

East Wake Academy High School



2016-2017 Course Selection Guide

GENERAL INFORMATION

EAST WAKE ACADEMY HIGH SCHOOL
COLLEGE/UNIVERSITY PREP
Graduation Requirements

Meets the highest level of academic standards and fulfills the minimum course requirements for admission to UNC Institutions.

COURSE	No. Of Credits
English English I, II, III, & IV	4
Mathematics Math I, Math II, Math III and a higher level math course	4
Science Earth/Environmental Science Biology Chemistry or Physics	3
Social Studies World History American History I American History II Civics and Economics	4
Second Language Two credits in the same language **recommended Junior or Senior year	2
Healthful Living Education Health/PE	1
Electives	10
Total	28

All core courses can be at an Honors level except for Math I

North Carolina Diploma Endorsements

Students may earn more than one endorsement.

Students may earn the following endorsements as additional recognitions to their high school diploma:

College Endorsement

- A. The student shall complete the Future-Ready Core mathematics sequence of Math I, II, III and a fourth mathematics course aligned with the students post-secondary plans. The fourth math course must meet University of North Carolina system Minimum Admission Requirements
- B. The student shall earn an **unweighted** grade point average of at least 2.6.

College/UNC Endorsement

- A. The student shall complete the Future-Ready Core mathematics sequence of Math I, II, III and a fourth mathematics course that meets University of North Carolina system Minimum Admission Requirements
- B. The student shall complete three units of science including at least one physical Science one biological science and one laboratory science course that must include either physics or chemistry.
- C. The student shall complete two units of a world language (other than English).
- D. The student shall earn a **weighted** grade point average of at least 2.5.

North Carolina Academic Scholars Endorsement

- A. The student shall complete the Future-Ready Core mathematics sequence of Math I, II, III and a fourth mathematics course that meets University of North Carolina system Minimum Admission Requirements
- B. The student shall complete three units of science including an Earth/Environmental science course, Biology, and at least one physical science course that must include either Physics or Chemistry.
- C. For students entering 9th grade in 2010-11 or 2011-12, the student shall complete three units of Social Studies including US History, World History and Civics and Economics. For students entering 9th grade in 2012-13 or later the student shall complete four units of social studies including World History; American History: Founding Principles, Civics and Economics; and American History I and

American History II.

- D. The student shall complete two units of a world language (other than English).
- E. The student shall complete four elective credits constituting a concentration recommended from one of the following: Career and Technical Education (CTE), JROTC, Arts Education, Second Languages, any other subject area.
- F. The student shall have taken three higher level courses during junior and/or senior years which carry quality points such as Advanced Placement; International Baccalaureate; Dual or college equivalent courses; Advanced CTE and CTE credentialing courses; Online courses; Honors level courses OR two higher level courses during junior and/or senior years which carry quality points such as Advanced Placement; International Baccalaureate; Dual or college equivalent courses; Advanced CTE and CTE credentialing courses; Online courses; Honors level courses and a Graduation Project.
- G. The student shall earn an **unweighted** grade point average of at least 3.50.

COURSE REQUIREMENTS

COURSE LOAD

Our scheduled is based on block scheduling. Students will take four courses (90 minutes each) first semester, completing these courses prior to our December trackout. Upon return from trackout, students will begin second semester with four new courses. Students have the potential to earn 8 credits per year.

Students are not allowed to take two required English courses concurrently. For example, you may not take English II and English III during the same semester. If there are extenuating circumstances, the Principal may be consulted for approval.

COURSE WITHDRAWAL POLICY

Except when approved by the principal, students are not allowed to drop a course after the first (10) ten days of school. If a student withdraws after the (10) ten-day period and an emergency situation does not exist, a failure (WF) is noted as the grade, and the course is counted as a course attempted with no quality points earned.

GRADING SCALE

In October 2014, the State Board agreed and approved a standard 10-point grading scale to begin with the 2015-16 school year. This scale will not include “pluses” or “minuses” and it will be applied for coursework beginning with the 2015-16 school year for students in grades 9, 10, 11 and 12. There will not be any attempt to retroactively alter grades from prior years.

Under the new scale grades and grade point average calculations will be applied as follows:

A: 90-100 = 4.0
B: 80-89 = 3.0
C: 70-79 = 2.0
D: 60-69 = 1.0
F: < 59 = 0.0

New standards for quality points will take effect for the ninth graders in the fall of 2015-16 and all students entering high school after that year. This change will not affect students who will be in grades 10, 11 or 12 in 2015-16.

Freshman 2015-2016 and beyond

Academic Courses (Standard)	Honors	Advanced Placement
A= 4.0	4.5	5.0
B= 3.0	3.5	4.0
C= 2.0	2.5	3.0
D= 1.0	1.5	2.0
F= 0	0.0	0.0

Freshman 2014-2015 and beyond

Academic Courses (Standard)	Honors	Advanced Placement
A=4.0	5.0	6.0
B=3.0	4.0	5.0
C=2.0	3.0	4.0
D= 1.0	2.0	3.0
F= 0	0.0	0.0

MANDATED STUDENT ATTENDANCE POLICY

If students miss more than 10 days in a single semester course, the student will receive an FF, indicating they passed the course academically but based on absences they will not receive credit.

GRADING PERIODS/INTERIMS/REPORT CARDS

Report cards are issued every nine weeks. Interim reports are issued at the midpoint of the first and third nine weeks for students with a D or lower. Otherwise a message will be sent to parents to check Powerschool for online grades.

ACADEMIC HONORS

Grade point averages are calculated and rounded off to four decimal places. Class rank is based on that four-decimal place of the weighted grade point average. Please note the following concerning graduating with Honors:

Honor Graduates – Seniors with a weighted cumulative grade point average of a 3.5 or above as a result of the last reporting period.

Honors vs. AP Courses

Honors Courses – there is a distinction applied to certain classes to distinguish them from regular (or academic) course offering. The difference between a regular class (such as English 1) and the Honors class (English 1 Honors) is not necessarily the amount of work, but the type of work required and the pace of studying. Honors courses are enriched; therefore, they offer the same material in greater detail combined with a faster pace. Honors courses emphasize critical and independent thinking to produce creative application of ideas. Motivation is the main quality that characterizes an Honors student. Teacher recommendation is considered when placing students in Honors courses.

Advanced Placement Courses (AP) – is a curriculum sponsored by the United States College Board which offers standardized courses to high school students that are generally recognized to be equivalent to undergraduate courses in college. The keys to success are motivation, self-discipline, and academic preparation. AP classes are more challenging and stimulating. They take additional time and require more work. The content of AP courses is more sophisticated than that in typical high school Honors courses. Students should have previous practice in analyzing content, drawing comparisons, and reasoning. They must be able to read perceptively and independently. Additionally, students will need to be proficient in writing clear, concise essays. Students who are not skilled in these areas must be even more highly motivated to make up deficiencies at the same time they are taking more rigorous courses. The earlier students prepare for AP or college courses by taking the most rigorous classes available, the more likely they will experience success. The keys to success are maturity, motivation, self-discipline, and academic preparation. Teacher recommendation is considered when placing students in Advanced Placement courses.

NORTH CAROLINA END-OF-COURSE TEST REQUIREMENTS

End-of-Course (EOC) Tests will be administered for the following courses:

Math I English II Biology

CLASS RANK

Class rank is cumulative from 9th grade. To determine class rank, we use final course grades, dividing the total number of quality points earned by the total number of units of credit attempted. This course guide designates courses with weighted credit with an “AP” or “HN.” To obtain information about which courses carry weighted credit, as well as general information about class rank, students should consult with their School Counselor. A Senior Honors Rank is upon completion of final grades at the end of the final semester senior year for any senior honors or awards.

PROMOTION REQUIREMENTS

Promotion requirements are earned through a successful completion of courses and earning the designated number of credits.

FROM GRADE	PROMOTION CRITERIA	CREDITS
9 TO 10	English I, two of the following three: science, social studies, and three additional credits	6
10 to 11	English I, English II, one credit in math, one credit in science, one credit in social studies and two additional credits	12
11to 12	English I, English II, English III, two credits in science, three credits in math, and 2 credits in social studies and additional electives	20

COURSE DESCRIPTIONS

ENGLISH LANGUAGE ARTS COURSES

REQUIRED COURSES

English I **10212X0** **1 credit**

A survey of literary types, this course focuses on comprehension and expressive writing. Students should expect nightly homework assignments and/or compositions that reinforce classroom instruction. Writing instruction at this level focuses on mechanical correctness, fluency and structure. The student is expected to function at grade level in communication and thinking skills.

Honors English I **10215X0** **1 credit (HN)**

This honors course is designed to challenge the academically advanced/gifted, highly motivated student. It concentrates on developing reading, writing, and critical thinking skills through an intensive survey of literary types and appropriate written and oral responses. The course provides a review of grammar, mechanics, vocabulary, and usage as needed. This course focuses on the development of complex thought processes, independence in learning, and creative expression through discussion and frequent writing assignments.

English II **10222X0** **1 credit**

This academic world literature course focuses on comprehension and informational writing. Students should expect nightly homework assignments and/or compositions that reinforce classroom instruction. Writing instruction at this level focuses on mechanical correctness, fluency and structure.

The final exam is the North Carolina English II – End of Course Test.

Honors English II **10225X0** **1 credit (HN)**

This honors course concentrates on developing reading, writing, and critical thinking skills through an intensive study of a variety of world literature and appropriate oral and written responses. . The course provides a review of grammar, mechanics, vocabulary, and usage as needed. This course focuses on the development of complex thought processes, independence in learning, and creative expression through discussion and frequent writing assignments.

The final exam is the North Carolina English II – End of Course Test.

English III **10232X0** **1 credit**

This American literature course addresses reading comprehension and critical writing. Students should expect nightly homework assignments and/or compositions that reinforce classroom instruction. Writing instruction at this level focuses on mechanical correctness, fluency and structure.

Honors English III **10235X0** **1 credit (HN)**

This honors course is designed to challenge the academically advanced/gifted, highly motivated student. It concentrates on developing reading, writing and critical thinking skills through an intensive study of selected American literature and appropriate oral and written responses. The course provides a review of grammar, mechanics, vocabulary, and usage as needed. This college preparatory course focuses on the development of complex thought processes, independence in learning, and creative expression through discussion and frequent writing assignments.

Advanced English Language & Composition **10265X0** **1 credit (HN)**

Recommended: A “B” or above in English II Honors

Course Description: This is the fall semester course taken before AP Eng. Lang. and Comp. **Students should only take this course if they are planning to take the AP course.**

Advanced Placement English III**10357X0****1 credit (AP)**

Prerequisite: Honors English II

Recommendation from the English Department is required

This college-level course provides an analytical and historical study of American literature and language in a comprehensive program of reading, writing, and critical thinking. As preparation to take the Advanced Placement Test in Language and Composition, students read, discuss, analyze, and write about challenging works of recognized literary merit to develop honest, concise, and effective use of language and the ability to organize ideas in a clear, coherent, and persuasive way. Independent literary analysis and a total mastery of writing skills are goals of the course. Because it meets the needs of academically gifted or highly motivated advanced students who hope to bypass introductory courses in composition and literature when they enter college, students in an AP course should expect assignments and instruction paced at the college level. **Greater amounts of time and effort are expected on the part of the student.** Students enrolled in this course are expected to take the College Board Advanced Placement Test.

English IV**10242X0****1 credit**

This British literature course addresses reading comprehension and argumentative writing. Students should expect nightly homework assignments and/or compositions that reinforce classroom instruction. Writing instruction at this level focuses on mechanical correctness, fluency and structure.

Honors English IV**10245X0****1 credit (HN)**

This honors course is designed to challenge the academically advanced/gifted, highly motivated student. It concentrates on developing reading, writing, and critical thinking skills through an intensive study of selected British literature and appropriate oral and written responses. The course provides a review of grammar, mechanics, vocabulary, and usage as needed. This college preparatory course focuses on the development of complex thought processes, independence in learning, and creative expression through discussion and frequent writing assignments. Homework is a reinforcement and extension of classroom instruction.

Advanced Literature and Composition**10275X0****1 credit (HN)**

Recommended: A "B" or above in English III Honors

This is the fall semester course taken before AP Eng. Literature and Comp. **Students should only take this course if they are planning to take the AP course.**

Advanced Placement English IV**10367XS0****1 credit (AP)**

Prerequisite: Honors English III

Recommendation from the English Department is required

This college-level course provides an analytical and historical study of British and world literature in a comprehensive program of reading, writing, and critical thinking. As preparation to take the Advanced Placement Test in Literature and Composition, students read, discuss, analyze, and write about challenging works of recognized literary merit to develop honest, concise, and effective use of language and the ability to organize ideas in a clear, coherent, and persuasive way. Independent literary analysis and a total mastery of writing skills are goals of the course. Because it meets the needs of academically gifted or highly motivated advanced students who hope to bypass introductory courses in composition and literature when they enter college, students in an AP course should expect assignments and instruction paced at the college level. **Greater amounts of time and effort are expected on the part of the student.** Students enrolled in this course are expected to take the College Board Advanced Placement Test.

Elective English Courses

Essentials of Writing **10252X0A** **1 credit**
This course is for first semester freshmen only.

In this nine week course, students produce expressive, informational, argumentative, critical and literary writing as background for all high school English classes. The writing process, with emphasis on revising/editing, is modeled. In addition, students build grammar skills to apply in their writing.

Creative Writing **10252X0** **1 credit**
Recommended for 11th & 12 grade only

The course is designed for the student interested in writing original poetry, plays, essays, and short stories. Students consider the elements of creativity – inspiration, form and content – in relation to styles of representative authors. Self-criticism, group evaluation, contest entries and publication of students' work are required activities.

Exploring Themes in Film **10272X0** **1 credit**
Recommended for 11th & 12 grade only

This course is primarily a writing class, using film as a catalyst for writing about universal themes and social issues. In every time period, literature has remained a reflection of society, and film is a modern form of literature as it conveys tales of the human condition. The focus of this course will be to watch, analyze, discuss, critique, and write about specifically chosen films and the roles they play in exposing certain social issues. Students in this class should be prepared to write extensively and take an active part in class discussions. The objectives will include enhancing interpretive, thinking, and writing skills. Expository writing in Standard English, the most common form of college and professional writing will be the required mode of written expression.

Public Speaking/Communication Skills **10142X0** **1 credit**

In this course, students learn how to present informative, communication, develop listening skills, and build self-confidence, they learn to reduce the stress involved in presenting ideas in an open forum. In this comfortable class setting, students are supported and encouraged to excel as they prepare and present speeches for the class audience.

Journalism I **10312X0** **1 credit**
Recommended Prerequisites: Recommendation of current high school English or Journalism teacher

This course focuses on the basic elements of journalistic writing and layout. Students who elect to take the course should be genuinely interested in developing journalistic skills and becoming an active member of the school's publication staff. Student responsibilities include selling advertising, conducting interviews, and writing stories, designing pages, proofreading copy, and distributing the newspaper.

Journalism II **10322X0** **1 credit**
Recommended Prerequisites: Completing of one semester of Journalism; submission of an application and approval of Journalism Teacher

Students in Journalism II will build on the skills and knowledge they developed in Journalism I by continuing to write articles for the student newspaper and to design newspaper pages. These levels of journalism will distinguish themselves from the first level of the course through more demanding requirements of students' time, leadership and expertise. Students will not only contribute to the paper but will lead the class in determining content of the paper. They will not merely receive and apply information, but will teach Journalism I students basic skills while building their own skills. Learning goals for the course include: work within the guidelines of ethical and responsible journalism; sell advertisements in a professional manner; contribute to the publication of a student newspaper; write stories on a variety of topics in journalistic style; utilize technology in the process of publishing a student newspaper; analyze writing techniques in various journalistic publications. Recommended positions: Editor-in-Chief, Production Manager, Business Manager, News, Sports, and In-depth Editors

Journalism/Yearbook**10312X0A****1 credit**

Prerequisites: English 1; this class can be repeated.

This course focuses on the basic elements of journalistic writing and layout, as well as the development process of the school's yearbook. This course is for students sophomore level or higher, and requires recommendations from two previous core course teachers. This course is demanding in that it requires students' time, leadership and expertise. Students will be required to attend and cover events after-school, in the evenings and possibly on the weekends. Learning goals for the course include: work within the guidelines of ethical and responsible journalism, sell advertisements in a professional manner, write stories using Associated Press style, edit copy, interact and interview staff and students, take photographs for both the newspaper and yearbook, and represent your school publications across the campus by acting in a professional and mature manner. Students must learn how to work as a team while meeting deadlines and time restraints.

WORLD LANGUAGE COURSES**Spanish I****11412X0****1 credit**

Students study basic grammatical structures and vocabulary and use them in listening, speaking, reading, and writing activities at the beginning level. Topics include the present tense, preterit tense, agreement and placement of adjectives, definite and indefinite articles, numbers, basic adjectives, common prepositions, telling time, basic foods, forming questions, demonstrative adjectives, weather expressions, the calendar, basic idiomatic expressions, and the culture of the Spanish-speaking world.

Spanish II**11422X0****1 credit**

Recommended prerequisite(s): Spanish I

This course is for the student who has successfully completed Spanish I. Students review topics covered in Spanish I, while studying more complex grammatical structures and additional vocabulary to use in listening, speaking, reading, and writing activities. Grammatical topics include the future tense, conditional tense, imperfect tense, subjunctive mood, formation of adverbs, object pronouns, reflexive verbs, and relative pronouns, sequence of tenses, and comparatives and superlatives.

Honors Spanish III**11435X0****1 credit (HN)**

Recommended prerequisite(s): Spanish II

This course is for the student who has successfully completed Spanish II. Emphasis is on increasing aural-oral skills through reading, writing and conversation. The basic principles of Spanish grammar are reviewed. The student's knowledge of cultures and lands where Spanish is spoken is broadened through readings and audio-visual materials. Acquiring an active vocabulary is still a goal.

Honors Spanish IV**11445X0****1 credit (HN)**

Recommended prerequisite(s): Spanish III

This course is for the student who has successfully completed Spanish III. It is intended to increase the level of comprehension and conversational skills. Oral proficiency is stressed by means of interpretation of events, analysis of literature, dialogues, discussions, and debates. Students read literary works in prose, poetry, and drama to develop analytical skills. Advanced grammatical structures are utilized in the writing of poetry, essays and reports.

American Sign Language I**12812X0****1 credit**

This course is designed as an introduction to the study of American Sign Language and the world of the deaf. Students will become familiar with both expressive (signing) and receptive (seeing and understanding) sign language and finger spelling. Students will develop skills to communicate at a basic level in American Sign Language. Basic conversational skills, emphasizing vocabulary and pragmatics will be covered. The course also includes information on the social, cultural, and educational implications of deafness. **Completion of American Sign Language I and II fulfills the second language requirement for college admission to the UNC system.**

Math II**22012X0****1 credit**

Prerequisite(s): Algebra I/ Common Core Math I

This rigorous course expands on the concepts learned in Common Core Math I and focuses on quadratic expressions, equations, and functions, comparing their characteristics and behavior to those of linear and exponential functions from Common Core Math I. The geometry topics solidify the knowledge of concepts already encountered, and basic trigonometry is introduced. Students need to be able to solve equations with two variables and to simplify algebraic expressions, and they will broaden their use of the coordinate plane to include isometric transformations such as rotations, reflections, translations, and the non-isometric dilation transformation. The exploration of data includes expanding on ideas of probability to make and evaluate decisions. Students are consistently taught how to solve problems without the aid of a calculator, but appropriate technology, including the TI-83+ or TI-84+ graphing calculator, will be used for instruction and assessment. Daily preparation for class is essential since topics continually build upon each other and connections between topics are continually examined. Common Core Math courses must be taken sequentially.

Honors Math II**22015X0****1 credit (HN)**

Prerequisite(s): Algebra I/Common Core Math I

Honors Math 2 builds on students' study of algebraic concepts including functions, polynomials, equations, inequalities and rational expressions. Students will also begin making more in depth connections by creating relationships and modeling of measurements and properties for one-, two-, and three-dimensional objects. Reasoning skills will be sharpened and students will further expand their use of the coordinate plane. Honors Math 2 curriculum is aligned to the Common Core. The topics include, but are not limited to: the real number system, equations and inequalities, functions, polynomials, congruence, foundations of geometry, transformations, probability, similarity, 2D and 3D measurement, circles, and basic trigonometry, with emphasis on their interconnectedness.

Math III**23012X0****1 credit**

Prerequisite(s): Common Core Math II

This course continues students' study of topics from algebra, geometry, and statistics in a problem-centered, connected approach. Functions, matrix operations, and algebraic representations of geometric concepts are the principle topics of study. Students will be expected to describe and translate among graphic, algebraic, numeric, tabular, and verbal representations of relationships and use those representations to solve problems.

Honors Math III**23015X0****1 credit (HN)**

Prerequisite(s): Honors Math II and/or Teacher Recommendation

Honors Common Core Algebra II is designed to study the Common Core Algebra II curriculum in greater depth and with less teacher direction. Strong emphasis is placed on problem solving, investigations, analysis, discovery and independent thinking. Additional topics include sequence and series, advanced graphing theories and techniques, probability and introduction to limits. Students are expected to demonstrate proficiency with appropriate technology.

Advanced Functions and Modeling**24002X0****1 credit**

Prerequisite: Math III

This course provides students with an in-depth study of modeling and applying functions to real-world situations. Major topics include: linear, quadratic, cubic, exponential and logarithmic functions, systems of equations and inequalities, and right triangle trigonometry. Applications may originate from home, work, recreation, consumer issues, public policy and scientific investigations. **A student cannot receive math graduation credit for both Advanced Functions and Modeling and Pre-Calculus; one must count as an elective.**

Honors Pre-Calculus**24035X0****1 credit (HN)**

Prerequisite(s): Honors Math III or Teacher Recommendation

The Pre-Calculus curriculum includes a complete study of trigonometry, as well as advance algebra topics, analytical geometry, series and sequence, data analysis, vectors and limits. Applications and modeling are included throughout the course of study. Appropriate technology, from manipulatives to calculators and application software, is used for instruction and assessment. Student must have extensive knowledge of the graphics calculator. A student cannot receive math credit for both Analytical Geometry/Trigonometry and Pre-Calculus; one course must count as a math elective.

Advanced Calculus **25005X0** **1 credit (HN)**
Recommended prerequisites: Honors Pre-Calculus

This course is taken the fall semester of AP Calculus. **Students should only take this course if they are planning to take the AP course.**

Advanced Placement Calculus AB **25017X0** **1 credit (AP)**
Recommended prerequisites: Honors Pre-Calculus

The AP Calculus curriculum includes limits, continuity, derivatives with applications, and elementary integration with applications. This is a college course. It follows the prescribed AP Calculus AB syllabus. The intent is to prepare students for second semester/block college calculus. For each session of classroom instruction the student is expected to spend, as a minimum, an equal amount of time outside the classroom for review, written assignments, and preparation. **Greater amounts of time and effort are expected on the part of the student.** It is expected that students enrolled in this course will take the College Board Advanced Placement Exam.

*** Additional Math options are also located under the North Carolina School of Math and Science course offerings

SCIENCE COURSES

Biology **33202X0** **1 credit**

This course is designed to develop student understanding of biological concepts and principles and promote an understanding of plant and animal processes from the cellular to the multi-cellular level. Laboratory work is an important phase of each phase of the course.
The final exam is North Carolina Biology End-of-Course Test.

Honors Biology **33205X0** **1 credit (HN)**

Content and principles for biology are taught but at a greater depth and magnitude. Students do extensive research, independent study, and laboratory investigations. This course is designed for students who have shown superior achievement and high interest in science courses.
The final exam is the North Carolina Biology End-of-Course Test.

Advanced Biology **33215X0** **1 credit (HN)**
Prerequisite: H Biology, H Chemistry or teacher recommendation

This is the fall semester course taken before AP Biology course. **Students should only take this course if they are planning to take the AP course.**

Advanced Placement Biology **31007X0** **1 credit (AP)**
Prerequisite: Biology

Students study the basic principles and concepts covered in a rigorous introductory “General Biology” college-level course. Topics include the structure and function of cells and organisms, the organization, requirements and development of living systems, and heredity and evolution. Students are provided in-depth laboratory experiences. This course covers in greater scope and scale the concepts, knowledge, and skills introduced in a first level high school biology program. **Greater amounts of time and effort are expected on the part of the student.** It is expected that students enrolled in this course will take the College Board Advanced Placement Test.

Pre-Chemistry **30202X02C** **1 credit**
Intro to Chemistry

This course is designed to introduce students to the fundamental regularities of chemistry as they explore the structure and properties of matter and develop the mathematical and problem-solving skills necessary to perform chemical calculations

and to analyze experimental data. Through guided-inquiry and project-based lessons or students will apply their understanding of chemistry to real-world situations. **Students will have to take Chemistry or Physics to meet their Physical Science graduation requirement.**

Chemistry **34202X0** **1 credit**

Recommended prerequisite(s): Math III **or** Concurrent enrollment in Math III

Chemistry is the study of the composition and properties of matter. It provides an introduction to the theories concerning the structure of matter and includes mathematical problems that illustrate these theories. Laboratory experiences and demonstrations are integral parts of this course.

Honors Chemistry **34205XS0** **1 credit (HN)**

Recommended prerequisite: Honors Math III **or** teacher recommendation

The concepts and principles of chemistry are presented in a greater depth and more rapid and rigorous pace than in Academic Chemistry. This course will continue to explore the composition and properties of matter. It also provides an investigation of theories concerning the structure of matter and includes mathematical problems that illustrate these theories. Laboratory experiences and demonstrations are integral parts of this course.

Advanced Chemistry II **34215XS0** **1 credit (HN)**

Recommended prerequisite: Honors Chemistry or students received an A in Academic Chemistry

This course will explore those concepts covered of the first chemistry course in more depth, especially the concepts of thermodynamics and equilibrium. It is designed to prepare students for their first college chemistry course, including key lab skills used in the college laboratory setting. **This course is also recommended for those students taking either the SAT II: Chemistry Test and/or AP Chemistry.**

AP Chemistry **31207X0** **1 credit (AP)**

Recommended prerequisite: Honors Chemistry/Honors Math 3 or teacher recommendation

"This course is intended to meet the objectives of the Advanced Placement Chemistry curriculum designed by the College Board. The course covers advanced topics in chemistry including kinetics, oxidation-reduction, equilibrium, thermochemistry, quantitative and qualitative analysis, and introductory organic chemistry. Students continue to develop chemistry laboratory skills and learn to predict results of reactions and properties of reaction products. Students complete an intensive schedule of advanced lab exercises and perform independent research projects. The course prepares students to take the Advanced Placement exam in May. This class is designed for highly motivated students with good reading comprehension and study skills. **Greater amounts of time and effort are expected on the part of the student.** It is expected that students enrolled in this course will take the College Board Advanced Placement Exam/"

Earth/Environmental Science **35012X0** **1 credit**

Earth/Environmental Science focuses on the functions of the Earth's systems. This includes the following concepts: solar system and its position in the universe, tectonic processes, origin and evolution of the earth system, weather and climate, water quality, and human impacts on the earth systems. Students will be involved in a heavy inquiry-based laboratory experience to also build on experimentation and science process skills.

Honors Earth/Environmental Science **35015X0** **1 credit (HN)**

All topics covered in Earth/Environmental Science will be covered in this course with increased depth. Additional topics will be added for enrichment. Earth/Environmental Science focuses on the functions of the Earth's systems. This includes the following concepts: solar system and its position in the universe, tectonic processes, origin and evolution of the earth system, weather and climate, water quality, and human impacts on the earth systems. Students will be involved in a heavy inquiry-based laboratory experience to also build on experimentation and science process skills.

Students examine the political and legal systems; learn about rights and responsibilities as citizens, the structure of legal and governmental systems within which they live, and how these systems influence their lives. Also examined are the origins, development, and main principles of important US documents, including the constitution. **Beginning with the freshmen class of the 2014-2015 school year, this course will be taken after American History II.**

Honors Civics and Economics

42095X0

1 credit (HN)

Prerequisite: Honors World History and Honors American History I & II

This honors course focuses on basic economic concepts, economic institutions, and approaches for analyzing and evaluating economic problems, actions and policies. Additional reading/writing/research assignments are required for the honors level of this class. Students examine economic topic and questions and apply concepts to economic decisions. They see themselves as consumers, producers, and participants in the national and global economy. Students examine the political and legal systems; learn about rights and responsibilities as citizens, the structure of legal and governmental systems within which they live, and how these systems influence their lives. Also examined are the origins, development, and main principles of important US documents, including the constitution. **Beginning with the freshmen class of the 2014-2015 school year, this course will be taken after American History II.**

American History I

43042X0

1 credit

The Founding Principles will begin with the European exploration of the new world through Reconstruction. Students will examine the historical and intellectual origins of the United States from European exploration and colonial settlement to the Revolutionary and Constitutional eras. Students will learn about the important political and economic factors that contributed to the development of colonial America and the outbreak of the American Revolution as well as the consequences of the Revolution, including the writing and key ideas of the U.S. Constitution. American History I: The Founding Principles will guide students as they study the establishment of political parties, America's westward expansion, the growth of sectional conflict, how that sectional conflict led to the Civil War, and the consequences of the Civil War, including Reconstruction.

Honors American History I

43045X0

1 credit (HN)

American History I: The Founding Principles will begin with the European exploration of the new world through Reconstruction. Students will examine the historical and intellectual origins of the United States from European exploration and colonial settlement to the Revolutionary and Constitutional eras. Students will learn about the important political and economic factors that contributed to the development of colonial America and the outbreak of the American Revolution as well as the consequences of the Revolution, including the writing and key ideas of the U.S. Constitution. American History I: The Founding Principles will guide students as they study the establishment of political parties, America's westward expansion, the growth of sectional conflict, how that sectional conflict led to the Civil War, and the consequences of the Civil War, including Reconstruction. **Honors cover the material in greater complexity, novelty, and pacing. It is distinguished by a difference in the quality of the work expected, not merely an increase in quantity.**

American History II

43052X0

1 credit

The Founding Principles will guide students from the late nineteenth century time period through the early 21st century. Students will examine the political, economic, social and cultural development of the United States from the end of the Reconstruction era to present times. The essential standards of American History II: The Founding Principles 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 in the United States in an interconnected world.

Honors American History II

43055X0

1 credit (HN)

The Founding Principles will guide students from the late nineteenth century time period through the early 21st century. Students will examine the political, economic, social and cultural development of the United States from the end of the Reconstruction era to present times. The essential standards of American History II: The Founding Principles 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 in the United States in an interconnected world. **As an Honors course the material will be taught greater complexity, novelty, and pacing. It is distinguished by a difference in the quality of the work expected, not merely an increase in quantity.**

Advanced US History **43015X0** **1 credit (HN)**
Prerequisite: Honors World History

This course is taken the fall semester of AP US History. **Students should only take this course if they are planning to take the AP course.**

Advanced Placement US History **43077X0** **1 credit (AP)**
Prerequisite: Honors World History

Advanced Placement American History conforms to the pattern of introductory level American History at the college level. Students will isolate and examine the major trends spanning American History from the age of discovery to the present day. Advanced Placement courses are a program of the College Entrance Examination Board. A student may earn college credit for Advanced Placement courses upon achievement of an appropriate score on the standardized test that concludes a year with an Advanced Placement course. This is a year-long course which meets the U.S. History requirements for graduation. **As an AP course, this course is far greater in rigor than Honors American History parts I & II. Greater amounts of time and effort are expected on the part of the student.**

Social Studies Electives

Law and Justice **42072X0** **1 credit**
This course should be taken before Civics.

This academic course focuses on the legal, judicial, law enforcement, legal procedures and corrections systems of the United States. Examined are relevant examples of civil and criminal laws, law-enforcement methods, court procedures, and efforts toward corrective justice. Students also examine problems within the legal and justice systems. Classes will benefit from their schools' participation in the Lawyers-In-The-Schools Program through the North Carolina Bar Association, gaining resources, speakers, programs and publications through LIS for law-related education.

Psychology **44032X0** **1 credit**
This course is open to Juniors and Seniors only.

In this course, the history and growth of psychology as a science is studied. Basic theories of learning, personality development, patterns of human behavior, heredity and environment, and mental health are analyzed.

FINE & PERFORMING ARTS COURSES

Visual Arts

Beginning Visual Arts I **54152XS0** **1 credit**

This course introduces the elements and principles of design through an exploration of a broad range of media. Activities emphasize skills and techniques in the following areas: drawing, painting, fibers, ceramics, art history, and three-dimensional design.

Intermediate Visual Arts II**54162X0****1 credit**

Recommended prerequisite(s): Visual Arts I or portfolio

This course offers an in-depth study of design through repeated use of art elements; i.e., color line texture, value, and shape, while expanding technical abilities. Design is taught through experiences in the following areas: drawing and painting, art history and survey, three-dimensional using materials such as wood, clay, graphics with processes involving silk screening and/or woodcuts, and fibers (loom weaving and batik).

Proficient Visual Arts III**54175X0****1 credit (HN)**

Recommended prerequisite(s): Visual Arts II or portfolio

Students who have demonstrated advanced skill levels in visual arts are eligible to take honors level Visual Arts III. Success at the honors level requires rigorous study, excellence in design and production, and extensive knowledge of a variety of art forms. Students are encouraged to explore a variety of media, to produce experimental culturally significant works of art, and to gain an extensive knowledge of art history.

Advanced Visual Arts IV**54185X0****1 credit (HN)**

Recommended prerequisite(s): Visual Arts III or portfolio

This level of advanced art involves more in-depth knowledge of processes, media, history, and the development of art. Students understand and apply all skills through a variety of media.

Visual Arts Independent Study**1 credit (HS)**

Prerequisites: Art I and teacher approval - Grades 11 and 12 only

This course is designed for the dedicated art student who has shown/expressed a deeper interest in advanced study of Art, Art History, and/or Design. It is imperative that students enrolled in this course are self-motivated and can use class time to work independently over the course of the semester. Students will design course work defined in a contract between the student, Art Teacher, and the Principal. Course work will include elements of research, rehearsal/production, presentation, and reflection. Course work must also include an element of cross-curricular learning. Interested students should plan in advance to ensure that their ideas and goals are clearly defined, accommodate their needs, and constitute appropriate subject matter.

Theatre Arts**Theatre Arts I****53152X0****1 credit**

This course trains students in basic aspects of body movement and vocal expression. Class activities include pantomime, improvisation, individual and group presentation of oral reading, and solo and ensemble acting. The course culminates in a polished presentation before an audience. Participation in an after-school rehearsal and performance is required/expected.

Theatre Arts II**53162X0****1 credit**

Recommendation required: Prerequisite Theatre Arts I

Students explore theatre as a comprehensive performing art. The technical aspect of production including lighting, sound, makeup, property, scenic and costume design enhance the study of acting, directing, and basic theatre management. Participation in after-school rehearsals and performances is expected/required.

Honors Theatre Arts III**53175X0****1 credit (HN)**

Recommendation required: Prerequisite Theatre Arts II

Students who have demonstrated exceptional skill levels in the dramatic arts are eligible to take honors level Theatre Arts III. Success at the honors level requires rigorous study, excellence in performance, and extensive knowledge of all areas

of theatre including production and directing, and an in-depth study of a variety of dramatic literature. Participation in after-school rehearsals and performances is expected/required.

Honors Theatre Arts IV **53185X0** **1 credit (HN)**
Recommendation required: Prerequisite Theatre Arts III

Students who have demonstrated exceptional skill levels in the dramatic arts are eligible to take honors level Theatre Arts IV. Success at the honors level requires rigorous study, excellence in performance, and extensive knowledge of all areas of theatre including production and directing, and an in-depth study of a variety of dramatic literature. Students are encouraged to explore a variety of theatrical styles and work with others to produce experimental culturally significant works of art. Participation in after-school rehearsals and performances is expected/required.

Independent Study in Theatre Arts **53985X0** **1 credit (HN)**
Prerequisites: Theatre Arts I and teacher approval. Grades 11 and 12 only

The course is designed for the dedicated Theatre Arts student who has shown/expressed a deeper interest in advanced study of theatre performance, theatre history, and/or theatre design. It is imperative that students enrolled in this course are self-motivated and can use class time to work independently over the course of the semester. Students will design course work defined in a contract between the student, Theatre Arts Teacher, and the Principal. Course work will include elements of research, rehearsal/production, presentation, and reflection. Course work must also include an element of cross-curricular learning. Interested students should plan in advance to ensure that their ideas and goals are clearly defined, to accommodate their needs, and to constitute appropriate subject matter.

Modern Dance

Modern Dance I - Beginning **51152X0** **1 credit**

This course explores movement as a creative art form. This level introduces the student to body awareness, alignment, improvisation, dance history, and interpretation of different forms of dance. This builds an appreciation for all types of dance. (NC DPI Standard Course of Study) The students are evaluated by written and movement exams. The students much reach a basic performance skill level to perform on stage.

Jazz Dance I **51152X0A** **1 credit**

In this class the students will explore the stylized forms of jazz dance from Broadway to Hip-Hop. Dance technique, history and composition will be covered. Students will work to develop strength, flexibility, proper alignment and musicality in this energizing course. **Students who take this course are strongly encouraged, though not required, to take Modern Dance I.**

Jazz Dance II **51162X0A** **1 credit**
Prerequisite: Jazz Dance I

In this course students will continue to explore multiple styles of jazz dance ranging from Broadway to Street Jazz. Through the exploration of styles students will fulfill an understanding of jazz history, technique, and composition. Students will work to develop strength, flexibility, proper alignment, and musicality in this high-energy course.

Clogging **51152X0C** **1 credit**
Prerequisite: Modern Dance I

This class will be a fusion of mountain and street clogging styles. Clogging works with timing and rhythm and understanding how the dance steps fit into the music. Dancers will work with various styles of music as well as acapella style. Elements of dance, technique, and student choreography will be integrated into the class.

Modern Dance II - Intermediate**51162X0****1 credit**

Prerequisites: Modern Dance I or Audition

This course continues the development of technical skills acquired in Dance I, with students continuing movement through exploration of the elements of basic modern dance. Classwork includes experiences that reinforce strength, flexibility, and endurance. Dance attire is recommended. In lieu of leotards and tights, students may wear loose, comfortable clothing to assure a full range of movement. Participation in some after-school rehearsals and performances may be expected.

Modern Dance III - Proficient**51175X0****1 credit (HN)**

Prerequisite: Audition Required

Students who have demonstrated a serious commitment and advanced skill in modern dance are eligible to take Modern Dance III at the honors level. Success at the honors level requires rigorous study, excellence in technical performance, and deep aesthetic awareness. Appropriate attire is required. Participation in after-school rehearsals and performances is expected.

Modern Dance IV - Advanced**51185X0****1 credit (HN)**

Prerequisite: Audition Required

Dance IV Honors provides the students with the opportunity to develop an advanced level of dance technique and refine their skills as both choreographer and performer. The student works strive to clearly express ideas through the creative process of integrating movement with choreographic intent. (NC DPI Standard Course of Study) The dance portfolio showcases their written work, biography, and builds their performance resume'. Students are encouraged to apply for scholarships, summer workshops, and performance opportunities enhance their education as a performer.

Pre-College Modern Dance**51275X0****1 credit (HN)**

Prerequisite: Audition Required

This course is designed to prepare the dancer who is considering a major or minor in dance in college. The course will stress technical ability, choreographic skills, performance, history, and dance criticism. Students will be a member of the dance ensemble, which will require extra rehearsals and performances. This course can be repeated.

Vocal Music: Choral Ensemble I**52302X0****1 credit**

Prerequisite: Audition Required

This introductory year long course is open to students who have an interest in music and singing. In this class, choral literature is studied through various genres of music. The course includes an introduction to music theory and music appreciation. Emphasis is placed on correct vocal production, notation, and performance skills. Participation in after-school rehearsals and performances is expected. Students are required to audition for the course.

HEALTHFUL LIVING COURSES**Required Course****Health/PE****63022X0****1 credit**

The Healthful Living Curriculum is designed to help individual develop proactive health promoting behaviors. Students develop the knowledge and skills that empower them to identify and manage health behaviors related to stress management, self-protection, interpersonal relationships, nutrition/weight management, substance abuse, family life, CPR, and first aid. The physical education component stresses lifetime sports, gymnastics, cardiovascular fitness, and dance skills. Students have the opportunity to demonstrate acceptable levels of health-related fitness and to develop the knowledge and skills to implement their own personal fitness program. **Completion of this course is required to meet the North Carolina High School graduation requirements.**

Elective Courses

Team Sports I

62022X0

1 credit

Prerequisite: Health/PE

This course is an extension of some sports that were taught in Healthful Living and additional new sports. Some examples include: floor hockey, basketball, volleyball, flag football, and various team building games. Each sport will be taught at a level above that of Healthful Living and will include: basic offensive and defensive strategies play making, rules, and team work. The amount of time for each sport will be equal throughout the semester and upon completion of this course, the learner should be able to perform each sport at a level competent enough to play for recreation/intramural leagues.

Team Sports II

62022X0B

1 credit

Prerequisite: Team Sports I

This course is a more advanced level course for the learner who wants to gain experience/knowledge and includes the same sports taught in Team Sports I. Advanced offensive and defensive strategies, individual assessment/analyzing of plays, officiating and coaching will be taught during the semester for each sport in this course. The amount of time for each sport will be equal throughout the semester and upon completion of this course, the learner should be able to perform at a level competent enough to play for school athletics and/or organized competitive leagues.

Physical Fitness I

62032X0

1 credit

Prerequisite: Health/PE

This course focuses on intense training for the purpose of improving physical fitness through strength training, cardiovascular conditioning, flexibility exercise, speed training, polymerics, and diet and nutrition. Students are tested periodically in the above areas. Students are required to participate five days per week. This course cannot be taken more than twice.

Physical Fitness II

62042X0

1 credit

Prerequisite: Physical Fitness I

This course continues to focus on intense training for the purpose of improving physical fitness through strength training, cardiovascular conditioning, flexibility exercise, speed training, polymerics, and diet and nutrition. Students are tested periodically in the above areas. Students are required to participate five days per week. This course cannot be taken more than twice.

MISCELLANEOUS COURSES

Freshman Seminar

96102X0

1 credit

This course is for first semester freshmen only.

The main object of this required nine week course is to introduce high school to freshmen. The development of critical thinking and problem solving skills will provide an opportunity for students to enhance personal characteristics necessary for successful school and life experiences. Students will be guided through goal setting and career planning lessons. Organizational skills and study skills activities will be taught in conjunction with time management. Academic support will be integral to the program and will be provided through structured tutorials.

Leadership

96102X0D

1 credit

This course is for Juniors and Seniors and can be repeated once.

Student are assigned to a specific teacher to assist with daily classroom preparation. Duties may include but are not limited to general clerical duties such as word processing and research, and general errands within the school building, and classroom organization. Duties could also include working directly with the students during class. A daily log of activities and a weekly reflection is required for the class as well as reading a book, (to be chosen by the teacher of record), about leadership and teamwork. Students involved in this class must be in good academic standing and possess a commitment to leadership.

NORTH CAROLINA VIRTUAL PUBLIC SCHOOL

The purpose of the North Carolina Virtual Public School (NCVPS) is to provide e-learning opportunities to students. The legislation directed NCVPS to begin operations no later than June 30, 2007. The authorizing legislation for NCVPS states “NCVPS shall be available at no cost to all students in North Carolina who are enrolled in North Carolina’s public schools Department of Defense schools, and schools operated by the Buereau of Indian Affairs.” – See more at: Please visit www.ncvps.org for additional information.

East Wake Academy participates in the North Carolina Virtual Public School.

Criteria for enrolling in a NCVPS course:

In order to take an online course, there must be an established need for a graduation requirement within that semester or it must be an approved class **not** offered face-to-face at EWA. Administrator approval is required for all online classes.

Grades 10-12 (first time in NCVPS):

1. Must have a GPA of 2.5 unweighted or 3.0 weighted, whichever is higher
2. No history of discipline issues in High School

Upper classmen (previously enrolled in NCVPS):

1. Must have a GPA of 2.5 unweighted or 3.0 weighted, whichever is higher
2. No history of discipline issues in High School
3. Have passed previous NCVPS courses with a minimum grade a 80% grade

Students with and IEP or 504 Plan:

1. Must meet criteria for regular education students
2. Must have EC Teacher’s approval (IEP) or Counselor’s approval for 504

Credit Recovery:

Open to any high school student that needs the credit for graduation, with Administrator approval. Any enrollments that are exceptions to the criteria should be discussed prior to enrollment, with approval of High School administrator and eLA.

NCVPS COURSE OFFERINGS

The courses listed are those that are currently offered. The course selection is always subject to change. NCVPS reserves the right to amend their course selections to omit or add courses as needed. For more information on courses please visit ncvps.org. It is not recommended for 9th graders, however may be considered on an individual basis under administrative approval. For the most updated information including course descriptions, please visit ncvps.org.

Early Calendar/Fall Only

Personal Finance
Principles of Business and Finance
Psychology Honors
Medieval Studies
Leadership Development
Psychology

Traditional Calendar

Fine Arts

Visual Arts Specialization (Intermediate): Art of Game Design (must have completed Art I)
Visual Arts Specialization (Intermediate): Art of Advertising (must have completed Art I)
Visual Arts Specialization (Intermediate): Art of Photography (must have completed Art I)
Music Specialization (Beginning): Music Appreciation
Music Specialization (Beginning): Music Business and Recording
Visual Arts Specialization (Beginning): Non Western Art
Visual Arts Specialization (Intermediate): Art of Videography (must have completed Art I)
Visual Arts Specialization (Intermediate): Visual Journaling (must have completed Art I)
Visual Arts Specialization (Intermediate): Art of Fashion (must have completed Art I)

Career Technical Courses

Accounting I
BioTech and Agriscience I
Computer Programming I (must have completed Math I)
Entrepreneurship I
Personal Finance
Principles of Business and Finance (BE/ME)
Strategic Marketing
Success 101
Career Management

Core electives

Anatomy and Physiology Honors
African-American Studies
ACT Prep

Advanced Placement Courses *yearlong**

AP Computer Science A
AP Environmental Science
AP European History
AP Government and Politics US
AP Human Geography
AP Chinese Language and Culture
AP Music Theory (must be able to read music)
AP Physics I
AP Psychology
AP World History
AP Calculus AB
AP Calculus BC

Foreign Language

Arabic I
Arabic II
Japanese I
Japanese II
Latin I
Latin II
Mandarin Chinese I
Mandarin Chinese II
German I
German II
Russian I
Russian II
French I
French II

*If you need a level three of the above courses, please check with Mrs. Reid to make sure it is available.

Foreign Language online is not the optimal experience due to the lack of engagement in the classroom. FL may require voice responses and recording as part of the course completion.

NORTH CAROLINA SCHOOL OF SCIENCE AND MATH COURSES

EWA has partnered with the NC School of Science and Math to provide a blended learning environment with rigorous course selections. For the 2016-2017 school year, the following courses are available. The courses are taught in the Spectrum Room where students are watching a live feed of the teacher from NCSSM and a facilitator in the room to assist. These courses are offered for Juniors and Seniors.

Honors Forensic Science (Fall & Spring semesters)

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. Prerequisites Completion of Language Arts/ English with a grade of "A", completion of Biology I, completion of Algebra II, and completion of a Placement Exam with a score of 70 or above. NCSSM will provide a placement test to be administered by the school at the time of registration.

Honors Forensic Science: Anthropology (Spring Semester)

This upper level science course provides a broad overview of forensic anthropology – an applied field of biological anthropology that seeks to recover, identify, and evaluate human skeletal remains within a medico-legal context. In this course, students will learn to identify the bones of the human skeleton, as well as basic recovery techniques and crime scene investigation. We will then apply this knowledge towards the techniques used by forensic anthropologists to determine sex, age at death, ancestry, and stature; and how to estimate time since death and identification of trauma to bone. Finally, students will explore the role forensic anthropologists play in mass disaster and human rights investigations, as well as the associated ethical responsibilities that come with working with human skeletal remains. This course requires the ability to write clear and concise lab and investigative reports. Good writing skills are imperative. Prerequisites Completion of Language Arts/ English with a grade of "A", completion of Biology I, completion of Algebra II, and completion of Honors Forensic Science with a grade of "C" or above. Students must demonstrate maturity in other classes, be highly motivated, and have a strong background in science.

Honors Genetics and Biotechnology (Fall & Spring semesters)

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. Prerequisites Completion of Biology I with a B or higher and completion of Algebra II

Honors Physics (Fall & Spring semesters)

This course is a hands-on, inquiry based introductory course which combines both “conceptual” and “mathematical” approaches to learning physics. The course covers the laws of mechanics and their applications. Students will learn to solve real problems by investigating real systems. Investigations will cover physics topics that are fun and engaging for the students. Students will design experiments, use accurate measuring equipment and construct and test conclusions based on accurate data. Prerequisite Completion of Algebra II with a C or higher

Honors Aerospace Engineering (Fall & Spring semesters)

In this 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. Prerequisites Completion of Algebra II

Foundations of Multivariable Calculus (Spring semester only)

Code TBD 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. Prerequisites or Suggested Skills Students must have successfully completed AP Calculus BC and earned a score of 4 or 5 on the AP Calculus BC Exam or received permission from the NCSSM Dean of Distance Education. NCSSM will provide a placement test to be administered by the school at the time of registration. Grade Level: 11-12

Honors Calculus (fall)

This course is rich in technology and applications, and prepares students for the AP Calculus AB Exam. AP Calculus develops the student’s understanding of the concepts of the Calculus (functions, graphs, limits, derivatives) and provides experience with methods and applications. The course encourages the geometric, numerical, analytical, and verbal expression of concepts, results, and problems. Prerequisite Completion of Precalculus with an “A” and the recommendation of the math teacher. Students should have a strong background in algebra and functions, including polynomial, exponential, logarithmic, and trigonometric. Students should also have knowledge of basic graphing calculator functions ... graphing an equation, determining a Window, use of the built-in Intersect, Maximum, Minimum, Zero, & Value functions. A summer assignment will be sent to enrolled students. The completion of the summer assignment is mandatory. Schools will be asked to supply the following student information: PSAT scores- both Verbal and Mathematical and ACT scores. Grade Level: 10-12

Honors Statistics (fall)

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. The completion of the summer assignment is mandatory. Prerequisite: Students must have completed a course beyond Algebra II with a B average or better and have strong algebra skills. They must also possess strong verbal skills as well as sufficient mathematical maturity and quantitative reasoning ability. A summer assignment will be sent to enrolled students. The completion of the summer assignment is mandatory. Schools will be asked to supply the following student information: PSAT scores- both Verbal and Mathematical and ACT scores. Grade Level: 10-12 Material requirements:

AP Statistics (spring)

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. Prerequisite: Successful completion of the NCSSM Honors Statistics course, offered in the fall. Schools will be asked to supply the following student information: PSAT scores- both Verbal and Mathematical and ACT scores. Grade Level: 10-12

College and Career Promise

Career & College Promise ("CCP") is North Carolina's dual enrollment program for high school students. This program allows eligible NC high school students to enroll in college classes at North Carolina community colleges and universities through their high school. Students who successfully complete college courses earn college credit they can take with them after graduation. In many cases, students can also earn dual credit - meeting high school graduation requirements with college courses.

Career & College Promise offers students the option to choose from these pathways:

- **College Transfer** - Designed for students planning to continue their educational career beyond high school to eventually achieve an Associate's or Bachelor's degree at a community college or university.
- **Career & Technical Education** - Allows students to begin a certification or diploma program in a particular technical field or career area.
- **Cooperative Innovative High Schools** - North Carolina's early colleges and other innovative schools are small public high schools, usually located on the campus of a university or community college, where students simultaneously work toward completion of both the high school diploma and an associate's degree.

Career & College Promise offers North Carolina high students options to pursue educational and career goals of their choice using a rigorous yet supportive structure designed to help them become successful.

To be eligible to attend the CCP program you must be a Junior or Senior and have a GPA of at least 3.0. If you would like to take courses at Wake Tech, you must begin that process by attending an information session. The information sessions begin March 3, 2016 and continue through to May 4, 2016. You must preregister for these sessions at <http://www.waketech.edu/programs-courses/career-and-college-promise/information-sessions/reserve-ccp>

Once you have attended those sessions, they will direct you to complete the enrollment process. You must provide transportation to your courses.