2017-2018

High School Course Descriptions Catalog

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DISCRIMINATION POLICY

It is the policy of the Hamilton County Board of Education not to discriminate on the basis of sex, race, national origin, creed, religion, age, marital status, or disability in its educational programs, activities, or employment policies.

A complaint may be filed by anyone who has a grievance regarding discrimination as set forth in one of the following statutes:

(1) The Rehabilitation Act of 1972, Section 504;

(2) Title VI of the Civil Rights Act of 1964; or

(3) Title IX of the Educational Amendments of 1972.

Marsha Drake is the Title VI and Title IX Coordinator for Hamilton County Schools. Mrs. Drake may be reached by calling (423) 209-8654.

Graduation Requirements

English	4 credits
Mathematics	4 credits (Algebra I, Geometry, Algebra II and 1 advanced math class.) ***Students are required to take a math class every year***
Science*	3 credits (Biology, Chemistry **or** Physics and 1 lab science) 1 credit Additional HCDE Science Elective
Social Studies**	3 credits (World History & Geography, U.S. History & Geography, ½ credit US Government **and** ½ credit Economics)
Wellness	1 credit (2 credits ROTC may be used to satisfy this requirement)
Physical Education	1/2 credit
Personal Finance	1/2 credit
Foreign Language	2 credits (same language)
Fine Arts	1 credit
Senior Project **or** Service Learning (Capstone)	Successful Completion Required
Focused Electives	3 credits
Total:	**23 credits (plus Capstone)**

Focused Electives: **Students will select courses from ONE of the areas listed below**. *Courses used to satisfy the Focused Electives requirements must be above courses taken to satisfy core requirements*.

- **Mathematics/Science:** Any combination of three (3) courses in mathematics and science
- **Career/Technical:** Three (3) courses in a concentration (program of study)
- **Humanities/Fine Arts:** Any combination of three (3) courses in literature, history, foreign language, fine arts and journalism
- **AP:** Any combination of three (3) Advanced Placement elective credits

***All East Hamilton students will be required to take a science course during their senior year**. Space permitting in schedules, students may elect to double up on science courses as underclassmen. This decision should be made in consultation with the student's science teacher(s) and counselor. Students who satisfy the minimum requirement for credits in science

by doubling up as underclassmen will be required to take a science class during their senior year, thus earning a total of five credits in science.

****Students will be required to take a social studies course each year of HS.** Students must meet minimum graduation requirements, but will take an additional social studies "elective" course in either grade 9 or 10.

GRADE CLASSIFICATION

Freshman	0-4 credits
Sophomore	5-10 credits
Junior	11-15 credits
Senior	16 + credits

Graduation requirements (number of credits) for transfer students will be evaluated on an individual basis.

Grade classification for Exceptional Education (non-gifted) students is determined by an IEP.

Only those students within graduation range at the end of the current school year may be promoted to senior status mid-year.

SCHEDULING POLICIES

Registration for next year's courses begins in late February. East Hamilton School sets the number of sections and builds its Master Schedule based entirely on student requests for courses. The spring registration determines the courses the school will offer the following fall.

Students take the equivalent of 7 credits per year, and will be asked to plan a full schedule when completing pre-registration paperwork. Courses requiring teacher approval will be indicated on course selection sheets. If a parent wishes to override a recommendation made by the school pertaining to the student's schedule, the student must remain in the class the parent selects until its completion. All such requests must be made in writing prior to the end of the current school year.

Once the Master Schedule has been created, students are obligated to take the courses they requested. In other words, students will not be allowed to change their minds in August or September or January. ***Students, therefore, should select courses in a thoughtful, careful manner to match their abilities and educational needs.***

1. **The only changes allowed in August:** Valid schedule corrections only to update course selections based on summer school credits or to correct a scheduling error made by the

school take place the first 10 school days of each semester. The beginnings of the semesters cannot be times to revise schedules as a result of changing intentions or changing minds. The Master Schedule has already been created.

2. **No dropping in level:** With agreement of counselor, teacher and administrators, change in level may be permitted within the first 10 days of the semester. Requests for change in level must be made in writing, requiring both student and parent signature. ***Requests of this nature will not be considered after the 10th day of classes***.

3. **Course may not be dropped during the semester:** Students may not change or drop a course during the semester to avoid failing or to get out of work different from their expectations, even if the course is an elective the student had to take to have a full schedule or to substitute for a full class. Students with low grades should seek help from various resources available to improve and be successful.

VALEDICTORIAN & SALUTATORIAN DETERMINATION

VALEDICTORIAN- must have the highest numerical average, rounded to the nearest hundredth. To be eligible for valedictorian, the student must take the highest level of course that is offered in each of the four core areas (English, mathematics, science and social studies) during each of the four years of high school. The valedictorian must be enrolled in East Hamilton School at the beginning of the junior year.

SALUTATORIAN - must have the second highest numerical average, rounded to the nearest hundredth. To be eligible for salutatorian, the student must take the highest level of course that is offered in each of the four core areas (English, mathematics, science and social studies) during each of the four years of high school. The salutatorian must be enrolled in East Hamilton School from which he/she graduates at the beginning of the junior year.

Following is a possible course of study for a student pursuing valedictorian/salutatorian ranking:

Grade 9	Grade 10	Grade 11	Grade 12
Honors Eng 9	Honors Eng 10	AP English Language	AP English Literature
Honors Geometry	Honors Alg 2	Honors Pre-Calculus	AP Calculus AB
Honors PWC	Honors Chemistry	Honors Biology	AP Chemistry/AP Physics
AP Human Geography	AP World History	AP US History	Honors Government & Honors Economics

This is an example only; student's course of study may change based upon yearly course offerings.

Students may repeat courses to improve their grade point average, provided that this is not for Valedictorian/Salutatorian determination. For determining Valedictorian and Salutatorian, only ninth grade students may repeat a course to improve their grade point average. The highest

grade earned in a course that has been repeated will be used in determining a student's grade point average and class rank for all purposes other than determining valedictorian and salutatorian. There is no time limit on repeating courses for the single purpose of improving GPA.

OFFICE AIDE POLICY

East Hamilton School recognizes that one of the ways in which our students may contribute to their community is by serving as an office aide during the school day. This is a senior-year privilege that may be granted to students who have a GPA of 3.5 or higher by the end of their junior year. Students must also have satisfactory discipline and attendance records; a minimum number of credits may be required to ensure that serving as an office aide does not jeopardize on-time graduation. Written parental permission will be required, and administration has the right of final approval for all office aide applications.

HOW TO USE THIS BOOKLET

The course descriptions shown on the following pages represent possible course offerings for the upcoming school year. This information is provided as a guide for planning purposes. Courses may not be offered each year and will be scheduled based on staff resources as well as student need.

ENGLISH/LANGUAGE ARTS

English 9 **1 Credit**
Grade: 9
Prerequisite: None
Students will develop skills in various forms of writing, critical thinking, and analysis of literature, as well as a sound knowledge of English grammar and punctuation. Students are also familiarized with the availability and use of resource material.

Honors English 9 **1 Credit**
Grade: 9
Prerequisite: None
This course includes classical literature, plays, poetry, mythology, short stories and novels. Several genres of writing are covered, including an independent study project and culminating in the development of a research paper. Grammar is reinforced in the development of writing skills. Students will purchase additional novels. High levels of reading comprehension and critical thinking skills are essential.

English 10 **1 Credit**
Grade: 10
Prerequisite: English 9
This course builds upon the foundation of skills in grammar, vocabulary, composition, and an appreciation of literature with attention to remediation as needed. The writing of various types of paragraphs and short themes is emphasized. A research paper is required. Students are required to purchase novels specified by the teacher.

Honors English 10 **1 Credit**
Grade: 10
Prerequisite: English 9
In this course, focus is placed on both literature and composition. Types of literature include novels, Greek and Shakespearean drama, essays of nonfiction, poetry, and short stories. A research paper and several smaller papers are required.

English 11 **1 Credit**
Grade: 11
Prerequisite: English 10
This course is a study of American literary works. Students study language, character, plots, themes, and critical approaches. The study of literature also includes short stories, poetry, and drama. Emphasis is placed on comprehension and interpretation as demonstrated in writing, oral presentations, and projects. A research paper is required.

Honors English 11 **1 Credit**
Grade: 11
Prerequisite: English 10
The course explores the literature, nonfiction, and culture of America. Reading comprehension and literary analysis are emphasized and assessed through essays, projects, and presentations. Strengthening critical thinking and refining voice and style in arguments are goals. Students may be asked to purchase novels in order to annotate. High levels of reading comprehension and critical thinking skills are essential, as well as a developed work ethic.

AP English Language & Composition
Grade: 11 **1 Credit**
Prerequisite: English 10
Additional Fee: Materials, AP exam fee
SUMMER READING IS REQUIRED.
Students in this introductory college-level course read and analyze a challenging range of prose with a concentration on nonfiction. Students are expected to read analytically, creating an awareness of rhetoric and argument. They then take this critical awareness to become skilled readers of prose and skilled writers for a variety of purposes. As this is a college-level course, performance expectations are appropriately high, and the workload is challenging. Students are responsible for purchasing a college-level text and a vocabulary workbook. Students will need their own copies of texts in order to actively annotate/highlight the selections. In addition, students are expected to take the AP exam in May. ***Students who are eligible for fee waivers with the school system may be eligible for a fee reduction on the AP exam through the AP Program.***

English 12 **1 Credit**
Grade: 12
Prerequisite: English 11
This course emphasizes reading analytically and writing persuasively as students prepare for college or work. In addition, development of vocabulary and refinement of grammatical skills are emphasized through writing instruction. Fiction and non-fiction, both current and historical, are studied. Essays of argumentation, as well as a documented research paper/presentation, are required.

AP English Literature & Composition **1 Credit**
Grade: 12
Prerequisites: English 11
Additional Fee: Materials, AP exam fee
SUMMER READING IS REQUIRED.
Designed for the motivated student seeking college-level work, the Advanced Placement (AP) course is part of a nationally-recognized program that provides an opportunity for students to earn college credit by taking the AP exam in May. The instruction is focused on developing critical thinking skills through interpreting fiction, primarily novels, plays, and poems, and writing argumentative essays. Students are expected to read analytically and to annotate extensively; therefore, there are some literary selections that they will need to purchase. A commitment of time is necessary to develop critical reading strategies and the needed writing skills. Students are expected to take the AP Exam in May. ***Students who are eligible for fee waivers with the school system may be eligible for a fee reduction on the AP exam through the AP Program***

EARLY COLLEGE (Dual Enrollment) see pg. 22 for program details

Composition I (ENGL 1010) **Fall Semester**
Grade: 12 **1 Credit**
Eligibility: ACT English 18, ACT Reading 19, EHS approval
The first of two senior-year Early College English courses offered at East Hamilton School includes a focus on exposition and argument; process and development using various rhetorical patterns. ***Students must pass ENGL 1010 & ENGL 1020 to satisfy the 4th credit graduation requirement in English.***

Composition II (ENGL 1020) **Spring Semester**
Grade: 12 **1 Credit**
Eligibility: Composition I (ENGL 1010), final college grade of "C" or higher, EHS approval
The second of two senior-year Early College English courses offered at East Hamilton School includes a focus on reading and responding to short fiction, poetry, drama and/or non-fiction prose. ***Students must pass ENGL 1010 & ENGL 1020 to satisfy the 4th credit graduation requirement in English.***

Photojournalism/Yearbook **1 Credit**
Grades: 11, 12
Prerequisite: Signed approval of instructor
This is a course designed to cover all the phases of yearbook journalism, giving students competency in yearbook planning, layout design, copy preparation, sales management, advertising, copy editing, and uses of style and graphics. This course **is not** a substitute for English.

Creative Writing **1 Credit**
Grades: 11, 12
Prerequisite: English 10
Creative Writing focuses on three genres: short stories, poetry, and drama. Students review the fundamentals of writing fiction, study published models of poetry and prose, and learn techniques of crafting and evaluating their own writing. Creative Writing is designed to develop a student's voice, style, and creative expression. Students are expected to share their writing with an audience and to craft pieces for publication. A writer's notebook, pen and flash drive are needed.

Speech **1 Semester**
Grades: 9, 10, 11, 12 **1/2 Credit**
Speech is a hands-on communication class, covering all aspects of the speech curriculum from strategies used for public speaking and debate to mass media. The class offers a "how to" approach that helps to build a student's self-confidence while strengthening a student's ability to communicate in a variety of situations. This class offers novice speakers a chance to deliver a variety of speeches (informative, process, persuasive, etc.) as well as to learn how to become better, more discerning listeners. Students will also work in groups to analyze a variety of famous speeches. At the completion of this class, students should be able to communicate more effectively and to develop confidence in their ability to speak and listen.

Newspaper **1 Credit**
Grades: 10, 11, 12
Prerequisite: Signed approval of instructor
Students in this journalism class will be responsible for production of East Hamilton's online newspaper, *The Eye of the Storm*. This course is perfect for students who want to act as voices for their school and champions for free speech. When you become a member of this newspaper staff, you will write, interview, edit, photograph, and design. We cover all beats, from sports and news, to features and editorials, so there should be something for every interest. Expectations are that you will write two to three stories a week with multiple sources. You must be fair and be able to see issues from different perspectives. You do need to have afterschool transportation and a flexible afterschool schedule to cover Hurricane sports, prom, homecoming, plays, etc.

MATHEMATICS

Algebra I **1 Credit**
Grades: 9
This course will provide the student with an understanding of the language, notation, and application of algebraic skills. Topics include linear and quadratic functions, exponents and radicals, polynomials, rational expressions, probability and statistics. **State exams required.**

Geometry **1 Credit**
Grade: 9, 10
Prerequisite: Algebra I
Students will learn basic formulas for perimeter and area, volume and surface area of three dimensional figures. Other topics in this course include an introduction to angles and triangles, right angle geometry, parallel and perpendicular lines, simple transformations, similarities, congruencies, quadrilaterals, circles, cones, cylinders, spheres, coordinate geometry, inductive and deductive reasoning, right triangle trigonometry, and extensions in area and volume. **State exams required.**

Honors Geometry **1 Credit**
Grade: 9
Prerequisites: "B" average in Algebra I
This course explores the basic formulas for perimeter and area, volume and surface area of 3-dimensional figures, introduction to angles and triangles, right triangle geometry, parallel and perpendicular lines, simple transformations, similarities, congruencies, quadrilaterals, circles, right triangle trigonometry, and extensions in area and volume. This is a rigorous class, with papers and projects not required in standard Geometry. **State exams required.**

Algebra II **1 Credit**
Grades: 10, 11
Prerequisite: Geometry
Algebra II begins the study of extended Algebra, and it continues in linear functions, exponential and logarithmic functions, quadratics, radicals and complex numbers, higher order polynomial functions, continuous and discontinuous

functions, functions relations and inverses, periodic functions. **State exams required.**

Honors Algebra II **1 Credit**
Grades: 10, 11
Prerequisite: Honors Geometry or Geometry with final average of "A"
Honors Algebra II begins the study of extended Algebra, and it continues in linear functions, exponential and logarithmic functions, quadratics, radicals and complex numbers, higher order polynomial functions, continuous and discontinuous functions, functions relations and inverses, periodic functions. There are additional projects, both individual and group work. **State exams required.**

Applied Mathematical Concepts **1 Credit**
Grades: 11, 12
Prerequisites: Honors Algebra II or Algebra 2
This course focuses on applications and modeling of various mathematical concepts used to solve real world problems. The course includes financial mathematics, linear programming, logic and Boolean Algebra, problem solving techniques for real world problems, logic solving techniques, as well as statistical concepts that include counting and combinatoric reasoning, normal probability distributions and confidence levels.

Honors Pre-Calculus **1 Credit**
Grades: 11, 12
Prerequisites: Honors Algebra II or AAT
This course will emphasize the interrelationship of various fields of mathematics. Topics with a focus on engineering include: functions and graphs, polynomials and rational functions, trigonometry, triangle applications, vectors, exponents and logarithms functions, systems of equations, matrices, complex numbers, sequences and limits. This course is in preparation for Honors/AP Calculus.

Honors Statistics **1 Semester**
Grades: 11, 12 **1 Credit**
Prerequisites: Honors Algebra II or Algebra 2
TI-83 or TI-84 required
Honors Statistics is an advanced mathematics course that deals with the collection, tabulation and systematic classification of quantitative data, especially as a basis for inference and induction. The course will focus on meaningful real-world problems using advanced means of statistical analyses, interpretations and predictions. Students will also use appropriate technologies that will allow them to perform complicated statistical techniques with relative ease.

AP Calculus AB **1 Credit**
Grade: 12
Prerequisites: Honors Pre-Calculus
Calculus AB is primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. The courses emphasize a multi-representational approach to calculus, with concepts, results and problems being expressed graphically, numerically, analytically and verbally. The connections among these representations also are important. In broad view, AP Calculus AB examines in depth uses of derivatives and integrals as it introduces the basic methodologies for calculating such quantities. Students are expected to take the AP Exam in May. Scores on the AP Exam may be used to obtain credit at many colleges and universities around the country. ***Students who are eligible for fee waivers with the school system may be eligible for a fee reduction on the AP exam through the AP Program.***

SAILS Math **1 Credit**
Grade: 12
Prerequisites: Algebra II and ACT Math score below 19
This course is taught in partnership with Chattanooga State through the SAILS program. SAILS (Seamless Alignment and Integrated Learning Support) introduces the college developmental math curriculum in the high school senior year. The Learning Support Math allows students to get a head start on their college career. Students who successfully complete the program are ready to take a college math course for credit. The SAILS model will allow students to master the math competencies needed to be successful in college math while at the same time earning their high school Bridge Math credit. This program is free.

EARLY COLLEGE (Dual Enrollment) see pg. 22 for program details

College Algebra **1 Semester**
Grade: 12 **1 Credit**
Eligibility: ACT Reading 19, ACT Math, 22 and EHS approval
A study of functions and graphs with an emphasis on modeling and regression analysis. Functions included are linear, quadratic, cubic, exponential, and logarithmic.

Statistics **1 Semester**
Grade: 12 **1 Credit**
Eligibility: ACT Reading 19, ACT Math 19, and EHS approval
Sampling, data organization, variability and central tendency, probability, distributions and confidence intervals, hypothesis testing, inference and regression

AP Computer Science **1 Credit**
Grades: 11, 12
Students entering the course are not required to meet the following prerequisites, but it is strongly encouraged that they complete Honors Geometry or successful demonstration of computational and analytical skills through Programming & Logic II. The course includes several individual programming projects and enrichment activities. Through the class students will learn to code fluently in Java; understand the concept of an algorithm; implement algorithms in Java using conditional and iterative control structures and recursion; discuss ethical and social issues related to the use of computers. This course meets the fourth math credit requirement. Students will prepare for the AP exam in computer science. ***Students who are eligible for fee waivers with the school system may be eligible for a fee reduction on the AP exam through the AP Program.***

SCIENCE

Environmental Science **1 Credit**
Grade: 9
Prerequisite: None
This course is designed to provide students with the opportunity to acquire the knowledge, values, commitment and skills necessary to protect and improve the environment. Environmental science incorporates a variety of scientific disciplines including, biology, geology, and ecology but also incorporates various aspects of politics and economy. Students will identify different environmental issues and analyze both their impacts on the environment and the underlying causes from different viewpoints. Students will have an opportunity to develop their own philosophy on how humans can live sustainably and what each person can do as an individual to make a difference. Topics include: Ecology, human population, energy resources, and climate change.

Physical World Concepts **1 Credit**
Grade: 10, 11
Prerequisite: Algebra 1
This course is an algebra-based conceptual physics course for ninth grade students. Content covered will include Mechanics, Thermodynamics, Waves and Sound, Light and Optics, Electricity and Magnetism, and Atomic and Nuclear Physics. Physical World Concepts offers a basic introduction to physics concepts with an emphasis on developing a qualitative conceptual understanding of general principles and models in addition to the nature of scientific inquiry. Coursework concentrates on conceptual development and provides an enriching laboratory experience that prepares students for future, more mathematically rigorous science courses. While this course does not count as a higher level physics credit, it does count as a laboratory science credit.

Honors Physical World Concepts **1 Credit**
Grades: 9
Prerequisite: Algebra I
Co-requisite: Honors Geometry
This course is offered to those students with a high interest in science. The honors course covers the same content as the standard course. Topics will be covered in greater depth and students will be required to complete additional rigorous assignments using problem solving and inquiry.

Course: Chemistry **1 Credit**
Grade: 10, 11, 12
Prerequisite: Algebra I
Chemistry is a course that explores the properties of substances and the changes that substances undergo. Students will investigate Atomic Structure, Matter and Energy, Interactions of Matter, Properties of Solutions and Acids and Bases. Content is covered using a variety of strategies, for example, inquiry, hands on projects and laboratory experiments. Upon completion of Chemistry I, students should be able to relate chemistry to real world issues. Students should also demonstrate appropriate safety in the lab and classroom settings.

Honors Chemistry I **1 Credit**
Grade: 10, 11, 12
Prerequisites: Algebra I and Physical World Concepts
Co-requisite: Algebra II
This course is designed for students with an expressed interest in science and a strong math background. Topics covered will include those covered in the standard class but in greater depth with an emphasis on preparing students for an Advanced Placement Chemistry or a Chemistry II class. Content is covered using a variety of strategies, for example, inquiry, hands on projects and laboratory experiments. Additional projects and laboratory experience increase the rigor of this class.

Honors Chemistry II **1 Credit**
Grades: 11, 12
Prerequisite: Honors Chemistry I or Chemistry I with at least a "B" average
Chemistry II is a continuation of Chemistry I and considered an Honors level course. We will review the topics from Chemistry I but in greater depth. The students will also investigate the structure and states of matter, gas laws, reactions, thermochemistry, electrochemistry and solution chemistry. This course may be used as the basis for an AP Chemistry class.

AP Chemistry **1 Credit**
Grades: 11, 12
Prerequisite: "B" average or better in Honors Chemistry I or Chemistry I, Algebra II and Teacher approval
AP Chemistry is a rigorous and challenging course that covers the content typical of college and university general chemistry courses. Students learn the usefulness and relevance of chemistry in both their intended areas of study and in the everyday world. The course provides instruction in each of the following content areas: Structure of Matter States of Matter, Reactions, Descriptive Chemistry, and Laboratory work. Emphasis is on chemical calculations and the mathematical formulation of principles. The course includes a required, hands-on laboratory component comparable to college-level chemistry laboratories. Each student will complete a lab notebook or portfolio of lab reports. Students are expected to take the AP Exam in May. ***Students who are eligible for fee waivers with the school system may be eligible for a fee reduction on the AP exam through the AP Program.***

Biology **1 Credit**
Grades: 11, 12
Prerequisites: Env Sci/H PWC & Chemistry
Biology is a course which explores the living world around us. This course covers topics such as the basic Processes of Life, Ecological Principles, Energy Transfer, Genetics and Biotechnology, Biodiversity and Biological Change. This course includes lab work involving the use of microscopes and electrophoresis.

Honors Biology **1 Credit**
Grade: 10, 11, 12
Prerequisites: H PWC
This class is recommended for students with a high interest in science. The topics covered are the same as in the standard course but will be covered in greater depth. The course also involves additional laboratory work, more rigorous assignment load, a scientific novel and test questions involving higher order thinking.

Honors Physics **1 Credit**
Grades: 11, 12
Prerequisites: Pre-Calculus
A senior level physics course that deals with the relationship between matter, energy and their interactions. Topics taught will include the areas of Mechanics, Thermodynamics, Waves and Sound, Light and Optics, Electricity and Magnetism and Atomic and Nuclear Physics. Students will carry out investigations using inquiry based learning, hands-on laboratory investigations, observation of demonstrations, individual studies, and group activities. Physics is intended to build on the foundation attained in Conceptual Physics using a more rigorous application of algebra, trigonometry, and some basic calculus. Students will develop a deeper understanding of the main principles of physics, preparing them for the college level physics courses required in **health-related majors, life science, and other science majors**.

AP Physics C: Mechanics **Spring**
Grades: 11, 12 **1 Credit**
Prerequisites: Honors Physics and Teacher approval
Co-requisites: AP Calculus AB
AP Physics C: Mechanics is the first semester of the college sequence that serves as the foundation in physics for students majoring in the physical sciences or engineering. Methods of calculus are used in formulating physical principles and in applying them to physical problems. Strong emphasis is placed on solving a variety of challenging problems, some requiring calculus, as well as continuing to develop a deep understanding of physics concepts. This course utilizes guided inquiry and student centered learning to foster the development of critical thinking skills and uses introductory differential and integral calculus throughout the course. Content areas include: kinematics; Newton's laws of motion; work, energy, and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. A major component of this course is laboratory inquiry, involving observation, analysis and strong problem-solving skills. Students are expected to take the AP Exam in May. ***Students who are eligible for fee waivers with the school system may be eligible for a fee reduction on the AP exam through the AP Program.***

Scientific Research **1 Credit**
Grades: 11, 12
Prerequisites: Two Lab Sciences and Algebra I
This course offers high school students a challenging scientific course using critical thinking and investigation that is characteristic of college-level courses to conduct independent research. Our students will generate a research question, develop a hypothesis, create an experiment to collect and analyze data, collaborate with content-area experts, and present their research with each topic.

Anatomy & Physiology **1 Credit**
Grade: 12
Prerequisites: Biology and Chemistry I
Anatomy and Physiology is the study of the body's structures and respective functions at the molecular/biochemical, cellular, tissue, organ, systemic, and organism levels. Topics covered in the curriculum include Anatomical Orientation, Protection, Support, and Movement, Integration and Regulation, Transportation, Absorption and Excretion and Reproduction, Growth, and Development.

Ecology **1 Credit**
Grade: 12
Prerequisites: Biology and Chemistry I
Ecology is a *laboratory science course* that enables students to develop an understanding of the relationships between natural and man-made environment and the environmental problems the world faces. Students explore ecological concepts through an inquiry approach. There are three general sets of basic skills field biologists need to master which are addressed in this course:

- *field and taxonomic skills*, such as identifying birds or plants, mapping, taking measurements, laying out transects and preparing specimens;
- *analytical skills*, such as comparing vegetation at two different locations and drawing a conclusion about which is more diverse;
- *communication skills*, such as preparing proposals and reports that effectively and clearly make the points you wish to make.

The campus ecosystem is utilized as a working laboratory where these skills are taught and practiced.
Due to the nature of ecology and field studies, students can expect to spend about 80% of the course outdoors. Just as with field biologist and naturalists, weather is not a hindrance to accomplishing the tasks at hand and students are expected to dress appropriately for the weather.

SOCIAL STUDIES

Advanced Placement Human Geography **1 Credit**
Grade: 9
Prerequisite: None
SUMMER ASSIGNMENT REQUIRED
The AP Human Geography course is equivalent to an introductory college-level course in human geography. The course introduces students to the study of patterns and processes that have shaped human understanding, use, and alteration of the Earth. Topics studied include geography, population and migration, culture, political organization, agriculture and land use, urbanization, and economic development. The course is intended to be an introduction to Advanced Placement (AP) and is intended for freshmen who are considering AP courses in the future.

World History and Geography **1 Credit**
Grades: 9, 10
Prerequisite: None
This course is designed to build a foundation for understanding the beginnings of human history across different cultures and civilizations in Western and non-Western societies. The connections among archeology, anthropology, geography and history will form the introduction of the course. Emphasis will be placed on the interaction among world cultures, the linking of the past and present, and the importance of the relationship of geography and history. Ideas and concepts which bridge the space between the ancient and the modern world will be stressed including, but not limited to, the development of language, government, art, philosophy and religion.

Advanced Placement World History **1 Credit**
Grades: 10
Prerequisite: None
SUMMER ASSIGNMENT REQUIRED
This is a college-level course designed to teach students how to study world history as an historian would. The AP World History textbook, supplementary readings and tests are all written at the college level. The course content offers a truly global approach to world history: major cultural regions are given roughly equal weight. Students are required to do a great deal of independent learning outside of class; class time is dedicated to developing the analytical and writing skills necessary to succeed on the AP World History exam which is administered every year in May. Students are encouraged to take this exam in the hopes that they can obtain college credit. ***Students who are eligible for fee waivers with the school system may be eligible for a fee reduction on the AP exam through the AP Program.***

United States History & Geography **1 Credit**
Grade: 11
Prerequisite: None
In this course students study the history of the United States since Reconstruction to the present. We will focus on the political, economic, and social events and issues related to a variety of events from industrialization and urbanization to reform movements such as the Civil Rights movement. Students are expected to use critical thinking skills, analyze historical documents, and complete projects detailing important topics in U.S. History. **State End of Course Examination required.**

Advanced Placement United States History
Grades: 11, 12 **1 Credit**
Prerequisite: None
SUMMER ASSIGNMENT REQUIRED
Advanced Placement United States History is designed to offer a college-level experience and training for the AP Exam given each May. Analyzing documents, mastering factual information, and writing critical essays are stressed throughout the course. Emphasis will be placed on key themes mandated by the College Board such as American diversity, American identity, culture, demographic changes, economic transformations, environment, globalization, politics and citizenship, reform, religion, slavery and its legacy, and war and diplomacy. Students are required to do a great deal of independent learning outside of class; class time is dedicated to developing the analytical and writing skills necessary to succeed on the AP US History exam. Students are encouraged to take this exam in the hopes that they can obtain college credit. ***Students who are eligible for fee waivers with the school system may be eligible for a fee reduction on the AP exam through the AP Program.***

United States Government **1 Semester**
Grade: 12 **1/2 Credit**
Prerequisite: US History
This is a nine week course which is paired with Economics, and it is required for graduation. Students will study the origins, structure, function, and powers of government at the federal, state, and local levels. Time will be spent analyzing primary and secondary sources which will help students understand the rights and responsibilities of living in a democratic society.

Economics **1 Semester**
Grade: 12 **1/2 Credit**
Prerequisite: US History
This is a nine week course which is paired with US Government, and it is required for graduation. Students will study how people, businesses, and governments choose to use their resources. Time will be spent comparing and contrasting various economic systems, with an emphasis placed on the American free-enterprise system.

Honors US Government **1 Semester**
Grade: 12 **1/2 Credit**
Prerequisite: US History
Honors United States Government focuses on the origins and functions of government as well as the intellectual influences in the development of representative democracy in America. Through a detailed study of the United States Constitution, students become knowledgeable of the structure and workings of government at all levels, national, state and local. You will also learn the role of politics in creating public policies and the interrelationship between people, institutions and policies in the U.S. political system. The course will cover these topics through analysis of six principles: federalism, separation of powers, checks and balances, judicial review, limited government, and popular sovereignty. Students will draw on their knowledge of US history, world history, and Geography as background information in their study of politics.

Honors Economics **1 Semester**
Grade: 12 **1/2 Credit**
Prerequisite: US History
Honors Economics focuses on the workings and institutions of modern day economic systems and economic theory, rather than consumer economics. The course will devote equal amounts of time to Microeconomic and Macroeconomic principles. Upon completion of the course the student will have an advanced understanding of the functions of Supply and Demand in a market economy, basic market structures, monetary and banking systems, federal and state budgets, taxation, GDP, unemployment, and Global Trade. Students will apply the knowledge and understanding acquired in their

study to modern economic problems and issues in our world today. The study of economics will include the use and interpretation of maps, charts, graphs, tables, and other expressions of statistical data.

Contemporary Issues-Street Law **1 Semester**
Grades: 10, 11, 12 **1/2 Credit**
Prerequisite: None
Street Law is a semester long social studies elective that serves as an introductory course to law and legal systems in the United States. The class will focus on constitutional law, civil and criminal law, court procedures, and civil rights. We will use case studies, individual research, group discussion/debate, guest speakers, and mock trials to reach our learning goals. Students may also have the opportunity to go out into the legal community in Chattanooga to see the law in action. At the end of the course, students will have a working knowledge of how the law impacts their daily lives. Students interested in competing on East Hamilton's Mock Trial Team are encouraged to take this class.

Comparative Religions **1 Credit**
Grades: 10, 11, 12
Prerequisite: World History
Comparative Religions of the World is a social studies elective class in which students will examine the beginnings, core beliefs and practices, and spread of major world religions, including early/traditional religions, Judaism, Christianity, Islam, Hinduism, Buddhism, Confucianism, Daoism, Shinto, and syncretic religions. Students will analyze how and why religions stayed the same or changed over time; compare and contrast characteristics and influences of religions; and, analyze the significance of the various religions to historical and modern world events.

Bible History – Old Testament **1 Credit**
Grades: 9, 10, 11, 12
Prerequisite: None
Students will study the 39 books that make up the Old Testament in the Bible. From the Creation, The Exodus out of Egypt, the conquest of the Land of Canaan, the divided nation, to captivity, and return back to Jerusalem, there is primary focus upon the Covenant God established and carried out with His people, the Israelites. Emphasis is given to important geographical locations, the establishment of nations, issues the Biblical authors addressed and the people who were instrumental in leadership.

Bible History – New Testament **1 Credit**
Grades: 9, 10, 11, 12
Prerequisite: None
Students will study the time from the Intertestamental Period through the book of the Revelation. The New Testament Survey Class is a survey of the 27 books that make up the New Testament in the Bible. There is a focus on the Life of Christ which is recorded in the gospels and also the book of Acts which tracts the beginning of and establishment of the organized church. The class then studies the spread and development of the church throughout the then known world which is recorded in the Pauline and General Epistles. Emphasis is given to important geographical locations, issues the Biblical authors addressed and the people who were instrumental in leadership. Finally, the class studies future events which are recorded in the book of The Revelation.

African American History **1 Credit**
Grades: 10, 11, 12
African American History is a social studies elective course that provides students with a deeper understanding of the significant role African Americans have played in shaping the development of America and the world. Students will explore the role of slavery in shaping African American society, the consequences of emancipation and industrialization, the impact of African American migration, the development of African nationalism, the Civil Rights movement, and the development of contemporary African American culture. Through the analysis of primary and secondary sources, this course asks students to consider how cross-cultural interactions and patterns of social, political, and economic change have impacted the United States and the global society.

Facing History and Ourselves **1 Credit**
Grades: 10, 11, 12
Prerequisite: World History
Facing History and Ourselves is a social studies elective course that draws on content and methodology from *Facing History and Ourselves*, an international education foundation. In the course, students will investigate the Holocaust, the events leading up to it, and the actions of groups and individuals involved in the Holocaust. Through discussion, character exploration, primary source material, and group exercises, students will see the tragic events from every perspective. Facing History and Ourselves engages students in a thorough examination of the Holocaust in order to promote the development of a more humane informed citizenry.

Personal Finance **1 Semester**
Grades: 11, 12 **1/2 Credit**
Personal Finance is a course designed to help students understand the impact of individual choices on occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will design personal and household budgets; simulate use of checking and saving accounts; demonstrate knowledge of finance, debt, and credit management; and evaluate and understand insurance and taxes. This course will provide a foundational understanding for making informed personal financial decisions. **This course is a graduation requirement.**

FOREIGN LANGUAGE

French I **1 Credit**
Grades: 8, 9, 10, 11
Prerequisite: None
Students will practice the fundamental language skills of listening, speaking, reading and writing in French. Learning vocabulary, grammar, syntax and pronunciation is the key to a successful language experience. Communication skills will be

developed for interpersonal, interpretive and presentational modes in present and future tense. The cultures of French speaking areas will also be introduced. Emphasis in this area will include the study of cultural practices and perspectives.

French II **1 Credit**
Grades 9, 10, 11, 12
Prerequisite: French I
Students will continue to develop their skills in listening, speaking, reading and writing in French. Correct usage of vocabulary, grammar, syntax and pronunciation will be reinforced and developed. Communication skills will be further developed for interpersonal, interpretive and presentational modes in present, past and future tenses. The cultures of French speaking areas will also be discussed, including the study of cultural practices, products and perspectives.

Honors French III/IV **1 Credit**
Grades: 10, 11, 12
Prerequisite: French II
This course gives students an opportunity to read, speak and write French effectively while developing an appreciation for important aspects of francophone cultures. Social customs, cuisine, art, and music are discussed. Francophone literature is introduced. Emphasis is on communication, both oral and written. Students write journal entries, letters, summaries, and read short stories, plus participate in speaking and listening tasks. Credit can be received for French III or French IV.

Spanish I **1 Credit**
Grades: 8, 9, 10, 11
Prerequisite: None
Students will acquire the fundamental elements of the interpretative (reading/listening) and production (speaking/writing) aspects of the Spanish language. The students' skills will be developed for competency within the present tense and future tense levels. The course will also introduce the geography and cultures of the Spanish-speaking countries.

Spanish II **1 Credit**
Grades: 9, 10, 11, 12
Prerequisite: Spanish I
Spanish II reviews and continues the study of Spanish I via the interpretative (reading/listening) and production (speaking/writing) aspects of the Spanish language methodologies for greater vocabulary acquisition and fluency. Vocabulary and fluency will continue to be expanded with emphasis on communication skills. Students will read, discuss, and write about many daily activities, travel, and certain aspects of history in the target language.

Honors Spanish III/IV **1 Credit**
Grades: 10, 11, 12
Prerequisite: Spanish II
Course work will include advanced grammatical study and introduction of literature from the target language culture. Proficiency will continue to be expanded primarily through conversational interaction focusing on high frequency vocabulary in the target language. Students will read, discuss and write about current and historical events in target language countries. Credits can be received for Spanish III or Spanish IV.

German I **1 Credit**
Grades: 8, 9, 10, 11
Prerequisite: None
Students will begin to develop proficiency in listening, speaking, reading, and writing in German. Emphasis is on language development. Discussion of German culture (including famous Germans) and history will be introduced in context with learning the language. Most of the class will be conducted in German, and students will be expected to be active participants. The language introduced and practiced will be meaningful to the students, as they will each have opportunities to draw upon personal experiences when speaking in class, working with a small group, or working individually on an essay or project.

German II **1 Credit**
Grades: 9, 10, 11, 12
Prerequisite: German I
Students will further develop proficiency in listening, speaking, reading, and writing in German. Emphasis is put on language development. Discussion of German and Austrian culture, history, and literature will be introduced in context with learning the language. All of the class will be conducted in German, and students will be expected to be active participants. The language introduced and practiced will be meaningful to the students, as they will each have opportunities to draw upon personal experiences when speaking in class, working with a small group, or working individually on an essay or project.

Honors German III/IV **1 Credit**
Grades: 10, 11, 12
Prerequisite: German II
Students continue to develop and refine proficiency in listening, speaking, reading, and writing in German. Emphasis is on a thorough tense study, grammatical structure, and language development. Discussion of German, Austrian, and Swiss culture, history, and literature will be extensively studied in context with learning the language. Intricacies and comparisons of German-speaking culture with English-speaking culture will be a major component of the course. All of the class will be conducted in German, and students will be expected to be active participants. The language introduced and practiced will be meaningful to the students, as they will each have opportunities to draw upon personal experiences when speaking in class, working with a small group, or working individually on an essay or project. Credits can be received for German III or German IV.

FINE ARTS

Visual Art I **1 Credit**
Grades: 9, 10, 11
Prerequisite: None
This art foundations course is an introductory studio course exploring visual language while focusing on the elements of art and the principles of design. It introduces studio practices in a

wide range of media, with the intention of developing the practical and critical thinking skills necessary for art production and comprehension. Students may expect a variety of concept-based projects, lectures, seminars, research and reflective writings and critiques. Art history will be incorporated into the curriculum through specific art processes and concepts. The greater strands of history will be the subject of team research and presentation.

Visual Art II **1 Credit**
Grades: 10, 11, 12
Prerequisites: Art I
Second-year art students will begin to develop and broaden their personal voice in artistic choices while enhancing aesthetic awareness, problem solving and critical thinking skills, with a more disciplined approach to technical skills. Major emphasis will be placed on observational skills in drawing and painting. Students will also apply inventive compositional solutions in other 2 and 3-d design projects. Research and reflective writing in Art History and on the students' own work will be required.

Visual Arts III/IV **1 Credit**
Grades: 11, 12
Prerequisites: Art II or Art III ("B"Average) and Teacher approval or portfolio review
Third and fourth year art students will work towards developing high quality work based on a theme or area of personal interest. The goal is to produce college entrance portfolio pieces, digital documentation and thoughtful reflective writing. Sketchbook and journal writings will be a major component of coursework along with the portfolio presentation and exhibition. Research in specific areas of art scholarship will be required. Studio experiences apart from the student's personal areas of interest will also be a part of the course.

Sculpture/3-D Design **1 Credit**
Grades: 11, 12
Prerequisites: Art II and Teacher Approval
This class is designed to allow the student to explore various means of artistic expression in a rich array of 3-D materials. Clay, wood, metal, foam, plaster and "junk" will be used to stimulate creative thinking while responding to historical pieces and contemporary trends. Fees are required as materials are expensive ($40 minimum).

AP Studio Art **1 Credit**
Grades: 11, 12
Prerequisites: Teacher approval
The AP Studio Art course is a college level program which aims to develop mastery in composition, technique and concept/content in the Visual Arts. Students will explore a wide range of concepts and approaches in order to develop their work. The work culminates in a portfolio of works demonstrating quality of work, breadth of experience, and a concentration of artistic vision. Since this is a college level class, students should be prepared to work rigorously in and outside of class. Students are expected to take the AP Exam in May, which consists of submitting a portfolio for review. Scores on the AP Exam may be used to obtain credit at many colleges and universities around the country. ***Students who are eligible for fee waivers with the school system may be eligible for a fee reduction on the AP exam through the AP Program.***

Color Guard **Fall Semester**
Grades: 9, 10, 11, 12 **1/2 Credit**
Prerequisite: Audition
This course introduces and refines the fundamentals of dance movements, flag exercises, and rifle/sabre spinning. Concentration is centered on a high level of performance. Color Guard is the visual element of the band and will participate in all functions of the band during the fall semester. Summer rehearsals, after school rehearsals, and performances are required.

Varsity Band **1 Credit**
Grades: 9, 10, 11, 12
Prerequisite: Signed approval of the Band Director
This course stresses the reading of music, playing in an ensemble, music theory, music history, and marching fundamentals. Concentration is centered on a high level of performance. After school rehearsals & performances required.

General Music: History of Rock & Roll
Grades: 10, 11, 12 **1 Credit**
Prerequisite: None
This course introduces the fundamentals of music listening and analysis, and traces the history of Rock music beginning with blues of the early 20th century. Styles to be covered include but are not limited to: 50's Rock and Roll, Surf Rock, Folk, Southern Rock, Soul, Funk, British Invasion Rock, Heavy Metal, and Art Rock.

Beginning Choir **1 Credit**
Grades: 9, 10
Prerequisite: None
Students sing music from various periods and genres. Basic sight-singing skills and beginning music theory are learned. This class is a prerequisite to concert choir. This is a performance-based class. No audition required.

Concert Choir **1 Credit**
Grades: 10, 11, 12
Prerequisites: Audition and signed approval of the Choral Director; Open to 9th grade with special permission
This course is for the advanced music student. Advanced sight-singing and music theory are learned. Students sing music from various periods and genres. This is a performance-based class. After school rehearsals and concerts are required. Open to SATB voices.

Piano Lab I **1 Credit**
Grades: 9, 10, 11
Prerequisite: None
This course is a beginning level piano class for students desiring to learn to play the piano. Piano Lab provides students with experience in performance of both solo and ensemble literature. Curriculum includes basic music reading, music theory, basic repertoire, major scales, and composition.

Piano Lab II **1 Credit**
Grades: 9, 10, 11, 12
Prerequisite: Instructor approval
This course is for intermediate/advanced level piano students. Students will learn to construct and play chords, play major and minor scales, and perform a repertoire of pieces requiring advanced technical demands and complexity.

Advanced Piano Lab (Piano III) **1 Credit**
Grades: 9, 10, 11, 12
Prerequisite: Audition Only
Piano students will work towards developing high quality work based on a theme or area of personal interest. Students in advanced piano will be self-study, with several prior years of private piano lessons. Students may be working toward their piano diploma with their private piano teachers. This class will be designed to compose, study advanced theory, and play in many different genres.

Intro to Film **1 Credit**
Grades: 11, 12
Prerequisite: None
The course focuses on teaching movies as visual narratives, but students analyze and study all of the language systems of film (e.g. photography, editing, sound, acting, story, writing, ideology, etc.). In studying these valuable tools that filmmakers use, students better understand how movies are constructed and appreciate the criteria necessary to make a film. The course is a film history course and a genre study course, for students study important film movements as well as the conventions of a genre. Film Study is not intended to be a course solely for aspiring filmmakers; however, a few creative independent and group projects will challenge students to make their own movies.
This course does not satisfy the 1.0 credit graduation requirement in Fine Arts.

Theater Arts I **1 Credit**
Grades: 9, 10, 11
Prerequisite: None
This course is designed to develop the student as a confident, creative communicator. An introduction to basic acting skills, improvisation, storytelling, scriptwriting, theater history, play reading, and stagecraft will be covered.

Theater Arts II **1 Credit**
Grades: 10, 11, 12
Prerequisites: Theatre Arts I and Teacher approval
This course will build upon the knowledge and skills of Theater Arts I. Special emphasis will be placed upon an in-depth study of improvisation for the theater and performance techniques for speech and theatre forensics competition.

Theater Arts III **1 Credit**
Grades: 11, 12
Prerequisite: Theater Arts II and Teacher approval
This course will focus on performance. Students will produce, direct and perform "completion type" one act and/or three and four act pieces. Students will enhance their knowledge and skill as they assume responsibility to perform, direct, and produce all aspects of theatrical production.

CAREER & TECHNICAL EDUCATION

The Career & Technical Education (CTE) department is dedicated to providing students the opportunity to participate in a rigorous and relevant career and technical education program that leads to academic achievement, post-secondary education, leadership, and successful employment in a global economy.

Students can choose classes from various programs of study including:

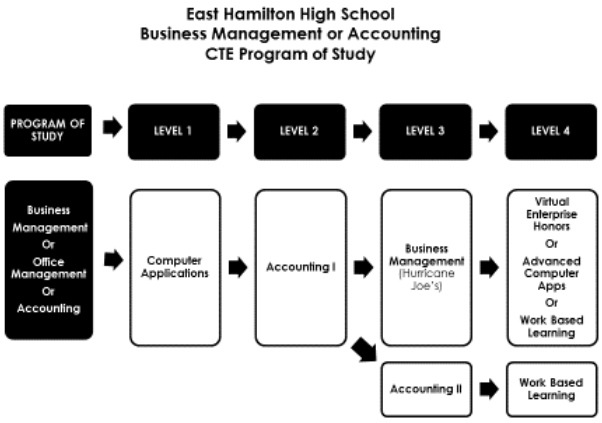
Business Management
Office Management
Accounting
Architecture & Engineering Design
Engineering (STEM)
Coding
Web Design
A/V Technologies

All CTE classes provide:

- Academic subject matter taught with relevance to the real world
- Articulation and pathways linking secondary and postsecondary education
- Leadership and employability skills, from career-related skills to workplace ethics
- Education for additional training and advanced degrees

CTE students will be able to apply their acquired skills and knowledge to make informed decisions involving education, careers, and a path toward lifelong learning.

Business and Administrative Management Pathways



The Business and Administration Management Cluster prepares learners for careers in planning, organizing, directing

and evaluating business functions essential to efficient and productive business operations. Career opportunities are available in every sector of the economy and require specific skills in organization, time management, customer service and communication. Not only are these skills important for career opportunities in all professions, they are also critical to collegiate success. After completing the Business and Administrative Program of Study, students will be prepared for postsecondary study and career advancement in Management, Entrepreneurship, Marketing, Finance, Accounting, and Business Administration.

The business management and administration services industry is projected to be one of the fastest growing through the year 2020. Nearly half of all jobs are in managerial and professional occupations, and nearly one-fourth of all workers are self-employed. The business management and administration services industry is one of the highest-paying industries.

Computer Applications **1 Credit**
Grades: 9, 10, 11, 12
Prerequisite: None
This course is designed to develop computer technology skills using a variety of computer software and hardware tools and features. Students will effectively use software to create a variety of word processing, spreadsheet, database, and desktop publishing documents as well as an integrated multimedia presentation. Students will create a portfolio incorporating a variety of personal and professional documents which highlight their skills. Future Business Leaders of America (FBLA) will be offered to provide students with opportunities for leadership development, personal growth, and school/community involvement. Articulation with Chattanooga State is possible allowing students to earn college credit upon successfully passing written and production tests.

Accounting I **1 Credit**
Grades: 9, 10, 11
Prerequisite: Computer Applications
The primary focus of Accounting I is for students to learn the rules and procedures of accounting for profit-motivated businesses. Students will be introduced to the language of business and basic accounting principles. Students will complete an accounting cycle for a service business organized as a sole proprietorship. The course will integrate computer applications and electronic accounting to complete business simulations and present information. This course is highly recommended for students interested in business careers after high school, students majoring in business at a post-secondary institution, students interested in starting their own business, and students who want to understand financial information for their own personal use. Future Business Leaders of America (FBLA), a co-curricular student organization, will provide students with opportunities for leadership development, personal growth, and school/community involvement.

Accounting II **1 Credit**
Grades: 10, 11, 12
Prerequisite: Accounting I
Accounting II is an advanced study of concepts, principles and techniques that build on the competencies acquired in Accounting I used in keeping the electronic and manual financial records of a sole proprietorship, a partnership and a corporation. Departmental, management, cost, and not-for-profit accounting systems are explored. This course will apply the theory and practices developed in Accounting I.

Business Management **1 Credit**
(Hurricane Joe's)
Grades: 10, 11, 12
Prerequisite: Computer Apps & Accounting I
Students in Business Management will develop a foundation in the many activities, problems, and decisions that are intrinsic to the management of a successful business, as well as an appreciation for the importance of these responsibilities. ***In addition, students will plan, organize, manage, and operate our for-profit business, Hurricane Joe's!*** Areas to be examined include business organization, ethical and legal responsibilities, communication, decision-making, human resources, professional development and required post-secondary education. By gaining an understanding of these areas, students will be better prepared to enhance the business decisions of tomorrow. Future Business Leaders of America (FBLA), a co-curricular student organization, will provide students with opportunities for leadership development, personal growth, and school/community involvement. This class is a pre-requisite for Virtual Enterprise, Honors.

Virtual Enterprise Honors **1 Credit**
Grades: 11, 12
Pre-requisite: Business Management and Application
With an emphasis on college readiness, Virtual Enterprise is an in-school, live, global business simulation that offers students a competitive edge through project-based, collaborative learning and the development of 21st-century skills in entrepreneurship, global business, problem solving, communication, personal finance and technology.

Drawing on the European tradition of apprenticeships, this multidimensional, experiential learning model, which is part of a global network of student-run businesses in over 40 countries, transforms high school students into independent-thinking business professionals and their classrooms into a limited liability corporation.

In addition to giving students a head start on college and careers, VE reinforces students' academic skills and achievement. Through developing and managing businesses, students gain expertise in problem-solving, decision-making, communication, collaboration, technology, and accessing, using and analyzing information—21st-century skills that are key to success in both college and careers.

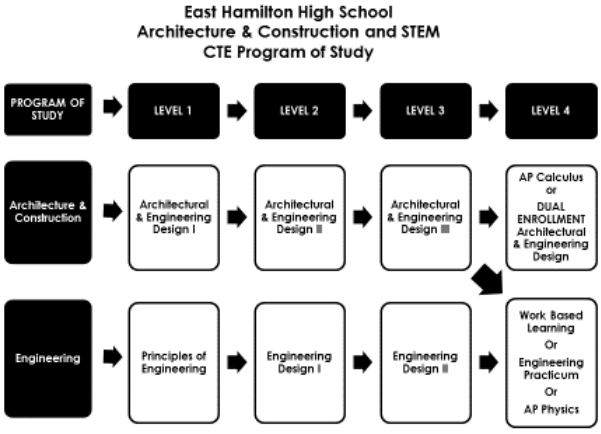
VE can be a fast paced class. It requires students to be self-disciplined, mature, be able to work alone or in teams with little supervision, and have an exemplary work ethic. The students compete both regionally (Pigeon Forge, Tennessee)

and internationally (New York, NY) with other Virtual Enterprise firms.

Students may earn up to two credits in VE Honors. Successful completion of this course will satisfy the ½ credit requirement for ***economics****.*

Work-Based Learning **1 Credit**
Grade: 12
Pre-requisite: CTE Concentrator or Instructor Approval
The Work Based Learning Program is a capstone course intended to provide students with the opportunity to apply the skills and knowledge learned in previous CTE courses out in the real world of work. WBL experiences may take the form of internships, cooperative education, service learning, and job shadowing. Students must maintain their placement or employment during the course and will be allowed to leave campus to go to their placements.

STEM-Engineering Pathway



A career in science, technology, engineering or mathematics is exciting, and ever-changing. Learners who pursue one of these career fields will be involved in planning, managing, and providing scientific research and professional and technical services including laboratory and testing services, and research and development services.

Given the critical nature of much of the work in this cluster, job possibilities abound even in times of economic downturn. More scientists, technologists and engineers will be needed to meet environmental regulations and to develop methods of cleaning up existing hazards.

Principles of Engineering **1 Credit**
Grades: 9, 10
Prerequisite: None
This is a foundation course in the STEM cluster for students interested in learning more about careers in engineering and technology. This course covers basic skills required for engineering and technology fields of study. Upon completion of this course, proficient students are able to identify and explain the steps in the engineering design process. They can evaluate an existing engineering design, use fundamental sketching and engineering drawing techniques and complete simple design projects.

Engineering Design I **1 Credit**
Grades: 10, 11
Prerequisite: Principle of Engineering
Engineering Design I is a fundamental course in the STEM cluster for students interested in developing their skills in preparation for careers in engineering and technology. The course covers essential knowledge, skills, and concepts required for post-secondary engineering and technology fields of study. Students successfully completing this course will be able to identify simple and complex machines; calculate various rations related to mechanisms, explain fundamental concepts related to energy; follow the steps in the engineering design process to complete a team project.

Engineering Design II **1 Credit**
Grades: 11, 12
Prerequisite: Engineering Design I
Engineering Design II is an applied course in the STEM career cluster for students interested in further developing their skills as future engineers. This course covers knowledge, skills, and concepts required for postsecondary engineering and technology fields of study. Upon completion of this course, proficient students are able to explain the differences between scientists and engineers, understand the importance of ethical practices in engineering and technology, identify components of control systems, describe differences between laws related to fluid power systems, explain why material and mechanical properties are important to design, create simple free body diagrams, use measurement devices employed in engineering, conduct basic engineering economic analysis, follow the steps in the engineering design process to complete a team project, and effectively communicate design solutions to others.

Engineering Practicum **1 Credit**
Grades: 12
Prerequisite: Engineering Design II and Instructor Approval
The practicum is a capstone course intended to provide students with the opportunity to apply the skills and knowledge learned in previous Engineering courses within a professional, working environment. In addition to developing an understanding of the professional and ethical issues encountered by engineers and technologists in the workplace, students learn to refine their skills in problem solving, research, communication, data analysis, teamwork, and project management.
Students may take AP Physics in place of this course to satisfy POS requirements.
Work-Based Learning **1 Credit**
Grade: 12
Pre-requisite: CTE Concentrator or Instructor Approval
The Work Based Learning Program is a capstone course intended to provide students with the opportunity to apply the skills and knowledge learned in previous CTE courses out in the real world of work. WBL experiences may take the form of internships, cooperative education, service learning, and job shadowing. Students must maintain their placement or

employment during the course and will be allowed to leave campus to go to their placements.

Architecture & Engineering Design

This Career Cluster prepares learners for careers in designing, planning, managing, building and maintaining the building environment. People employed in this cluster work on new structures, restorations, additions, alterations and repairs. Architecture and construction comprise one of the largest industries in the United States. Based on the latest statistics, this career cluster has 13.8 million jobs. In the next few years, many new jobs will be added and many employment opportunities will result from the need to replace experienced workers who leave jobs.

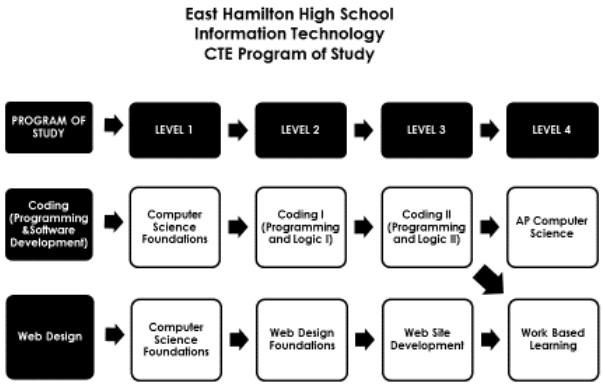
Architectural & Engineering Design I **1 Credit**
Grades: 9, 10
Prerequisite: None
Architectural & Engineering Design I is a foundational course in the Architecture & Construction cluster for students interested in a variety of engineering and design professions. Upon completion of this course, proficient students will be able to create technical drawings of increasing complexity, and utilize these skills to complete the design process and communicate project outcomes. Students will build foundational skills in freehand sketching, fundamental technical drawing, and related measurement and math. Standards in this course also include career exploration within the technical design industry, as well as an overview of the history and impact of architecture and engineering.

Architectural & Engineering Design II **1 Credit**
Grades: 10, 11
Prerequisite: Architectural & Engineering Design I
Architectural & Engineering Design II is the second course in the Architectural & Engineering Design program of study. Students in this course build their skills in developing and representing design ideas using technical drawing and modeling techniques, and apply the design process to solve design problems. Upon completion of this course, proficient students will be able to use computer-aided drafting (CAD) software to create multi-view, sectional view, auxiliary view, and three-dimensional drawings using industry standard dimensioning and notation. Students will connect drawings with actual physical layouts by building models based on drawings, creating drawings based on objects and other physical layouts, and using software to create basic three-dimensional models.

Architectural & Engineering Design III **1 Credit**
Grades: 11, 12
Prerequisite: Architectural & Engineering Design II
Architectural & Engineering Design III is the third course in the Architectural & Engineering Design program of study. In this advanced course, students will apply technical drawing and design skills developed in the previous courses to specific architectural and mechanical design projects and contexts. In the process, students will expand their problem-solving and critical-thinking skills by assessing the requirements of a project alongside the available resources in order to accomplish realistic planning. Upon completion of this course, proficient students will be able to employ methods of data collection and analysis to provide others with appropriate information for projects and to develop their own designs. Students will also be able to engage with industry-specific technology to create visual representations of project outcomes. In addition, students will continue compiling artifacts for inclusion in a portfolio, which they will carry with them throughout the full sequence of courses in this program of study.

Work-Based Learning **1 Credit**
Grade: 12
Pre-requisite: CTE Concentrator or Instructor Approval
The Work Based Learning Program is a capstone course intended to provide students with the opportunity to apply the skills and knowledge learned in previous CTE courses out in the real world of work. WBL experiences may take the form of internships, cooperative education, service learning, and job shadowing. Students must maintain their placement or employment during the course and will be allowed to leave campus to go to their placements.

Information Technology (Coding & Web Design)



Computer Science Foundations (CSF) **1 Credit**
Grades: 9, 10
Prerequisite: None
CSF is a course intended to provide students with exposure to various information technology occupations and pathways, such as Coding and Web Design. Proficient students will be able to describe various information technology (IT) occupations and demonstrate logical thought processes and discuss the social, legal, and ethical issues encountered in the IT profession. Proficient students will also demonstrate an understanding of electronics and basic digital theory; teamwork; and writing code like HTML, CSS and JavaScript.

Coding

Coding I (formerly Prog & Logic I) **1 Credit**
Grades: 10, 11
Prerequisite: ITF

Coding is a course in which students will develop basic software engineering skills as they work on programming projects of increasing complexity. The class will focus on both the basics of writing computer programs as well as the basics of software design and professional communications. The bulk of student work is programming projects, both individual and in groups. This work will be supplemented by design and research presentations, as well as an introduction to quality assurance and testing. Programming work will deal primarily with two languages, Scala and Swift, but students will also study and compare the history of a variety of mainstream programming languages. Course content will be repeatedly applied to increasingly complex projects. Early work will revolve around text based programs, but later projects will involve graphical programs running on iOS and desktop systems.

Coding II (formerly Prog & Logic II) **1 Credit**
Grades: 11, 12
Prerequisite: Coding I (formerly Prog & Logic I)
Coding II is a course in which students will develop advanced programming skills as they work on multifaceted software projects. Students will study a variety of advanced algorithms, programming concepts, and toolkits. The order and choice of topics covered will vary by student and group per their interests. Languages and toolkits used will vary by project, and in some cases students will propose and justify their choices rather than be mandated to use a particular language. Several key languages will be C#, Java, VisualBasic, Swift, and Ruby. The bulk of student work will be programming projects, both individual and in groups. Projects will include design, implementation, testing, and documentation portions, as well as an introduction to professional source control and build management.

AP Computer Science **1 Credit**
Grades: 11, 12
Prerequisite: Coding II
Students entering the course are not required to meet the following prerequisites, but it is strongly encouraged that they complete Algebra 2, Honors Geometry or successful demonstration of computational and analytical skills through Programming & Logic II. The course includes several individual programming projects and enrichment activities. Through the class students will learn to code fluently in Java; understand the concept of an algorithm; implement algorithms in Java using conditional and iterative control structures and recursion; discuss ethical and social issues related to the use of computers. Students will prepare for the AP exam in computer science. ***Students who are eligible for fee waivers with the school system may be eligible for a fee reduction on the AP exam through the AP Program.***

Work-Based Learning **1 Credit**
Grade: 12
Pre-requisite: CTE Concentrator or Instructor Approval
The Work Based Learning Program is a capstone course intended to provide students with the opportunity to apply the skills and knowledge learned in previous CTE courses out in the real world of work. WBL experiences may take the form of internships, cooperative education, service learning, and job shadowing. Students must maintain their placement or employment during the course and will be allowed to leave campus to go to their placements.

Web Design

Computer Science Foundations (CSF) **1 Credit**
Grades: 9, 10
Prerequisite: None
CSF is a course intended to provide students with exposure to various information technology occupations and pathways, such as Coding and Web Design. Proficient students will be able to describe various information technology (IT) occupations and demonstrate logical thought processes and discuss the social, legal, and ethical issues encountered in the IT profession. Proficient students will also demonstrate an understanding of electronics and basic digital theory; teamwork; and writing code like HTML, CSS and JavaScript.

Web Design Foundations **1 Credit**
Grades: 10, 11
Prerequisite: CSF
Web Design Foundations focuses on learning HTML, CSS, and JavaScript to create webpages. It is a course that prepares students with work-related web design skills for advancement into postsecondary education and industry. The course is intended to develop fundamental skills in both theory and practical application of the basic web design and development process, project management and teamwork, troubleshooting and problem solving, and interpersonal skill development. Upon completion of this course, proficient students will be prepared for more advanced coursework in the Web Design program of study.

Web Site Development **1 Credit**
Grades: 11, 12
Prerequisite: Web Design Foundations
Web Site Development builds on the skills and knowledge gained in Web Design Foundations and introduces PHP to further prepare students for success in the web design and IT fields. Emphasis is placed on applying the design process toward projects of increasing sophistication, culminating in the production of a functional, static website. As students work toward this goal, they acquire key skills in coding, project management, basic troubleshooting and validation, and content development and analysis. Upon completion of this course, proficient students will be prepared to pursue a variety of postsecondary programs in the computer sciences, sit for industry certification, or apply their skills in a WBL Program.

Work-Based Learning **1 Credit**
Grade: 12
Pre-requisite: CTE Concentrator or Instructor Approval
The Work Based Learning Program is a capstone course intended to provide students with the opportunity to apply the skills and knowledge learned in previous CTE courses out in the real world of work. WBL experiences may take the form of internships, cooperative education, service learning, and job shadowing. Students must maintain their placement or

employment during the course and will be allowed to leave campus to go to their placements.

A/V (Audio/Video) Technologies

A/V Production I **1 Credit**
Grades: 10, 11, 12
Prerequisite: None
A/V (audio/visual) Production I is a foundational course in the Arts, A/V Technology, & Communications cluster for students interested in A/V production occupations. Upon completion of this course, proficient students will be able to explain and complete the phases of the production process including pre-production, production, and post-production. Students will establish basic skills in operating cameras, basic audio equipment, and other production equipment. Standards in this course include career exploration, an overview of the history and evolution of A/V production, legal issues affecting A/V production. Students will compile artifacts for inclusion in a portfolio.

Advanced Manufacturing Technology Program

Grades: 11, 12 **1 Credit**
A Dilemma We Face: Manufacturing in the Chattanooga region is growing and many more production workers are needed. With 20- 30% of our region's high school graduates choosing to work after high school, these graduates could obtain employment with a much better starting salary ($11-$14/hour and with benefits) if they choose manufacturing. The problem is that too many high school graduates have a misunderstanding or misconception of what it's like to work in manufacturing. Manufacturing facilities today are clean and modern, offering a great place to work and excel.

One Solution: One solution is… introduce high school juniors and seniors to manufacturing through a dual enrollment program at the Chattanooga State TCAT, Advanced Manufacturing Technology (AMT) program. In the AMT program, students may earn 1 – 4 nationally recognized manufacturing credentials in 1) Safety, 2) Manufacturing Processes and Production, 3) Quality Practices and Measurement, and 4) Maintenance Awareness. The curriculum and credentials are from the Manufacturing Skills Standard Council (MSSC) a national organization dedicated to producing Certified Production Technicians (CPT) for the manufacturing industry. If a student completes all four credentials, the student will receive a Chattanooga State TCAT certificate in Advanced Manufacturing Technology that is approved by the Tennessee Board of Regents. **So it is possible for a high school graduate to earn nationally recognized credentials and a higher education certificate upon graduation from high school.**

How: Students will be dually enrolled at the Chattanooga State TCAT and they will take the AMT / CPT classes at their high school. The AMT / CPT program is integrated into their Career and Technical Education (CTE) program. While most students will complete their work at their high school, some assignments may need to be completed at home.

Cost: The State of Tennessee dual enrollment grant, for which students must complete an application (see guidance counselors or CTE teachers) covers all costs of the program including the four MSSC tests.

PHYSICAL EDUCATION AND WELLNESS

Wellness **1 Credit**
Grades: 9
Prerequisite: None
The Physical Education and Wellness program at East Hamilton High School seeks to develop the student physically, mentally, emotionally and socially through an organized program of activities while also enhancing the student's awareness of health related issues. Wellness is a combination of gaining knowledge of your body, learning how it functions and what each student will need to know to maintain individual health for their lifetime as well as putting their new information into practice. Each student will be in the classroom for a total of 9 weeks and the gym for 9 weeks. This will be split up so that students can quickly apply the material covered in the classroom.

Students transferring into the Hamilton County School system who have earned 1/2 credit in Physical Education and 1/2 credit in Health may substitute these credits for the required Wellness credit.

*Students may earn multiple credits in all Physical Education classes **except** Wellness.*

Physical Education I **1 Credit**
Grades: 9, 10, 11, 12
Prerequisite: None
This course is designed to continue to give students the opportunity to gain personal fitness skills and knowledge through an enriched Physical Education program. Students will be empowered to make choices, meet challenges, develop positive behaviors, and learn different game strategies. Making positive, sweeping changes in physical education takes time and is dependent upon gathering the appropriate data. Fitness test results are the logical first step in this process. One of our main assessments in class is the Fitnessgram. The use of the Fitnessgram at this level is now possible for states, metro areas, and very large districts that want to collect and aggregate data and generate a wide variety of reports for data analysis.

PE II: Weight Training **1 Credit**
Grades: 10, 11, 12
This course will engage East Hamilton Students in sport specific training that will directly prepare the student athletes for a particular sport by mimicking the biomechanical movements of that sport as well as the metabolic demands found within their competition. This program will demand high physical and mental exertion as well as cognitive recognition of the physiological musculature of the human body and its role in

specific multi-joint movements in the frontal, sagital and transverse planes

Cardio Fitness **1 Credit**
Grades: 10, 11, 12
Prerequisite: Required PE credit completed
Cardio Fitness is a class designed for students who want to gain the benefits of cardiovascular endurance and fitness. This class will include the use of technology to assess the students' heart rate, and calories burned throughout the class. Activities in this class will include, but not limited to spin bikes, treadmills, walking, plyometrics, rhythmic movements, and muscular endurance training, flexibility exercises and circuit training. This class was designed with the students in mind who want to get their cardio fitness in top shape.

Intro to Athletic Training **1 Credit**
Grades: 11, 12
Prerequisite/Co-Requisite: Biology
The purpose of this class is to introduce students to skills used in the field of Athletic Training. The content includes, but is not limited to, roles and responsibilities of team members, emergency and non-emergency procedures, anatomy and physiology, injury evaluation, equipment and modalities of rehabilitation, injury and disease prevention, and protective equipment. The program will provide a background for continuation in postsecondary level athletic training programs.

GIFTED PROGRAM

Students who are certified as gifted through assessment by the Exceptional Education department may enroll in the following courses.

Advanced Study Skills **1 Credit**
Grade: 9
Prerequisite: IEP Required
Advanced Study Skills is a class for freshmen in the gifted program. This is a portfolio class that focuses on problem solving; select readings, projects, current events and discussion are emphasized. Students enter contests; work on resumes, Model United Nations, Youth in Government, begin Tennessee Governor's School process and complete problem solving activities.

College Prep **1 Credit**
Grade: 11
Prerequisite: IEP required
The course is designed to provide students with projects which explore social issues, service to community opportunities, and select readings. Students will apply to Tennessee Governor's School, opportunity to attend Model United Nations and Youth in Government. College prep class is set up to aid the gifted student in applying to colleges, obtaining scholarships, investigating professions, essays, and practice interview skills. Students will continue their high school resume. Several speakers present on topics such as insurance, college safety, honors programs, health, stress management, and interviewing skills.

EARLY COLLEGE PROGRAM

This dual enrollment program allows high school students to earn college credit during the regular school year or during the summer.

Students must complete Chattanooga State Early College registration paperwork and pay all fees prior to the start of class. Costs are based on the prevailing per-semester hour fee at CSTCC, plus the usual application fee.

Seniors who have been TN residents for one year, and whose college GPAs are 2.75 or higher (if they have a college GPA), may be eligible to receive up to $500 towards the cost of their first college class, $500 towards the cost of their second college class and $200 towards the cost of their third college class.

To be eligible for up-front funding, all Early College application materials and the dual enrollment grant application must be completed by June 1 (Fall courses) or December 1 (Spring courses).

Composition I (ENGL 1010) **Fall Semester**
Grades: 12 **1 Credit**
Eliibility: ACT English 18, ACT Reading 19, EHS approval
The first of two senior-year Early College English courses offered at East Hamilton School includes a focus on exposition and argument; process and development using various rhetorical patterns. ***Students must pass ENGL 1010 & ENGL 1020 to satisfy the high school graduation requirement in English.***

Composition II (ENGL 1020) **Spring Semester**
Grades: 12 **1 Credit**
Eligibility: Composition I (ENGL 1010), final college grade of "C" or higher, EHS approval
The second of two senior-year Early College English courses offered at East Hamilton School includes a focus on reading and responding to short fiction, poetry, drama and/or non-fiction prose. ***Students must pass ENGL 1010 & ENGL 1020 to satisfy the high school graduation requirement in English.***

General Psychology (PSYC 1030) **1 Semester**
Grades: 11, 12 **1 Credit**
Eligibility: ACT English 18, ACT Reading 19, EHS approval
An introductory course which includes the following: the principles, methods and history of psychology, the brain, altered states of consciousness, principles of learning, perception, motivation, sensation, memory and learning, language and problem solving.

College Algebra **1 Semester**
Grade: 12 **1 Credit**
Eligibility: ACT Reading 19, ACT Math, 22 and EHS approval
A study of functions and graphs with an emphasis on modeling and regression analysis. Functions included are linear, quadratic, cubic, exponential, and logarithmic.

Statistics **1 Semester**
Grade: 12 **1 Credit**
Eligibility: ACT Reading 19, ACT Math 19, and EHS approval
Sampling, data organization, variability and central tendency, probability, distributions and confidence intervals, hypothesis testing, inference and regression

Off Campus Dual Enrollment
Grades: 11, 12
Prerequisite: Must meet all entrance requirements Students may receive permission by the school administration to attend courses on the campuses of Chattanooga State. Students/parents are responsible for transportation.