industrial drafting tools and instruments used by architects and engineers. Computer Assisted Drawing (CAD) will be used by the students to learn how to make construction drawings.

### **Early Childhood Education Academy**

Early Childhood Education is a dynamic field, a strong yet flexible discipline, that evolves as research in child development and learning brings new discoveries to light. North Carolina has been a leader in the field of early childhood education with programs such as SmartStart. These programs promote high quality childcare and education for all of North Carolina's children. With the Early Childhood Education Academy, students will learn about how you can be a part of these programs and initiatives.

### **Engineering Technology Academy**

The Engineering Technology Academy is organized around Union County manufacturing and engineering and contains a challenging academic component with substantial hands on opportunities that prepare students for success. The Engineering Technology Academy was created to develop practical thinkers and problem solvers. It is a program for students who enjoy challenges and want to learn in art, mathematics, physics, and computer programming in a project-oriented, multidisciplinary way.

### **Health Informatics Academy**

The health informatics pathway introduces students to the discipline through a series of authentic projects that merge information science, computer science and health care. Through real-world projects, students use information technology, data analysis software and statistics to address a range of health related topics. Students will: a) use a variety of technologies and software that can be applied not only to the field of health care but also to other career fields; b) collect, analyze and prepare data reports targeted to a specific audience; c) read, understand and synthesize related documents that deal with critical health topics in the health field; and d) make sense out of data that can serve the general welfare and quality of healthcare in the nation. Students will also learn about the array of careers available in the field of Health Informatics.

### **Media Production Broadcasting & TV Production Academy**

This Academy provides students who show an interest and talent with movie/broadcasting and photo and digital graphics an opportunity to receive exposure and skills related to the Arts, Audio-Video Technology and Communications Career Pathway. Students will receive hands-on experience with the industry standard technology which will enable them to make educated decisions about careers in the Digital Media field.

### **Media Production Film Editing & Production Academy**

This Academy provides students who show an interest in movie/broadcasting, and photo/digital graphics an opportunity to receive exposure and skills related to the Arts, Audio-Video Technology and Communications Career Pathway. Students will receive hands-on experience with the industry standard technology which will enable them to make educated decisions about careers in the Digital Media field.

### **Music Production and Recording Arts**

The Music Production and Recording Arts Academy provides students the opportunity to develop a foundation in music theory, the history behind the recording industry, music business, recording equipment and job opportunities available in the recording field. Students will continue to develop skills using industry studio equipment and software. Professionalism and personal skills are stressed throughout the entire program enabling them to work cohesively as a team towards success and high level qualities of production.

### **Nurse Aide Academy**

The demand for healthcare professionals is high in all areas. This need is projected to increase for at least the next 30 years and has resulted in higher wages and more diverse job opportunities for Nursing Assistants. The Nurse Aide Academy is a multi-year program that introduces students to nursing. Certified nursing assistants (CNAs) are employed by hospitals, nursing homes, outpatient clinics, and private individuals to take care of patients' everyday needs.

**Pharmacy Tech Academy**

The Academy of Pharmacy Technology prepares students for the growing pharmaceutical industry by providing them with the clinical and business skills needed to work successfully alongside pharmacists and physicians. Pharmacy Technicians play a very critical role in pharmacies and healthcare organizations by handling prescriptions and medication orders and by providing assistance to licensed pharmacists. They assist licensed pharmacists by providing patients with medications and healthcare products. Students may pursue rewarding careers in a variety of settings, including hospitals, retail pharmacies, nursing homes, pharmaceutical companies and wholesalers, and the federal government.

**Project Lead the Way Engineering**

PLTW Engineering is more than just another high school engineering program. It is about applying engineering, science, math, and technology to solve complex, open-ended problems in a real-world context. Students focus on the process of defining and solving a problem, not on getting the “right” answer. They learn how to apply STEM knowledge, skills, and habits of mind to make the world a better place through innovation. PLTW students have said that PLTW Engineering influenced their post-secondary decisions and helped shape their future. Even for students who do not plan to pursue engineering after high school, the PLTW Engineering program provides opportunities to develop highly transferable skills in collaboration, communication, and critical thinking, which are relevant for any coursework or career.

**Public Safety Emergency Medicine Academy**

The Emergency Medicine Academy is aligned to the EMT Basic Certification from the North Carolina Office of Emergency Medical Services. This academy will help students to develop the emergency skills to assess and manage a multitude of healthcare emergencies.

**Public Safety Fire Fighter Academy**

Union County Public Schools is partnering with the local Fire Departments to create a retention and development tool for the surrounding fire departments. The academy will develop highly trained firefighters and overall outstanding professional people. Students will be able to earn certifications in several areas while in high school and be prepared for a career in public service or continue at a postsecondary college or university.

**Public Safety Law and Justice**

The Law and Justice Academy will develop highly trained Security and Law Enforcement Officer and overall outstanding professional people. Students will be able to earn certifications in several areas while in high school and be prepared for a career in security services or continue at a post-secondary college or university.

**Veterinary Assisting Academy**

The Veterinary Assisting Academy provides students who show an interest in learning about veterinary medicine an opportunity to receive exposure and skills related to animal care. Students are exposed to proper veterinary practice management and client relations, pharmacy and laboratory procedure, advanced animal care, and surgical/radiological procedures.



# Program Areas

Career and Technical Education (CTE) in the Union County Public School System has a mission to better prepare high school graduates for entry into the post-secondary system and the workplace. Career and Technical Education courses are important for all students regardless of whether they will enter the workforce directly after high school or after pursuing higher education. Several Career and Technical Education courses offer students the opportunity to earn articulated community college credit and through relationships with local community colleges, Career and College Promise pathways allow students to take college courses and receive high school and college credit. Union County High School students may also earn business and industry certifications while in high school. Specific Career and Technical Education courses provide the knowledge and skills to take exams that qualify the students for these credentials.

Career and Technical Education, at the high school level, emphasizes applications of theory, problem solving and critical thinking skills that business, industry, and post-secondary institutions are encouraging students to acquire for further study in any field. Students taking Career and Technical Education courses can definitely get an early start on a technical degree, business and industry credentials and future employment opportunities. Program areas that are part of Career and Technical Education include:

## **Agricultural Education**

## **Business, Finance and Information Technology Education**

## **Family and Consumer Sciences Education**

## **Health Science Education**

## **Marketing and Entrepreneurship Education**

## **Technology Engineering and Design Education**

## **Trade and Industrial Education**

Courses offered in each of the above program areas are described on the following pages. As you will see, students have a wide variety of college and career preparations available through these programs. Every program area is associated with a student organization that offers students the opportunity to develop leadership skills, participate in civic service, earn valuable scholarships and compete in regional, state and national competitions. As students are being prepared for careers in the 21st century, Career and Technical Education stands out as an excellent delivery system for higher academic standards. Some courses are offered at both Honors and Advanced Honors levels. Advanced Honors (AH) receive five credit points which is equivalent to Advanced Placement courses.

## **North Carolina High School to Community College Articulation Agreement**

The North Carolina High School to Community College Articulation Agreement (CAA) provides a seamless process that joins secondary and postsecondary Career and Technical Education (CTE) programs of study. This statewide articulation agreement is comprised of many high school CTE courses that match the knowledge and skills taught in similar community college courses. The articulation agreement ensures that if a student is proficient in their high school course, the student can receive college credit for that course at any North Carolina community college. This streamlines the student's educational pathway by eliminating the need to take multiple courses with the same learning outcomes.

To receive articulated credit, students must enroll at the community college within two years of their high school graduation date and meet the following criteria:

- Final grade of B or higher in the course and
- A score of 93 or higher on the standardized CTE post assessment

# Credentials and Certifications

## Agricultural Education

### AWS Welding Certifications

Earning your specialized welding certification can reward you in significant ways, including higher salary potential, stronger employment demand and better job stability. In addition, specialized certification shows employers your ability to continually learn and grow in your field, both critical qualities to succeed in bigger career roles like team leadership or more complex jobs.

### Certified Veterinary Assistant Level 1

The Certified Veterinary Assistant (CVA) certification program establishes knowledge and performance standards in the practice of veterinary assisting and encourages the widespread adoption of these standards through a highly valued credential of competency.

### Master Service Technician Briggs and Stratton

Today's consumer is looking for a higher level of technical service. Becoming a Master Service Technician fulfills that consumer's service need. Briggs & Stratton recognizes this outstanding achievement with added status and benefits.

### OSHA 10-Hour General Industry Certification Agriculture

The OSHA 10-Hour General Industry (Agriculture) training course provides training for entry level workers and employers on the recognition, avoidance, abatement, and prevention of safety and health hazards in workplaces in agriculture industry. The program also provides information regarding workers' rights, employer responsibilities, and how to file a complaint. Through this training, OSHA helps to ensure that workers are more knowledgeable about workplace hazards and their rights.

## Business, Finance, and Information Technology Education

### Adobe Premier, Photoshop, Dreamweaver Certifications

Adobe conducted research to identify the foundational skills students need to effectively communicate using digital media tools. Based on feedback from educators, design and video professionals, businesses, and educational institutions around the world, the objectives cover entry-level skill expectations for video communication.

### Conover Workplace Readiness Soft Skills Credential

This credentialing system covers critical soft skills employers are looking for when assessing potential job candidates. The skills included are: Attitude, Communication, Planning and Organizing, Critical Thinking, Interpersonal/Social Skills, Teamwork, Professionalism and Media Rules.

### Financial Literacy through Everfi

EverFi™ – Financial Literacy provides students who successfully complete the course with certification in financial literacy, which can be a powerful tool for job applications, college search, and internships.

### Intuit Quickbooks Certification

By certifying one's skills, individuals can validate their technical abilities and demonstrate proficiency, while providing marketable skills that speak to employers. The objectives reflect an easy-to-understand platform for students to grasp accounting concepts while honing skills in the most prevalent bookkeeping application in small business today.

### Microsoft Office Specialist Word, PowerPoint, Excel, Access

Demonstrate that you have the skills needed to get the most out of Office by earning a Microsoft Office Specialist (MOS) certification in a specific Office program.

### SAS Base & Advanced Programming for SAS-9

SAS® has long had certification available for its programming language. SAS® Certification is a validation of your SAS® knowledge and it shows that you have at least a base knowledge of the subject matter, and is a way to stand out in the SAS® Community.

## Family and Consumer Science Education

### CPR

The students receive a certification in cardiopulmonary resuscitation (CPR) that is recognized across the country.

### North Carolina Early Childhood Credential (NCECC)

The education of child care providers directly impacts children's ability to grow and develop to their fullest potential. To improve the quality of child care in North Carolina, the Division of Child Development created the North Carolina Early Childhood Credential.

### ServSafe Food Protection Managers Certification

The ServSafe® program provides food safety training, exams and educational materials to foodservice managers. Students can earn the ServSafe Food Protection Manager Certification, accredited by the American National Standards Institute (ANSI)-Conference for Food Protection (CFP).

## Health Science Education

### CPR/First Aide

The students receive a certification in cardiopulmonary resuscitation (CPR) that is recognized across the country.

### North Carolina Nurse Aide I

This is a state recognized certification that allows students to be hired as Certified Nursing Assistants after high school graduation.

### OSHA 10-Hour General Industry Certification (Healthcare)

The OSHA 10-Hour General Industry (Healthcare) training course provides training for entry level workers and employers on the recognition, avoidance, abatement, and prevention of safety and health hazards in workplaces in healthcare industry. The program also provides information regarding workers' rights, employer responsibilities, and how to file a complaint. Through this training, OSHA helps to ensure that workers are more knowledgeable about workplace hazards and their rights.

## Marketing and Entrepreneurship Education

### Advanced Customer Service and Sales Certification

The Advanced Customer Service and Sales Certification from the National Retail Federation helps individuals demonstrate core skills that can be applied to careers in retail and other sales-focused industries.

### Certified Guest Service Professional (CGSP)

The Certified Guest Service Professional (CGSP®) designation provides recognition for those individuals that know how to achieve and express exceptional service by engaging with their guests and creating memorable experiences. Recognized worldwide, the CGSP® designation is the highest acknowledgment of awarding-winning guest service for employees in the lodging industry.

### Customer Service and Sales Certification

The Customer Service and Sales Certification from the National Retail Federation helps individuals demonstrate knowledge and skills in areas that employers value.

### Fundamentals Marketing Concepts

The Institute for the Assessment of Skills and Knowledge of Business (A\*S\*K Business Institute) is a joint initiative of DECA and MBA Research and Curriculum Center. It operates as a quasi-independent agency providing objective, industry-based proof of learning for students of business. A\*S\*K exams and certificates are based on performance indicators derived from MBA Research's continuing research of the business community.

## Technology Engineering and Design Education

### OSHA 10-Hour Industry

The OSHA Outreach Training Program for General Industry provides training for entry level workers and employers on the recognition, avoidance, abatement, and prevention of safety and health hazards in workplaces in general industry. Through this training, OSHA helps to ensure that workers are more knowledgeable about workplace hazards and their rights.

## Trade and Industrial Education

### ASE G1 - MLR

The ASE Student Certification program is specially designed to evaluate and certify students who are near the end of their studies in the areas of Automobile Service, Collision Repair & Refinishing, and M/H Truck. This certification can be thought of as the first step in building a career as a service professional by providing them with their first industry-recognized certification through ASE.

### Autodesk Certified Inventor

The Inventory Certified User exam includes both academic and industry requirements designed to confirm that Autodesk® Inventor® software users have the skills necessary to continue their design careers—whether they attend college, enter the workforce, or work toward additional levels of industry certification.

### Autodesk Certified User

Those who are relatively new to Autodesk software and want to demonstrate basic proficiency can seek to become Certified Users. Certification at this level helps demonstrate a commitment to academic success or career development.

### Autodesk Revit Architecture Certified User

The Revit Architecture Certified User exam includes both academic and industry requirements designed to confirm that Autodesk® Revit Architecture® software users have the skills necessary to continue their design careers—whether they attend college, enter the workforce, or work toward additional levels of industry certification.

### AWS Welding Certifications

Earning your specialized welding certification can reward you in significant ways, including higher salary potential, stronger employment demand and better job stability. In addition, specialized certification shows employers your ability to continually learn and grow in your field, both critical qualities to succeed in bigger career roles like team leadership or more complex jobs.

### Certified SolidWorks Associate (CSWA)

As a Certified SOLIDWORKS Associate - Academic (CSWA - Academic), students will demonstrate their expertise with SOLIDWORKS 3D solid modeling software, design concepts, and sustainable design, giving them a competitive edge in today's job market.

### CISCO CCENT

A CCENT certification opens the doors to a career in networking. Having a CCENT means students have what it takes to manage a small, enterprise branch network. A CCENT is a student's first step toward CCNA certification and will help them stand out from the crowd in entry-level positions.

### CISCO CCNA

Cisco Certified Network Associate (CCNA) Routing and Switching is a certification program for entry-level network engineers that helps maximize a student's investment in foundational networking knowledge and increase the value of an employer's network. The CCNA Routing and Switching validates the ability to install, configure, operate, and troubleshoot medium-size routed and switched networks.

### Comp TIA A+ 801

### Comp TIA A+ 802

IT success stories start with CompTIA A+ certification. It validates understanding of the most common hardware and software technologies in business and certifies the skills necessary to support complex IT infrastructures. CompTIA A+ is a powerful credential that helps IT professionals worldwide ignite their IT career.

### ETA EM1

Employers worldwide choose ETA-certified electronics professionals because of the certification programs' competency criteria and testing benchmarks that conform to the highest international electronics standards. ETA-certified professionals work for some of the most widely-known companies, including Bellsouth, ADT Security, American Airlines, AutoZone, Boeing, Budweiser, Canon, Caterpillar, Circuit City, Ford Motor Company, Home Depot, Kmart, Lockheed Martin, Motorola, Quest Communications, Raytheon, State Farm, TD Ameritrade, Verizon Communications and thousands more.

### I-CAR Non-Structural ProLevel 1

A Non-Structural Technician restores damaged exterior panels to their original integrity, function, and appearance. This technician uses hand tools and power tools to remove or repair damaged parts, weld as needed, and properly install new parts. He or she works with a variety of metals and plastics, as well as glass, electrical, and mechanical parts.



### **I-CAR Refinish Technician ProLevel 1**

A Refinish Technician prepares and applies paint to repaired vehicles. Duties may include final sanding, masking, color mixing and tinting, spray booth operations, and applying primers, sealers, and clearcoats. He or she may need to blend color into adjacent panels for a better color match to the existing vehicle finish. This individual works with potentially hazardous materials, so attention to safety and personal protection is essential. Vehicles must be correctly prepared and refinished to ensure proper adhesion, color match, and overall appearance.

### **MTA OS & MTA Networks**

Microsoft Technology Associate (MTA) is an introductory Microsoft certification for individuals considering a career in technology. MTA certification addresses a wide spectrum of fundamental technical concepts, assesses and validates your core technical knowledge, and enhances your technical credibility.

### **National Institute for Metalworking Skills (NIMS)**

Skills in the metalworking industry are certified through the earning of NIMS credentials. The credentials are awarded on satisfactory completion of both performance tests and related theory exams. Metalworking companies use the credentials as a basis for recruiting, hiring, placement and promotion. The guesswork is removed from the human resource process. Companies can advertise for specific NIMS credentialed skills, preferring or requiring certain credentials. Individual certifications include; Measurement, Materials & Safety; Job Planning, Benchmark & Layout; Manual Milling Skills

### **NCCER Credentials in Core and Sustainable Construction, Your Role in the Green Environment, Carpentry, Masonry, Electrical Trades, and Weatherization**

NCCER offers curricula in over 70 different craft areas and more than 80 different assessments. When you successfully complete training, assessments and/or performance verifications through an NCCER Accredited Training Sponsor or Assessment Center, NCCER's Registry System records your completions and issues the appropriate credentials. It is these portable, industry-recognized credentials that many industry leaders look for when making employment decisions.

### **Office of State Fire Marshal (OSFM) Fire Fighter Certifications**

In a continued effort to reduce fire loss in the State of North Carolina, the State Legislature established General Statute 58-78-5.14b, which requires the State Fire and Rescue Commission to establish voluntary minimum professional qualifications for all levels of fire and rescue service personnel. The standard for Firefighter Certification is considered to be a minimum standard and the Fire & Rescue Commission fully recognizes that, due to differing requirements, many fire departments may set forth standards much higher than these for their personnel. It is the intent, however, that through a voluntary program, personnel who provide firefighting services to the communities of our state, will meet or exceed this standard. Individual Certifications include: Orientation & Safety; Health and Wellness; Fire Behavior; Personal Protective Equipment; Fire Hose, Streams, & Appliances; Portable Extinguishers, Foam Fire Streams; Emergency Medical Care; Building Construction; Ropes; Alarms & Communications; Forcible Entry; Ladders; Ventilation; Loss Control; Water Supplies; Sprinklers; Fire & Life Preparedness; Rescue; Mayday; Safety & Survival.

### **OSHA 10-Hour Construction Industry Certificate**

The OSHA Outreach Training Program for the Construction Industry provides training for entry level workers and employers on the recognition, avoidance, abatement, and prevention of safety and health hazards in workplaces in the construction industry. Through this training, OSHA helps to ensure that workers are more knowledgeable about workplace hazards and their rights.

### **S/P2 Safety & Pollution Prevention**

This certification shows that students know about the hazards of the shop environment—before they enter the shop classroom. S/P2 online safety training gives students the awareness they need to recognize the hazards around them, and provides the skills that are desirable to employers.

# Course Offerings and Descriptions

## Agricultural Education

Agricultural Education allows students to participate in coordinated group and individual instructional activities that are focused on preparation for future careers in agriculture. The program is designed to develop technical, leadership, and management skills needed by high school students preparing for careers in agricultural occupations and higher education in an agriculturally-related field.

Agriculture encompasses various elements of the food, fiber, and natural resources systems. Agricultural employment includes careers that require agricultural knowledge, skills, and attitudes needed in producing, managing, processing, marketing, distributing, regulating, or protecting any of the renewable resources. 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

### Agriculture Co-op Education (Summer Only) (3)

**Grades: 11-12**

**Prerequisite: Must have earned at least one Agriculture course credit**

Students enrolling in any of the agriculture education courses may choose to participate in a cooperative education work experience or internship during the following summer of the same school year. Students must have an approved application in order to register for this credit and provide proof of employment by the tenth day of class. A student choosing the cooperative work approach in an approved job, submits wage and hour documentation, and completes other assignments as required by the teacher-coordinator. Failure to maintain employment throughout the summer session will result in the student being dropped from the course. Agriculture Coop Education will be offered during the summer. Any exceptions to this schedule must have prior approval of the Director of CTE and the Deputy Superintendent.

### Agricultural Mechanics I (3) S

**Grades: 10-12**

**Maximum Enrollment: 20**

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.

### Agricultural Mechanics II (3) S

**Grades: 10-12**

**Maximum Enrollment: 20**

**Prerequisite: Agricultural Mechanics I**

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 metal working skills and technology, advanced welding and metal cutting skills, working with plastics, and advanced career exploration/decision making.

### Agricultural Mechanics II-Small Engines (3) S

**Maximum Enrollment: 20**

**Prerequisite: Agricultural Mechanics I, Automotive Services Fundamentals**

Course provides hands-on instruction and emphasizes small engine systems including the compression, fuel, electrical, cooling and lubrication systems. Troubleshooting methods are emphasized. Students learn how to select engines for specific applications. Materials are covered to prepare students for the Master Service Technician Exam.

### Introduction to Agriculture (3) S

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.

**Animal Science I (3) S (VAA-P)**

This course focuses on the basic scientific principles and processes that are involved in animal physiology, breeding, nutrition, and care in preparation for an animal science career major. Topics include animal diseases, introduction to animal science, animal nutrition, animal science issues, career opportunities, and animal evaluation.

**Animal Science II (3) S (VAA-P)****Prerequisite: Animal Science I**

This course includes more advanced scientific principles and communication skills and includes animal waste management, animal science economics, decision making, global concerns in the industry, genetics, and breeding.

**Animal Science II (3) S – Small Animal****Prerequisite: Animal Science I**

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.

**CTE Advanced Studies in Agriculture (3) S Grades: 11-12****Prerequisite: Two technical credits in Agriculture Education, one being a completer course.**

The Advanced Studies course must augment the content of the completer course. 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.

**Equine Science I (3) S**

This course focuses on the basic scientific principles and processes related to equine physiology, breeding, nutrition, and care in preparation for a career in the equine industry.

**Equine Science II (3) S****Prerequisite: Equine Science I**

The course focuses on more advanced applications of feeding, breeding, and management practices involved in the horse industry.

**Horticulture I (3) S****Maximum Enrollment: 20-25  
(Based on greenhouse size)**

Horticulture 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.

**Horticulture II – Honors (4) S****Prerequisite: Horticulture I**

Landscaping 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.

**Horticulture II – Landscaping – Honors (4) S****Prerequisite: Horticulture I**

Landscaping 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.

**Horticulture II – Turfgrass Management – Honors (4) S****Prerequisite: Horticulture I**

Turfgrass provides hands-on instruction and emphasizes eight units of instruction including fundamentals of soils and pests, environmental issues related to turf management, landscape basics, lawn care and turf production, golf course management, sports turf and turf irrigation, turf equipment and maintenance, and human resources and financial management. Safety skills will be emphasized.

**Sustainable Agriculture Production I (3)****Prerequisite: Horticulture I**

The course provides information on topics that can be used in sustainable agriculture careers. Content in this course includes soil management, water conservation, crop production, agroforestry, animal husbandry, integrated pest management and food safety.

**Sustainable Agriculture Production II (3)****Prerequisite: Sustainable Agriculture Production I**

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.

**Veterinary Assisting I (3) S****Maximum Enrollment: 10****Prerequisite: Animal Science II or  
Animal Science II – Small Animal**

This course focuses on instruction for students desiring a career in animal medicine.

**Business Finance and Information Technology Education**

Business, Finance and Information Technology Education (BFIT) program is designed to prepare students as viable competitors in the national and global business landscape while providing advanced educational opportunities that reflect real-world challenges and problem-solving techniques. BFIT Education empowers students to use business principles and concepts while managing their current and future responsibilities as informed consumers and productive workers in the 21st century. BFIT Education also encompasses a wide variety of opportunities to attain computer skills that are needed for a 21st century career.

**Accounting I – Honors (4) S**

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.

**Accounting II – Honors (4) S****Prerequisite: Accounting I Honors**

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.

**AP Computer Science (5) S****Prerequisite: Computer Science Principles OR NC Math 3 and a programming language**

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 will use Java programming language to emphasize object oriented programming methodology. The course is designed to be the equivalent of a first-semester college course in computer science and students are expected to take the AP exam at the end of the semester.



**AP Computer Science Principles - (5) S**

Computer Science Principles is a rigorous, introductory honors-level 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 the BYOB/SNAP, GameMaker and AppInventor 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.

**Audio Engineering Technology I - Honors (4)****Maximum Enrollment: 20**

This course allows students to learn about the physics of sound and the history of recording technologies. They learn about the four stages of professional music recording projects: recording, editing, mixing, and mastering. Using a recording and mixing software program, they practice the techniques used by sound engineers to produce multitrack recordings. Through a series of engaging hands-on projects, they learn the fundamental concepts of audio engineering.

**Audio Engineering Technology II Honors (4)****Maximum Enrollment: 20****Prerequisite: Audio Engineering Technology I**

This course is a continuation of the first level course and expands on those concepts including combining multi-track recordings into stereo track or the mixing process. Dynamic, range, and processors are also covered.

**Business Financial Planning - Honors (4) S****Prerequisite: Principles of Business and Finance**

This course expands student understanding of finance as it is impacted by globalization, convergence and consolidation, technological innovation, and increased regulation. Accounting and financial services including banking, insurance, and securities and investments are emphasized throughout the course.

**Business Law - Honors (4) S****Prerequisite: Principles of Business and Finance**

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.

**Business Management – Honors (4) S****Prerequisite: Principles of Business and Finance**

This course expands student understanding of management, including management of information, knowledge, customer relationships, human resources, product-development, projects, quality and strategies. Economics, finance, and professional development are also stressed throughout the course.

**Career Management (3) S**

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.

**CTE Advanced Studies in Business and Information Technology (3) S****Grade: 12****Prerequisite: Two technical credits in Business Education, one being a completer course.**

The Advanced Studies course must augment the content of the Business 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 specific Business area 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.

**Computer Programming I – Honors (4) S****Maximum Enrollment: Based on computer lab size****Prerequisite: NC Math 1**

This course is designed to introduce the concepts of programming, application development, and writing software solutions in the Visual Studio environment. Emphasis is placed on the software development process, principles of user interface design, and the writing of a complete Visual Studio program including obtaining and validating user input, logical decision making and processing, graphics, and useful output.

**Computer Programming II – Honors (4) S****Maximum Enrollment: Based on computer lab size****Prerequisite: Computer Programming I**

This course is designed to teach students advanced programming concepts, including class structures, multimedia programming, advanced arrays, and file structures.

**CTE Advanced Studies in Business and Information Technology (3) S****Grade: 12****Prerequisite: Two technical credits in Business Education, one being a completer course.**

The Advanced Studies course must augment the content of the Business 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 specific Business area 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.

**Digital Film Editing and Production I – Honors (4) S****Maximum Enrollment: Based on computer lab size****Prerequisite: Multimedia and Webpage Design**

Digital Film Editing and Production I explores basic filming and editing skills. Students will explore film editing software interface, editing tools, file management and professional editing best practices while creating several original video projects. This course is aligned to Adobe Premiere certification.

**Digital Film Editing and Production II – Honors (4) S****Maximum Enrollment: Based on computer lab size****Prerequisite: Digital Film Editing and Production I**

Digital Film Editing and Production II is taught by a teacher who is a Certified Trainer for film editing and explores advanced filming, editing, and graphic motion techniques while preparing students to take film editing software. The course is a project-based video course that develops enhanced career and communication skills in video production using Adobe tools.

**e-Commerce I – Honors (4) S****Prerequisite: Multimedia and Webpage Design**

This course is designed to help students master skills in the design and construction of complex web sites for conducting business electronically. Emphasis is on skill development in advanced web page construction and entrepreneurial applications of conducting business electronically as well as economic, social, legal, and ethical issues related to electronic business. Students learn through project-based applications as they plan, design, create, publish, maintain and promote an e-commerce website

**Entrepreneurship I (3) S****Prerequisite: Marketing or Personal Finance or Principles of Business and Finance**

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.

**Entrepreneurship II (3) S****Recommended Maximum Enrollment: 25****Prerequisite: Entrepreneurship I**

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.

**Foundations of Information Technology (3) S (CHN-P)**

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.

**Health Informatics – Data and Use - Honors (4) S****Maximum Enrollment: 25**

This foundational course focuses on the use of data and databases within the health field. Students explore the following questions using project-based and problem based scenarios. What are data? What are the sources of data in the medical and health informatics fields? How can we use data? How do we make sense of data? How may we apply data to our own lives? Students interact with professionals in the health informatics field through interviews or on-site and/or virtual field trips.

**Health Informatics – Transforming Data into Information – Honors (4) S****Maximum Enrollment: 25****Prerequisite – Health Informatics – Data and Use**

In this course, students study ways to use data to address both patient and industry needs in the healthcare field. Students use software to collect and analyze data, develop a healthcare registry, create a mobile app mock up and develop forms and systems to solve health-care problems. The following questions are addressed through project or problem-based scenarios: How can technology and analysis create better information to inform better decisions? How can we use technology tools to create information from data? How can we use technology to improve public and individual health? How can we use technology to protect patient privacy?

**Health Informatics – Transforming Information into Knowledge – Honors (4) S****Maximum Enrollment: 25****Prerequisite – Health Informatics – Transforming Data into Information**

This course allows students to make improvements in the healthcare field by designing solutions using the information, knowledge and technology tools available to health informatics professionals. Students are engaged in the following activities: building a system of sharing information among healthcare facilities; using social media tools to reduce diseases in foreign countries; exploring voice recognition software; using a motion-based video gaming console for rehabilitation; and exploring clinical decision rules for improving patient care.

**Introduction to Cyber Security****Maximum Enrollment 20****Prerequisite: Foundations of Information Technology**

This course introduces students to the concepts of physical security systems, computer security, network security, and external organization protection.

**Microsoft Excel (3) S**

Students in Microsoft IT Academies 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 certification exam will have a fundamental understanding of the Excel environment and the ability to complete tasks independently. Candidates create and edit a workbook with multiple sheets and use a graphic element to represent data visually. Expert-level candidates for the Excel 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.

**Microsoft Word and PowerPoint (3) S**

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 current 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 current version of Microsoft PowerPoint interface, commands, and features to create, enhance, customize, and deliver presentations.

**Multimedia and Webpage Design (3) S****Maximum Enrollment: Based on computer lab size**

This course focuses on desktop publishing, graphic image design, computer animation, multimedia production, and webpage design. Communication skills and critical thinking are reinforced through software applications.

**Personal Finance (3) S**

This course prepares students to understand economic activities and challenges of individuals and families, the role of lifestyle goals in education and career choices, procedures in a successful job search, financial forms used in independent living, and shopping options and practices for meeting consumer needs. The course also prepares students to understand consumer rights, responsibilities, and information, protect personal and family resources, and apply procedures for managing personal finances.

**Principles of Business and Finance (3) S**

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.

**Robotics I - Honors (4) S**

**Recommended Maximum Enrollment: 20**

**Prerequisite: NC Math I**

Robotics I provides a comprehensive study of programming, engineering and other STEM concepts. These core concepts are delivered through relevant activities and projects using robotics as a vehicle to convey the principles of programming and engineering. Project-based learning is an essential learning strategy in Robotics I as it uses authentic activities, scenarios and in-class competitions as a final project.

**Robotics II - Honors (4) S**

**Recommended Maximum Enrollment: 20**

**Prerequisite: Robotics I**

Robotics II is a continuation of Robotics I and students work in groups with a common goal and use their imagination and inquiry to develop individual solutions. Competitions and projects motivate students and solidify the concepts learned in the classroom. Students develop communication, teamwork and leadership skills while also learning core programming and engineering principles.

**SAS Programming I – Honors (4) S**

**Maximum Enrollment: 20**

**Prerequisite: One course in another computer programming language**

This course is the entry point for students to learn SAS programming. Students will learn how to plan and write SAS programs to solve common data analysis problems. Instruction provides practice running and debugging programs. The emphasis is placed on reading input data, creating list and summary reports, defining new variables, executing code conditionally, reading raw data files and SAS data sets, and writing the results to SAS data sets.

**SAS Programming II - Honors (4) S**

**Maximum Enrollment: 20**

**Prerequisite: SAS Programming I**

This course is for experienced SAS student programmers who will learn how to prepare data for analysis. The comparisons of manipulation techniques and resource cost benefits are designed to help student programmers choose the most appropriate technique for their data situation. This course also teaches students how to process SAS data using Structured Query Language (SQL) and how to use the components of the SAS macro facility to design, write, and debug macro systems that are reusable and dynamic. Emphasis is placed on understanding how programs with macro code are processed.

**Television Programming and Broadcasting I - Honors (4) S**

**Prerequisite: Digital Film Editing and Production I**

This course is designed to introduce students to mass media and television production. The course provides hands-on instruction in station organization and personnel duties, safety, basic television equipment, camera techniques, television lighting, audio, graphics, studio directing, talent/performance, television studio production, editing and programming.

**Television Programming and Broadcasting II - Honors (4) S**

**Prerequisite: Television Programming and Broadcasting I**

Television Programming and Broadcasting II is the continuation of Television Programming and Broadcasting I. Instruction centers around advanced aspects of television broadcasting including commercial broadcasting operations, advertising, other revenues and profits, programs and programming basics, ratings, effects of media on viewers.



## Family and Consumer Sciences Education

Family and Consumer Sciences Education prepares students for careers working with individuals and families, as well as for competence in the work of their own families. The courses emphasize the following core areas: Consumer Education and Resource Management, Early Childhood Education and Services, Family and Interpersonal Relationships, Food Production and Services, Food, Nutrition, and Wellness, Housing, Interiors, and Design, Parenting Education and Human Development, and Textiles, Apparel, and Fashion.

### Apparel & Textile Production I (3)

**Maximum Enrollment: 20 (or 2 per sewing machine)**

In this course students are introduced to clothing production in the areas of preparation for clothing construction, basic clothing construction techniques, consumer decisions, textiles, historical perspectives and design, and career opportunities. Emphasis is placed on students applying these construction and design skills to apparel and home fashion. Art, mathematics, and science are reinforced.

### Apparel & Textile Production II (3) S

#### Apparel & Textile Production II Honors (4) S

**Maximum Enrollment: 20 (or 2 per sewing machine)**

**Prerequisite: Apparel I**

In this course students are introduced to advanced clothing and housing apparel development skills. The use of fibers and fabrics is combined with design and construction techniques to develop and produce clothing or housing apparel products. A real or simulated apparel business enterprise and FCCLA activities allow students to apply instructional strategies and workplace readiness skills to an authentic experience and to develop a portfolio.

### CTE Advanced Studies in Family and Consumer Science (3) S Grade: 12

**Prerequisite: Two technical credits in Family and Consumer Science, one being a completer course**

This culminating course is for seniors who have earned two technical credits, one of which is a FACS completer course, in one Career Cluster and who are career focused in the community and family services, food science, nutrition or interior design career areas. The Advanced Studies course must augment the content of the completer course in 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.

### Culinary Arts & Hospitality I (4) S Honors

**Maximum Enrollment: 20**

**Prerequisite:** Introduction to Culinary Arts & Hospitality OR Foods II - Enterprise AND ServSafe Certification or alternative ServSafe assessment score

This course focuses on basic skills in cold and hot food production, baking and pastry, and service skills. Art, English language arts, mathematics, and science are reinforced. Family, Career and Community Leaders of America (FCCLA) leadership activities provide the opportunity to apply instructional competencies and workplace readiness skills to authentic experiences.

### Culinary Arts & Hospitality II (4) Y Honors (2 Credits)

**Maximum Enrollment: 20**

**Prerequisite: Culinary Arts & Hospitality I**

This course provides advanced experiences in cold and hot and food production, management (front and back of the house), and service skills. Topics include menu planning, business management, and guest relations. Art, 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.

### Early Childhood I (3) Y (2 credits)

**Grades: 11-12**

**Prerequisite: Parenting & Child Development, Students must be 16 by October 1 of the school year.**

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.

**Early Childhood II – Honors (4) Y (2 credits) Grade: 12****Prerequisite: Early Childhood I**

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, career development and professionalism

**Foods and Nutrition I (3) S****Grade: 9,10,11****Maximum Enrollment: 20 (or 4-5 per laboratory kitchen)**

This course examines the nutritional needs of the individual. Emphasis is placed on fundamentals of food production, kitchen and meal management, food groups and their preparation, and time and resource management.

**Foods and Nutrition II – Honors (4) S****Maximum Enrollment: 20 (or 4-5 per laboratory kitchen)****Prerequisite: Foods I**

In this course, students experience the intersection of nutrition science and food preparation, while building skills for an expanding range of career opportunities. Emphasis is placed on health and social responsibility while improving the way people eat. Students learn how to manage food safety; plan and prepare meals for a variety of consumers and clients; and explore the food system and global cuisines.

**Interior Digital Applications (3) S****Prerequisite: Interior Design II**

This course prepares students for entry-level and technical work opportunities in interior design. Students apply design skills through Autodesk Revit software to meet clients' needs using components found in residential and commercial spaces.

**Interior Design I (3) S**

This course engages students in exploring various interior design professions, while building the content knowledge and technical skills necessary to provide a foundational knowledge of the design industry. Emphasis is placed on design thinking and utilization of the interior design process; human, environmental and behavioral factors; color theory, elements and principles of design; hand sketching/digital design techniques, space planning, selection of products and materials for residential interiors; client relationship building and design communication techniques.

**Interior Design II (3) S****Prerequisite: Interior Design I**

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.

**Intro to Culinary Arts & Hospitality- Honors (4) S****Maximum Enrollment: 20 (or 4-5 per laboratory kitchen)****Prerequisite: Foods and Nutrition I**

In this course, basic safety and sanitation practices leading to a national industry-recognized food safety credential are introduced. Commercial equipment, smallwares, culinary math, and basic knife skills in a commercial food service facility are taught. Art, mathematics, and science are reinforced.

**Parenting and Child Development (3) S**

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 care of infants, toddlers, and children three through six. Emphasis is on responsibilities of parents, readiness for parenting, and the influence parents have on children while providing care and guidance.

**Health Science**

Health Science Education is a broad curriculum at the middle and high school levels that provides students with meaningful instruction for and about healthcare careers. Health Science Education plays a major role in meeting present and predicted needs for health care professionals within a health care delivery system characterized by diversity and changing technologies. Health Science Education is designed to prepare graduates as viable competitors in the healthcare industry and for advanced educational opportunities.

**Biomedical Technology I (3) S****Recommended Prerequisite: Biology Recommended**

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.

**Biomedical Technology II (3) S****Prerequisite: Biomedical Technology I**

This course focuses on genetics, neurobiology, sleep disorder and biological rhythms, bioethics, the evolution of medicine, and use of technology to study cellular and molecular biology. The curriculum was developed by the National Institutes of Health (NIH). Students will learn about careers in biotechnology within the context of the course content.

**CTE Advanced Studies in Health Science (3) S****Grade: 12****Prerequisite: Three credits in Health Occupations; one of which must be a second level course**

This course is designed for senior students planning on entering the health or medical career. Students will be required to produce a research paper, product, and presentation.

**Health Science I – Honors (4) S****Recommended Prerequisite: Biomedical Technology I or Biology**

This course focuses on human anatomy, physiology and human body diseases and disorders, and biomedical therapies. Students will learn about health care careers within the context of human body systems. Projects, teamwork, and demonstrations serve as instructional strategies that reinforce the curriculum content.

**Health Science II – Honors (4) S****Prerequisite: Health Science I or PLTW Human Body Systems**

This course is designed to help students expand their understanding of financing and trends of health care agencies, fundamentals of wellness, legal and ethical issues, concepts of teamwork, and effective communication. Students will learn health care skills, including current CPR and first aid training. \*Selected students must be able to provide their own transportation and have updated immunizations.

**Nursing Fundamentals – Honors (4) Y – 2 credits****Grade: 12****Maximum Enrollment: 10**

**Enrollment is limited per North Carolina Board of Nursing (BON) Administrative Rule 21 NCAC 36.0318(i), which requires the ratio of teacher to nurse aide students be 1:10 or less while in the clinical area. DHSR applies BON Rule to the classroom training area. Selected students must be able to provide the following: transportation to clinical sites, proof of updated immunizations and valid government-issued photo ID. These students must submit to a criminal background check and drug screen.**

**Prerequisite: Health Science II**

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 NNAAP become listed on the NC NAI Registry. Healthcare agencies may require testing for tuberculosis and/or other diseases and a criminal record check for felonies related to drugs.

**Pharmacy Technician - Honors (4) S****Prerequisite: Health Science II or Biomedical Technology II**

This course has self-paced, on-line instruction designed to prepare high school seniors for a pharmacy technician career. Topics included in this course are federal law, medication used in major body systems, calculations, and pharmacy operations. This course is accredited by the Accreditation Council for Pharmacy Education (APCE). Upon successful completion of this course and after graduation, the student is eligible to take the Pharmacy Technician Certification Board (PTCB) exam.

**PLTW Biomedical Innovations – Honors (4) S****Recommended Maximum Enrollment: 20****Prerequisite: PLTW Medical Interventions**

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 21st century. Students work on independent projects and may work with a mentor in the healthcare industry.

**PLTW Human Body Systems – Honors (4) S****Recommended Maximum Enrollment: 20****Prerequisite: PLTW Principles of Biomedical Sciences**

In this honors 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.

**PLTW Medical Interventions – Honors (4) S****Recommended Maximum Enrollment: 20****Prerequisite: PLTW Human Body Systems**

This honors 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.

**PLTW Principles of Biomedical Sciences – Honors (4) S****Recommended Maximum Enrollment: 20**

This honors 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.

**Public Health Fundamentals - Honors (4) S****Maximum Enrollment: 20****Prerequisite: Health Science II**

This course is designed to assist future healthcare professionals to understand the unique challenges and strategies involved in the delivery of healthcare outside traditional facilities and without traditional supervision structure, and is responsive to overwhelming need for community based healthcare. Public Health Fundamentals carries North Carolina Division of Health Services Regulation NAI registry endorsement when certain criteria are met.

## Marketing and Entrepreneurship Education

Marketing and Entrepreneurship Education provides opportunities for students to apply problem solving and analytical skills. Students are prepared for advancement in marketing, management, and entrepreneurship careers. Marketing, management, and entrepreneurship are vast and diverse disciplines that exist in all industries. These disciplines encompass activities of ideation of products and services, better use of resources, and the aspects of

consumption of products and services. These activities prepare students with knowledge and skills as specific as procedures for research and as general as the creativity needed in promotion.

**CTE Advanced Studies in Marketing (3) S****Prerequisite: Two technical credits in Marketing, one being a completer course**

The Advanced Studies course must augment the content of the Marketing completer course. Students work under the guidance of a teacher with expertise in the specific Business area 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.

**Fashion Merchandising (3) S****Fashion Merchandising - Honors (4) S**

This course is designed to simulate a comprehensive experience of the business of fashion. The experience should bring alive the economics, distribution, promotion, and retail of fashion, and essential strategies of promoting and selling fashion. Upon completion of the course, students should be ready for entry-level fashion retail work or post secondary education.

**Hospitality and Tourism (3) S****Prerequisite: Marketing or Sports and Entertainment Marketing I**

In this course, students acquire understanding of the economic impact and marketing strategies for hospitality and tourism destinations. Emphasis is on destination complexity, customer relations, economics, legal and ethical responsibilities, safety and security, and tourism promotion.

**Marketing (3) S****Marketing – Honors (4) S**

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.



**Marketing Applications – Honors (4) S****Prerequisite: Marketing or Fashion Merchandising**

In this course, students will apply an understanding of marketing functions and impact of the functions on business decisions. Through problem solving and critical thinking, students will apply knowledge and skills in the areas of customer relations, economics, financial analysis, channel management, marketing-information management, marketing planning, products and services management, and selling. Relative opportunities are available for students to use technology to acquire and use marketing information.

**Marketing Co-op (3) S****Grades: 11-12****Co-requisite: Face to Face Marketing course within the same semester**

Students enrolling in Marketing Education courses may choose to participate in a cooperative education work experience during the same semester. A student choosing the cooperative work approach must be employed in an approved job by the deadline, submit documentation of hours worked and complete other assignments as required by the CTE Work-Based Learning Coordinator. An application is required. Please see the Marketing Cooperative Education Program Guidelines for more details.

**Sports and Entertainment Marketing I (3) S****Sports and Entertainment Marketing I - Honors (4)**

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.

**Sports and Entertainment Marketing II (3) S****Sports and Entertainment Marketing II – Honors (4) S****Prerequisite: Sports and Entertainment Marketing I**

In this course, students acquire an understanding of selling, promotion, and market planning 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.

**Technology Education****Adobe Visual Design (3) S****Prerequisite: Multimedia and Webpage Design**

This course aligns to standards needed to achieve certification for Adobe Photoshop, InDesign, and Illustrator including setting project requirements, identifying design elements when preparing images, understanding Adobe software, manipulating images by using Adobe software and publishing digital images by using Adobe software.

**Adobe Digital Design (3) S****Prerequisite: Adobe Visual Design**

This course aligns to standards to achieve certification for Adobe Dreamweaver and Adobe Flash software. Students will learn how to create project requirements, the elements of projects in the software, and how to manipulate functions and publish materials. The addition of the Adobe courses expands opportunities for students interested in Digital Media. Since Adobe is an industry recognized program, and for many businesses the standard, certification in these programs will lead to competitive advantage for students.

**Advanced Game Art and Design – Honors (4) S****Maximum Enrollment: 20****Prerequisite: Game Art and Design - H**

This course is a continuation in the study of game design and interactivity. Emphasis is placed on visual design, evaluating, scripting and networking protocols, and legal issues as well as 3D visual theory. Students compile a game portfolio. Advanced topics include the use of audio and visual effects, rendering, modeling, and animation techniques. Students work in collaborative teams to develop a final 3D game project.

**Aerospace Advanced Technology– Honors (4) S****Maximum Enrollment: 20****Prerequisite: Aerospace Technology Fundamentals**

This course builds on the fundamentals course and engages students in applying the design process, using tools to collect and analyze data, exploring a deeper level of the science of aviation and discovering how quality control systems work in the aviation field. Students will work collaboratively in teams to design, build and test a wing; plot a course for a plane to take off and land; design, build and test a wing attachment system; test materials under stress; and design, build and test an electric-powered plane. Students will demonstrate their newly acquired knowledge and skills by presenting their innovative ideas, techniques and solutions.

**Aerospace Engineering Applications– Honors (4) S****Maximum Enrollment: 20****Prerequisite: Aerospace Advanced Technology**

In this project-based learning course students will learn about systems such as flight control, remote-control vehicles and the virtual world. Students will learn to fly using flight simulators. They will work collaboratively to propose a shift from a VOR navigation system to a GPS system and determine the cost savings. In addition, students will develop rotor blades for helicopters and design and program an unmanned flying vehicle.

**Aerospace I Technology Fundamentals – Honors (4) S****Maximum Enrollment: 20****Prerequisite: Math I**

This project-based learning course engages students who are curious about aviation and aerospace careers. This course will introduce students to an engineering design process, tools to collect and analyze data, the science of aviation, materials and structures, and safety. Students will participate in real-world experiences such as designing, building and test a pilot seat, kite, straw rocket and launcher, motor-powered rocket and a model glider.

**Aerospace Astronautics Engineering Applications – Honors (4) S****Maximum Enrollment: 20****Prerequisite: Aerospace Engineering Applications**

Students in this capstone course will focus on outer space and underwater applications. During the six projects, they will work collaboratively to design, build and test a laser communication system; develop a plan for space survivability in hostile environments; and utilize software to create a three-dimensional model of a satellite orbit and a team remote vehicle for underwater exploration.

**Avionics I – Honors (4) S****Maximum Enrollment: 20**

The avionics program will be offer electronics labs, aircraft visits and projects. State-of-the-art electronics training equipment will be utilized for this program. Avionics systems are an integral part of aircraft design and have vastly increased aircraft capability. This first course will introduce students to the fundamental of aviation maintenance, technical communications skills, basic aircraft wiring, basic and advanced DC circuits and power systems.

**Avionics II – Honors (4) S****Maximum Enrollment: 20****Prerequisite: Avionics I**

This course builds on the skills learned in the first course. Students will learn basic and advanced AC circuitry, components, aircraft AC power systems, and aircraft drawings.

**Avionics III – Honors (4) S****Maximum Enrollment: 20****Prerequisite: Avionics II**

This course builds on the skills learned in the first two courses. Students will learn about solid-state devices including setting up, operating power supplies, oscilloscopes and function generators for solid-state devices. They will also learn about various analog circuits including using test equipment to measure and analyze.

**Avionics IV – Honors (4) S****Maximum Enrollment: 20****Prerequisite: Avionics III**

This course builds on the skills learned in the first three courses. Students will learn to set up and operating equipment as well as troubleshoot digital circuits. They will also learn to work with microprocessors as they relate to avionics. Communication employability skills will also be reinforced in this course.

**Clean Energy Applications – Honors (4) S****Maximum Enrollment: 20****Prerequisite: Clean Energy Systems**

This course builds on the foundation of Clean Energy Systems and introduces nuclear power, steam generation, fuel cells, geothermal power, water power, AC/DC power generation, heat transfer and the laws of thermodynamics. In addition, students now use chemical and thermal energy principles to create, store and use energy efficiently to power a variety of mechanical and electrical devices. Students will engage in a variety of hands-on design projects to demonstrate principles using advanced technology hardware and software.

**Clean Energy Strategies – Honors (4) S****Maximum Enrollment: 20****Prerequisite: Clean Energy Applications**

Students in this course utilize applicable skills from the foundational courses to tackle challenges associated with the implementation of clean energy technology. The hands-on projects encountered during this course will require students to address specific issues related to providing portable power in any situation, developing new energy storage systems,

increasing the efficiency of the modern home, and designing more energy efficient buildings and homes.

### **Clean Energy Systems – Honors (4) S**

**Maximum Enrollment: 20**

This course exposes students to three sources of renewable energy: wind, solar and biofuels. Working with solar, thermal, chemical and mechanical sources of clean energy teaches students how to apply physics, geography, chemistry, biology, geometry, algebra and engineering fundamentals. Students learn the most efficient and appropriate use of energy production as they explore the relevant relationships among work, power and energy. Students will engage in a wide variety of hands-on projects and lab activities that both test their knowledge and illustrate the interrelationships between the various forms of clean energy.

### **CTE Advanced Studies in Technology (3) S Grade: 12**

**Prerequisite: Two technical credits in Technology, one being a completer course**

The Advanced Studies course must augment the content of the Technology completer course. Students work under the guidance of a teacher with expertise in the specific Technology area 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.

### **Engineering Technology I (3) S**

#### **Engineering Technology I – Honors (4) S**

**Maximum Enrollment: 20**

**Prerequisite: Recommended Introduction to Trade and Industrial Education or Robotics I**

This course provides students an overview of advanced manufacturing and introduces them to the foundational skills required to begin in an advanced manufacturing career including safety, formulas, blueprint reading, mechanical measurements and tools.

### **Engineering Technology II (3) S**

#### **Engineering Technology II – Honors (4) S**

**Maximum Enrollment: 20**

**Prerequisite: Engineering Technology I or Advanced Manufacturing I**

This course provides students a more in-depth review of advanced manufacturing including quality control, CNC milling & turning technology, and introduces the students to lean and flexible manufacturing systems.

### **Game Art and Design – Honors (4) S**

**Grades: 11-12**

**Maximum Enrollment: 20**

**Prerequisite: Scientific and Technical Visualization I**

This course introduces students to techniques used in the electronic game industry. Students will focus on the principles used in game design including mathematical and virtual modeling. Emphasis is placed on areas related to art, history, ethics, plot development, storyboarding, programming, 2D visual theory, and interactive play technologies. Students develop physical and virtual games using hands-on experiences and a variety of software.

### **Metals Manufacturing Technology I (3) S**

#### **Metals Manufacturing Technology I – Honors (4) S**

**Maximum Enrollment: 20**

**Prerequisite: (Engineering Technology I, Advanced Manufacturing I, PLTW POE, or PLTW CIM) and NC Math 2**

This course introduces various processes and job opportunities in manufacturing with emphasis on machining metal parts. Topics include safety, math, measurement, blueprint reading, layout, bench work, sawing, drilling, turning, and milling.

### **Metals Manufacturing Technology II (3) S (2 Credits)**

#### **Metals Manufacturing Technology II – Honors (4) S (2 Credits)**

**Maximum Enrollment: 20**

**Prerequisite: (Metals Manufacturing Technology I)**

This course provides advanced instruction in manufacturing and introduces computer-assisted drafting/manufacturing and numerical control processes. Topics include safety, environmental protection, quality control, metallurgy, materials, layout, assembly, sawing, turning, milling, grinding, computer numerical control, computer-aided manufacturing, welding, and maintenance.

### **PLTW Aerospace Engineering – Advanced (5) S**

**Maximum Enrollment: 20**

**Prerequisites: Principles of Engineering and NC Math 3**

In this specialization Project Lead the Way (PLTW) Pathway to Engineering (PTE) course, students design problems related to aerospace information systems, astronautics, rocketry, propulsion, the physics of space science, space life sciences, the biology of space science, principles of aeronautics, structures and materials, and systems engineering. Using 3-D design software, students work in teams utilizing hands-on activities, projects, and problems and are exposed to various situations encountered by aerospace engineers.

**PLTW Civil Engineering and Architecture – Advanced (5) S****Maximum Enrollment: 20****Prerequisites:** Introduction to Engineering Design, Computer Integrated Manufacturing and Principles of Engineering

In this specialization Project Lead the Way (PLTW) Pathway to Engineering (PTE) course, students learn important aspects of building and site design and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3-D architectural design software.

**PLTW Computer Integrated Manufacturing – Advanced (5) S****Maximum Enrollment: 20****Prerequisite:** Introduction to Engineering Design and NC Math 2

In this specialization Project Lead the Way (PLTW) Pathway to Engineering (PTE) course, students discover and explore manufacturing processes, product design, robotics, and automation, and then they apply what they have learned to design solutions for real-world manufacturing problems.

**PLTW Digital Electronics – Advanced (5) S****Maximum Enrollment: 20****Prerequisite:** Principles of Engineering

In this foundation Project Lead the Way (PLTW) Pathway to Engineering (PTE) course, students explore the foundations of computing by engaging in circuit design processes to create combinational logic and sequential logic (memory) as electrical engineers do in industry.

**PLTW Engineering Design and Development – Honors (4) S****Maximum Enrollment: 20****Prerequisite:** Computer Integrated Manufacturing or three PLTW Engineering Courses

In this capstone Project Lead the Way (PLTW) Pathway to Engineering (PTE) course, students identify a real-world challenge and then research, design, and test a solution, ultimately presenting their unique solutions to a panel of engineers.

**PLTW Introduction to Engineering Design – Advanced (5) S****Maximum Enrollment: 20**

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.

**PLTW Principles of Engineering – Advanced (5) S****Maximum Enrollment: 20****Prerequisite:** Introduction to Engineering Design

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.

**Scientific and Technical Visualization I – Honors (4) S****Maximum Enrollment: 20**

This course introduces students to the use of complex graphic tools. Emphasis is placed on the principles, concepts, and use of complex graphic and visualization tools as applied to the study of science and technology. Students use complex 2D graphics, animation, editing, and image analysis tools to better understand, illustrate, explain, and present technical, mathematical, and/or scientific concepts and principles. Emphasis is placed on the use of computer-enhanced images to generate both conceptual and data-driven models, data-driven charts and animations. Science, math, and visual design concepts are reinforced throughout the course.

**Scientific and Technical Visualization II – Honors (4) S****Maximum Enrollment: 20****Prerequisite:** Scientific and Technical Visualization I

This course provides students with advanced skills in the use of complex visualization tools for the study of science, technology, or mathematical concepts. Students design and develop increasingly complex data and concept-driven visualization models. Students use complex 2D and 3D graphics, animation, editing, and image analysis tools to better understand, illustrate, and explain concepts. Students present technical, mathematical, and/or scientific concepts and principles.



## Trade and Industrial Education

Many of these courses lead to certifications recognized by business and industry. Hands-on experiences and Skills USA leadership activities provide opportunities to enhance classroom instruction and career development.

### Advanced Studies in Trade and Industrial (3) S

**Grade: 12**

**Prerequisite:** Two technical credits in Trade and Industrial, one being a completer course

The Advanced Studies course must augment the content of the T & I completer course. Students work under the guidance of a teacher with expertise in the specific T & I area 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.

### Automotive Service I (3) S

**Maximum Enrollment: 20**

**Prerequisite:** Automotive Service Fundamentals

This course develops automotive knowledge and skills in performing scheduled automotive maintenance, servicing and basic testing of 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.

### Automotive Service II (3) S

**Maximum Enrollment: 20**

**Prerequisite:** Automotive Service I

This course builds on the knowledge and skills introduced in Automotive Service 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.

### Automotive Service III (3) S

**Maximum Enrollment: 20**

**Prerequisite:** Automotive Service II

This course builds on the knowledge and skills introduced in Automotive Service I & II, building advanced automotive skills and knowledge in vehicle servicing, testing repair, and diagnosis of brakes, electrical systems, 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.

### Automotive Service – Engine Drivetrain (3) S

**Grades: 11-12**

**Maximum Enrollment: 20**

**Prerequisite:** Automotive Service III

This course builds on the knowledge and skills introduced in Automotive Service I, II, & III. Building advanced automotive skills and knowledge in vehicle servicing, testing, repair and advanced diagnosis in engine repair, engine performance, automatic transmission, manual transmission and axles while emphasizing hands-on experience. As part of the NATEF accreditation, topics are aligned to the Automobile Service Technician (AST) requirements.

### Automotive Service – Suspension Chassis Electrical (3) S

**Grades: 11-12**

**Maximum Enrollment: 20**

**Prerequisite:** Automotive Service III

This course builds on the knowledge and skills introduced in Automotive Service I, II, & III. Building advanced automotive skills and knowledge in vehicle servicing, testing, repair and advanced diagnosis in suspension and steering, brakes, electrical systems, and HVAC while emphasizing hands-on experience. As part of the NATEF accreditation, topics are aligned to the Automobile Service Technician (AST) requirements.

### Carpentry I (3) S

**Maximum Enrollment: 20**

**Prerequisite:** Introduction to Construction

This course covers basic carpentry terminology and develops technical aspects of carpentry with emphasis on development of introductory skills such as using hand and power tools, reading plans and elevations, using reinforcing materials, framing procedures and understanding stair layouts.

**Carpentry II (3) S****Maximum Enrollment: 20****Prerequisite: Carpentry I**

This course covers additional technical aspects of carpentry with emphasis on development of intermediate skills. The course content includes floor systems, wall and ceiling framing, roof framing, introductions to concrete, reinforcing materials and forms, windows and exterior doors, and basic stair layout.

**Carpentry III (3) S****Maximum Enrollment: 20****Prerequisite: Carpentry II**

This course develops advanced technical aspects of carpentry with emphasis on development of skills. The course content includes roofing applications, thermal and moisture protection, exterior finishing, cold formed steel framing and drywall installations.

**Collision Repair Fundamentals (3) S      Grades: 11-12****Recommended Maximum Enrollment: 20****Prerequisite: Application must be completed, Acceptance into program required,****Recommended: Automotive Service Fundamentals**

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 career and various job opportunities in the collision repair industry will be discussed.

**Collision Repair I      Grades: 11-12****Maximum Enrollment: 20****Prerequisite: Collision Repair Fundamentals**

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.

**Collision Repair II – Non-Structural (3) S      Grades: 11-12****Maximum Enrollment: 20****Prerequisite: Collision Repair I**

This course continues the focus on non-structural repairs to automobiles. Using curriculum materials from the industry recognized I-CAR organization, students will learn additional information about trim and hardware, material identification, steel cosmetic straightening and plastic repair, moveable glass replacement, and bolted-on parts replacement.

**Collision Repair III – Refinishing (3) S      Grades: 11-12****Maximum Enrollment: 20****Prerequisite: Collision Repair II – Non-Structural**

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.

**Collision Repair IV – Estimating (3) S      Grades: 11-12****Maximum Enrollment: 20****Prerequisite: Collision Repair III – Refinishing**

Estimator students learn to write a complete and accurate damage analysis report for front, side, and rear impact damage on drivable vehicles, work safely around hybrid vehicles, analyze damage to restraint systems, coordinate parts ordering and scheduling, understand the automotive refinish process, diagnose simple electrical damage, analyze damage to advanced materials, identify hail, theft, and vandalism damage as they prepare for the I-CAR® ProLevel™ Estimator Platinum Certification.

**Computer Engineering Technology I (3) S****Recommended Maximum Enrollment: 25**

This course is the first in a two course series that introduces the skills required for entry level PC technicians. It includes objectives in the following four domains, a) PC Hardware, b) Networking c) Mobile devices d) Hardware and networking troubleshooting.

**Computer Engineering Technology II – Honors (4) S****Recommended Maximum Enrollment: 25****Prerequisite: Computer Engineering Technology I**

This course is the second in a two course series that introduces the skills required for entry level PC technicians.

It includes objectives in the following five domains, a) Windows operating system, b) Other operating systems and technologies c) Security, d) Software troubleshooting, e) Operational procedures.

### **Introduction to Construction (3) S**

#### **Maximum Enrollment: 20**

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".

### **Cosmetology I (3) Y**

**Grade: 11**

#### **Maximum Enrollment: 20**

**Prerequisite:** Application must be completed. Acceptance into program required. Principles of Business and Finance Recommended

This course introduces developmental skills, employment opportunities, and career information required for the cosmetology industry. Topics include facials, manicures, hair cutting, chemical relaxing and restructuring, wet hair styling, and hair coloring and lighting. Skills in mathematics, science, biology, leadership, and problem solving are reinforced in this course. Students are required to purchase uniforms, shoes, and equipment that meet State Board of Cosmetic Arts requirements. To receive three (3) units of credit for the course, a student must complete six hundred (600) hours of supervised in-class work which requires additional time beyond the traditional course time. Students will be required to attend 4 weeks of a Summer School. Students will also be required to provide their own transportation.

### **Cosmetology II (3) Y**

**Grade: 12**

**Prerequisite:** Cosmetology I, Cosmetology Summer School

Twelve-hundred (1200) hours qualify the student to take the North Carolina State Board of Cosmetic Arts Licensing Examination after which the student must complete a six (6) month apprenticeship. Fifteen-hundred (1500) hours qualify the student to take the Licensing Examination with no apprenticeship requirement. In Cosmetology II, students practice the skills learned by working with customers in the clinic. Approximately 75% of the time in class is devoted to clinic work. In order for a student to receive three (3) units of credit for Cosmetology II, he/she must have a total of twelve-hundred (1200) hours of supervised class work.

Students who complete all requirements are expected to take the North Carolina State Board of Cosmetics Licensing Examination. Students will also be required to provide their own transportation.

### **CTE Advanced Studies in Trade and Industrial (3) S**

**Grade: 12**

**Prerequisite:** Two technical credits in Trade and Industrial, one being a completer course

The Advanced Studies course must augment the content of the T & I completer course. Students work under the guidance of a teacher with expertise in the specific T & I area 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.

### **Drafting I – Honors (4) S**

#### **Maximum Enrollment: Based on lab size**

**Prerequisite:** NC Math 1

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.

### **Drafting II – Architectural – Honors (4) S**

#### **Maximum Enrollment: Based on lab size**

**Prerequisite:** Drafting I

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).

### **Drafting II – Engineering – Honors (4) S**

#### **Maximum Enrollment: Based on lab size**

**Prerequisite:** Drafting I

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).

**Drafting III – Architectural – Honors (4) S****Maximum Enrollment: Based on lab size****Prerequisite: Drafting II - Architectural**

This course introduces students to advanced architectural design concepts. Emphasis is placed on the use of computer assisted design (CAD) tools in the design and execution of site and foundation plans as well as topographical information and detail drawings of stairs and wall sections.

**Drafting III – Engineering – Honors (4) S****Maximum Enrollment: Based on lab size****Prerequisite: Drafting II - Engineering**

This course introduces students to advanced architectural design concepts. Emphasis is placed on the use of computer assisted design (CAD) tools in the design and execution of site and foundation plans as well as topographical information and detail drawings of stairs and wall sections.

**Electrical Trades I (3) S****Maximum Enrollment: 20****Prerequisite: Introduction to Construction**

This course covers basic electrical trade's terminology and develops technical aspects of electrical trades with emphasis on development of introductory skills such as residential wiring, electrical installation, and service. Topics include basic electricity, electrical construction codes and practices, the National Electrical Code, the use of test equipment, and electrical hand and power tools.

**Electrical Trades II (3) S****Maximum Enrollment: 20****Prerequisite: Electrical Trades I**

This course builds on skills mastered in Electrical Trades I and provides an introduction to the National Electric Code, devices boxes, hand bending, raceways and fittings, conductors and cables, construction drawings, residential services, test equipment, alternating circuits, grounding and bonding.

**Electrical Trades III (3) S****Maximum Enrollment: 20****Prerequisite: Electrical Trades II**

This course content includes motors, electric lighting, conduit bending, pull and junction boxes, conductor installations, cable tray, conductor terminations and splices, circuit

breakers and fuses, control systems, and concepts. Upon successful completion of this course, students should be prepared to enter the workforce as an electrical helper and/or continuing education towards degrees in Construction Management or Electrical Engineering.

**Electronics I (3) S****Grades: 10-12**

This course covers Direct Current (DC) Basics and is aligned to the Electronic Technicians Association (ETA) EM1 certification. Topics include basic electrical theory, magnetism, safety, electronic equipment, electronic components, Ohms Law Mathematics for electronics, electronic measurements, series circuits, parallel circuits, series/parallel circuits, and battery power supplies.

**Electronics II (3) S****Electronics II – Honors (4) S****Prerequisite: Electronics I**

This course covers Digital Basics and is aligned to the Electronic Technicians Association (ETA) EM4 certification. Topics include: numbering systems and conversions, block diagrams – schematics – wiring diagrams, test equipment and measurements, safety, theory of digital logic functions and circuitry, and computer electronics.

**Fire Fighter Technology I (3) S****Maximum Enrollment: 20****Prerequisite: Public Safety I**

This course covers part of the North Carolina Fire Fighter certification modules required for all fire fighters in North Carolina. The modules include: Orientation and Safety; Health and Wellness; Fire Behavior; Personal Protective Equipment; Fire Hose, Streams, and Appliances; Portable Extinguishers; Foam Fire Streams; and Emergency Medical.

**Fire Fighter Technology II (3) S****Maximum Enrollment: 20****Prerequisite: Fire Fighter Technology I**

This course covers additional North Carolina Fire Fighter certification modules required for all fire fighters in North Carolina. The modules include: Building Construction; Ropes; Alarms and Communications; Forcible Entry; Ladders; Ventilation; and Loss Control.



**Fire Fighter Technology III (3) S****Maximum Enrollment: 20****Prerequisite: Fire Fighter Technology II**

This course covers part of the North Carolina Fire Fighter certification modules required for all fire fighters in North Carolina. The modules include: Water Supplies; Sprinklers; Fire & Life Preparedness, Rescue, Mayday, and Safety & Survival.

**Green Technology and Solar PV (3) S****Maximum Enrollment: 16****Prerequisite: Level 1 Trade and Industrial Course or Horticulture I**

This course explains the reasons the Green Movement has taken on such importance in a relatively short amount of time. Students will learn the breath of the green movement and then focuses on the Green Power technology portion of the movement. This course is designed to prepare students for jobs in the Solar PV workforce. This is accomplished by combining a solid Solar PV theory with a highly realistic collection of hands on lab procedures. In addition, the course prepares the student to challenge the industry standard PV Installer certification exam from the Electronic Technicians Association (ETA) as well as the Certified Energy Practitioners (CEP) exam from the NABCEP.

**HVAC – Comfort Cooling (3) S****Maximum Enrollment: 20****Prerequisite: HVACR Electricity**

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.

**HVAC – Heating Technology (3) S****Maximum Enrollment: 20****Prerequisite: Comfort Cooling**

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.

**HVAC – HVACR Electricity (3) S****Maximum Enrollment: 20****Prerequisite: Introduction to Refrigeration**

This course introduces electricity as it applies to HVACR equipment. Emphasis is placed on power sources, interaction of electrical components, wiring of simple circuits, and the use of electrical test equipment. Upon completion, students should be able to demonstrate good wiring practices and the ability to read simple wiring diagrams.

**HVAC - Introduction to Refrigeration (3) S****Maximum Enrollment: 20****Prerequisite: Introduction to Construction**

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 instruments of the trade.

**Automotive Service Fundamentals (3) S****Maximum Enrollment: 20**

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.

**Hybrid and EV Technology (3) S****Maximum Enrollment: 20****Prerequisite: Automotive Service III**

This course is designed to educate students about the design, construction and assembly of electric vehicles. The course describes sequential procedures for modifying an internal combustion engine into battery electric drive or building a Switch Electric Car. The resulting vehicle will be a fully operational electric vehicle (EV).

**Law and Justice I (3) S****Maximum Enrollment: 25****Prerequisite: Public Safety**

Students desiring to pursue a career in Law and Justice will examine 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 skill areas including communicating with diverse groups, conflict resolution, the use of force continuum, report writing, operation of police and emergency equipment, and courtroom testimony.

**Law and Justice II (3) S****Maximum Enrollment: 25****Prerequisite: Law and Justice I**

This course emphasizes the structure of the American legal system while examining constitutional legal issues. Students will explore the difference between common and statutory law in the context of how legal precedent is established. The course will explore the rights of citizens guaranteed by the United States and North Carolina constitutions. Students will also evaluate the powers granted to the police and the restrictions placed upon them by the respective constitutions and their amendments. Specific topics of discussion will include search and seizure, arrests, interviews, interrogations, and confessions in the context of criminal prosecution. Major emphasis will be placed on the role and decisions of the United States Supreme Court.

**Masonry I (3) S****Maximum Enrollment: 20****Prerequisite: Introduction to Construction**

This course covers basic masonry terminology and develops technical aspects of masonry with emphasis on development of introductory skills. This course introduces the nature of masonry technology, materials and supplies, and employability skills. Topics include safety, layout, tools, leveling, plumbing, use of straight-edge, and jointing brick and block in wall construction.

**Masonry II (3) S****Maximum Enrollment: 20****Prerequisite: Masonry I**

This course builds on skills mastered in Masonry I and provides advanced masonry skills including measurements, drawing and specifications, mortar, masonry units, and installation techniques.

**Masonry III (3) S****Maximum Enrollment: 20****Prerequisite: Masonry II**

This course develops advanced technical aspects of Masonry with emphasis on development of skills introduced in Masonry II. The course content includes residential plans and drawing interpretation, residential masonry, grout and other reinforcement, and metalwork in masonry. Introductory skills for the Crew Leader are also introduced in this course.

**Manicuring (3) S****Grades: 11-12****Maximum Enrollment: 20**

The primary purpose of the Manicuring course is to train the student in basic manipulative skills, in manicuring, pedicuring and various methods of nail extensions. Students will learn about safety judgments, proper work habits and desirable attitudes necessary for entry level positions as a Nail Technician or related career avenue. The students will also learn new and current information related to techniques, trends, and methods for career development in nail technology and related fields. Students are required to purchase uniforms, shoes, and equipment that meet State Board of Cosmetic Arts requirements. To receive three (2) units of credit for the course, a student must complete three hundred (300) hours of supervised in-class work which generally requires additional time beyond the traditional course time. Students will be required to attend occasional sessions outside the normal school day and/or on Saturdays. Students will also be required to provide their own transportation.

**Natural Hair Care (3) S****Grades: 11-12****Maximum Enrollment: 20**

The natural hair course offers students instruction in all phases of hair care including theory, success and professional image training as well practical instruction. These topics are delivered in three phases; History and Professional Image, Science and Professional Hair Braiding. This course consists of general sciences and practices specific to infection control, bacteriology, client consultation, twisting the hair, wrapping, extending, locking, business management,

professional ethics and other related topics. Students are required to purchase uniforms, shoes, and equipment that meet State Board of Cosmetic Arts requirements. To receive three (2) units of credit for the course, a student must complete three hundred (300) hours of supervised in-class work which generally requires additional time beyond the traditional course time. Students will be required to attend occasional sessions outside the normal school day and/or on Saturdays. Students will also be required to provide their own transportation.

### **Network Engineering Technology I (3) S Grades: 10-12**

This course provides a hands-on introduction to networking and the Internet using tools and hardware commonly found in home and small business environments. Content includes personal computer hardware and operating systems, connection to networks and to the Internet through an ISP, network addressing, network services, wireless technologies, basic security, and troubleshooting networks. This course uses Cisco CCNA Discovery -Networking for Home and Small Businesses curriculum and must be conducted using the Cisco Networking Academy connection.

### **Network Engineering Technology II – Honors (4) S**

This course provides a basic overview of routing and remote access, addressing, security, email services, web space, and authenticated access. Content includes the Internet and its uses, Help Desk operations, planning network upgrades, planning the addressing structure, configuring network devices, Routing, ISP services, ISP responsibilities, troubleshooting, and Cisco Certified Entry Networking Technician (CCENT) exam preparation. This course uses Cisco CCNA Discovery -Working at a Small-to-Medium Business or ISP curriculum and must be conducted using the Cisco Networking Academy connection.

### **Network Engineering Technology III – Honors (4) S**

#### **Prerequisite: Network Engineering Technology II**

This course provides content for advanced networking engineering. Content includes networking in the Enterprise including infrastructure, switching, addressing, routing, WAN Links, filtering traffic, troubleshooting, design concepts, network requirements, identification of application impacts on network design, creating the design, prototyping, and preparing the proposal. This course is designed for networking students who are seeking their Cisco Certified Network Associate (CCNA) certificate. This course uses both CCNA Discovery – introducing Routing and Switching in the Enterprise curriculum and CCNA Discovery – Designing and Supporting Computer Networks curriculum. These courses must be conducted using the Cisco Networking Academy connection.

### **Public Safety I (3) S**

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.

### **Smart Home Technology Integration (3) S**

#### **Maximum Enrollment: 16**

#### **Prerequisite: Introduction to Construction**

This course equips students with the fundamental knowledge and skills to enable them to install and integrate interconnected subsystems within the home. Primary topics include voice, data, and video distribution, surveillance network, multi-room audio/video distribution, infrared (IR) repeater, scenic light control, and home automation.

### **Welding Technology I (3) S**

#### **Maximum Enrollment: 20**

#### **Prerequisite: Introduction to Construction**

This course covers basic industrial and construction welding practices, occupation characteristics, and employment opportunities. Topics include safety, tools, print reading, measurement, thermal cutting processes, base metal preparation and shielded metal arc welding (SMAW).

### **Welding Technology II (3) S**

#### **Maximum Enrollment: 20**

#### **Prerequisite: Welding Technology I**

This course introduces advanced welding and cutting practices used in industry and construction and emphasizes hands-on experience. Topics include weld fit-up and testing, metal properties, gas metal (GMAW), flux cored (FCAW), and shielded metal (SMAW) arc welding.

### **Welding Technology III (3) S**

#### **Maximum Enrollment: 20**

#### **Prerequisite: Welding Technology II**

This course is designed to continue the development of advanced welding and cutting practices used in industry and construction and emphasizes hands-on experience. Further emphasis is placed on topics covered in Welding Technology II such as weld fit-up and testing, metal properties, gas metal (GMAW), flux cored (FCAW), and shielded metal (SMAW) arc welding.

## Work Based Learning

### Marketing Co-op (3) S

**Grades: 11-12**

**Co-requisite: Face to Face Marketing course within the same semester, Application or Instructor Approval**

Students enrolling in Marketing Education courses may choose to participate in a cooperative education work experience during the same semester. A student choosing the cooperative work approach must be employed in an approved job by the deadline, submit documentation of hours worked and complete other assignments as required by the CTE Work-Based Learning Coordinator. An application is required. Please see the Marketing Cooperative Education Program Guidelines for more details.

### CTE Co-op (3) S

**Grades: 11-12**

**Co-requisite: Related CTE course in Agriculture, Business and Information Technology, Family and Consumer Sciences, Technology Education, or Trade and Industrial Education within the same semester, Application or Instructor Approval**

Students enrolling in a CTE Level II or completer course in Agriculture, Business and Information Technology, Family and Consumer Sciences, Technology Education, and Trade and Industrial Education may choose to participate in a cooperative education work experience during the same semester. A student choosing the cooperative work approach must be employed in an approved job by the deadline, submit documentation of hours worked and complete other assignments as required by the CTE Work-Based Learning Coordinator. The Work-Based Learning Coordinator, teacher, student and community sponsor jointly plan the organization, assignments, implementation and evaluation of the CTE Co-op. An application is required. Please see the Cooperative Education Program Guidelines for more details.

### CTE Semester Internship (3) S

**Grade: 12**

**Prerequisite: Two CTE credits within the same Career Cluster, one being a completer course, Application or Instructor Approval**

A CTE Semester Internship allows students to observe and participate in daily operations, develop direct contact with professionals in the field, ask questions about careers, and perform appropriate job tasks. The Work-Based Learning Coordinator, teacher, student and community sponsor jointly plan the organization, implementation and evaluation of an internship, which may be unpaid or paid. Students participating in a CTE Semester Internship are allowed one release period, either at the beginning or end of the school day. They must document a minimum of 135 contact hours (100 on site) and complete assignments, including a

journal and a capstone project. An application is required and includes satisfying attendance, GPA and disciplinary qualifications. Confirmed placement is required before enrolling in a semester internship.

### CTE Flex Internship (3) S

**Grade: 12**

**Prerequisite: Two CTE credits within the same Career Cluster, one being a completer course, Application or Instructor Approval**

A CTE Flex Internship is completed outside of the school day (after school, weekends, breaks or summer). A Flex Internship allows students to observe and participate in daily operations, develop direct contact with professionals in the field, ask questions about careers, and perform appropriate job tasks. The Work-Based Learning Coordinator, student and community sponsor jointly plan the organization, implementation and evaluation of the internship, which may be unpaid or paid. Scheduling the Flex Internship is based on the availability and convenience of the community sponsor and student, and may begin at any time during the senior year or during the summer before the senior year. Students participating in a CTE Flex Internship must document a minimum of 68 contact hours (50 on site) and complete assignments, including a journal and a capstone project. The grade for a Flex Internship is not factored into GPA calculation and will appear on the transcript after completion of the assignments and required hours. An application is required and includes satisfying attendance, GPA and disciplinary qualifications. Notes: ½ Credit for 68 hours or 1 Credit for 135 hours.





# Appendix I

## Grievance Procedure

Should a student believe a teacher, principal, or other school system employee has violated, failed to enforce, or misinterpreted a local school rule, school system regulation, or Board of Education policy, he/she will be expected to use the following procedure to present the grievance:

### STEP 1

The student should first talk to the person whom the student feels is responsible. A telephone call is acceptable but face-to-face contact is best. The student should contact this person within a 24 hour period and state the grievance in a calm manner and listen carefully to the reply.

### STEP 2

If the student believes that the problem is not resolved, he/she should ask for a conference with the principal within a 48 hour period. The principal will see the student within a 48 hour period. The student and the principal should work together to resolve the problem. If the student finds the solution not to be acceptable, he/she should so inform the principal. The principal will send the student a letter explaining why he/she disagrees with the student.

### STEP 3

If the student wishes to pursue the grievance beyond the principal, he/she should call within 48 hours to the Assistant Superintendent of Administration, Union County Public Schools, at telephone 704-296-9898 and explain the problem. The Assistant Superintendent will discuss the problem with the student. He/she may ask the student to state his/her grievance to him/her in a letter. He/she will conduct a thorough investigation. He/she may ask the student and others to meet with him/her to discuss and, hopefully, resolve the matter. If the grievance cannot be resolved by the Assistant Superintendent to the satisfaction of all concerned, he/she will prepare a written report of his/her findings and recommendations for the Superintendent and send the student a copy of the report.

### STEP 4

The Superintendent of Union County Public Schools will review the report. The Superintendent may ask for a conference with all parties involved. The Superintendent will, in writing, notify the student of his/her decision concerning the grievance within five (5) days.

### STEP 5

If the student is not satisfied with the decision of the Superintendent, he/she may appeal to the Board of Education within ten days of receipt of the Superintendent's letter. The student may call or write the Superintendent for an appointment with the Board. The student will be notified of the date, time, and place for the appeal to the Board. A complete record of the grievance will be sent to the Board. The record will describe the facts and positions of all parties involved. The student will have an opportunity to review the report and make changes if it does not accurately state his/her position before it goes to the Board. The hearing before the Board will be informal, and all parties will be given the opportunity to speak and be heard. The Board will make a decision concerning the grievance.

# Appendix II

## Four Year Academic Plan Worksheet

Future Ready Core Course of Study		Future Ready Occupational Course of Study	
English 4 credits	*English I _____ *English II _____ *English III _____ *English IV _____ Other English: _____	English 4 credits and one local recommendation	*English I _____ *Mod English _____ *English II _____ *English III _____ *English IV _____
Math 4 credits	*Math I _____ *Math II _____ *Math III _____ Other Math: _____	Math 3 credits and one local recommendation	*Intro to Math _____ * Foundations of Math I (local) _____ *Math I _____ *Financial Mgmt _____
Science 3 credits	*Earth Science or AP Environmental _____ *Biology _____ *Physical Science or Chemistry or Physics _____ Other Science: _____	Science 2 credits and one local recommendation	*Applied Science _____ *General Science _____ *Biology _____
Social Studies 4 credits	*World History _____ - _____ *Civics & Economics _____ *American History I & II or AP U.S. History _____ _____ Other Social Studies: _____	Social Studies 2 credits	*American History I _____ *American History II _____
		CTE 4 credits	_____ _____ _____ _____
Health & PE 1 credit	*Health and Physical Ed _____ Other PE _____	Health & PE 1 credit	*Health and Physical Ed _____ Other PE _____
Academic Electives 6 credits	4 from within a single concentration CTE/JROTC/Arts Ed/other academic subject area _____ _____ _____ _____	Occupational Preparation 6 credits	*Occupational Prep I _____ *Occupational Prep II _____ *Occupational Prep II _____ *Occupational Prep III _____ *Occupational Prep III _____ *Occupational Prep IV _____
	2 from CTE/Arts Ed/World Language _____ _____		_____ _____
Other Courses for a total of 32 credits: _____ _____ _____ _____		Other Courses for a total of 32 credits: _____ _____ _____ _____	
*Required Courses		32 credits – 4 courses = 28 courses to fulfill the graduation	



# Appendix III

## Acronyms

AFJROTC	Air Force Junior Reserve Officers' Training Corps
AG	Agricultural Education
ALTS	Alternative to Long Term Suspension
ANSI	American National Standards Institute
AP	Advanced Placement
ASE	Automotive Service Excellence
AVA	Aviation Academy
AWS	American Welding Society
BFIT	Business, Finance and Information Technology Education
CAA	North Carolina Comprehensive Articulation Agreement
CAA	Culinary Arts Academy
CAD	Computer-Aided Design
CAS	Cosmetic Arts and Science Academy
CASP	Career Academy of South Providence
CATA	Central Academy of Technology and Arts
CCENT	Cisco Certified Entry Networking Technician
CCNA	Cisco Certified Network Associate
CCP	Career and College Promise
CCP CTP	Career and College Promise College Transfer Pathways
CDM	Credit by Demonstrated Mastery
CEA	Clean Energy Academy
CERT	Community Emergency Response Team
CETA	Construction Electrical Trades Academy
CFP	Conference for Food Protection
CGSP	Certified Guest Service Professional
CHS	Cuthbertson High School
CP	College Prep
CPR	Cardiopulmonary Resuscitation
CSWA	Certified SolidWorks Associate
CT	Construction Trade
CTC	Construction Trades Carpentry Academy
CTE	Career and Technical Education
CTH	Construction Trades Heating, Ventilation, and Air Conditioning Academy
CTM	Construction Trades Masonry Academy
CTW	Construction Trades Welding Technology Academy
DEA	Drafting Academy - Engineering or Architecture
ECA	Early Childhood Education Academy
ELL	English Language Learner
EOC	End of Course
ETA	Electronics Technicians Association
ETech	Engineering Technology Academy
FACS	Family and Consumer Science

## Acronyms

FCCLS	Family, Career and Community Leaders of America
FERPA	Family Educational Rights and Privacy Act
FHHS	Forest Hills High School
GIS	Global Information Systems
GPA	Grade Point Average
GPS	Global Positioning Systems
H	Honors
HIA	Health Informatics Academy
HIPAA	Health Insurance Portability and Accountability Act
HL	Higher Level
HSE	Health Science Education
IB	International Baccalaureate
IDEA	Individuals with Disabilities Education Act
IEP	Individualized Education Plan
IMS	Instructional Management System
LEA	Local Education Agency
MHS	Monroe High School
MJROTC	Marine Junior Reserve Officers' Training Corps
MKT	Marketing Education
MOS	Microsoft Office Specialist
MRHS	Marvin Ridge High School
MTA	Microsoft Technology Associate
NAA	Nurse Aide Academy
NCCER	National Center for Construction Education and Research
NCECC	North Carolina Early Childhood Credential
NCVPS	North Carolina Virtual Public School
NIMS	National Institute for Metalworking Skills
NJROTC	Naval Junior Reserve Officers' Training Corps
OCS	Occupational Course of Study
OSFM	Office of State Fire Marshal
OSHA	Occupational Safety and Health Administration
PDHS	Piedmont High School
PLTW	Project Lead the Way
PWHS	Parkwood High School
PRHS	Porter Ridge High School
ROTC	Reserve Officers' Training Corps
S	Semester
SAS	Statistical Analysis Software
SASI	Senior Aerospace Science Instructor
SL	Standard Level
SPS	South Providence School
SREB	Southern Regional Education Board



Acronyms

STEM	Science, Technology, Engineering and Math
SVHS	Sun Valley High School
T&I	Trades and Industrial Education
TECH	Technology Education
TOK	Theory of Knowledge
UCEC	Union County Early College
UCPS	Union County Public Schools
UCV	Union County Virtual
UGETC	Universal General Education Transfer Component
UNC	University of North Carolina
WHS	Weddington High School
Y	Year



# Index

SUBJECT	PAGE NUMBER
Academic Difficulty of Courses	17
Academic Letter Guidelines	20
Academic Recognition	18
Advanced Placement Courses	17
AIG Suggested Courses	17
AP Capstone Diploma Recognition	15
Athletic Eligibility Requirements	22
Attendance	22
Auditing Classes	24
Career Academy of South Providence	8
Career and College Promise	9
Career and Technical Education Course Descriptions	84-106
Central Academy of Technology and Arts (CATA)	7
CATA Academies	73
Changing or Withdrawing from Courses	24
Class Adjustment Procedure	23
Class Rank	18
Class Size	23
Classification/Promotion Standards	16
Courses for Credit	12
Courses Taken at Middle School	24
Credit by Demonstrated Mastery	9
Credit Recovery	19
Cuthbertson High	6
Driver Education	27
Driver Eligibility	27
Early Graduation	24
End-Of-Course Tests	17
English Course Descriptions	29-32
Exam Exemptions	17
Fifth Year Seniors	26
Fine and Performing Arts Course Descriptions	44-48
Flex Day	25
Forest Hills High	6
Future Ready Course of Study	29
Graduation Honors	20
Graduation Requirements	10-13
Guidance and Counseling Services	23
Health and Physical Education Course Descriptions	49-50
High School Certificate of Achievement	12
Honor Rolls	20
Honor Society	20
Honors Courses	17
Incomplete Grades	19
Independent Study	10
International Exchange Students	26
Junior ROTC	51-55

SUBJECT	PAGE NUMBER
Junior Marshals	20
Marvin Ridge High	6
Marvin Ridge High - International Baccalaureate Program	7
Mathematics Course Descriptions	33-35
Maximum Potential	12
Mid-Year Graduation for Seniors	25
Minimum Course Requirements	13
Miscellaneous Course Descriptions	56-57
Monroe High	6
Non UCPS Courses	10
North Carolina Academic Scholars Program	14
North Carolina Virtual Public School	9
Online Coursework	13
Parkwood High	6
Pass/Fail Credit	19
Piedmont High	6
Policy Relevant to Pregnant & Parenting Students	26
Porter Ridge High	6
Progress Reports	22
Re-taking Courses	19
Science Course Descriptions	37-39
Social Studies Course Descriptions	40-43
South Providence School	7
Student Assistants	26
Summer Credit Recovery	20
Sun Valley High	6
Transfer Credit	21
UCPS Global Scholars Program	15
UC Virtual	9
Union County Early College	8
UNC Requirements	13
Valedictorian and Salutatorian	21
Weddington High	6
Weighting of Grades	18
Wolfe School	8
World Languages Course Descriptions	58-61





## On the Cover

### MARVIN RIDGE HIGH SCHOOL

Derek Barnes  
Ally Bigham  
Joyce Deng  
Ishan Dalsania  
Amarachi Emezie  
Jordan Martin  
Elizabeth Schupp  
Grant Sutherland



# High School Directory

**Central Academy of Technology and Arts**  
**“Leading the Way”**

600 Brewer Drive  
Monroe, NC 28112-6110  
704-296-3088  
cata.ucps.k12.nc.us

**Cuthbertson High School**  
**“Connecting our Students to the World”**

1400 Cuthbertson Road  
Waxhaw, NC 28173  
704-296-0105  
chs.ucps.k12.nc.us

**Forest Hills High School**  
**“We Expect Success”**

100 Forest Hills School Road S.  
Marshville, NC 28103  
704-296-3025  
fhhs.ucps.k12.nc.us

**Marvin Ridge High School**  
**“Passport to the World”**

2825 Crane Road  
Waxhaw, NC 28173  
704-290-1520  
mrhs.ucps.k12.nc.us

**Monroe High School**  
**“Proud Past, Promising Future”**

1 High School Drive  
Monroe, NC 28112  
704-296-3130  
mhs.ucps.k12.nc.us

**Parkwood High School**  
**“Learners Today...Leaders Tomorrow!”**

3220 Parkwood School Road  
Monroe, NC 28112  
704-764-2900  
pwhs.ucps.k12.nc.us

**Piedmont High School**  
**“Piedmont Academics  
Character Excellence”**

3006 Sikes Mill Road  
Monroe, NC 28110  
704-296-3170  
pmhs.ucps.k12.nc.us

**Porter Ridge High School**  
**“Rigor, Relevance, and Relationships”**

2839 Ridge Road  
Indian Trail, NC 28079  
704-292-7662  
prhs.ucps.k12.nc.us

**South Providence School**  
**“Rising from Adversity to Strength”**

500 South Providence Street  
Waxhaw, NC 28173  
704-290-1580  
sps.ucps.k12.nc.us

**Sun Valley High School**  
**“Celebrate Success”**

5211 Old Charlotte Highway  
Monroe, NC 28110  
704-296-3020  
svhs.ucps.k12.nc.us

**Union County Early College**

4209-A Old Charlotte Highway  
Monroe, NC 28110  
704-290-1565  
ucec.ucps.k12.nc.us

**Weddington High School**  
**“Empowering Students to Reach  
Their Full Potential”**

4901 Monroe-Weddington Road  
Matthews, NC 28104  
704-708-5530  
wdhs.ucps.k12.nc.us

**Wolfe School**

722 Brewer Drive  
Monroe, NC 28112  
704-290-1568  
wolfe.ucps.k12.nc.us





# DIRECTORY

**Dr. Andrew Houlihan**

Superintendent  
704-296-0766

**Dr. William Breedlove**

Chief Academic Officer  
704-296-1002

**Dr. Chris Barnes**

Assistant Superintendent  
Human Resources  
704-225-8420

**Jarrod McCraw**

Assistant Superintendent of Student Support  
704-296-3065

**Mark Strickland**

Assistant Superintendent  
Administration and Operations  
704-225-8420

**Tahira Stalberte**

Assistant Superintendent  
Communications and Community Relations  
704-296-5188

**Shanna McLamb**

Chief Financial Officer  
704-296-5314

**Jay Parker**

Chief Technology Officer  
704-296-3143

**Dr. Laurel Healy**

Director of Secondary Education  
704-296-0832

**Shirlene Leaks**

Secretary to Director  
of Secondary Education  
704-296-0833

**Union County Board of Education**

**Melissa Merrell, Chairman**

**Kathy Heintel, Vice-Chairman**

**Christina Helms**

**Matt Helms**

**Travis Kiker**

**Joseph Morreale**

**Gary Sides**

**Candice Sturdivant**

Materials provided by:  
Secondary Education

Layout and Design by:  
Communications Department



## Secondary Education

400 North Church Street  
Monroe, NC 28112  
Phone 704.296.0833 Fax 704.283.8419  
[www.ucps.k12.nc.us](http://www.ucps.k12.nc.us)

In compliance with federal law, UCPS administers all educational programs, employment activities and admissions without discrimination against any person on the basis of gender, race, color, religion, national origin, age or disability.



Follow us on Social Media #UCPSNC