

ESSEX COUNTY  
SCHOOLS OF TECHNOLOGY

2021-22

ACADEMIC  
COURSE  
CATALOG



Office of Curriculum & Instruction



[www.essextech.org](http://www.essextech.org)

*Dr. James Pedersen-Superintendent/ Ms. Dixiana Carbonell-Assistant Superintendent*



Joseph N. DiVincenzo, Jr.,  
Essex County Executive  
And Essex County Board  
of County Commissioners



*"Our Schools of Technology  
offer our students a dynamic,  
first-class education that will  
provide them with the  
foundation for a successful  
future."*

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Individuals with questions about any form of discrimination, or who wish to report a violation, are encouraged to contact any of the persons or agencies listed below. In addition, inquiries about the application of Title IX may be referred to the Title IX Coordinator, to the U.S. Department of Education Office for Civil Rights, or both.

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Essex County Newark Tech

Principal: Carmen Morales

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## ENGLISH LANGUAGE ARTS

### **English Literary Survey**

**Credits: 5 Credits**

**Prerequisite: Terranova Assessment Performance**

English Literary Survey continues the study of the literary genres (novel, short story, poetry, etc.). Exploration of each genre's literary elements; determination of theme and intent; and examination of vocabulary and semantics, grammar and usage are included in the course content. Reading, writing and speaking assignments are required as an additional method to improve understanding and comprehension. Students entering the ninth grade will build a foundation in fiction, drama, poetry, mythology, and literary nonfiction. In addition, they will analyze literature from various angles, to view literature in historical context, and to observe connections between literature and the arts. In their essays, students will analyze, compare and contrast, create arguments and/or take a position on stated claims. Students will engage in structured discussions that examine philosophical questions that arise in certain works. By encouraging students to generate critical thinking inquiries and topics for discussion and written expression, they are prepared for a focused literary study: American Literature in grade 10, British Literature in grade 11, and World Language in grade 12.

### **Honors English Literary Survey**

**Credits: 5 Credits**

**Prerequisite: Honors Criteria**

Honors English Literary Survey includes the study of literature from a variety of genres, cultures and historical periods. Students will explore issues, ideas and cultural aspects found in short stories, novels, poetry, drama, music and media. Students will individually and collaboratively create and present a number of written projects including essays and presentations, which will integrate research, literature, art, film, music and multimedia. Students will write in a variety of writing styles, analyzing, explaining, and/or evaluating a variety of subjects including identifying and analyzing recurring themes, compare and contrasting of writing styles, characterization, points of view. Students will formulate thesis statements and/or major claims, and back up these claims with evidence using both fiction and non-fiction texts. Grammar usage, mechanics and vocabulary building through learning activities are designed to strengthen and build upon existing skills and knowledge. By encouraging students to generate critical thinking inquiries and topics for discussion and written expression, they are prepared for an advanced course of study: Honors American Literature in grade 10, Honors British Literature and /or AP Language & Composition in grade 11, Honors World Literature and/or AP Literature & Composition in grade 12.

### **Creative Writing**

**Credits: 5 Credits**

Creative Writing offers students the opportunity to develop and improve their technique and individual writing style in short story, poetry, essays, and other forms of prose. The emphasis of the course is on writing; however, students will read and analyze exemplary representations and authors to obtain a fuller appreciation of the form and craft including but not limited to fiction, nonfiction, poetry, personal essays, etc.

### **American Literature**

**Credits: 5 Credits**

**Prerequisite: English Literature Survey**

American Literature focuses on American authors and their work. This course is devoted to the study of American literature from colonial to modern period. Much of the literature is nonfiction (diaries, letters, sermons, almanacs, speeches, and foundational documents); there are many opportunities to analyze historical and informational texts and make connections with history, art, and other subjects. Students continue to build on their writing skills, integrating multiple sources and perspectives into their work, reading literary criticism, and writing longer and more complex essays. The course will include short texts, poetry and other selections from non-fiction literary text, as well as American based novels and plays. By encouraging students to generate critical thinking inquiries and topics for discussion and written expression, they are prepared for a focused literary study: British Literature in grade 11 and World Language in grade 12.

### **Honors American Literature**

**Credits: 5 Credits****Prerequisite: English Literary Survey; Honors English Literary Survey**

Honors American Literature course develops student understanding of the history and cultural progression of our country through fiction and non-fiction literature. Students will explore selections by contemporary as well as traditional American authors from diverse cultural and ethnic origins. Students will engage in dialogue, reflection, formal and informal writing including analysis, narrative, compare-and-contrast, etc. A formal research paper will reinforce research skills and focus on organization and source documentation. Grammar usage, mechanics and vocabulary through learning activities are designed to strengthen and build upon existing skills and knowledge. By encouraging students to generate critical thinking inquiries and topics for discussion and written expression, they are prepared for an advanced course of study: Honors British Literature and /or AP Language & Composition in grade 11, Honors World Literature and/or AP Literature & Composition in grade 12.

**British Literature****Credits: 5 Credits****Prerequisite: American Literature; Honors American Literature**

British Literature exposes the student to selected timeframes of England's development both literary and historically focusing on the literature reflective of the time (short stories, plays, poems, etc.) from Anglo Saxon to Modern time. Using complex literary forms such as short story, poetry, novels, and informative texts, students read and discuss in writing and orally how earlier works influence later works and how forms and ideas have evolved over time. Students improve their critical-thinking skills by determining the underlying assumptions and values in the literature and its reflection the time period. British Literature also includes an ongoing focus on language skills/writing, and vocabulary and oral discussions. By encouraging students to generate critical thinking inquiries and topics for discussion and written expression, they are prepared for a focused literary study: World Language in grade 12.

**Honors British Literature****Credits: 5 Credits****Prerequisite: Honors American Literature**

Honors British Literature is a literature-based course of study with focus on the history of British literature. The chronologically based literature begins with the Anglo-Saxon Period and consists of theme-oriented poetry, short stories, essays, non-fiction, and full-length works as it moves into Modern Times. Literary devices, content, style, and cultural diversity is studied in addition to vocabulary skills, library and research skills, public speaking, and various forms of essay/report writing. Students improve grammar and usage skills through guided writing and emphasis is placed on the development of critical and analytical thinking skills through discussion and writing to reading texts. By encouraging students to generate critical thinking inquiries and topics for discussion and written expression, they are prepared for an advanced course of study: Honors World Literature and/or AP Literature & Composition in grade 12.

**Journalism****Credits: 1.25 Credits**

Journalism will encompass all of the introductory, yet crucial elements of responsible reporting, including intellectualizing, editing, and media coverage. Via the exploration of professional, critical writing and coverage of ethical issues, students will be able to appropriately address, discuss, and demonstrate both objective and subjective journalism. The course will also differentiate between hard news reporting and opinion-based writing. Additionally, students will improve skills relating to grammar, composition, investigation, and interview techniques. The course will also integrate components of the British Literature curriculum and current events in an effort to allow students to build a journalistic foundation via literary and world sources. Furthermore, this course will further strengthen (as in all the English courses offered), general study skills, particularly analytical reading, expository writing, and oral communications comparable to what they are expected to produce in a college level course.

**Writing Persuasively****Credits: 1.25 Credits**

This is a one-cycle course focused on the art of persuasion and persuasive writing. The goal is for students to become well versed in the art of persuasion, specifically with regard to writing, so that they are prepared to write the ultimate persuasive piece—the college essay. Students will learn to write persuasively, a type a writing that attempts to persuade a reader to adopt a particular point of view or take a particular action. Students will learn to use s ethics, reasoning and emotions to appeal to a particular reader/audience. Students will learn to support their argument with facts, logical and emotional reasoning, concrete examples, statistics and expert opinions. Students will use all phases of the writing process

to produce at least one polished persuasive essay, a first draft of a college application essay and a first draft of a cover letter.

### **AP Language & Composition**

**Credits: 5 Credits**

**Prerequisite: Honors American Literature**

The AP course in English Language and Composition engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way genre conventions and the resources of language contribute to effectiveness in writing.

### **World Literature**

**Credits: 5 Credits**

**Prerequisite: British Literature**

World Literature allows students to closely study literature from around the world, as well as analyze the historical and cultural context. Students continue in their quest to become critical thinkers, readers, and effective writers by focusing on the communication skills needed to be successful in the course and later in college and career. Students will write using standard written language through informal and formal papers and for a variety of audiences and purposes. Students in this course will gain a global perspective through inquiry into a variety of the world's literary cultures and their distinctive perceptions of the political, economic, and religious forces sweeping the world. This course uses representative literature selections (poems, novels, informational texts, etc.) from ancient and/or modern times from countries around the world. Students improve their critical thinking skills, as they comprehend the diversity of literary traditions and influences of those traditions. Oral discussion is an integral part of the course as are written compositions.

### **Honors World Literature**

**Credits: 5 Credits**

**Prerequisite: British Literature; Honors British Literature**

Honors World Literature offer students an intensive study of diverse literature, cultures, and ideas. Students explore key literary fictional and non-fictional texts to develop the skills of critical and inquisitive thinkers, recognizing the global connections of our world. Using inference, analysis, evaluation and synthesis, students will use logic and reasoning to discuss and write essays. Students will provide textual evidence to support their writing, claims, opinions, and interpretations of the works. Students will develop an appreciation and respect for world literature and its reflection on culture, history, society, economy, and politics of a point in time and how these influence our global interactions.

### **AP Literature & Composition**

**Credits: 5 Credits**

**Prerequisite: Honors British Literature**

Following the College Board's suggested curriculum designed to parallel college-level English courses, the AP English Literature and Composition course enables students to develop critical standards for evaluating literature. Students study the language, character, action, and theme in works of recognized literary merit; enrich their understanding of connotation, metaphor, irony, syntax, and tone; and write compositions of their own (including literary analysis, exposition, argument, narrative, and creative writing).

### **Public Speaking**

**Credits: 5 Credits**

**Elective**

The Public Speaking courses will allow students, through practice, to develop communication skills that can be used in both academic and career speaking situations (such as small and large group discussions, delivery of lectures or speeches in front of audiences, etc.). Course topics include research and organization, writing for oral presentations, persuasive, argumentative and informational choices, visual and oral presentation skills, analysis and critique, and development of confidence when presenting.

## ENGLISH AS A SECOND LANGUAGE (ESL)

### **Beg ESL/Literary Survey**

**Credits: 10 Credits**

**Prerequisite: Terranova Assessment Performance & WIDA for EL Screener Performance**

Beg ESL/Literary Survey is designed to provide non-native English speakers with a variety of learning activities specifically geared towards developing students' English proficiency and content specific language. It also includes an infusion of the Literary Survey course offered to native English speakers to expose EL students to the same intensive study as their peers and further develop students' skills in reading, writing, speaking, listening, viewing, and media literacy, introduction to literature, development of vocabulary and usage skills in effective writing. Emphasis is also placed on writing: grammatical correctness, sentence structure, paragraph formation, and organization of clear, concise essays. Students will not only build a foundation in acquiring a second language but will be exposed to fiction, drama, poetry, mythology, and literary nonfiction. This is achieved not only with the use of the ESL curriculum but also with exposure to the same literary texts from the Literary Survey curriculum for the Regular English Students. The student will with differentiation analyze literature from various angles, in historical context, and observe connections between literature and the arts across the major genres (short story, novel, poetry, drama, epic poetry, and literary nonfiction). Students will discuss and write about works, memorize short poems and excerpts of speeches and orally present to assist them with pronunciation.

### **Intermediate ESL/American Literature**

**Credits: 10 Credits**

**Prerequisite: Beg ESL/Literary Survey & WIDA ACCESS for EL Performance**

Intermediate ESL/American Literature are designed to provide non-native English speakers with a variety of learning activities specifically geared towards developing students' English proficiency and content specific language. It also includes an infusion of American Literature from the Puritan Period to Modern Literature. Students study primary historical documents, plays and Shakespearean drama, as those offered to native English speakers to expose EL students to the same intensive study as their peers. Students further develop their skills in writing, speaking, listening, viewing, and media literacy. Emphasis is also placed on writing: grammatical correctness, sentence structure, paragraph formation, and organization of clear, concise essays. ESL students entering the tenth grade will continue to build on their learning of English as a Second Language but will also continue analyzing fiction, drama, poetry, mythology, and literary nonfiction. This is achieved with continued exposure to the same literary texts listed in the American Literature curriculum for the Regular English Students in addition to the ELS curriculum using the textbook Edge. The students will with differentiation analyze literature from various angles, in historical context, and observe connections between literature and the arts across the major genres (short story, novel, poetry, drama, epic poetry, and literary nonfiction). Students will discuss and write about works, memorize short poems and excerpts of speeches and orally present to assist them with pronunciation.

### **Advanced ESL/British Literature**

**Credits: 10 Credits**

**Prerequisite: Intermediate ESL/American Literature ACCESS for EL Performance**

Advance ESL/ British Literature is designed to provide non-native English speakers with a variety of learning activities specifically geared towards developing students' English proficiency and content specific language. It also includes an infusion of British Literature from the Medieval Period through Postmodern/Contemporary. Another focus of study is on the historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. Students will study historical periods of the British literature such as Medieval, Renaissance, 17th and 18th Century, Romantic, Victorian, Modern and postmodern eras. All the literary texts (fiction, nonfiction, drama, poetry and informational texts, etc.) will focus on different types of genres, and themes. Students also further develop their skills in speaking, listening, viewing, and media literacy. Grammatical correctness, sentence structure, paragraph formation, is continuously being developed with the exposure and creation of writing tasks for different audiences and purposes.

## **Advanced ESL/World Literature**

**Credits: 10 Credits**

**Prerequisite: British Literature/WIDA ACCESS for EL Performance**

The Advance ESL/World Literature has been aligned to the WIDA's English Language Development Standards (ELD) to meet the cognitive and linguistic needs of EL. As its name indicates, the Transitional ESL / World literature course will give EL, 12th-grade students, a chance to have a deeper awareness and understanding of global civilizations by examining, discussing, and reflecting on a variety of some diverse and rich cultures. This course will focus on some ancient and modern world literary selections. Students will improve their critical thinking skills by evaluating global political, economic, religious and social forces that shaped the world. They will continue to enhance their speaking, listening, reading and writing skills by completing various creative and critical thinking activities.

## WORLD LANGUAGE

### **Spanish 1A: Spanish Conversation & Culture**

**Length/Credits: Semester/2.5**

**Prerequisite: None**

This course is designed to offer novice World Language students the opportunity to begin developing communicative competence in Spanish and learn about the target culture. It will use the three modes of communication: interpersonal, interpretational and presentational emphasized in national and in the New Jersey Students Learning Standards (NJSLS). The practice of listening, pronunciation, conversation, and reading will be accompanied by reviews of previous general grammar's knowledge and vocabulary. Culture, on the other hand, will be incorporated into each thematic unit in order to provide students with a better understanding of the art, music, literature, and society of the Spanish-speaking world in order to understand the meaning of cultural identity.

### **Spanish 1B: Composition**

**Length/Credits: Semester/2.5 Credits**

**Prerequisite: Spanish 1A**

This course is designed to help students to improve reading and writing skills in Spanish by developing not only communicative skills, but also linguistics competence of the main, grade level appropriate, language structures. In this manner, students will be able to read and understand more complex passages, and write coherent and logical responses, developed from an accurate knowledge of grammar and vocabulary in context. There will be a thorough review of all the important grammatical concepts covered on Spanish Conversation and Culture; and language's learning, linguistic and communicative competence, will be reinforced with brief explanations of the linguistic concepts study in exercises, stories, compositions and situations. Videos, cultural presentations, film, literature and music will be also used to improve the understanding of vocabulary and offer the possibility of expressing themselves in Spanish.

### **Spanish II**

**Length/Credits: Semester/5.0 Credits**

**Prerequisite: Spanish I-A and Spanish I-B**

Spanish II curriculum has been designed to acquaint students with the four language skills (listening, speaking, reading, and writing), and the cultural background of the Spanish-speaking countries throughout the development of meaningful thematic units. As the student advances in proficiency, linguistic as well as communicative competence grade-level appropriate, the Spanish II program aims to involve the student in the NJ Student Learning Standards, twenty first century education oriented as mandated by the state of New Jersey. This approach not only yields students who are proficient in basic grammar and vocabulary but will include experiences that promote the use of language as a communicative tool, task-oriented instruction and learning: i.e. an ability to communicate about oneself and others, an ability to express the fundamentals of daily life, an ability to interact with others in the target language.

### **Advanced Spanish II**

**Length/Credits: Semester/2.5 Credits**

**Prerequisite: None**

Advanced Spanish II builds upon skills developed in previous Spanish courses, extending students' ability to understand and express themselves in Spanish and increasing their vocabulary. Typically, students learn how to engage in discourse



for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. This course will allow students to focus uniquely on the history and literature of Spanish-speaking people to deepen their understanding of the target culture.

Furthermore, emphasis is on all four-language skills development simultaneously: listening, speaking, reading, and writing. Written and oral communicative skills include a variety of topics and thematic units: family life, community, physical environment, meal taking, health and welfare, education, earning a living, leisure, public and private services, shopping, travel and current events.

### **AP Spanish Language & Culture**

**Credits: 5**

**Prerequisite: Spanish I-A, Spanish I-B, Spanish II, Spanish for Heritage Speakers, or Advanced Spanish II**

AP Spanish Language and Culture course has been designed to provide advanced high school students with a rich and rigorous opportunity to study the language and culture of the Spanish-speaking world that is approximately equivalent to an upper-intermediate college or university Spanish course, as per College Board's suggested curriculum. The course engages students in an exploration of culture in both contemporary and historical contexts. It also develops students' awareness and appreciation of products, both tangible (e.g., tools, books) and intangible (e.g., laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions that underlie both practices and products). Students have the opportunities to demonstrate their proficiency in each of the three modes in the Intermediate to Pre-Advanced range as described in the ACTFL Performance Guidelines for K–12 Learners. The course is completely in Spanish and takes a holistic approach to language proficiency and recognizes the complex interrelatedness of comprehension and comprehensibility, vocabulary usage, language control, communication strategies, and cultural awareness.

## MATHEMATICS

### **Conceptual Pre-Algebra**

**Credits: 5 Credits**

**Prerequisite: Terranova Assessment Performance**

Pre-Algebra courses increase students' foundational math skills and prepare them for Algebra I by covering a variety of topics, such as properties of rational numbers (i.e., number theory), ratio, proportion, estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving first-degree equations and inequalities.

### **Conceptual Algebra I**

**Credits: 5 Credits**

**Prerequisite: Terranova Assessment Performance**

This course offers students a conceptual understanding of the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations. Emphasis is on conceptual understanding of algebraic concepts and problem solving in context.

### **Algebra 1**

**Credits: 5-10 Credits**

**Prerequisite: Terranova Assessment Performance**

Algebra I includes the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations.

Algebra 1 is a course that will focus on the study of Relationships Between Quantities and Reasoning with Equations, Linear Relationships, Expressions and Equations, Quadratic Functions and Modeling, and Functions and Descriptive Statistics. In this Algebra 1 course, effective communication using the language of mathematics is essential. Correct use of mathematical definitions, notation, terminology, syntax and logic should be required throughout the course. Real world applications are presented within the course content and a function's approach is emphasized.

## **Honors Algebra 1**

**Credits: 5 Credits**

**Prerequisite: Terranova Assessment Performance & Honors Criteria**

Honors Algebra I includes the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations. This honors course is designed to provide students with an in-depth level of instruction at an accelerated pace, and to extend the instruction by including reasoning, application, and modeling problems.

Honors Algebra is designed for students in an accelerated program and will focus on the study of Linear Equations and Functions, Quadratics Equations and Functions, and an introduction to Exponential Functions. This course extends and deepens the topics of the regular course. In this Honors Algebra 1 course, effective communication using the language of mathematics is essential. Correct use of mathematical definitions, notation, terminology, syntax and logic should be required throughout the course. Real world applications are presented within the course content and a function's approach is emphasized.

## **Conceptual Geometry**

**Credits: 5 Credits**

**Prerequisite: Conceptual Algebra 1**

Conceptual Geometry courses emphasize a practical approach to the study of geometry and deemphasize an abstract, formal approach. Topics typically include properties of and work with plane and solid figures; inductive methods of reasoning and use of logic; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.

## **Geometry**

**Credits: 5 Credits**

**Prerequisite: Algebra 1**

This Geometry course, emphasizing an abstract, formal approach to the study of geometry, includes topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles. By the end of this course, students will have enough knowledge to move on to an Algebra II class and be successful.

## **Honors Geometry**

**Credits: 5 Credits**

**Prerequisite: Honors Algebra 1 or Algebra 1**

This Honors Geometry course, emphasizing an abstract, formal approach to the study of geometry, includes topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles. This honors course is designed to provide students with an in-depth level of instruction at an accelerated pace, and to extend the instruction by including reasoning, application, and modeling problems.

Honors Geometry is designed to introduce students to the fundamental concepts of Geometry, but with high performance expectations. Honors Geometry includes all the subject content of the regular geometry course but more emphasis is given to algebra, logic, third dimension, transformational geometry and technology to prepare students for other courses in the enriched high school mathematics sequence. To appreciate the power of logic as a tool for understanding the world around you, the concept of proof is a substantial focus of the course. Because development of precise mathematical language is stressed, reading and problem solving are emphasized throughout.

## **Algebra 2**

**Credits: 5-10 Credits**

**Prerequisite: Geometry**

Algebra 2 course topics typically include field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations;

solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; properties of higher degree equations; and operations with rational and irrational exponents.

This Algebra 2 course is designed to build upon the previous algebraic and geometric topics covered. It should reinforce previous important topics such as solving linear equations, graphing linear functions (using slope intercept form, intercepts, and tables), and simplifying expressions. Emphasis should be placed on representing elementary functions in numerous ways such as graphically, algebraically, numerically, and verbally. These elementary functions should include linear, quadratic, higher order polynomial, exponential, logarithmic, and rational functions. Problem solving involving all types of elementary functions will be the main focus of this course. This course will also include an extension of the number system into the complex field (e.g....imaginary unit and complex numbers), solving linear systems, use of matrices to solve real world situations, probability involving counting principles, and summarization and comparison of data sets. By the end of this course, students will have enough knowledge to move on to a Pre-Calculus class and be successful.

## **Honors Algebra 2**

**Credits: 5-10 Credits**

**Prerequisite: Honors Geometry or Geometry**

Algebra 2 course topics typically include field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; properties of higher degree equations; and operations with rational and irrational exponents. This honors course is designed to provide students with an in-depth level of instruction at an accelerated pace, and to extend the instruction by including reasoning, application, and modeling problems.

This Honors Algebra 2 course is designed to build upon the previous algebraic and geometric topics covered. It should reinforce previous important topics such as solving linear equations, graphing linear functions (using slope intercept form, intercepts, and tables), and simplifying expressions. Emphasis should be placed on representing elementary functions in numerous ways such as graphically, algebraically, numerically, and verbally. These elementary functions should include linear, quadratic, higher order polynomial, exponential, logarithmic, and rational functions. Problem solving involving all types of elementary functions will be the main focus of this course. This course will also include an extension of the number system into the complex field (e.g....imaginary unit and complex numbers), solving linear systems, use of matrices to solve real world situations, probability involving counting principles, and summarization and comparison of data sets. By the end of this course, students will have enough knowledge to move on to a Pre-Calculus class and be successful.

## **Pre-Calculus/Honors Pre-Calculus**

**Credits: 5 Credits**

**Prerequisite: Algebra 2 or Honors Algebra 2**

Pre-Calculus combines the study of Trigonometry, Elementary Functions, Analytic Geometry, and Math Analysis topics as preparation for calculus. Topics typically include the study of complex numbers; polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their relations, inverses and graphs; trigonometric identities and equations; solutions of right and oblique triangles; vectors; the polar coordinate system; conic sections; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity.

Pre-Calculus is the fourth in a series of courses that are designed to not only enable our strongest students in the study of mathematics to undertake a course in Calculus upon the completion of the series but also to prepare them in pursuing mathematics education in college. The topics selected are part of this specific preparation while working within the Common Core Curriculum Standards. Pre-Calculus typically includes a review of algebra, as well as an introduction to exponential logarithmic and trigonometric functions. \* Honors Pre-Calculus will offer a more in-depth study of the Pre-Calculus topics.

The scope of work transcends normal work in Trigonometry. Particular emphasis is placed on the trigonometric functions, graphs and inverse trigonometric functions, trigonometric identities and equations, polar coordinates and complex numbers, sequences and series, the nature of graphs, limit theorems, and parametric equations. The approach to teaching this subject matter incorporates the use of technology (graphing calculators, computers and when appropriate), attention to

real-life applications, cooperative learning, alternative assessment strategies and traditional deductive and inductive reasoning. Students enrolled in this course should have a command of the fundamentals of Algebra and experienced in handling selected advanced Algebra topics.

### **Trigonometry**

**Credits: 5 Credits**

**Prerequisite: Algebra I and Geometry**

This course combines trigonometry and advanced algebra topics and is intended for students who have attained Algebra I and Geometry objectives. Topics include right trigonometric and circular functions, inverses, and graphs; trigonometric identities and equations; operations with rational expressions; factoring of rational expressions; graphing rational and exponential functions; properties of higher degree equations; solving and graphing higher degree equations.

### **Introductory College Mathematics**

**Credits: 5 Credits**

**Prerequisite: Placement test**

This course covers topics including special products, factoring, and other operations on polynomials, rational and radical expressions, integral and rational exponents, and scientific notation. In addition, analytic and graphical methods of solving linear equations, linear systems, literal equations, and elementary polynomial equations are covered. Students are also introduced to the analytic geometry of functions, including lines, circles, and parabolas. Diverse applications are emphasized throughout the course.

### **Introduction to College Algebra**

**Credits: 5 Credits**

**Prerequisite: Algebra 2**

This course is designed to take students from concrete arithmetic ideas to the more abstract algebraic forms of these ideas. Throughout the course, the emphasis is on showing students the practical use of concepts and developing understanding by translating English phrases and sentences into algebraic expressions. Topics include simplifying arithmetic and algebraic expressions, signed numbers, fractions, decimals, percents, estimations, geometric applications, linear equations, graphing, exponents, systems of linear equations, quadratic equations, and applications. Students who receive a "C" or better on the Essex County College (ECC) midterm and final exams will fulfill the ECC core proficiency requirements for mathematics.

### **Calculus**

**Credits: 5 Credits**

**Prerequisite: Pre-Calculus**

Calculus includes the study of derivatives, differentiation, integration, the definite and indefinite integral, and applications of calculus. Typically, students have previously attained knowledge of pre-calculus topics (some combination of trigonometry, elementary functions, analytic geometry, and math analysis). Topics include elementary functions, properties of functions and their graphs, limits and continuity, differential calculus, and integral calculus.

### **Probability & Statistics**

**Credits: 5 credits**

**Prerequisite: Algebra 2**

Probability and Statistics Probability and Statistics courses introduce the study of likely events and the analysis, interpretation, and presentation of quantitative data. Course topics generally include basic probability and statistics: discrete probability theory, odds and probabilities, probability trees, populations and samples, frequency tables, measures of central tendency, and presentation of data (including graphs). Course topics may also include normal distribution and measures of variability.

### **AP Calculus AB**

**Credits: 5 Credits**

**Prerequisite: Pre-Calculus**

Following the College Board's suggested curriculum designed to parallel college-level calculus courses, AP Calculus AB provides students with an intuitive understanding of the concepts of calculus and experience with its methods and applications. This course introduces calculus and includes the following topics: elementary functions; properties of functions and their graphs; limits and continuity; differential calculus (including definition of the derivative, derivative formulas, theorems about derivatives, geometric applications, optimization problems, and rate-of-change problems); and integral calculus (including antiderivatives and the definite integral).

This course should prepare students to take the Advanced Placement Calculus AB exam. By the end of this course, students will have enough knowledge to move on to a College-Level Calculus course and be successful.

### **AP Statistics**

**Credits: 5 Credits**

**Prerequisite: Pre-Calculus**

Following the College Board's suggested curriculum designed to parallel college-level statistics courses, AP Statistics courses introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, sampling and experimentation, anticipating patterns, and statistical inference.

## VISUAL & PERFORMING ARTS

### **Visual & Performing Arts: Music**

**Length/Credits: Semester/5.0**

**Credits Prerequisite: None**

ECST Performing Arts Music program is a course designed to provide 12<sup>th</sup> grade students with a more in-depth study of the music. This course identifies core content skills to be acquired based and moves students along the competency-based continuum of skills through multilevel performance-based projects which are introduced to the class on a continual basis, enabling the teacher to meet the individual needs of each student. This course introduces students to the production of performing arts through music. All students will receive training in music fundamentals, music appreciation and music literacy skills to broaden their appreciation and understanding of music as an art form. Students will be creating, performing, and responding to multiple forms of music education. Students develop familiarity with music theory, the basics of piano keyboarding and voice training, as well as the creative process of basic writing and composing. Students will learn to create digital music and record their performances using Mac Book Pro technologies.

### **Visual & Performing Arts: Theatre**

**Length/Credits: Semester/5.0 Credits**

**Prerequisite: None**

ECST Performing Arts Theatre program is a course designed to provide 12<sup>th</sup> grade students with a more in-depth study of theatre. This course identifies core content skills to be acquired based and moves students along the competency-based continuum of skills through multilevel performance-based projects which are introduced to the class on a continual basis, enabling the teacher to meet the individual needs of each student. This course introduces students to the production of performing arts through theatre. All students will receive training in theatre fundamentals, theatre appreciation and theatrical literacy skills to broaden their appreciation and understanding of theatre as an art form. Students will be creating, performing, and responding to multiple forms of theatre education. Students develop familiarity with theatre through public speaking, poetry, and monologue and scene selections. Students will also be introduced to the creative process through original script and monologue creations. Students will learn to use their bodies and voices as creative instruments to communicate a range of emotions. Students will use technology to view relevant theatrical performances and create scripts.

### **Visual & Performing Arts: Dance**

**Length/Credits: Semester/5.0 Credits**

**Prerequisite: None**

ECST Schools Performing Arts Dance program is a course designed to provide 12<sup>th</sup> grade students with a more in-depth study of the dance. This course identifies core content skills to be acquired based and moves students along the competency-based continuum of skills through multilevel performance-based projects which are introduced to the class on a continual basis, enabling the teacher to meet the individual needs of each student. This course introduces student's

content including modern dance techniques, introducing Horton, Graham and Limon philosophies. Ballet vocabulary will also enhance the student's knowledge while exploring movement as a creative art form. Through their experiences, students will develop kinesthetic awareness, proper body alignment, physical strength, flexibility, endurance, and general care of the dance instrument. Dance history, introduction to human anatomy and ballroom dancing will also be explored. Improvisational skills and basic principles of dance composition will be introduced. Students will combine the use of technique, improvisation and choreographic principles to explore the choreographic process.

### **Visual & Performing Arts: Visual Arts**

**Length/Credits: Semester/5.0 Credits**

**Prerequisite: None**

Visual Arts introduces students to many forms of art and help them form an aesthetic framework through which they can judge and critique art of various ages and cultures. This course also explores the place and significance of art in our society. Through this course, students learn design elements and principles in the purposeful arrangement of images and text to communicate a message. They focus on creating art products such as advertisements, product designs, and identity symbols.

### **Visual & Performing Arts: Dramatics**

**Length/Credits: Semester/5.0 Credits**

**Prerequisite: None**

This course is intended to help develop students' experience and skill in one or more aspects of theatrical production. This course is introductory in nature, providing an overview of the features of drama such as acting, set design, stage management, and so on. However, the course also focuses on improving technique and expanding students' exposure to different types of theatrical techniques and traditions.

## SCIENCE

### **Conceptual Physics**

**Credits: 5 Credits**

**Prerequisite: None**

Conceptual Physics course introduces students to the use of chemicals, characteristic properties of materials, and simple mechanics to better describe the world and nonliving matter. The course emphasizes precise measurements and descriptive analysis of experimental results. Topics covered may include energy and motion, electivity, magnetism, heat, the structure of matter, and how matter reacts to materials and forces.

Conceptual Physics is a laboratory-based science course that will allow students to actively explore and discover the physical world through hands-on activities. Emphasis is placed on developing predictive and inferential skills by utilizing scientific logic and scientific analytical methodology. Through justification practice and validity analysis, students will engage in discussions pertaining to current issues. As a science with deep roots in mathematics, this course also highlights the ability to solve real problems using real numbers and real situations. Creative problem solving in combination with accurate computational skills will prepare our students for 21st Century jobs, in particular within the STEM fields. This course will uncover four major topics; Mechanics, Energy, Electricity & Magnetism, and Vibrations & Light. As a foundational science, physics gives students advanced content knowledge of the physical principles that govern our Universe and answers some of the most timeless questions mankind has dared to ask.

### **Physics**

**Credits: 5 Credits**

**Prerequisite: None**

Physics courses involve the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, and magnetic and electric phenomena.

Physics is a laboratory-based science course that will allow students to actively explore and discover the physical world through hands-on activities. Emphasis is placed on developing predictive and inferential skills by utilizing scientific logic and scientific analytical methodology. Through justification practice and validity analysis, students will engage in

discussions pertaining to current issues. As a science with deep roots in mathematics, this course also highlights the ability to solve real problems using real numbers and real situations. Creative problem solving in combination with accurate computational skills will prepare our students for 21st Century jobs, in particular within the STEM fields. This course will uncover four major topics; Mechanics, Energy, Electricity & Magnetism, and Vibrations & Light. As a foundational science, physics gives students advanced content knowledge of the physical principles that govern our Universe and answers some of the most timeless questions mankind has dared to ask.

## **Biology**

**Credits: 5 Credits**

**Prerequisite: Environmental Science or Physics**

Biology courses are designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy. Biology is a second-year course that emphasizes Organization and Development, Matter and Energy Transformation, Interdependence, Heredity and Reproduction, and Evolution and Diversity. The course will provide cross-disciplinary concepts in from all fields including Math, English, and Technology. Learning will occur through laboratory experiments, active participation, inquiry-based lessons, and hands-on activities. The Biology course objective is to provide each student with the knowledge that will serve them for their lifetime and aid each child in whichever profession they choose.

## **Honors Biology**

**Credits: 5 Credits**

**Prerequisite: Honors Criteria**

Biology courses are designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy. This honors course is designed to provide students with an in-depth level of instruction at an accelerated pace, and to extend the instruction by including application problems. Honors Biology is designed to introduce students to the fundamental concepts of modern biology, with high performance expectations. The material presented in the honors course may be offered at an accelerated pace and/or will go in greater depth than the standard course, with the honors student having access to greater learning opportunities and being expected to do more reading and independent written work.

## **Conceptual Chemistry**

**Credits: 5 Credits**

**Prerequisite: Biology Conceptual**

Chemistry course is a practical, non-quantitative chemistry course designed for students who desire an understanding of chemical concepts and application. Chemistry courses involve studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied.

Conceptual Chemistry is a laboratory-based science course that will allow students to actively participate through hands-on activities. Emphasis is placed on developing inferential skills, utilizing the scientific method to solve problems, and the discovery of various phenomena in science. As a central science, chemistry provides the link between fundamental physical principles and the biological world we live in.

## **Chemistry**

**Credits: 5 Credits**

**Prerequisite: Biology**

Chemistry courses involve studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied. Chemistry is a laboratory-based science course that will allow students to actively participate through hands-on activities. Emphasis is placed on developing inferential skills, utilizing the scientific method to solve problems, and the discovery of various phenomena in science. As a central science, chemistry provides the link between fundamental physical principles and the biological world we live in. Core topics uncovered in this course include: General Principles (Introduction to Science; Atoms and

Elements), Thermochemistry (Matter and Energy), Electrochemistry (Chemical Bonding; Chemical Reactions), Reaction Chemistry (Chemical Reactions), Stoichiometry (The Mole). At the end of the course, students will be able to perform the following skills with precision: Problem-solving and Questioning (General Principles; The Mole), Analysis (Atoms and Elements; Matter and Energy), Prediction (Chemical Bonding; Chemical Reactions).

### **Honors Chemistry**

**Credits: 5 Credits**

#### **Prerequisite: Honors Criteria**

Chemistry courses involve studying the composition, properties, and the reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structures. Chemical formulas and equations and nuclear reactions are also studied. This honors course is designed to provide students with an in-depth level of instruction at an accelerated pace, and to extend the instruction by including application problems. The Honors Chemistry students will have access to greater learning opportunities and be expected to do more reading and independent written work.

### **AP Environmental Science**

**Credits: 5 Credits**

#### **Prerequisite: Honors Criteria**

AP Environmental Science courses are designed by the College Board to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, identify and analyze environmental problems (both natural and human made), evaluate the relative risks associated with the problems, and examine alternative solutions for resolving and/or preventing them. Topics covered include science as a process, ecological processes and energy conversions, earth as an interconnected system, the impact of humans on natural systems, cultural and societal contexts of environmental problems, and the development of practices that will ensure sustainable systems.

### **AP Biology**

**Credits: 5 Credits**

#### **Prerequisite: Honors Criteria**

Adhering to the curricula recommended by the College Board and designed to parallel college level introductory biology courses, AP Biology courses stress basic facts and their synthesis into major biological concepts and themes. These courses cover three general areas: molecules and cells (including biological chemistry and energy transformation); genetics and evolution; and organisms and populations (i.e., taxonomy, plants, animals, and ecology). AP Biology courses include college-level laboratory experiments.

### **AP Chemistry**

**Credits: 5 Credits**

#### **Prerequisite: Honors Criteria**

Following the curricula recommended by the College Board, AP Chemistry courses usually follow high school chemistry and second-year algebra. Topics covered may include atomic theory and structure; chemical bonding; nuclear chemistry; states of matter; and reactions (stoichiometry, equilibrium, kinetics, and thermodynamics). AP Chemistry laboratories are equivalent to those of typical college courses.

### **Global Ecosystems and Biodiversity**

**Credits: 5 Credits**

#### **Prerequisite: None**

The Earth's diversity of ecosystems is reflected in the diversity of species living within them. This course focuses on the properties of major biomes and the adaptations of the biodiverse species living within these habitats. Causes, consequences, and potential solutions to ecological challenges (such as climate change, habitat loss, pollution, species extinction) will be significant topics throughout this class. An understanding of ecosystems and the importance of biodiversity is needed to address the environmental issues we are facing in the 21st century.

## *SOCIAL STUDIES*

### **United States History I**



**Credits: 5 Credits****Prerequisite: None**

The United States History I course examines the history of the United States from the period of European Exploration to the Civil War era and includes a historical overview of political, military, scientific, and social developments. Through the US History I course, students will examine various historical events that took place during the 18th century and their impact on the United States, as well as the World. They will consider multiple perspectives to gain a comprehensive view about the social, political, economic cause and effect relationships that led to shaping America. Hence, students will explore and investigate the development of life in Americas in order to understand events in the past and how they relate to the present and future. The course has been enriched with literacy, interdisciplinary connections, infusion of technology and 21st century learning skills to ensure that students will be afforded every resource and opportunity to become active, informed, critical thinkers. The United States History course has been designed to provide students with the skills, knowledge and attitudes they need to become “civic minded, globally aware, and socially responsible citizenry”.

**Advanced United States History I****Credits: 5 Credits****Prerequisite: None**

The Advanced United States History I examines the history of the United States from the British Colonization period to the Civil War and/or the Reconstruction era and includes a historical overview of political, military, scientific, and social developments. In this course, students will examine various historical events that took place during the 18th century and their impact on the US and World. As an honors course, students should expect a rigorous content level and pace. This course demands greater independence and responsibility as it concentrates on the development of higher-level skills such as reading and analyzing text and engaging in comprehensive discussions. Students in the Advanced US History course will consider multiple perspectives to gain a comprehensive view about the social, political, economic cause and effect relationships that led to shaping America. This analysis of these relationships will allow students to gain a greater understanding of past events and how they relate to modern issues in our global society. The Advanced US History I course places a strong emphasis on the incorporation of literacy skills to adequately prepare students for the demands of both college and the workplace. Concomitantly, there is a strong focus on making interdisciplinary connections, infusing technology and developing 21st century learning skills to ensure that students will be afforded every resource and opportunity to become active, informed, critical thinkers. The Advanced United States History course has been designed to provide students with the skills, knowledge and attitudes they need to become “civic minded, globally aware, and socially responsible citizens”.

**United States History II****Credits: 5 Credits****Prerequisite: United States History I**

The U.S. History II course examines the history of the United States from the Civil War and/or Reconstruction era through the present time and includes a historical review of political, military, scientific, and social developments. This course examines the growth and development of the United States from the post-Civil War era into the twenty-first century. Students will investigate the origins and development of various concepts, themes, and issues that Americans faced, such as political reforms and social movements. They will acquire a basic understanding and appreciation for American traditions and values that developed from global interactions. Using this knowledge of history as a context, students will be able to identify what it means to be an American both past and present. Analysis of the evolution of the nation's cultural, political, economic institutions and attitudes will be achieved by exploring the Harlem Renaissance, Amendments, Civil Rights movements, the arts and more. There will be emphasis on the social developments and interactions of the ever-growing population of American society.

**Global Studies****Credits: 5 Credits****Prerequisite: United States History I & II**

The Global Studies course provides students with the ability to understand their world and to build literacy skills in civics, economics, and geography. In this course, students will cover the following topics: The Emergence of the First Global Age (1350-1770); The Renaissance, Reformation, Scientific Revolution, and Enlightenment (1350-1700); The Age of Revolutions (1750-1914); The Era of the Great Wars (1900-1945); and The 20th Century Since 1945 (1945- Today). This course is enriched with literacy, interdisciplinary connections, technology applications, and 21st century learning

skills to ensure that all students are afforded every resource and opportunity possible to become active and informed critical thinkers.

### **Civics**

**Credits: 5 Credits**

**Prerequisite: None**

From Civic Action Project (CAP) curriculum, students will learn about government, civics, and policy. More specifically, students will examine the general structure and functions of American systems of government, the roles and responsibilities of citizens to participate in the political process, and the relationship of the individual to the law and legal system.

### **Economics**

**Credits: 5 Credits**

**Prerequisite: None**

The Economics course provides students with an overview of economics with primary emphasis on the principles of microeconomics and the U.S. economic system. These courses may also cover topics such as principles of macroeconomics, international economics, and comparative economics. Economic principles may be presented in formal theoretical contexts, applied contexts, or both.

### **Advanced Placement World History (APWORLD)**

**Credits: 5 Credits**

**Prerequisite: United States History I and II**

The Advanced Placement World History course is structured around the investigation of five course themes and 19 key concepts in six different chronological periods, from approximately 8000 B.C.E to the present. The AP World History course develops students' capacity and ability to think and reason in a deeper, more systematic way, better preparing them for subsequent college courses. The following course themes present areas of historical inquiry that students will investigate throughout the year: (1) Interaction Between Humans and the Environment, (2) Development and Interaction of Cultures, (3) State-Building, Expansion, and Conflict, (4) Creation, Expansion, and Interaction of Economic Systems, and (5) Development and Transformation of Social Structures. This course is enriched with literacy, interdisciplinary connections, technology applications, and 21st century learning skills to ensure that students are provided with the opportunity to be an active, informed and contributing member of their global community.

### **Advanced Placement United States History (APUSH)**

**Credits: 5 Credits**

**Prerequisite: United States History I & World History\***

Advanced Placement United States History is a chronological survey course covering the time period from Colonial America (1607) to contemporary America (1990). The Essex County Vocational Technical School's Advance Placement program in United States History is designed to provide students with the analytical skills and factual knowledge to deal critically with the problems and issues in American history. The course prepares students for immediate and advanced college courses by making demands on the student equivalent to those made by full year introductory college courses.

Students will learn to assess historical materials—their relevance to a given interpretive problem, their reliability, and their importance. Students will also be prepared to take the AP U.S. History exam offered by the College Board and earn college credit or placement at the college or university of their choice.

### **Advanced Placement United States Government and Politics (APUSGP)**

**Credits: 5 Credits**

**Prerequisite: US History I and US History II**

AP United States Government and Politics introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments. By the end of this course, students will be prepared to take the AP U.S. Government and Politics exam offered by the College Board and earn college credit or placement at the college or university of their choice.

## **TEALC**

### **HST 101 World Civilization I**

**Credits: 3 College Credits through Essex County Community College**

**Prerequisites: Grade of “C” or better in ENG 096 and RDG 096 or placement; it is recommended that HST 101 be taken before HST 102**

World Civilization I is a college level course offered through Essex County Community College. This course examines aspects of the major social, political, economic, religious, and intellectual developments of world civilization from earliest times to the seventh century. Emphasis is placed on the ideas and institutions that have shaped the culture of world civilization. As a result of this course, students will understand historical events and movements in World, Western, non-Western, or American societies and assess their subsequent significance.

## COMPREHENSIVE HEALTH & PHYSICAL EDUCATION

### **Health I**

**Length/Credits: Year/2.5 Credits**

**Prerequisite: None**

Character Education is embedded in the following units of study in the 9th grade health curriculum. Students will explore the following topics for one semester. Describe how individuals in healthy relationships share thoughts and feelings, have fun together, develop mutual respect, share responsibilities and goals, and provide emotional security for one another. Effective prevention and intervention strategies address domestic or dating violence (e.g., rules of consent). Informed and educated decisions on when and if to become sexually active and how it affects one’s physical, social, and emotional health. Responsible actions regarding sexual behavior impact the health of oneself and others. Discussion of topics regarding sexuality requires a safe, supportive environment where sensitivity and respect is shown toward all. Relate the use of alcohol and other drugs to decision-making and risk for sexual assault, pregnancy, and STI’s. Early detection strategies and regular physical exams assist in the prevention and treatment of illness or disease. Pregnancy, childbirth, and parenthood are significant events that will cause numerous changes in one’s life and the lives of others.

### **Health II**

**Length/Credits: Year/2.5 Credits**

**Prerequisite: None**

Character Education will be embedded in the 10th grade curriculum in all of the units describe below. Students will learn to identify unsafe situations and choosing appropriate ways to reduce or eliminate risk that contributes to the safety of self and others. Describe the causes of intentional and unintentional injuries in adolescents and young adults in driving accidents. Strategies will be implemented to prevent accidents from occurring. Summarize the components of the traffic safety system and explain how people contribute to making the system effective. Analyze the causes and the consequences of noncompliance with the traffic safety system. Students will develop a rationale to persuade peers to comply with traffic and safety laws and avoid driving distracters. Students will understand the cause of conflicts and strategize ways to prevent conflicts from occurring. Negotiation and mediation are tools for resolving conflicts. It is important for teens to know the different types of violence and how to protect themselves. Students will identify the types of abuse: physical, mental, and emotional. Students will be able to describe the health care system including all the ways that people receive and pay for medical care. Both outdoor and indoor air pollution can put people’s health at risk. Outdoor air pollution also contributes to the greenhouse effect and global warming. Students will devise strategies to become “green” at home, school, community and globally.

### **Health III**

**Length/Credits: Year/2.5 Credits**

**Prerequisite: None**

The Essex County Vocational Technical Schools Health III, a course based on New Jersey’s Core Curriculum Standards for Comprehensive Health Education, is designed to provide 11th grade students the fundamentals to assist in adopting and maintaining a healthy lifestyle. This course will offer students the ability to establish behaviors that enhance and promote good health and decrease or avoid health risks. From a variety of instructional approaches, students engage in the development of practical health information; determine personal values that sustain healthy behaviors and lifestyles; acquire the necessary skills to practice, enhance, and maintain healthy behaviors and lifestyles.

This course includes the administration of essential topics in a sequential, comprehensive, designed approach health education curriculum. Essential topics include personal health and wellness, decision making and goal setting, social and emotional health, tobacco- and alcohol-free lifestyle, legal and illegal drugs and drug-free lifestyle, diseases and health conditions, and proper nutrition. This course provides students with the knowledge and skills of health and wellness core concepts, personal growth and development, interpersonal communication, decision making and goal setting, examining influences, accessing information, health enhancing behaviors and lifestyles, and health and wellness promoting skills.

#### **Health IV**

**Length/Credits: Year/2.5 Credits**

**Prerequisite: None**

Character Education continues to be embedded throughout the units of the 12th grade curriculum. Students will explore the following topics for one semester: 1. Deciding to act and the care provided may help save a life in an emergency. Ensuring your safety in an emergency is your top priority. 2. Protection from disease transmission and knowing how to properly move a person. 3. Basic legal information before giving care. 4. Discussion of basic anatomical terms and understanding the body's structures and how they work will allow more accurate communication with EMS personnel about a person's condition. 5. Recognizing an emergency and following the emergency action steps: CHECK – CALL – CARE can help make a difference and even save a life in an emergency. 6. Deciding to act can have a significant impact on the person's chance of survival. Life-Threatening Emergencies including: discussions and skill assessments: checking an unconscious and conscious person, CPR for an adult, child and infant, using an AED for an adult, child, and infant, conscious and unconscious choking for an adult, child and infant. 7. Discussions on cardiac and breathing emergencies, external and internal bleeding, shock. 8. Discussions and skill assessments for injuries including: soft tissue injuries, musculoskeletal injuries, and splinting and injuries to the head, neck, spine, chest, abdomen and pelvis. 9. Medical emergencies including: sudden illnesses, poisoning, bites and stings, substance misuse and abuse, heat related illnesses and cold related emergencies. 10. Special situations including water-related emergencies, pediatric, older adult and special situations.

#### **Physical Education I-IV**

**Length/Credits: 1.25cr/Cycle**

**Prerequisite: Course must be taken with one of the health courses**

The physical education program is designed for students to develop the skills and attitudes necessary to achieve and maintain lifelong health and fitness. Students will be encouraged to gain an active appreciation of the positive role of physical fitness in overall health and well-being, and to develop socially useful participation skills. The program seeks to provide for the equal participation of all students through a variety of experiences leading to the development of positive self-concept, creativity, and enthusiasm for participation. The physical education program is divided in five main activities: foundations of wellness, health related fitness, individual physical activities, movement skills performance, and team physical activities.