# Washington High School

Home of the Pam Pack



# 2022-2023 Course Descriptions

One Team
One Goal
One Pack

# **Table of Contents**

ENGLISH/ LANGUAGE ARTS	3
MATHEMATICS	6
SCIENCE	8
FOREIGN LANGUAGE	14
CULTURAL ARTS	16
HEALTH & PHYSICAL EDUCATION	21
JROTC MILITARY SCIENCE	23
CAREER AND TECHNICAL EDUCATION	25
Agriculture	25
Business, Finance, and Marketing	27
Computer Science and Information Technology	28
Family and Consumer Science	30
Health Science	31
Architecture and Construction	33
Manufacturing	37
Internships	38
NC School of Science and Math Broadcast Options	39
OCCUPATIONAL PREPARATION	41

## ENGLISH/ LANGUAGE ARTS

**English I – 10212X00SC** 

Grade Level: 9 Length: Semester Credit: One Unit

English I is designed to meet the needs of the student through an in-depth study of grammar and usage, vocabulary, writing, literature, oral communications, research skills, and listening skills. This course fulfills the English I requirement for graduation.

Students must take the State Common Exam.

English I Honors - 10215X00SA

Grade Level: 9 Length: Semester Credit: One Unit

This course is for students who have high interests and capabilities in the area of English. This course is designed to meet the needs of the advanced student through an in-depth study of grammar and usage, vocabulary development, writing, literature, oral communications, research skill, listening skills, and critical thinking skills.

Students must take the State Common Exam. Summer reading is required.

English II - 10222X00SD

Grade Level: 10 Length: Semester Credit: One Unit

Prerequisite(s): English I

Students will study the works of many well-known world authors. The literature is studied by genre and/or historical time periods with emphasis on authors' techniques, stylistic devices, cultural context and connecting global ideas to personal experiences. Students will also study grammar, composition, vocabulary, and research.

Students must take the North Carolina End of Course Test.

English II Honors – 10225X00SA

Grade Level: 10 Length: Semester Credit: One Unit

Prerequisite(s): English I

Students in the honors course will explore world literature more widely and deeply, including challenging and/or complete print and non-print texts. The honors English course fosters intellectual curiosity by encouraging students to generate thought-provoking questions and topics and to research diverse sources. Higher level thinking skills will be emphasized through interdisciplinary and critical perspectives as reflected in quality of student performance in oral language, written language, and other media/technology.

Students must take the North Carolina End of Course Test. Summer reading is required.

English III - 10232X00SA

Grade Level: 11 Length: Semester Credit: One Unit

Prerequisite(s): English II

English III is a comprehensive grammar, writing, and American literature course. American literature is designed to allow students to explore major themes and philosophies during the growth of America as reflected by American authors. Literary techniques, moral, social, and intellectual attitudes are examined through oral discussions, in-class writings, essays and independent projects reflecting organized ideas and critical thinking skills.

Students must take the State Common Exam.

English III Honors – 10235X00SA

Grade Level: 11 Length: Semester Credit: One Unit

Prerequisite(s): English II

Students in the honors course will explore United States literature more widely and deeply, including more challenging and/or complete print and non-print texts. The honors English course fosters intellectual curiosity by encouraging students to generate thought-provoking questions and topics and to research diverse sources. Honors courses will require students to work as self-directed and reflective learners, both independently and in groups as leaders and collaborators. Higher level thinking skills will be emphasized through interdisciplinary and critical perspectives as reflected in the quality of media/technology. **Students must take the State Common Exam. Summer reading is required.** 

English III AP Lang & Comp -10357X00SA

**Grade Level: 11** 

Length: Yearlong Paired 1st semester with Honors Credit

**Credit: Two Unit (Honors-Fall, AP-Spring)** 

Prerequisite(s): English II

This is a college level course designed for students who are academically ready to accept the challenge of work at the college level. Students are encouraged to take the AP exam in May. Successful scores on this exam may allow students to receive college credit. This course fulfills the English III graduation requirements. This class includes discussion and analysis of major texts, which comprise the canon of American literature, as well as classic and contemporary models in nonfiction. Students enrolled in this course 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. **Summer reading is required.** 

**English IV – 10242X00SA** 

Grade Level: 12 Length: Semester Credit: One Unit

Prerequisite(s): English III

This course is designed to develop clarity of expression in all types of writing. The students will review grammar usage as the need arises. They will explore English literature from its beginning in the fifth century. They will gain an insight into the Anglo-Saxon character, the medieval literary contributions, the glory of the Renaissance, the intellectual revolution during the Age of Reason, the revolt of the Romanticist, the Victorian age, and the new direction in the twentieth century.

Students must take the State Common Exam.

English IV Honors – 10245X00SA

Grade Level: 12 Length: Semester Credit: One Unit

Prerequisite(s): English III

Students in the honors course will explore British literature more widely and deeply. The honors English course fosters intellectual curiosity by encouraging students to generate thought-provoking questions and topics and to research diverse sources. Honors courses will require students to work as self-directed and reflective learners, both independently and in groups as leaders and collaborators. Higher level thinking skills will be emphasized through interdisciplinary and critical perspectives as reflected in the quality of student performance in oral language, written language, and other media/technology.

Summer reading is required.

English IVAP Lit & Comp - 10367X00SB

**Grade Level: 12** 

Length: Yearlong Paired 1st semester with Honors Credit

Credit: Two Unit (Honors-Fall, AP-Spring)

Prerequisite(s): English III

English IV Advanced Placement Literature and Composition is a college level course designed for students who are academically ready to accept the challenge of work at the college level. Students are encouraged to take the AP Literature and Composition exam in May. Successful scores on this examination allow students to exempt entry-level English courses at many colleges and universities. This course fulfills the English IV graduation requirement. Students will read a wide variety of literary masterpieces and will continue to explore expressive, expository, argumentative, and literary contexts with a focus on British literature. They will probe deeply into movements, themes, and philosophies of literature. They will pursue independent research and master many forms of written communication. **Summer reading is required.** 

# MATHEMATICS

Foundations of NC Math I - 20502X00SC

**Grade Level: 9** 

**Length: Semester (taken with NC Math Ib)** 

**Credit: One Unit** 

It is recommended that students who have a final average below 80 in middle school math or score a level I, II, or III on the 8th grade math EOG take this course. This course provides students with the skills to master the first three units of Math I, which include Introduction to Functions, Linear Functions and Exponential Functions. Upon successful completion of this course, students will enroll in NC Math Ib. Both Foundations of NC Math I and NC Math Ib may be taken in the same academic year. Students will take a teacher made exam at the end of this course.

NC Math Ib - 21032X00SA

**Grade Level: 9** 

Length: Semester (continuation of Foundations of NC Math I)

**Credit: One Unit** 

Prerequisite(s): Foundations of NC Math I

It is recommended that students who have a final average below 80 in middle school math or score a level I, II, or III on the 8<sup>th</sup> grade math EOG take this course, after successful completion of Foundations of NC Math I. This course provides students with the skills to master the remaining units of Math I, which include Quadratic Functions, Systems of Equations and Inequalities and Statistics. Students will be expected to describe and translate among graphic, algebraic, numeric, tabular, and verbal representations of functions and use those representations to solve problems. Students will also review all units of Math I in preparation for the Math I End-of-Course exam.

Students must take the Math I End-of-Course exam.

NC Math I - 21032X00SA

Grade Level: 9 Length: Semester Credit: One Unit

It is recommended that students who have a final average of 80 or above in middle school math or score a level IV or V on 8th grade math EOG take this course. In this course students will study Introduction to Functions, Linear Functions, Exponential Functions, Quadratic Functions, Systems of Equations and Inequalities and Statistics. Students will be expected to describe and translate among graphic, algebraic, numeric, tabular, and verbal representations of functions and use those representations to solve problems. **Students must take the Math I End-of-Course exam.** 

NC Math II - 22012X00SC

Grade Level: 10 Length: Semester Credit: One Unit

Prerequisite(s): NC Math I

It is recommended that students who took Math I in ninth grade take this course. This course progresses from the standards learned in Math I. In Math II, students will study Transformations, Similarity & Congruence, Quadratic Functions, Square Root Functions & Inverse Variation, Relationships in Triangles and Probability. **Students must take the Math II NC Final Exam.** 

NC Math II Honors – 23015X0

Grade Level: 9, 10 Length: Semester Credit: One Unit

Prerequisite(s): NC Math I

It is recommended that students who have a final average of 80 or above in Math I or score Level IV or V on the Math I EOC take this course. Math II Honors offers a more challenging approach to concepts in the Math II curriculum. This course progresses from the standards learned in Math I. In Math II, students will study Transformations, Similarity & Congruence, Quadratic Functions, Square Root Functions & Inverse Variation, Relationships in Triangles and Probability. **Students must take the Math II NC Final Exam.** 

NC Math III – 23012X0 Grade Level: 11, 12 Length: Semester Credit: One Unit

Prerequisite(s): NC Math II

It is recommended that students who took Math II or students who have a final average below 80 in Math II Honors take this course. Math III progresses from the standards learned in Math I and Math II. In this course students will study Functions, Exponential Functions, Rational Functions, Polynomial Functions, Geometric Modeling, Circles, Trigonometry and Statistics. Students will be expected to describe and translate among graphic, algebraic, numeric, tabular, and verbal representations of functions and use those representations to solve problems. **Students must take the Math III End-of-Course exam.** 

NC Math III Honors – 23015XO

Grade Level: 10, 11 Length: Semester Credit: One Unit

Prerequisite(s): NC Math II

It is recommended that students who have a final average of 80 or above in Math II Honors or a final average of 90 or above in Math II take this course. Math III Honors offers a more challenging approach to concepts in the Math III curriculum. Math III progresses from the standards learned in Math I and Math II. In this course students will study Functions, Exponential Functions, Rational Functions, Polynomial Functions, Geometric Modeling, Circles, Trigonometry and Statistics. Students will be expected to describe and translate among graphic, algebraic, numeric, tabular, and verbal representations of functions and use those representations to solve problems. **Students must take the State End-of-Course exam** 

Ennderingsof
Sequences
(Entering 2009/2010
and Beyond)

Earth/Environmental Science

35012X00SB Grade Level: 9 Length: Semester Credit: One Unit

This course is the study of the history of the ever-changing Farth and its role in the universe. The curriculum will emphasize the origin and evolution of Earth, the atmosphere, and the relationships between them. In addition to studying the Earth itself, the course will look at how each area interacts and its impact on the biosphere. Students will also study the human impact on each of these areas and its influence on Earth's sustainability. **Students must take the State Common Exam.** 

Earth/Environmental Science Honors - 35015X00SA

Grade Level: 9 Length: Semester Credit: One Unit

Honors Earth/Environmental Science is a rigorous curriculum designed to allow highly motivated students to conduct an in-depth study of the Earth and Environmental Sciences. It is recommended that the student have a final average of a 90 in English or above and a level IV or V on the reading EOG. In Honors Earth/Environmental Science students are expected to work independently on a variety of assignments and accept greater responsibility for their learning. In order to develop a greater understanding of the processes that shape our everyday lives, the curriculum will integrate inquiry investigations and a variety of technologies with the study of earth as a system. The impacts of human activities on earth systems will also be a focus. The results of student investigations should be communicated through presentations and formal laboratory reports. Enrichment and integration with other disciplines is encouraged. **Students must take the State Common Exam.** 

Biology I- 33202X00SB

Grade Level: 11 Length: Semester Credit: One Unit

Prerequisite(s): Earth Science

This is an introductory course designed to awaken students' admiration and awe for the complexity of life. It provides a comprehensive understanding of the physical and chemical laws of nature by integrating problem solving and scientific thought. The course focuses on a study of the five kingdoms of organisms and is designed to encourage the student to make practical, relevant applications of biological concepts to everyday experiences. The student will conduct research and solve problems. This course follows the North Carolina Essential Standards and will satisfy the life science component for graduation.

Students must take the State End- of- Course test.

Biology I Honors – 33205X00SA

Grade Level: 11 or 10 if student has successfully completed Math 2 Honors

Length: Semester Credit: One Unit Prerequisite(s): Math I

This is an introductory course designed to awaken students' admiration and awe for the complexity of life. It provides a comprehensive understanding of the physical and chemical laws of nature by integrating problem solving and scientific thought. This rigorous course exceeds the standard level through an in-depth, complex study of the biological processes, principles, and concepts. Students are expected to complete activities in enhancement categories throughout the school year. Students will undertake an in-depth study of the nature of life, chemical basis of biology, cellular biology, genetics, microbiology, non-vascular plants, ecology, vascular plants, invertebrates, vertebrates, and human biology. This course will satisfy the life science component for graduation. **Students must take the State End- of- Course test.** 

AP Biology-31007X00SA

Grade Level: 12 Length: Semester Credit: One Unit

Prerequisite(s): Advanced Biology Honors

This course is designed to prepare students for the advanced placement exam in Biology. It is a rigorous course that is equivalent to an introductory college course in Biology. Units of study will include the seven kingdoms, the cell, cell processes, genetics, ecology, human anatomy, physiology, biochemistry, and evolution. Projects will also be assigned throughout the year. **Students are encouraged to take the Advanced Placement biology examination that is administered in May.** Only those students who are self-motivated and academically strong should attempt this course. **Summer assignment is mandatory.** 

Physical Science - 34102X00SA

Grade Level: 10, 12 Length: Semester Credit: One Unit

Prerequisite(s): Earth Science

This course focuses on an introduction to chemistry, physics, and energy conservation. A set of goals and a sequence of skills emphasizing practical application of Physical Science principles have been defined for this lab-centered course. General knowledge of basic mathematics is necessary. This course follows the North Carolina Essential Standards and will satisfy the physical science component for graduation.

Students must take the State Common Exam.

#### Chemistry I Honors – 34205X00SA

Grade Level: 10, 12 Length: Semester Credit: One Unit

Prerequisite(s): Biology H

Honors Chemistry is an accelerated comprehensive laboratory course designed to give the students a more conceptual and in-depth understanding of the concepts in the North Carolina Standard Course of Study in Chemistry. In Honors Chemistry students are expected to work independently on a variety of assignments and accept greater responsibility for their learning. The course will include the more advanced mathematical applications.

Students must take the State Common Exam.

AP Environmental Science Grade Level: 9, 10, 11, 12

**Length: Semester Credit: One Unit** 

The AP Environmental Science course is designed to be the equivalent of an introductory college course in environmental science. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate risks associated with those problems, and to examine alternative solutions for resolving and/or preventing them.

## SOCIAL STUDIES

World History - 43032X00SB

Grade Level: 9 Length: Semester Credit: One Unit

This is a survey course that gives students the opportunity to explore recurring themes of human experience common to civilizations around the globe from ancient to contemporary times. The application of the themes of geography and an analysis of the cultural traits of civilizations will help students understand how people shape their world and how their world shapes them. As students examine the historical roots of significant events, ideas, movements, and phenomena, they encounter the contributions and patterns of living in civilizations around the world. Students broaden their historical perspectives as they explore ways societies have dealt with continuity and change, exemplified by issues such as war and peace, internal stability and strife, and the development of institutions. **Students must take the State Common Exam.** 

#### World History Honors – 43035X00SA

Grade Level: 9 Length: Semester Credit: One Unit

This is a survey course that gives students the opportunity to explore recurring themes of human experience common to civilizations around the globe from ancient to contemporary times. The application of the themes of geography and an analysis of the cultural traits of civilizations will help students understand how people shape their world and how their world shapes them. As students examine the historical roots of significant events, ideas, movements, and phenomena, they encounter the contributions and patterns of living in civilizations around the world. Students broaden their historical perspectives as they explore ways societies have dealt with continuity and change, exemplified by issues such as war and peace, internal stability and strife, and the development of institutions. **Students must take the State Common Exam.** 

#### AP World History Modern Grade Level: 9, 10, 11, 12

**Length: Semester Credit: One Unit** 

Study the cultural, economic, political, and social developments that have shaped the world from c. 1200 CE to the present. You'll analyze texts, visual sources, and other historical evidence and write essays expressing historical arguments. Students are encouraged to take the AP Exam in May.

#### American History - 43042X00SA

Grade Level: 10 Length: Semester Credit: One Unit

The study of American History I is designed as a semester survey course in U.S. History. This survey course will begin with the national period and the administration of George Washington. The focus of this course provides students with a framework for studying political, social, economic, and cultural issues, and for analyzing the impact these issues have had on American society. This course goes beyond memorization of isolated facts to the development of higher-level thinking skills, encouraging students to make historical assessments and evaluations.

Students must take the State Common Exam.

American History -Honors-402150SA

Grade Level: 10 Length: Semester Credit: One Unit

Honors American History I provide the opportunity for advanced work, rigorous academic study, and the practical application of the major ideas and concepts found in the study of United States history. The course is challenging and requires students to take greater responsibility for their learning by participating in problem-seeking and problem-solving, scholarly and creative processes, critical analysis and application, reflective thinking, and the expression and defense of ideas generated through the study of the content.

Students must take the State Common Exam.

Intro to U.S. History AP - 401050SA

Grade Level: 10 Length: Semester Credit: One Unit

This more rigorous course is designed to prepare students for the second semester AP U.S. History course. Students will be given readings from secondary and primary source readings from the 18th and 19th centuries. These readings will be the basis for writing assignments. Students will do extensive writing often using prompts similar to past AP examinations. Introduction to AP U.S. History is strongly recommended as a prerequisite to AP U.S. History. This course must be accompanied by US History AP to fulfill North Carolina graduation requirement.

**U.S. History AP – 402170SA** 

Grade Level: 10 Length: Semester Credit: One Unit

Prerequisite(s): Intro to US History AP

This course emphasizes the elements of research and contains a strong writing, reading, and critical thinking skills component. Original source research will be stressed with individual as well as class projects. This course should enable students to successfully complete the Advanced Placement American History Examination for college credit. This course fulfills the requirement of U.S. History for graduation. Students are encouraged to take the AP Exam in May.

# **Economics and Personal Finance-43192X00SA**

Grade Level: 11 Length: Semester Credit: One Unit

The standards and objectives in the Economics and Personal Finance course will provide students the opportunity to engage in intensive application of the skills, concepts, processes, and knowledge gained in previous social studies courses and prepare them to be college, career, and civic ready.

Civics and Economics – 42092X00SA

Grade Level: 12 Length: Semester Credit: One Unit

This course focuses on the development of economic and political knowledge and skills. Through the study of Civics and Economics, students will acquire the skills and knowledge necessary to become responsible and effective citizens in an interdependent world. Students will need a practical understanding of these systems of civics and economics that affect their lives as consumers and citizens. As informed decision-makers, students will apply acquired knowledge to real life experiences. When studying the legal and political systems, students will become aware of their rights and responsibilities and put this information into practice.

Civics & Economics Honors - 42095X00SA

Grade Level: 12 Length: Semester Credit: One Unit

This rigorous course is designed to meet the needs of the advanced student through an in-depth study of the economic, legal, and political systems. Students should have already mastered verbal and written communication skills. Through the study of Civics and Economics, students will acquire the skills and knowledge necessary to become responsible and effective citizens in an interdependent world. Students will need a practical understanding of these systems of civics and economics that affect their lives as consumers and citizens. As informed decision-makers, students will apply acquired knowledge to real life experiences. When studying the legal and political systems, students will become aware of their rights and responsibilities and put this information into practice.

Students must take the State Common Exam.

AP Human Geography-4A027X00SA

Grade Level: 9, 10, 11, 12

**Length: Semester Credit: One Unit** 

AP Human Geography studies people and places and their interactions: why do people live where they live, what type of work is available, the religions and customs of their areas and how that impacts their education, their work, and us even if we don't live near them. In today's ever-increasing interdependence, it is our responsibility to understand other people to work together for economic, medical, and political sustainability.

Updated 09/2022

#### FOREIGN LANGUAGE

Spanish I - 105120SA Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

Spanish I helps the students develop the ability to speak, read, and comprehend simple sentences in Spanish. The student attains a basic vocabulary and communication skills in the target language. Cultural differences and geography of the Spanish-speaking nations are explored.

Spanish II – 105220SB Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite(s): Spanish I

Spanish II builds upon the skills acquired in the first year of study. Emphasis is placed on acquiring more advanced communication skills in Spanish. Listening, speaking, and writing skills are further developed in conjunction with continued cultural and geographical comparisons. The UNC system advises students that they are required to have at least 2 years of a foreign language prior to being admitted to the colleges in the UNC system.

Spanish III – 105350SA Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite(s): C or higher in Spanish II

Spanish III provides a more advanced study of the language and literature of Spanish-speaking people. The focus will be on oral fluency as well as advanced grammar and vocabulary. Emphasis is on reading short stories, poetry, and informative articles related to the Spanish-speaking nations.

Spanish IV - 105450SA Grade Level: 11, 12 Length: Semester Credit: One Unit

Prerequisite(s): C or higher in Spanish III

Students will study the finer points of the language and read literature from Spanish-speaking countries. Students will write compositions with acceptable grammatical and literary quality using the Spanish language. Students taking this course should be well prepared for college Spanish.

French I – 104120SA Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

French I helps the students develop the ability to speak, read and comprehend simple sentences in French. The student attains a basic vocabulary and communication skills in the target language. Cultural differences and geography of the French-speaking nations are explored.

French II – 104220SA Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite(s): French I

French II builds upon the skills acquired in the first year of study. Emphasis is placed on acquiring more advanced communication skills in French. Listening, speaking, and writing skills are further developed in conjunction with continued cultural and geographical comparisons. The UNC system advises students that they are required to have at least 2 years of a foreign language prior to being admitted to the colleges in the UNC system.

French III – 104350SA Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

**Prerequisite(s):** C or higher in French II

French III provides a more advanced study of the communication skills and literature of French-speaking people. The focus will be on oral fluency as well as advanced grammar and vocabulary. Emphasis is on reading short stories, poetry, and informative articles related to the French-speaking nations.

French IV – 104450SA Grade Level: 11, 12 Length: Semester Credit: One Unit

Prerequisite(s): C or higher in French III

Students will study the finer points of grammar and read literature from French-speaking countries. Students will write compositions with acceptable grammatical and literary quality using the French language. Students taking this course should be well prepared for college French.

# **CULTURAL ARTS**

Music Appreciation Grade Level: 9, 10, 11, 12

**Length: Semester Credit: One Unit** 

Description: Students will learn about various genres of music and make connections between history, art, and culture. Students will explore music from a variety of cultures from around the world. Student will also learn the significance of music and the major role it plays in everyday society.

# \*\*\*FALL BAND REQUIRES STUDENT PARTICIPATION IN MARCHING BAND, AFTER SCHOOL HOURS, AND SUMMER BAND CAMP\*\*\*

Marching Band I and II - 52552X0 or 52562X0

Grade Level: 9, 10, 11, 12 Length: Semester Fall Credit: One Unit

Students enrolled in Marching Band are required to participate in all band activities during the Fall Semester. A waiver to this requirement can be addressed to the Marching Band Director. Various marching and music clinics are held in the spring and summer in addition to the August Band Camp. These activities are provided to prepare all members of the Marching Band for performances at football games, marching festivals, and parades.

Marching Band III and IV Honors – 52575X0 or 52585X0

Grade Level: 10, 11, 12 Length: Semester Fall Credit: One Unit

This course is designed for accomplished band students who can sight-read and perform honors music. Students enrolled in Marching Band are required to participate in all band activities during the Fall Semester. A waiver to this requirement can be addressed to the Marching Band Director. Various marching and music clinics are held in the spring and summer in addition to the August Band Camp. These activities are provided to prepare all members of the Marching Band for performances at football games, marching festivals, and parades.

Band I - 52552X0

Grade Level: 9, 10, 11, 12

**Length: Semester Credit: One Unit** 

Prerequisite(s): It is recommended that students have at least one year in school band.

Concert Band is designed for those students who have developed and wish to continue development of appropriate musical skills on a wind or percussion instrument. This course will include sight-reading, perfecting, and rehearsing music, all in preparation for concerts and contest. Students taking this course should have experience in performing in an ensemble. Students will be expected to attend after-school rehearsals for spring concert.

Band II – 52562X0 Grade Level: 10, 11, 12 Length: Semester Credit: One Unit Prerequisite(s): Band I

Band II is designed for those students who have developed a wish to continue development of appropriate musical skills on a wind or percussion instrument. This course includes sight-reading, rehearsing and perfecting music in preparation for concerts and contests. **Students will be expected to attend after-school rehearsals for spring concert.** 

Band III and IV Honors-52575X0 or 52585X0

Grade Level: 10, 11, 12 Length: Semester (Spring)

**Credit: One Unit** 

Prerequisite(s): Band II; teacher recommendation

This course is designed to advance students to a higher music level beyond Concert Band. Students will also study music theory and ear training to prepare for Honors Symphonic Band. **Students will be expected to attend after-school rehearsals for spring concert.** 

Theatre Arts I 53152X0

Grade Level: 9, 10, 11, 12

**Length: Semester Credit: One Unit** 

Students will begin their study of theatre with a look at theatre through the 1900's and basic acting skills including: mime, creative movement, puppetry, and basic technical skills.

Theatre Arts II 53162X0

Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite(s): Theatre Arts I

This course is a study of theatre in the 20th century. Students will learn take an inside look at various elements of theatre including playwriting, directing, stage managing, and acting.

**Theatre Arts III Honors** 

53175X0

Grade Level: 11, 12 Length: Semester Credit: One Unit

Prerequisite(s): Theatre Arts II (85 or higher)

Honors Theatre Arts III is an advanced continuation of the 5315 Theatre Arts I and II. This course involves additional in-depth application of theatre arts knowledge, skills and process.

**Theatre Arts IV Honors** 

53185X0

Grade Level: 11, 12 Length: Semester Credit: One Unit

Prerequisite(s): Theatre Arts III Honors (85 or higher)

Honors Theatre Arts IV is an even more advanced continuation of Honors and Theatre Arts III and will require students to become initiators of learning and accomplishment, as well as demonstrate leadership and expertise in theatre arts.

Art I (Beginning) – 54152X0 Grade Level: 9, 10, 11, 12

**Length: Semester Credit: One Unit** 

In Art I, students are involved with applying the basic elements of art and the principles of design to such creative activities as drawing, painting, printmaking, sculpture, and fine crafts. The role of communication, craftsmanship and quality are important for success in making art. Knowledge and appreciation of art history and aesthetics are integrated into the course. Sustained effort and attitude are essential aspects of this course. **Students are required to purchase a spiral-bound sketchbook.** 

Art II (Intermediate) - 54162X0

Grade Level: 10, 11, 12 Length: Semester Credit: One Unit Prerequisite(s): Art I

An in-depth involvement in the basic arts process is available in this course. Students are required to work more independently and to assume more responsibility for working with more sophisticated tools and materials. Consideration for individual talent and interest is considered. Enhanced knowledge, appreciation of art and art history are integrated into the course. Career awareness complements the studio work. **Students are required to purchase a spiral-bound sketchbook.** 

Honors Art III (Proficient)-54175X0

Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite(s): Art II (85 or higher), Teacher Recommendation

This course builds on previous courses with a more in-depth approach to the study of art processes and techniques, aesthetic issues, art criticism and art history. Teachers will help students form goals, become familiar with careers, and develop work habits of professional. Knowledge of the arts in relation to culture, history, other disciplines, and careers will be promoted through visual, verbal and written materials. Activities are teacher-defined and will include added student responsibility for project definition, concept development and independent research. Students will be expected to devote time outside of regular class to the production of their art. Students are required to purchase a spiral-bound sketchbook and any other additional art materials required for project completion.

Honors Art IV (Advanced) - 54185X0

Grade Level: 12 Length: Semester Credit: One Unit

#### Prerequisite(s): Art III Honors (85 or higher), Teacher Recommendation

This course builds on previous courses with a more in-depth approach to the study of art processes and techniques, aesthetic issues, art criticism and art history. Students are required to complete a portfolio of work consisting of original quality pieces showing knowledge and skill in media, process and technique as well as a concentration showing an in-depth investigative and creative study of a selected topic. Students will be expected to devote time outside of regular class to the production of their art. **Students are required to purchase a spiral-bound sketchbook and any other additional art materials required for project completion.** 

Pottery I – 54612X0 Grade Level: 10, 11, 12 Length: Semester Credit: One Unit Prerequisite(s): Art I

Students in this class will recognize Ceramics as the craft of working with clay. They will understand the historical significance of ceramics as a medium for producing objects for personal and ceremonial use. The class content will include traditional as well as contemporary uses of ceramics and will serve as an introduction to the techniques and processes used when making pottery through demonstration. A \$10 fee will be assessed each student for the firing of pottery during the semester.

Pottery II – 54622X0 Grade Level: 11, 12 Length: Semester Credit: One Unit

**Prerequisite(s): Pottery I** 

This course is a continuation of Pottery I with an emphasis on wheelwork and creating a permanent, useable, three-dimensional art form. The student will explore in-depth ceramic design, construction, and decoration techniques. Firing of the kiln and kiln maintenance will be presented. A body of work will be developed concentrating on ceramic design, process, and concept development. A \$20 fee will be assessed each student for the firing of pottery during the semester.

Photography I – 54612X0 Grade Level: 10, 11, 12 Length: Semester Credit: One Unit Prerequisite(s): Art I

This course is designed to introduce the fundamental aspects of photography. Learn how to make a camera from a shoebox. Basic picture taking and darkroom procedures, unusual photographic techniques as well as digital photography and photography related computer software are covered in this course. Students are required to purchase a digital camera and three-ring notebook with clear page protectors. A \$10 fee will be assessed each student for darkroom use and color printing of digital images during the semester.

Updated 09/2022

Photography II- 54622X0

Grade Level: 11, 12 Length: Semester Credit: One Unit

Prerequisite(s): Photo I, Teacher Recommendation

This course builds on previous courses with a more in-depth approach to the study of photographic processes and techniques, aesthetic issues, art criticism and history. Students are required to complete a portfolio of work consisting of original quality pieces showing knowledge and skill in photographic, processes and techniques as well as a concentration showing an in-depth investigative and creative study of a selected topic. Students will be expected to devote time outside of regular class to the production of their body of work.

Students are required to purchase a digital camera and three-ring notebook with clear page protectors. A \$10 fee will be assessed each student for darkroom use and color printing of digital images during the semester.

#### **HEALTH & PHYSICAL EDUCATION**

Health & PE Grade Level: 9 Length: Semester Credit: One Unit

This course is for freshmen. It is the Health and Physical Education which helps young people make independent informed decisions regarding their physical, mental, and social well-being. **This course is a requirement for graduation from high school.** 

PE Team Sports – 60602X0 Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite(s): Health & PE

Team Sports is designed to provide students with basic skills, knowledge, and fitness in team sports. Including flag football, volleyball, softball, basketball, and other team games selected by the instructor and class. Appropriate dress and active participation are required.

PE Lifetime Sports – 60602X0

Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite(s): Health & PE

Lifetime Sports will emphasize those activities that may benefit students throughout their lifetime. Activities may include archery, badminton, tennis, jogging, walking, Frisbee golf, other individual games, and volleyball. Appropriate dress and active participation are required.

PE Advanced –901520SG Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite(s): Health/PE

Advanced Physical Education will combine lifetime activities, team sports and conditioning. The course will emphasize basic skills, knowledge, and fitness in relevant activities. Appropriate dress and active participation are required.

Male Weightlifting -60602X0

Grade Level: 10,11,12 Length: Semester Credit: One Unit

Prerequisite(s): Health & PE

This course emphasizes rigorous physical conditioning and weight training. Emphasis is on development of strength through POWER lifting, cardiovascular endurance, and knowledge of how exercise develops. Appropriate dress and active participation are required.

Female Weightlifting-60602X0

Grade Level: 10,11,12 Length: Semester Credit: One Unit

Prerequisite(s): Health & PE

This course emphasizes rigorous physical conditioning and weight training. Emphasis is on development of strength through POWER lifting, cardiovascular endurance, and knowledge of how exercise develops. Appropriate dress and active participation are required.

# Unified Sports Honors Grade Level: 11, 12 Length: Semester Credit: One Unit

**Prerequisite: Application process** 

The Adapted Physical Education class will be an inclusive approach to physical education. Peer coaches will be paired with exceptional students with close instruction and guidance by teachers. The peer coach will demonstrate activities and motivate the students with special needs to participate.

Sports Medicine I Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

Is designed to educate students interested in fields such as athletic training, physical therapy, medicine, fitness, physiology of exercise, kinesiology, nutrition, and other sports medicine fields.

#### JROTC MILITARY SCIENCE

Army JROTC I – 95012X0 Grade Level: 9, 10, 11, 12

**Length: Semester Credit: One Unit** 

JROTC prepares students for success in high school and in life. It strengthens the student's self-esteem, develops your leadership potential, improves your physical fitness, and promotes high school completion. JROTC also teaches students personal skills such as how to take good notes, how to take tests and how to write and speak more effectively. JROTC does not obligate them to military service but will assist them in earning a ROTC scholarship or higher rank entering the military. Successful completion of this course qualifies a student for one advanced rank upon entry into any of the armed forces.

Army JROTC II – 95022X0 Grade Level: 9, 10,11, 12

**Length: Semester Credit: One Unit** 

Prerequisite(s): JROTC I

As cadet non-commissioned officers, students will continue to develop leadership personal skills by demonstrating those already learned and learning more advanced concepts. Students will have the opportunity to join competitive teams as well as participate in community service and social activities. Activities include a field trip, military ball, color guard and drill team competition, rifle team matches and an opportunity to attend summer camp.

Army JROTC III – 95032X0 Grade Level: 10, 11, 12 Length: Semester

Credit: One Unit

Prerequisite(s): JROTC II

As cadet senior non-commissioned officers and junior officers, the student will assist in the training and supervision of first- and second-year cadets. Students will learn how to perform a variety of command and staff functions in the areas of administration, training and operations planning, logistics management and public relations. Students will be trained as activity and team leaders, learning to guide and control groups of cadets involved in various activities. Successful completion of this course qualifies a student for a second advanced rank upon entry into any of the armed forces.

Army JROTC IV - 95042X0

Grade Level: 11,12 Length: Semester Credit: One Unit

Prerequisite(s): JROTC III

As cadet senior non-commissioned officer, commanders and staff officers, students will plan and supervise all activities of the corps of cadets with instructor guidance. Academic work will consist of self-paced study, suggested readings, seminars, case studies and special assignments.

Army JROTC V - 95052X0

Grade Level: 11, 12 Length: Semester Credit: One Unit

**Prerequisite(s): JROTC IV** 

As a staff officer cadets take an active role in performing duties associated with their staff position, including planning, writing reports and requisitioning supplies. They have assistants who they must train and supervise. Academic work is composed of self-paced study, evaluation of performance on staff duties, seminars, and special assignments.

Army JROTC VI - 95062X0

Grade Level: 11, 12 Length: Semester Credit: One Unit

Prerequisite(s): JROTC V

This course is for senior Staff Officers and the senior leadership of the cadet battalion. Cadets will plan, publish operation orders, and supervise the cadet battalion in the execution of major activities. Academic activities include writing plans, seminars, self-paced study, and special assignments.

#### CAREER AND TECHNICAL EDUCATION

# Agriculture

**Agriscience Applications - AU102X0** 

**Grade Level – 9,10,11,12** 

Length: Semester Credit: One Unit Prerequisite: None

POL (Proof of Learning) – CTE State Assessment

This course focuses on integrating biological/physical sciences with technology as related to the environment, natural resources, food production, science, and agribusiness. Topics of instruction include agricultural awareness and literacy, employability skills and introduction to all aspects of the total agricultural industry. English language arts, mathematics, and science are reinforced. \*Course enrollment must be limited to the recommended maximum to ensure safety in all classroom/laboratory settings.

Animal Science I - AA212X0 Animal Science I Honors - AA215X0

**Grade Level – 9,10,11,12** 

Length: Semester Credit: One Unit Prerequisite: None

POL (Proof of Learning) – PBM (Performance-based Measurement)

**Credential: NC Beef or Pork Quality Assurance** 

This course focuses on animal physiology, breeding, nutrition, health, and best management practices in preparation for an animal science career. Leadership development and employability skills are integral to the course and are delivered through authentic experiences. English language arts, mathematics, and science are reinforced in this class.

**Animal Science II Honors-Food Animals AA225X0** 

**Grade Level – 9,10,11,12** 

**Length: Semester Credit: One Unit** 

**Prerequisite: Animal Science I** 

POL (Proof of Learning) – CTE State Assessment Credential: NC Beef or Pork Quality Assurance

This course focuses on animal anatomy, physiology, digestion, reproduction, housing and facilities, management, and genetics of the food animal industry. Leadership development and employability skills are integral to the course and are delivered through authentic experiences. English language arts, mathematics, and science are reinforced in this class.

**Animal Science II - Companion Animals - AA235X0** 

**Grade Level – 9,10,11,12** 

**Length: Semester Credit: One Unit** 

**Prerequisite: Animal Science I** 

POL (Proof of Learning) – CTE State Assessment Credential: Canine Care and Training Program (CCTP)

This course focuses on animal welfare, safe handling practices, nutrition, digestion, breeding, grooming, care, classification, and the history of the companion animal industry. Leadership development and employability skills are integral to the course and are delivered through authentic experiences. English language arts, mathematics, and science are reinforced in this class.

**Veterinary Assisting Honors - AA415X0** 

Grade Level – 12 Length: Semester Credit: One Unit

POL (Proof of Learning) – Credential Prerequisite: Animal Science II

#### Credential: Certified Veterinary Assistant OR Elanco Veterinary Medical Applications

This course provides instruction for students desiring a career in animal medicine. Topics include proper veterinary practice management and client relations, pharmacy and laboratory procedure, advanced animal care, and surgical/radiological procedures. Applied mathematics, science and writing are integrated throughout the curriculum. Advanced FFA leadership will be infused throughout the curriculum to develop the student's ability to work with the public. All aspects of this course will feature hands-on skill sets designed to enhance experiential learning. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course are cooperative education, internship, mentorship, service-learning, job shadowing and supervised agricultural experience. FFA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skill through authentic experiences. Students who wish to take the Veterinary Assisting Exam developed by Texas Veterinary Medical Association to be a Certified Veterinary Assistant (CVA) Level 1 should complete an additional 500 hours of supervised agricultural experience (SAE) during their three animal science courses. Two hundred SAE hours focus on the care and management of animals; will be substantiated by records and conducted under the direct supervision of the agricultural teacher. Hours may be earned any time during the year including summer months. An additional 300 hours of supervised agricultural experience (worked based learning) will be conducted as an internship program in animal medicine under the supervision of a licensed veterinarian or certified veterinary technician who will attest those participating students have mastered a standard set of skills used in animal medicine as identified by the cooperating teacher. Hours may be earned any time during the year including summer months.

## Business, Finance, and Marketing

**Business Essentials - BF102X0** 

**Business Essentials Honors - BF105X0** 

Grade Level: 9, 10, 11, 12

Length: Semester Credit: One Unit Prerequisite: None

#### **POL** (Proof of Learning) – CTE State Assessment

This course will introduce students to realistic business and finance principles by examining fundamental economic concepts, the business environment, and primary business activities. Through workplace scenarios and problem-based learning, students will explore business ethics, customer relations, economics, financial analysis, human resources management, information management, marketing, operations, and business technology.

Accounting I Honors - BA105X0

Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite: Suggested Completion of Math I POL (Proof of Learning) – CTE State Assessment

This course is designed to help students understand the basic principles of the accounting cycle. Emphasis is placed on the analysis and recording of business transactions, preparation, and interpretation of financial statements, accounting systems, banking and payroll activities, basic types of business ownership, and an accounting career orientation. Mathematics is reinforced and entrepreneurial experiences are encouraged.

Accounting II Honors - BA205X0

Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

**Prerequisite: Accounting I** 

POL (Proof of Learning) – CTE State Assessment

**Credential: QuickBooks Certification** 

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, inventory control systems, managerial accounting and budgeting, and further enhancement of accounting skills. Mathematics is reinforced and entrepreneurial experiences are encouraged.

# Computer Science and Information Technology

Microsoft Word and PowerPoint - BM102X0

Microsoft Word and PowerPoint Honors - - BM105X0

Grade Level: 9, 10, 11, 12

Length: Semester Credit: One Unit Prerequisite: None

**POL** (Proof of Learning) – Credential

Credentials: Microsoft Office Specialist Word, Microsoft Office Specialist PowerPoint

Students in Microsoft IT Academies benefit from world-class Microsoft curriculum and software tools to tackle real-world challenges in the classroom environment. In the first part, students will learn to use the newest version of Microsoft Word interface, commands, and features to create, enhance, customize, share, and create complex documents, and publish them. In the second part, students will learn to use the newest version of Microsoft PowerPoint interface, commands, and features to create, enhance, customize, and deliver presentations. English language arts are reinforced.

Microsoft Excel Honors - BM205X0

Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite: Suggested Completion of Math I

POL (Proof of Learning) - Credential

**Credentials: Microsoft Office Specialist Excel -Expert.** 

Students in Microsoft Imagine 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 help you use the most current version of Microsoft Excel interface, commands, and features to present, analyze, and manipulate various types of data. Students will learn to manage workbooks as well as how to manage, manipulate, and format data. Mathematics is reinforced.

Computer Science I - BP412X0 Grade Level: 9, 10, 11, 12

Length: Semester Credit: One Unit Prerequisite: None

#### POL (Proof of Learning) – PBM (Performance-based Measurement)

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

**Computer Science II - BP422X0** 

Grade Level: 9, 10, 11, 12

**Length: Semester Credit: One Unit** 

**Prerequisite: Computer Science I** 

**POL (Proof of Learning) – PBM (Performance-based Measurement)** 

Computer Science II continues developing the concepts introduced in the prerequisite course, Computer Science I, introducing students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. More than a traditional introduction to programming, it is a rigorous, engaging, and approachable course that explores many of the foundational ideas of computing, so all students understand how these concepts are transforming the world we live in. Strong communication skills are necessary and English language arts, mathematics, and computer science standards are reinforced.

#### Family and Consumer Science

**Principles of Family and Human Services – FC112X0** 

Grade Level: 9, 10, 11, 12

Length: Semester Credit: One Unit Prerequisite: None

POL (Proof of Learning) – CTE State Assessment

Students learn life literacy skills and individual, family, and community systems in the context of the human services field. Emphasis is placed on human development, professional skills, diversity, analyzing community issues, and life management. Activities engage students in exploring various helping professions, while building essential life skills they can apply in their own lives to achieve optimal wellbeing. English/language arts, social studies, mathematics, science, technology, and interpersonal relationships are reinforced.

Food and Nutrition I - FN412X0

Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite: FC11 Principles of Family and Human Services recommended

POL (Proof of Learning): CTE State Assessment Credential: ANSI-Accredited Food Handler Certificate

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. English language arts, mathematics, science, and social studies are reinforced. \* For safety and sanitation reasons, enrollment should not exceed 20 in this course.

Food and Nutrition II - FN422X0

Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

**Prerequisite: Food and Nutrition I** 

POL (Proof of Learning): CTE State Assessment

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. English/language arts, social studies, mathematics, science, technology, interpersonal relationships are reinforced. \*For safety and sanitation reasons, enrollment should not exceed 20 in this course.

#### Health Science

Foundations of Health Science – HU102X0

Grade Level: 9, 10, 11, 12

Length: Semester Credit: One Unit Prerequisite: None

POL (Proof of Learning): CTE State Assessment

This course is designed for students to acquire foundational knowledge pertinent to healthcare professionals. Topics include advancements in healthcare, medical terminology, mathematics used in healthcare, the domains of healthcare, and in-demand healthcare careers. Students will enhance their communication, leadership, and career decision-making skills. English language arts and mathematics are reinforced.

**Health Science I – HU402X0** 

Health Science I Honors-HU405X0

Grade Level: 10, 11, 12 Length: Semester Credit: One Unit Prerequisite: None

POL (Proof of Learning): CTE State Assessment

**Credential: First Aid** 

This course is developed to focus on human anatomy, physiology, and human body diseases and disorders, and recognizing and responding to first aid emergencies. Students will learn about healthcare careers within the context of human body systems. Projects, teamwork, and demonstrations serve as instructional strategies that reinforce the curriculum content. English language arts and science are reinforced in this course.

**Health Science II- HU422X0** 

**Health Science II Honors- HU425X0** 

Grade Level: 9, 10, 11, 12

**Length: Semester Credit: One Unit** 

Prerequisite: Health Science I

**POL (Proof of Learning): PBM (Performance-based Measurement)** 

Credential: CPR/AED, OSHA 10-Jour Industry Certification (Healthcare), Stop the Bleed This course developed to help students expand their understanding of the healthcare industry, including employability skills, safety and infection control procedures, and clinical skills used by allied health professionals. In addition, students will demonstrate their understanding of cardiovascular and respiratory systems by applying BLS CPR skills. Projects, teamwork, and demonstrations serve as instructional strategies to reinforce the curriculum content. English language arts and science are reinforced in this course.

Nursing Fundamentals and Practicum Honors-HN435X0

Grade Level: 12 Length: Semester

**Credit: Two Units (Spring Only)** 

Prerequisite: Health Science II, must be a 12th grader

POL (Proof of Learning): Credential Credential: North Carolina Nurse Aide I

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. English language arts mathematics, and science are reinforced. \* Enrollment is limited per North Carolina Board of Nursing (BON) Administrative Rule 21 NCAC36.0318(i), which requires the ratio of teacher to HN43 Nurse Aide students be 1:10 or less while in the clinical area. DHSR applies this 1:10 ratio to the classroom and laboratory training area. HN43 Nursing Fundamentals is total Nurse Aide 1 training. Maximum enrollment for one teacher for one section of students is ten in HN43 Nursing Fundamentals.

#### Architecture and Construction

**Construction Core – IC002X0** 

Grade level 9, 10, 11 Length: Semester Credit: One Unit Prerequisite: None

**POL** (Proof of Learning): Credential

Credential: NC NCCER - Construction Core, must pass all modules with a 70 or higher

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 construction drawings blueprints, material handling, basic communication skills, and basic employability skills. "Your Role in the Green Environment" is an additional Green module and is "Supplemental. If the decision is made to teach this model, its content will provide students with instruction in the green environment, green construction practices, and green building rating systems, and will help students better understand their personal impacts on the environment and make them more aware of how to reduce their carbon footprint. English Language Arts and Mathematics are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. This course helps prepare students for additional National Center for Construction Education and Research (NCCER) Core certification. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. Geometry is recommended as preparation for this course. \* Due to potentially hazardous equipment, a maximum enrollment of 20 is recommended.

**Boat Building I Honors-IK535X0** 

Grade level: 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite: Construction Core AND/OR Drafting I

**POL (Proof of Learning): Local** 

The course will be the introductory course into the pathway of Boat Building. We will recommend that students have Construction Core and/or Drafting I prior to taking the course. The curriculum is adapted from some modules of the ABYC's (American Boat and Yacht Council) Fundamentals of Marine Service and more in-depth boat building hands-on processes. Modules of the ABYC include Introduction to Boat Handling and Safety, General Shop Safety and Practices, and Marine Materials: Wood, Metal, Composites. \*Due to potentially hazardous processes and equipment a maximum enrollment of 20 is recommended.

Boat Building II – IK542X0 Grade level: 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite: Boat Building I POL (Proof of Learning): Local

This course focuses on understanding and applying the processes and skills to use a building plan, create a materials list, cost analysis, and build a boat project such as a skiff or similar design. The course will also teach students to analyze and evaluate boat construction utilizing a rubric. English language arts and mathematics skills are reinforced. \*Due to potentially hazardous processes and equipment a maximum enrollment of 20 is recommended.

Carpentry I – IC212X0 Grade level 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite: Construction Core POL (Proof of Learning): Credential

Credential: NC NCCER - Carpentry I, must pass all modules with a 70 or higher

This course is designed for students to develop basic carpentry terminology and technical aspects of carpentry with emphasis on the development of introductory skills to include orientation to the trade, building materials, fasteners, and adhesives, hand and power tools, reading construction drawings, specifications, and layouts, floor system construction procedures, wall systems, and basic stair layout. English language arts and mathematics are reinforced. \*Due to potentially hazardous processes and equipment a maximum enrollment of 20 is recommended.

**Carpentry II Honors-IC225X0** 

Grade level 10, 11, 12 Length: Semester Credit: One Unit

**Prerequisite: Carpentry I** 

POL (Proof of Learning): Credential

Credential: NC NCCER – Carpentry II, must pass all modules with a 70 or higher

This course is designed for students to further develop skills mastered in Carpentry I and provide an emphasis on ceiling joist and roof framing procedures, residential roofing applications, thermal and moisture protection, building envelope systems, and residential exterior finishing. English language arts and mathematics are reinforced. \*Due to potentially hazardous processes and equipment a maximum enrollment of 20 is recommended

Carpentry III Honors-IC235X0

Grade level 11, 12 Length: Semester Credit: One Unit

Prerequisite: Carpentry II

POL (Proof of Learning): Credential

Credential: NC NCCER – Carpentry III, must pass all modules with a 70 or higher

This is designed for students to further develop skills mastered in Carpentry II and develop advanced technical aspects of carpentry with the emphasis on commercial drawings, cold-formed steel framing construction methods, drywall installations, drywall finishing procedures, doors and door hardware installation, and windows, door, floor and ceiling trim procedures. The Weatherization Module is also included in the course as a "Supplemental" Module. English language arts and mathematics are reinforced. \*Due to potentially hazardous processes and equipment a maximum enrollment of 20 is recommended.

Electrical Trades I—IC412X0 Grade level 9, 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite: Construction Core POL (Proof of Learning): Credential

Credential: NC NCCER – Electrical Trades I, must pass all modules with a 70 or higher

This course covers basic electrical trades 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 orientation to the electrical trade, electrical safety, introduction to electrical circuits, electrical theory, the National Electrical Code, device boxes, hand bending techniques, raceways, and fittings. English language arts, mathematics, and science are reinforced. Work-based learning strategies appropriate for this course include apprenticeship, cooperative education, internship, and job shadowing. This course helps prepare students for National Center for Construction Education and Research (NCCER) certification. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. \*Due to potentially hazardous processes and equipment a maximum enrollment of 20 is recommended.

Electrical Trades II Honors-IC425X0

Grade level: 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite: Electrical Trades I POL (Proof of Learning): Credential

Credential: NC NCCER – Electrical Trades II, must pass all modules with a 70 or higher
This course builds on skills mastered in electrical Trades I and provides an introduction to
conductors and cables, construction drawings, residential electric services, test equipment usage,
alternating current theory, grounding and bonding techniques, motors theory and application, and
electric lighting to structures. English language arts, mathematics, and science are reinforced. Workbased learning strategies appropriate for this course include apprenticeship, cooperative education,
internship, and job shadowing. This course helps prepare students for National Center for

Construction Education and Research (NCCER) certification. SkillsUSA competitive events, community service, and leadership activities provide the opportunity to apply essential standards and workplace readiness skills through authentic experiences. \*Due to potentially hazardous processes and equipment a maximum enrollment of 20 is recommended.

Electrical Trades III Honors-IC435X0

Grade level: 11, 12 Length: Semester Credit: One Unit

Prerequisite: Electrical Trades II POL (Proof of Learning): Credential

Credential: NC NCCER - Electrical Trades III, must pass all modules with a 70 or higher

This course builds on skills mastered in Electrical Trades II and the course content includes conduit bending techniques, pull and junction boxes, conductor installations, cable tray, conductor terminations and splices, circuit breakers and fuses, and control systems and fundamental concepts. The Weatherization Module is also included in the course as a "Supplemental" Module. 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. English language arts, mathematics, and science are reinforced. \* Due to potentially hazardous processes and equipment a maximum enrollment of 20 is recommended.

#### Manufacturing

Welding Technology I Honors - IM615X0

Grade level: 10, 11, 12 Length: Semester Credit: One Unit

**Suggested Prerequisite: None** 

**POL (Proof of Learning): CTE State Assessment** 

This course covers basic industrial and construction welding practices, characteristics, and entry level skills. Topics include tools and equipment, safety and health of workers, thermal cutting processes covering manual and mechanized oxyfuel cutting, manual plasma arc cutting, and manual air carbon arc cutting, and basic shielded metal arc welding (SMAW). Arts, English, Language Arts, Mathematics, and science are reinforced. \* Per AWS, The trainee/instructor ratio for each course should be kept as low as possible. A reasonable figure would be fifteen (15) welding trainees to one (1) welding instructor. However, this ratio should never exceed the number of work stations in the laboratory. Twenty (20) welding personnel to one (1) instructor would be the maximum recommended acceptable ratio.

Welding Technology II Honors – IM625X0

Grade level: 10, 11, 12 Length: Semester Credit: One Unit

Prerequisite: Welding Technology I Honors POL (Proof of Learning): Credential

Credential: AWS SENSE Entry Welder Program – Shielded Metal Arc Welding (SMAW)

This course introduces advanced welding and cutting practices used in industry and construction and emphasizes hands-on experience. Topics include safety, occupational skills, inspection and testing, drawing and symbol interpretation, electrode selection, and shielded metal arc welding. Arts, English language arts, mathematics, and science are reinforced. \* Per AWS, The trainee/instructor ratio for each course should be kept as low as possible. A reasonable figure would be fifteen (15) welding trainees to one (1) welding instructor. However, this ratio should never exceed the number of work stations in the laboratory. Twenty (20) welding personnel to one (1) instructor would be the maximum recommended acceptable ratio.

Welding Technology III Honors – IM635X0

Grade level: 11, 12 Length: Semester Credit: One Unit

Prerequisite: Welding Technology II Honors

**POL** (Proof of Learning): Credential

Credential: AWS SENSE Entry Welder Program – FCAW and AWS SENSE

This course is designed to continue the development of advanced welding and cutting practices used in industry and construction and emphasizes hands-on experience. Emphasis is placed on topics in equipment and filler materials used in gas metal arc welding (GMAW), flux cored arc welding (FCAW). Arts, English language arts, mathematics, and science are reinforced. \* Per AWS, The trainee/instructor ratio for each course should be kept as low as possible. A reasonable figure would be fifteen (15) welding trainees to one (1) welding instructor. However, this ratio should never exceed the number of work stations in the laboratory. Twenty (20) welding personnel to one (1) instructor would be the maximum recommended acceptable ratio.

# Internships

CTE Internship Grade level: 11, 12 Length: Semester Credit: One Unit

Prerequisite: Must have complete One CTE course prior. Students must apply to the Career

**Development Coordinator** 

**POL** (Proof of Learning): PBM (Performance-based Measurement)

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

#### NC School of Science and Math Broadcast Options

Foundations of Multivariable Calculus - 25017X00SA

Grade Level: 11, 12 Length: Spring Semester

**Credit: One Unit** 

**Taught by NCSSM Distance Learning** 

Prerequisite(s): Successfully completed AP Calculus and earned a score of 4 or 5 on the AP Calculus exam. Placement test required.

Designed for students who have completed AP Calculus BC, this course will give students a strong foundation for completing multivariable calculus at the college level. This course includes the theory and application of vector functions and partial derivatives. Topics include a vector approach to regression modeling, the Frenet-Serret equations, continuity, and differentiability of functions of several variables, gradients and directional derivatives, and classic optimization problems. Numerical methods such as Newton's Method for solving non-linear systems and modeling with vector-valued functions of scalar and scalar-valued functions of a vector are included.

**Honors Statistics - 24075X0** 

Grade Level: 11, 12

**Length: Fall Semester (two course sequence)** 

**Credit: One Unit** 

Prerequisite(s): Students must have completed a course beyond Math III with a B average or better

and have strong algebra skills

## **Taught by NCSSM Distance Learning**

This first part of a year-long course covers the content of a typical introductory college course in Statistics. In colleges and universities, the number of students who take a Statistics course is almost as large as the number of students who take a Calculus course. (At least one Statistics course is typically required for majors such as engineering, psychology, sociology, health science, mathematics, and business.) The first semester will provide an overview and introduction to Descriptive Statistics and will introduce students to the major concepts and the tools for collecting, analyzing, and drawing conclusions from data. Each student must have a graphing calculator that they may take home. (The course is taught from the perspective of the TI-84 or 84 Plus and so these calculators are preferred; TI-83 or 83 Plus or TI-Inspire are acceptable)

AP Statistics - 25117X0 Grade Level: 11, 12

**Length: Spring (two course sequence)** 

**Credit: One Unit** 

Prerequisite(s): Successful completion of the NCSSM Honors Statistics course, offered in the fall. Taught by NCSSM Distance Learning

The second half of the two-course sequence, AP Statistics covers the methods of Inferential Statistics, and will introduce students to the major concepts of hypothesis testing and confidence intervals. With the course curriculum established by The College Board, the course is to be representative of college-level mathematics. The semester's work includes ongoing review of the first semester topics and preparation for the AP exam. (The course is taught from the perspective of the TI-84 or 84 Plus and so these calculators are preferred; TI-83 or 83 Plus or TI-Inspire are acceptable)

Honors African American Studies - 46015X0

Grade Level: 10, 11, 12 Length: Semester Credit: One Unit

#### **Taught by NCSSM Distance Learning**

This interdisciplinary course introduces African American history, literature, and culture. Students examine significant social, political, economic, and religious issues as well as issues of identity in the lives of African Americans from the sixteenth to the present. In addition to primary and secondary source readings, students explore texts ranging from slave narratives, folktales, and spirituals to the works of past and contemporary writers, artists, musicians, and filmmakers. Through a variety of assignments and activities, students continue to develop their skills in reading, speaking, and research, with special emphasis on the writing process.

Honors Forensic Science - 30205X00SD

Grade Level: 11, 12 Length:Semester Credit: One Unit

Prerequisite(s): Biology, Math III Taught by NCSSM Distance Learning

This course focuses on the application of basic biological, chemical and physical science principles and technological practices to the purposes of justice in the study of forensic science as it relates to judicial and civil issues. The class is designed around authentic performance assessments with students working in teams to solve crimes using scientific knowledge and reasoning. Through lab work, students will apply inference and deductive reasoning to the investigation and potential solving of crimes. It involves all areas of science including biology, anatomy, chemistry, physics, and earth science with an emphasis in complex reasoning and critical thinking. In addition, students must incorporate the use of technology, communication skills, language arts, art, family and consumer science, mathematics and social studies. This course requires the ability to write clear and concise lab and investigative reports. Good writing skills are imperative. This course also deals with graphic content. Parents are asked to sign a permission slip at the beginning of the course, but students are expected to be mature when dealing with this content.

Honors Genetics and Biotechnology – 33605X0

Grade Level: 11, 12 Length: Semester Credit: One Unit

Prerequisite(s): Biology, Math III Taught by NCSSM Distance Learning

What do crime scene investigations, agriculture, medicine, conservation biology and manufacturing have in common? They have all been revolutionized by biotechnology! Almost every day we read about new developments in the rapidly changing fields of genetics and DNA-based biotechnology. In this course, students will first explore classical genetics and then move onto examining the structure and function of DNA and proteins. With state-of-the-art laboratory experiments, students will analyze DNA fingerprints from a crime scene, genetically transform bacteria and investigate their own DNA! Finally, they will survey the applications of biotechnology in many diverse fields and discuss in depth how biotechnology is changing our daily lives and our future. With the decline of traditional manufacturing in North Carolina, biotechnology is positioned to become a vital part of North Carolina's 21st century economy.

#### OCCUPATIONAL PREPARATION

OCS English I-921000SA

Grade Level: 9 Length: Semester Credit: One Unit Prerequisite(s): IEP

Students in Occupational English I explore and examine a variety of communication modes and the importance each plays in daily living and employment settings. They apply reading and writing strategies to interpret and express factual, functional information. They use oral language strategies to communicate effectively in both formal and informal situations. Students will also react to and reflect upon print and non-print and personal experiences, evaluate problems, examine cause/effect relationships, and answer research questions to inform an audience. This course will also focus on the writing process and helping students become effective writers for various purposes.

## OCS English II – 921100SA

Grade Level: 10 Length: Semester Credit: One Unit

Prerequisite(s): IEP, Occu Eng I

Students in Occupational English II analyze and employ effective communication strategies in both daily living and employment settings. They use standard rules of convention and syntax to give and request information. They read and comprehend a variety of functional texts.

## OCS English III - 921200SA Grade Level: 11

**Length: Semester Credit: One Unit** 

Prerequisite(s): IEP, Occu Eng II

Students in Occupational English III read, write, and orally express information required in a variety of daily living and employment settings. They identify main concepts and supporting information from print and non-print material. They examine the speaking skills expected in a variety of settings and demonstrate effective oral communication in each.

#### OCS English IV-921300SA

Grade Level: 12 Length: Semester Credit: One Unit

#### Prerequisite(s): IEP, Occupational Eng III

Students in Occupational English IV integrate oral, written, and visual skills to communicate effectively in a variety of daily living and employment situations. They use written communication for explanatory, argumentative, self-advocacy, and social purposes. They employ visual communication skills to locate and research information.

#### OCS Introduction to Math 1 9220BX0YSA

Grade Level: 9, 10 Length: Semester Credit: One Unit Prerequisite(s): IEP

This course continues the study of a) Computation: reading, writing, counting, and the mathematical skills using whole numbers, decimals, fractions, and percent; 6) Financial Management: recognizing and identifying basic financial information; c) Time and Measurement; d) Independent Living; and e) Technology. Students will acquire these skills through hands-on approaches and cooperative learning within the classroom and community.

# OCS Math I-922100SA Grade Level: 10, 11 Length: Semester Credit: One Unit

**Prerequisite(s): IEP, OCS Intro to Math 1** 

Topics to be mastered in this course include operations with real numbers and algebraic expressions, operations with matrices, use of linear functions and inequalities to model and solve problems, and use of linear systems of equation to model and solve problems. Appropriate technology, from manipulatives to calculators, will be used regularly for instruction and assessment. **Student must take the State End-of-Course test.** 

#### **OCS Financial Management-922200SA**

Grade Level: 11 Length: Semester Credit: One Unit

Prerequisite(s): IEP, OCS Math I

This course continues the study of computation and the application of these skills for independent living and successful employment. More emphasis is placed on application and problem solving in the areas of financial management, reading, and interpreting schedules, time and measurement and independent living using technology, hands-on approaches, and cooperative learning.

#### OCS Applied Science – 923100SA

Grade Level: 9 Length: Semester Credit: One Unit Prerequisite(s): IEP

This course is designed to provide students with the knowledge necessary to practice safety in all areas of life and maintain a healthful lifestyle. Students will also receive instruction in the provision of first aid and accessing medical care. Students will have opportunities to apply skills in the area of healthful living and safety to various situations within the home, community, and workplace.

OCS Biology - 923200SA

Grade Level: 9, 10 Length: Semester Credit: One Unit

**Prerequisite(s): OCS Applied Science** 

This is an introductory course designed to awaken students' admiration and awe for the complexity of life. The course focuses on a study of the five kingdoms of organisms and is designed to encourage the student to make practical, relevant applications of biological concepts to everyday experiences. The student will conduct research and solve problems. **Students must take the State End-of-Course test.** 

**OCS Civics** 

Grade Level: 9, 10, 11, 12

Length: Semester Credit: One Unit Prerequisite(s): IEP

The essential standards of this course are organized under three strands – Civics and Government, Personal Financial Literacy and Economics. The Civics and Government strand is framed to develop students' increased understanding of the institutions of constitutional democracy and the fundamental principles and values upon which they are founded, the skills necessary to participate as effective and responsible citizens and the knowledge of how to use democratic procedures for making decisions and managing conflict. The Economic and Personal Financial Literacy strands are framed to provide students with an understanding of the role economic factors play in making economic decisions, the ability to reason logically about key economic issues and the knowledge and skills needed to manage personal financial resources effectively for lifetime financial security. Taken together, these three strands should help to prepare students to become responsible and effective citizens in an interdependent world.

#### **OCS Economics and Personal Finance**

Grade Level: 9, 10, 11, 12

Length: Semester Credit: One Unit Prerequisite(s): IEP

The standards and objectives in the Economics and Personal Finance course will provide students the opportunity to engage in intensive application of the skills, concepts, processes, and knowledge gained in previous social studies courses and prepare them to be college, career, and civic ready.

Occupational Preparation I – 924000SA

Grade Level: 9 Length: Semester Credit: One Unit Prerequisite(s): IEP

This course is designed to introduce students to the fundamental attitudes, behaviors, and habits needed to obtain and maintain employment in their career choice and make career advancements. Students will participate in school-based learning activities including work ethic development, job-seeking skills, decision-making skills, and self-management. Students will be involved in on-campus vocational training activities such as school factories, work-based enterprises, hands-on vocational training in Workforce Development 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. Students will begin to develop the OCS portfolio in this class.

Occupational Preparation II-A – 924100SB

Grade Level: 10 Length: Semester Credit: One Unit

Prerequisite(s): IEP, Occu Prep I

This course is designed to allow students to develop skills generic to all career majors; resource management, communication, interpersonal relationships, technology, stamina, endurance, safety, mobility skills, motor skills, teamwork, sensory skills, problem solving, cultural diversity, information acquisition/management, and self-management. 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. Students will begin to develop the OCS portfolio in this class.

# Occupational Preparation II-B - 924100SC

Grade Level: 10 Length: Semester Credit: One Unit

Prerequisite(s): IEP, Occu Prep II - A

This is a continuation of Occupational Preparation II and provides the student with continued work experience. Students will orient to and become familiar with the PAES (Practical Assessment Exploration System) Lab where they will work in five job training modules to gain practical employment experience.

### Occupational Preparation III-A – 924200SB

Grade Level: 11 Length: Semester Credit: One Unit

Prerequisite(s): IEP, Occu Prep II

This course is designed to allow students to continue the development and begin the application of skills learned in Occupational Preparation I and II. Work-based learning activities are provided including community-based training, job shadowing, job sampling, internships, situational assessment, cooperative education, and apprenticeships. These work-based activities allow student to apply employability skills to competitive employment settings and demonstrate the effectiveness of their work personality. Multiple opportunities for leadership development and self-determination are provided. Students will begin to develop the OCS portfolio in this class.

#### Occupational Preparation III-B – 924200SC

Grade Level: 11 Length: Semester Credit: One Unit

Prerequisite(s): IEP, Occu Prep III - A

This is a continuation of Occupational Preparation III and provides the student with continued work experience. Students will continue to work in the PAES (Practical Assessment Exploration System) Lab where they will work in five job training modules to gain practical employment experience.

Occupational Preparation IV – 924300SA

Grade Level: 12 Length: Semester Credit: One Unit

Prerequisite(s): IEP, Occu Prep III A& B

This course gives students the opportunity to synthesize all the skills acquired in previous Occupational Preparation courses and apply them to their personal career choice. 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.