



# **Cross Keys High School**

## **Course Catalog**

Brittany Cunningham, Principal

Bernadette Gaines, Assistant Principal

Roberta Gibson, Assistant Principal

Tiffany Mahaffey, Assistant Principal

Reena Moorman, Assistant Principal

Ronda Price, Head Counselor

1626 N. Druid Hills Road NE

Atlanta, GA 30319

(678) 874-6102 | Main Office

(678) 874-6132 | Counseling Office

<http://crosskeyshs.dekalb.k12.ga.us>

# Table of Contents

Academic Information.....	3
English Language Arts.....	5
Mathematics.....	8
Science.....	11
Social Science.....	13
Language.....	14
Fine Arts.....	16
CTAE.....	19
Dekalb High School of Technology North.....	22

## THE ACADEMIC PROGRAM

Cross Keys High School operates on a two semester block semester system. Each semester is 18 weeks long. Students register for eight classes each year (four classes each semester) which meet every day for approximately 90 minutes. All courses carry credit. Credit is established in units. Upon successful completion of each course, students earn one unit of credit per class. It is possible, therefore, to earn four units per semester, or eight units per year. The failure of any course results in no credit awarded for that course.

There are two types of credits which students must earn in order to meet graduation requirements: core and elective credits. Core credits are courses which fall under the English Language Arts, Mathematics, Science, Social Studies or Foreign Language categories. Elective courses are those you choose other than those specifically referred to in the DCSD Graduation Requirements. Examples of elective courses include physical education, art, music, drama, career/technology. Additional math, science, social studies, or foreign language courses taken beyond what are required may also be considered academic electives.

As you choose a course of study, classes and levels of classes, please always have your plans for after high school on your mind. The course of study for graduation at Cross Keys is based on the district and state requirements for a high school diploma. Many colleges have admission criteria that exceed these course requirements.

### Grading Scale

Letter Grade	Grade Range	4.0 Scale	5.0 Scale (AP and Dual Enrollment Courses)*
A	100-90	4 points	5 points
B	89-80	3 points	4 points
C	79-71	2 points	3 points
D	70	1 points	2 points
F	69-0	0 points	0 points

\* = Advanced Placement (AP) and Dual Enrollment courses are college level courses. The DeKalb County School District awards an extra quality point for these courses, except for a failing grade. This is for purposes of calculation of GPA as defined by the DCSD. The state university system, private colleges, private universities, out of state universities, other school districts, and private schools may calculate a student's GPA differently.

### Promotion Requirements

**Core credits** are English Language Arts, Science, Mathematics, Social Science and Foreign Language

**Elective credits** are all other courses

Core Credits	Elective Credits	Total Minimum Credits	Grade Level
>3	>3	>6	9 <sup>th</sup>
3	3	6	10 <sup>th</sup>
6	6	12	11 <sup>th</sup>
9	9	18	12 <sup>th</sup>

**High School Graduation Requirements (Class of 2012 and subsequent years)** DeKalb County Board of Education offers one common set of requirements for all students to earn a regular diploma. In order to receive a diploma, students must satisfy these requirements and must also satisfy any required End Of Course/GA Milestone tests.

<b>Subjects</b>	<b>DCSD College Prep High School Diploma</b>
<b>English</b>	<b>4 Units Including:</b> 9th Grade Literature/Composition 10 <sup>th</sup> Grade Literature/Composition American Literature/Composition or AP Lang/Comp Multicultural Literature or AP Lit/Comp
<b>Mathematics</b>	<b>4 Units Including:</b> GSE Algebra GSE Geometry GSE Adv Algebra Adv Math Dec Making, Pre-Cal, AP Stats, or AP Calc
<b>Science</b>	<b>4 Units Including:</b> Biology Physics or Physical Science Chemistry or Environmental Science 1 additional science unit (Forensics, Human Anatomy, AP Bio, approved CTAE courses)
<b>Social Science</b>	<b>4 Units including:</b> ½ unit of American Government/Civics ½ unit of World Geography World History United States History ½ unit of Economics ½ unit of Personal Financial Literacy
<b>Health and Physical Education</b>	<b>2 Units Including:</b> Health (½ unit) Personal Fitness (½ unit) 1 additional PE course or JROTC
<b>Foreign Language</b>	<b>2 Units from same language:</b> French I, II, III Spanish I, II, III Spanish for Naïve Speakers I, II
<b>CTAE or Humanities/Fine Arts</b>	<b>3 Units as noted below:</b> Students must earn three units of credit in a coherent sequence of CTAE or Fine Arts courses through a self-selected pathway.
<b>Other</b>	<b>1 Unit as noted below:</b> Students must earn one unit in an additional course (core or elective) which is not being counted to fulfill one of the above listed graduation requirements.
<b>TOTAL UNITS MINIMUM FOR GRADUATION</b>	<b>24 Units</b>

\*Units of credit may be awarded for courses offered at the middle school level that meet the 9-12 GSE requirements.

\*Completion of diploma requirements does not necessarily qualify student for the HOPE Scholarship Program.

## COURSE REQUESTS AND SCHEDULE CHANGES

Courses selected during registration should be considered final. Each year, current 9<sup>th</sup> – 11<sup>th</sup> grade students will have the opportunity to review their academic progress towards graduation and submit course requests in Infinite Campus for the following school year. That timeframe is a specific timeframe as determined each year by the district prior to the end of the current school year. Once the next school year begins, graduation requirements, course pre-requisites, course availability and the master schedule determine whether a schedule change request can be granted. It is not possible to honor requests for specific teachers, lunch periods or class placement within the school day.

However, if students have been improperly placed in a course, they will follow directions given for the DROP/ADD procedures. The window for students to submit schedule change requests will occur at the beginning of the fall semester. Additionally, administrative schedule changes may be made during the first ten days of each semester.

## REGISTRATION DIRECTIONS

1. Read over all of the course descriptions in the 2022-2023 CKHS Course Catalog to become familiar with courses that will be offered. Be sure to pay close attention to any pre-requisite requirements.
2. Have your teachers or school counselors help you decide which courses are appropriate.
3. Current 9th, 10th and 11th grade students will complete registration through Infinite Campus and the CKHS course request form by December 3rd.

**\*Students who do not complete the registration process will have their courses for next year selected for them by administration and/or school counselors. Requests for schedule changes due to student failure to complete the registration process will not be honored.**

# English/Language Arts

## Course Name/Description

### **9th Grade Literature/Composition**

This course focuses on a study of literary genres and informational texts; the students develop initial understanding of both the structure and the meaning of a literary work. The students explore the effect of the literary form in regards to interpretation. The students will read across the curriculum to develop academic and personal interests in different subjects. The students will also demonstrate competency in a variety of writing genres: argumentative, informational/expository, and narrative. The students will engage in research, timed writings, and the writing process. Instruction in language conventions will occur within the context of reading, writing, and speaking, rather than in isolation. The students demonstrate an understanding of speaking and listening for a variety of purposes.

**(levels offered: general, accelerated, gifted, co-taught, ESL)**

### **English ESOL I**

This course focuses on interpersonal communication, school and survival skills through short responses within structured contexts and participation in simple conversations. It focuses on essential skills in listening, speaking, reading, and writing. It includes academic vocabulary drawn from the content areas and high-frequency vocabulary for everyday living. Course content will support 9th grade Literature and Composition. English ESOL I classes are composed solely of English language learners who require additional language support.

### **English ESOL II**

In this course, students continue developing proficiency in listening, speaking, reading, and writing English with opportunities to demonstrate their emerging skills in a stress free environment. English ESOL II emphasizes sustained interpersonal communication of ideas, personal and safety needs, plus cognitive-academic language proficiency. This course introduces the writing processes. Students study literature and authentic texts. English ESOL II classes are composed solely of English language learners who require additional language support.

### **Basic Reading**

This course provides fundamental skills development in the five strands of the GSE courses: Reading Literary texts, Reading Informational texts, Writing, Speaking and Listening, and Language. The setup is a language lab setting; the class includes drill and practice opportunities in reading comprehension, vocabulary development, writing (according to the GSE literary and informational texts, and writing genres associated with the students' English course), speaking, and critical thinking.

### **World Literature/Composition**

This course focuses on a study of world literature and informational texts; the students develop an understanding of chronological context and the relevance of period structures in literature within world cultures. A focus is to explore the ways the work's place of origin affects its structure and how the chronology of a literary work affects its meaning. The students develop an understanding of literature as both a culture's product and a culture-bearer. An exploration of commonalities and differences among works of literature from different times and places in the world is a major component. The students will read across the curriculum to develop academic and personal interests in different subjects.

**(levels offered: general, accelerated, gifted, co-taught, ESL)**

### **American Literature/Composition**

This course focuses on the study of American literature and informational texts, writing modes and genres, and essential conventions for reading, writing, and speaking. The students read a variety of informational and literary texts in all genres and modes of discourse. Reading across the curriculum develops students' academic and personal interests in different subjects. While expository writing is the focus in American literature, the students will also demonstrate competency in argumentative and narrative genres. The students will engage in research, timed writing, and the writing process. Instruction in language conventions will occur within the context of reading, writing, and speaking. The students demonstrate an understanding of speaking and listening for a variety of purposes.

**(levels offered: general, accelerated, gifted, co-taught, ESL)**

### **AP English Language and Composition**

This course focuses on the study of American literature and informational texts, embracing its rhetorical nature and

recognizing the literature as a platform for argument. It also emphasizes a variety of writing modes and genres and the essential conventions of reading, writing, and speaking. The students will develop an understanding of how historical context in American literature affects its structure, meaning, and rhetorical stance. The course will enable students to become skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts. The students will encounter a variety of informational, literary, and non-print texts from across the curriculum and read texts in all genres and modes of discourse, as well as visual and graphic images. Instruction in language conventions and essential vocabulary will occur within the context of reading, writing, speaking, and listening. The students will demonstrate an understanding of listening and for a variety of purposes. This course will focus on the consideration of subject, occasion, audience, purpose, speaker, and tone as the guide for effective writing, as well as the way generic conventions and resources of language contribute to writing effectiveness. The students will compose a variety of writing, including expository, analytical, and argumentative writings which support the academic and professional communication required by colleges; and personal and reflective writings which support the development of writing facility in any context. The students will produce responses to timed writing assignments, as well as writing that proceeds through several stages or drafts, which include opportunities for revision guided by feedback from teacher and peers. Students will analyze primary and secondary sources and develop the research skills needed to effectively synthesize these sources for their writing.

**(levels offered: general, gifted)**

### **British Literature/Composition**

This course focuses on the study of British literature and informational texts, writing modes and genres, and essential conventions for reading, writing, and speaking. The students develop an understanding of chronological context and the relevance of period structures in British literature. The students develop an understanding of the ways the period of literature affects its structure and how the chronology of a work affects its meaning. The students encounter a variety of informational and literary texts and read texts in all genres and modes of discourse. Reading across the curriculum develops the students' academic and personal interests in different subjects. While the continued focus is expository writing in British literature, the student will also demonstrate competency in argumentative and narrative genres. The students will engage in research, the impact that technology has on writing, timed writing, and the writing process. Instruction in language conventions will occur within the context of reading, writing, and speaking, rather than in isolation. The students demonstrate an understanding of speaking and listening skills for a variety of purposes.

**(levels offered: general, co-taught, ESL)**

### **AP English Literature and Composition**

The course focuses on an intensive study of representative works from various literary genres and periods. The focus is on the complexity and thorough analysis of literary works. The students will explore the social and historical values that works reflect and embody. The textual detail and historical context provide the foundation for interpretation: the experience of literature, the interpretation of literature, and the evaluation of literature. Writing to evaluate a literary work involves making and explaining judgments about its artistry and exploring its underlying social and cultural values through analysis, interpretation, and argument (e.g. expository, analytical, and argumentative essays). The writers will develop stylistic maturity: strong vocabulary, sentence variety, and effective use of rhetoric to maintain voice.

**(levels offered: general, gifted)**

### **Journalism**

This course focuses on an introduction to journalistic writing through an analysis of newspapers, yearbooks, literary magazines, and broadcast journalism. A concentration on the following components of journalistic writing may include, but is not limited to the interview process; evaluating sources; the purpose, structure, and diction in writing; and training in the various technology used in publishing. Students should participate in news gathering, the study of journalism ethics and laws, and the aspects of copy writing, editing, and revising. If a publication is produced, the students will be exposed to the process of publishing and how to manage a successful publication.

# Mathematics

## Course Name/Description

### **GSE Coordinate Algebra**

Coordinate Algebra is the first course in a sequence of three high school courses designed to ensure career and college readiness. The course represents a discrete study of algebra with correlated statistics applications and a bridge to the second course through coordinate geometric topics. The fundamental purpose of Coordinate Algebra is to formalize and extend the mathematics that students learned in the middle grades. The critical areas, organized into units, deepen and extend understanding of linear relationships, in part by contrasting them with exponential phenomena, and in part by applying linear models to data that exhibit a linear trend. Coordinate Algebra uses algebra to deepen and extend understanding of geometric knowledge from prior grades.

**(levels offered: general, co-taught, ESL)**

### **GSE Coordinate Algebra Support**

This course should be used in conjunction with GSE Coordinate Algebra; the purpose of a mathematics support class is to address the needs of students who have traditionally struggled in mathematics by providing the additional time and attention they need in order to successfully complete their regular grade-level mathematics course without failing. Mathematics support courses are elective classes that should be taught concurrently with a student's regular mathematics class.

**(levels offered: general, co-taught, ESL)**

### **Accelerated GSE Coordinate Algebra/Analytic Geometry A**

Accelerated Coordinate Algebra/ Analytic Geometry A is the first in a sequence of mathematics courses designed to prepare students to take AB, BC Advanced Placement Calculus, or other higher level mathematics courses. The fundamental purpose of Accelerated Coordinate Algebra/Analytic Geometry A is to formalize and extend the mathematics that students learned in the middle grades. The critical areas, organized into units, deepen and extend understanding of linear relationships, in part by contrasting them with exponential phenomena, and in part by applying linear models to data that exhibit a linear trend. The first unit in the course uses algebra to deepen and extend understanding of geometric knowledge from prior grades. The next unit ties together the algebraic and geometric ideas studied. Transformations on the coordinate plane provide opportunities for the formal study of congruence and similarity. The study of similarity leads to an understanding of right triangle trigonometry and connects to quadratics through Pythagorean relationships. The study of circles uses similarity and congruence to develop basic theorems relating circles and lines and rounds out the course.

**(Pre-requisite: 8th grade teacher recommendation)**

**(levels offered: general, gifted)**

### **GSE Analytic Geometry**

Analytic Geometry is the second course in a sequence of three high school courses designed to ensure career and college readiness. The course embodies a discrete study of geometry analyzed by means of algebraic operations with correlated probability/statistics applications and a bridge to the third course through algebraic topics. Analytic Geometry is organized into 7 critical areas: 1) formal understanding of similarity and congruence developed through transformations and proportional reasoning; criteria for similarity and congruence of triangles are examined, facility with geometric proofs is developed, and both are applied in proving theorems and generating geometric constructions involving lines, angles, triangles, and other polygons 2) right triangle trigonometry as an application of similarity and as a tool for solving problems involving right triangles; 3) understanding and application of theorems and properties related to circles and three-dimensional shapes; 4) properties of rational and irrational numbers to rewrite rational expressions and perform operations on polynomials; 5) analysis of quadratic functions, including an investigation of key features of graphs and solving quadratic equations limited to real number solutions; 6) algebraic verification of geometric relationships of circles in the coordinate plane; 7) formal understanding of the rules of probability to compute probabilities of compound events and to interpret data using independence and conditional probability.

**(Prerequisite: Successful completion of Coordinate Algebra or its equivalent.)**

**(levels offered: general, co-taught, ESL)**



**GSE Analytic Geometry Support**

This course should be used in conjunction with 27.09720; the purpose of a mathematics support class is to address the needs of students who have traditionally struggled in mathematics by providing the additional time and attention they need in order to successfully complete their regular grade-level mathematics course without failing. Mathematics support courses are elective classes that should be taught concurrently with a student's regular mathematics class.

**(levels offered: general, co-taught, ESL)**

**Accelerated GSE Geometry B/Advanced Algebra**

Accelerated Analytic Geometry B/Advanced Algebra is the second in a sequence of mathematics courses designed to prepare students to take AB, BC Advanced Placement Calculus, or other higher level mathematics courses. It is in this course that students pull together and apply the accumulation of learning that they have from their previous course, with content grouped into nine critical areas, organized into units. Quadratic expressions, equations, and functions are developed, comparing their characteristics and behavior to those of linear and exponential relationships from Accelerated Coordinate Algebra/ Analytic Geometry A. Circles return with their quadratic algebraic representations on the coordinate plane. The link between probability and data is explored through conditional probability. Students expand their repertoire of functions to include quadratic (with complex solutions), polynomial, rational, and radical functions. And, finally, students bring together all of their experience with functions to create models and solve contextual problems.

**(Prerequisite: Successful completion of Accelerated GSE Coordinate Algebra/Analytic Geometry A)**

**(levels offered: general, gifted)**

**GSE Advanced Algebra**

Advanced Algebra is the third course in a sequence of three high school courses designed to ensure career and college readiness. It is in Advanced Algebra that students pull together and apply the accumulation of learning that they have from their previous courses, with content grouped into six critical areas, organized into units. They apply methods from probability and statistics to draw inferences and conclusions from data. Students expand their repertoire of functions to include polynomial, rational, and radical functions. They expand their study of right triangle trigonometry to model periodic phenomena. And, finally, students bring together all of their experience with functions and geometry to create models and solve contextual problems.

**(Prerequisite: Successful completion of Analytic Geometry or its equivalent)**

**(levels offered: general, co-taught, ESL)**

**Advanced Math Decision Making**

This is a course designed to follow the completion of Advanced Algebra, Algebra II, or Mathematics III OR Accelerated Analytic Geometry B/Advanced Algebra, Accelerated Geometry B/Algebra II, or Accelerated Mathematics II. The course will give students further experiences with statistical information and summaries, methods of designing and conducting statistical studies, an opportunity to analyze various voting processes, modeling of data, basic financial decisions, and network models for making informed decisions.

**(levels offered: general, co-taught, ESL)**

**GSE Pre-Calculus**

Pre-Calculus is a fourth course option for students who have completed Coordinate Algebra/Algebra I, Analytic Geometry/Geometry, and Advanced Algebra/Algebra II. The course focuses on standards to prepare students for a more intense study of mathematics. The critical areas organized in seven units delve deeper into content from previous courses. The study of circles and parabolas is extended to include other conics such as ellipses and hyperbolas. Trigonometric functions are further developed to include inverses, general triangles and identities. Matrices provide an organizational structure in which to represent and solve complex problems. Students expand the concepts of complex numbers and the coordinate plane to represent and operate upon vectors. Probability rounds out the course using counting methods, including their use in making and evaluating decisions.

**(Prerequisite: Successful completion of Advanced Algebra/Algebra II or its equivalent)**

**(levels offered: general, gifted)**

**Accelerated GSE Pre-Calculus**

Accelerated Pre-Calculus is the third course in a sequence of mathematics courses designed to prepare students to

take AB, BC Advanced Placement Calculus, or other higher level mathematics courses. The course focuses on standards to prepare students for a more intense study of mathematics. The critical areas organized in nine units delve deeper into content from previous courses. The study of circles and parabolas is extended to include other conics such as ellipses and hyperbolas. Trigonometric functions are introduced and developed to include inverses, general triangles and identities. Matrices provide an organizational structure in which to represent and solve complex problems. Students expand the concepts of complex numbers and the coordinate plane to represent and operate upon vectors. They apply methods from statistics to draw inferences and conclusions from data. Probability rounds out the course using counting methods, including their use in making and evaluating decisions.

**(Prerequisite: Successful completion of Accelerated GSE Analytic Geometry B/Advanced Algebra)**

**(levels offered: general, gifted)**

#### **AP Calculus AB**

Advanced Placement Calculus AB is a course that follows the College Board syllabus for the Advanced Placement Calculus AB Examination. Includes properties of functions and graphs, limits and continuity, differential and integral calculus.

**(Prerequisite: Successful completion of Pre-Calculus or Accelerated Pre-Calculus)**

**(levels offered: general, gifted)**

#### **AP Statistics**

Advanced Placement Statistics is a course that follows the College Board syllabus for the Advanced Placement Statistics Examination. Covers four major themes: exploratory analysis, planning a study, probability, and statistical inference.

**(Prerequisite: Successful completion of Advanced Algebra/Algebra II)**

**(levels offered: general, gifted)**

# Science

## Course Name/Description

### **Biology**

The Biology curriculum is designed to continue student investigations of the life sciences that began in grades K-8 and provide students the necessary skills to be proficient in biology. This curriculum includes more abstract concepts such as the interdependence of organisms, the relationship of matter, energy, and organization in living systems, the behavior of organisms, and biological evolution. Students will investigate biological concepts through experience in laboratories and field work using the processes of inquiry.

**(levels offered: general, accelerated, co-taught, ESL)**

### **Physical Science**

The Physical Science curriculum is designed to continue student investigations of the physical sciences that began in grades K-8 and provide students the necessary skills to have a richer knowledge base in physical science. This course is designed as a survey course of chemistry and physics. This curriculum includes the more abstract concepts such as the conceptualization of the structure of atoms, motion and forces, and the conservation of energy and matter, the action/reaction principle, and wave behavior. Students investigate physical science concepts through experience in laboratories and field work using the processes of inquiry.

**(levels offered: general, co-taught, ESL)**

### **Chemistry**

The Chemistry curriculum is designed to continue student investigations of the physical sciences that began in grades K-8 and provide students the necessary skills to be proficient in chemistry. This curriculum includes more abstract concepts such as the structure of atoms, structure and properties of matter, characterization of the properties that describe solutions and the nature of acids and bases, and the conservation and interaction of energy and matter. Students investigate chemistry concepts through experience in laboratories and field work using the processes of inquiry.

**(levels offered: general, accelerated, co-taught, ESL)**

### **Physics**

The Physics curriculum is designed to continue student investigations of the physical sciences that began in grades K-8 and provide students the necessary skills to be proficient in physics. This curriculum includes more abstract concepts such as interactions of matter and energy, velocity, acceleration, force, energy, momentum, and charge. This course introduces the students to the study of the correction to Newtonian physics given by quantum mechanics and relativity. Students investigate physics concepts through experience in laboratories and field work using the processes of inquiry.

### **Human Anatomy/Physiology**

The human anatomy and physiology curriculum is designed to continue student investigations that began in grades K-8 and high school biology. This curriculum is extensively performance and laboratory based. It integrates the study of the structures and functions of the human body, however rather than focusing on distinct anatomical and physiological systems (respiratory, nervous, etc.) instruction should focus on the essential requirements for life. Areas of study include organization of the body.

### **Environmental Science**

The Environmental Science curriculum is designed to extend student investigations that began in grades K-8. This curriculum is extensively performance, lab and field based. It integrates the study of many components of our environment, including the human impact on our planet.

**(levels offered: general, co-taught, ESL)**

### **AP Biology**

This course is designed to be the equivalent of a two semester college introductory biology course usually taken by biology majors during their first year. The AP Biology course is designed to be taken by students after the successful completion of a first course in high school biology and on in high school chemistry. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. The topics covered on the course are molecules and cells, heredity and evolution, and

organisms and populations.

**(levels offered: general, gifted)**

**Forensic Science**

In this course students will learn the scientific protocols for analyzing a crime scene, how to use chemical and physical separation methods to isolate and identify materials, how to analyze biological evidence and the criminal use of tools, including impressions from firearms, tool marks, arson, and explosive evidence.

**(levels offered: general, co-taught)**

# Social Science

## Course Name/Description

### **American Government/Civics (9 weeks)**

The government course provides students with a background in the philosophy, functions, and structure of the United States government. Students examine the philosophical foundations of the United States government and how that philosophy developed. Students also examine the structure and function of the United States government and its relationship to states and citizens. This course meets the state's Citizenship requirement for graduation.

**(levels offered: general, accelerated, gifted, co-taught, ESL)**

### **World Geography (9 weeks)**

The world geography course provides students with an analytical view of how geographic factors have and continue to influence human behavior on the earth. Students will examine how the physical and cultural geographic factors contribute to varying levels of cooperation within the major world regions. Additionally, students will examine the importance that political, environmental, and economic factors have in a region's development.

**(levels offered: general, accelerated, gifted, co-taught, ESL)**

### **World History**

The high school world history course provides students with a comprehensive, intensive study of major events and themes in world history. Students begin with a study of the earliest civilizations worldwide and continue to examine major developments and themes in all regions of the world. The course culminates in a study of change and continuity and globalization at the beginning of the 21st century.

**(levels offered: general, accelerated, gifted, co-taught, ESL)**

### **U.S. History**

The high school United States history course provides students with a survey of major events and themes in United States history. The course begins with English settlement and concludes with significant developments in the early 21st Century.

**(levels offered: general, accelerated, co-taught, ESL)**

### **Principles of Economics**

Economics is the study of how individuals, businesses, and governments make decisions about the allocation of scarce resources. The economics course provides students with a basic foundation in the field of economics. The course has five sections: fundamental concepts, microeconomics, macroeconomics, international economics, and personal finance. In each area, students are introduced to major concepts and themes concerning that aspect of economics. These sections and the standards and elements therein may be taught in any order or sequence.

**(levels offered: general, accelerated, co-taught, ESL)**

### **AP Human Geography**

Conforms to the College Board topics for Advanced Placement Human Geography.

### **AP European History**

Conforms to College Board topics for the Advanced Placement European History Examination. Covers intellectual and cultural history, political and diplomatic history and social and economic history.

### **AP Psychology**

Conforms to College Board topics for the Advanced Placement Introductory Psychology Examination. Covers methods, approaches and the history of psychology as a science, biological bases of behavior, sensation and perception, states of consciousness, learning, cognition, motivation and emotion, developmental psychology, personality, testing and individual differences, abnormal psychology, treatment of psychological disorders and social psychology.

# Foreign Language

## Course Name/Description

### French I

Introduces the French language; emphasizes all skills: listening, speaking, reading, and writing in an integrated way. Includes how to greet and take leave of someone, to ask and respond to basic questions, to speak and read within a range of carefully selected topics and to develop an understanding of French-speaking cultures.

### French II

Enhances Level One skills in French and provides opportunities to develop listening, speaking, reading, and writing skills in an integrated way. Provides continued practice in how to greet and take leave of someone, to ask and respond to basic questions, and to speak and read within a range of carefully selected topics. Provides opportunities to increase understanding of French-speaking cultures.

### French III

Enhances Level Two skills in French and provides further opportunities to increase listening, speaking, reading, and writing skills in an integrated way. Provides continued practice in previous topics and introduces new topics; offers further opportunities to increase understanding of French-speaking cultures.

### Spanish I

Introduces the Spanish language; emphasizes all skills: listening, speaking, reading, and writing skills in an integrated way. Includes how to greet and take leave of someone, to ask and respond to basic questions, to speak and read within a range of carefully selected topics and to develop an understanding of Spanish-speaking cultures.

### Spanish for Native Speakers I

Designed for Heritage Language Learners of Spanish, this course can accommodate a wide range of Heritage language learners, from those who are minimally functional (can comprehend Spanish but are not able to speak fluently, read or write) to those who are more proficient and literate in Spanish. The recommended entrance requirement for the beginning level is at the Intermediate-Mid level of proficiency in listening comprehension on the ACTFL scale. It is not necessary that students speak at the Intermediate level prior to entering the course. This course will develop reading, writing, speaking and listening skills. The student will also develop an awareness and understanding of Hispanic cultures, such as language variations, customs, geography and current events.

### Spanish II

Enhances Level One skills in Spanish and provides opportunities to develop listening, speaking, reading, and writing skills in an integrated way. Provides continued practice in how to greet and take leave of someone, to ask and respond to basic questions, to speak and read within a range of carefully selected topics and to increase understanding of Spanish-speaking cultures.

### Spanish for Native Speakers II

Designed for Heritage Language Learners of Spanish, this course can accommodate a wide range of Heritage language learners, from those who are somewhat functional (can comprehend spoken Spanish but speak haltingly and need improvement in reading and/or writing) to those who are more proficient and literate in Spanish. The recommended entrance requirement is at the Intermediate-High level of proficiency in listening comprehension on the ACTFL scale and an Intermediate-Mid level of proficiency in reading, writing and speaking. This course will continue to develop reading, writing, speaking and listening skills and will promote a deeper understanding of the Hispanic cultures, such as language variations, customs, geography, history, and current events.

### Spanish III

Enhances Level Two skills in Spanish and provides further opportunities to increase listening, speaking, reading, and writing skills in an integrated way. Provides continued practice in previous topics and introduces new topics; offers further opportunities to increase understanding of Spanish-speaking cultures.

### AP Spanish Language and Culture

Is designed to further increase students' proficiency through in-depth study of the Spanish language and its cultures. The expectation is that after taking the course students will take the AP Spanish Language and Culture exam as well.

**(Pre-requisites: student must have earned credit in Spanish III and obtain teacher recommendation)**

# Physical Education

## Course Name/Description

### Health

Explores the mental, physical and social aspects of life and how each contributes to total health and well-being. Emphasizes safety, nutrition, mental health, substance abuse prevention, disease prevention, environmental health, family life education, health careers, consumer health, and community health.

### Personal Fitness

Introduces instruction in methods to attain a healthy level of physical fitness; implements a lifetime fitness program based on a personal fitness assessment and stresses strength, muscular endurance, flexibility, body composition, and cardiovascular endurance; includes instruction in fitness principles, nutrition, fad diets, weight control, stress management, adherence strategies, and consumer information; and promotes self-awareness and responsibility for fitness.

### Introduction to Team Sports

Introduces fundamental skills, strategies, and rules associated with team sports such as basketball, volleyball, soccer, softball, baseball, field hockey, lacrosse, team handball, and flag football.

### Aerobic Dance

Provides opportunities to perform choreographic routines to music and to increase strength, cardiovascular and muscular endurance and flexibility. Includes fitness concepts for developing healthy lifetime habits.

### Introduction to Weight Training

Introduces weight training; emphasizes strength development training and proper lifting techniques. Includes fitness concepts for developing healthy lifetime habits.

### Physical Conditioning

Provides opportunities to participate in a variety of activities to enhance flexibility, muscular strength and endurance, cardiovascular endurance and body composition. Includes fitness concepts for the development of healthy lifetime habits.

### Body Sculpting

Provides methods to redefine body shape through specific exercises. Based on the American College of Sports Medicine guidelines for fitness and conditioning programs, this course covers weight training, conditioning exercises, and proper nutrition to improve muscle tone, muscle definition, posture, bodily proportions, and overall condition of the body and energy levels.

# Fine Arts Electives

Course Name/Description	
Band	
<b>Beginning Band I</b>	Provides opportunities to develop performance skills on a wind or percussion instrument. Emphasizes performance and production. May include analysis, historical and cultural influences, improvisation, and appreciation of music. Organizes objectives for self-paced progress. Stresses individual progress and group experiences.
<b>Beginning Band II</b>	Enhances level-one skills. Provides opportunities to continue development of performance skills on a wind or percussion instrument. Continues emphasis on performance, production, analysis, and appreciation of music. Stresses individualized learning and group experiences.
<b>Beginning Band III</b>	Enhances level-two skills. Provides opportunities to develop performance skills and precision on a wind or percussion instrument. Continues emphasis on performance, production, and analysis. Includes historical and cultural contributions and influences, and creative aspects and appreciation of music. Builds reading skills and independent performance of one's part in an ensemble. Stresses individualized learning and group experiences.
<b>Beginning Band IV</b>	Enhances level-three skills. Provides further opportunities to develop performance skills and precision on a wind or percussion instrument. Continues emphasis on performance and production, analysis, and historical and cultural contributions and influences, creative aspects of music, and appreciation of music. Stresses individualized learning and group experiences.
<b>Intermediate Band I</b>	This performance-based class provides opportunities for intermediate-level performers to increase performance skills and precision on a wind or percussion instrument. Includes performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music, and appreciation of music. Stresses individual progress and learning and group experiences. Strengthens reading skills. Individual growth and achievement are encouraged through participation in adjudicated solo and ensemble festivals, district honor bands, and private lessons. Participation in concert performances outside of regular class hours is expected.
<b>Intermediate Band II</b>	This performance-based class enhances level-one skills and provides further opportunities for intermediate-level performers to develop reading techniques and increase performance skills. Covers performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music, and appreciation of music. Stresses individualized learning and group experiences. Individual growth and achievement are encouraged through participation in adjudicated solo and ensemble festivals, district honor bands, and private lessons. Participation in concert performances outside of regular class hours is expected.
<b>Intermediate Band III</b>	This performance-based class enhances level-two skills and provides further opportunities for intermediate-level performers to build independence and leadership within the ensemble. Covers performance and production, analysis and historical and cultural contributions and influences, creative aspects of music, and appreciation of music. Stresses individualized learning and group experiences. Individual growth and achievement are encouraged through participation in adjudicated solo and ensemble festivals, district honor bands, and private lessons. Participation in concert performances outside of regular class hours is expected.
<b>Intermediate Band IV</b>	This performance-based class enhances level-three skills and provides further opportunities for intermediate-level performers to increase performance skills and precision, and build independence and leadership skills within the ensemble. Covers performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music, and appreciation of music. Stresses self-paced progress, practice strategies, and group experiences. Individual growth and achievement are encouraged through participation in adjudicated solo and ensemble festivals, district honor bands, and private lessons. Participation in concert performances outside of



regular class hours is expected.

#### **Advanced Band I**

This performance-based class provides opportunities for advanced-level performers to increase, develop and refine performance skills and precision on a wind or percussion instrument. Covers performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music, and appreciation of music at advanced levels of understanding. Organizes objectives for self-paced progress. Stresses individual progress and learning strategies, and ensemble experiences. Individual growth and achievement are encouraged through participation in adjudicated solo and ensemble festivals, district honor bands, and private lessons. Participation in concert performances outside of regular class hours is expected.

#### **Advanced Band II**

This performance-based class enhances level-one skills and provides further opportunities for advanced-level performers to develop and refine performance skills and precision on a wind or percussion instrument. Covers performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music, and appreciation of music. Stresses self-paced progress, individual learning strategies, and ensemble experiences. Individual growth and achievement are encouraged through participation in adjudicated solo and ensemble festivals, district honor bands, and private lessons. Participation in concert performances outside of regular class hours is expected.

#### **Advanced Band III**

This performance-based class enhances level-two skills and provides further opportunities for advanced-level performers to develop and refine performance skills and precision on a specific instrument. Covers performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music, and appreciation of music. Stresses self-paced progress, individual learning strategies, and ensemble experiences. Individual growth and achievement are encouraged through participation in adjudicated solo and ensemble festivals, district honor bands, and private lessons. Participation in concert performances outside of regular class hours is expected.

#### **Advanced Band IV**

This performance-based class enhances level-three skills and provides further opportunities for advanced-level performers to develop and refine performance skills and precision on a wind or percussion instrument. Covers performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music, and appreciation of music. Stresses self-paced progress in an increasing breadth of repertoire, individual learning strategies, and ensemble experiences. Individual growth and achievement are encouraged through participation in adjudicated solo and ensemble festivals, district honor bands, and private lessons. Participation in concert performances outside of regular class hours is expected.

### **Chorus**

#### **Beginning Choral Ensemble**

Provides opportunities to develop performance skills and knowledge in ensemble singing. Limited to 16 to 20 performers and may include any style period. Covers performance and production, analysis and theoretical studies, historical and cultural influences, creative aspects of music and appreciation of music. Stresses balance of individual progress and group success.

### **Music**

#### **Beginning Music Theory and Composition**

Introduces the fundamentals of organized sound, emphasizing rules of Western music composition and offering opportunities to create original works. Students will develop the ability to describe, understand, and recognize aspects of tonal music, and skills in sight-singing, dictation/aural, written aspects, composition, and analytical areas. Students will be exposed to a variety of exercises designed to develop these skills including listening, performance, writing, creating, and analyzing music. While the main emphasis is placed on music of the Common Practice Period (1600-1750), music of other stylistic periods may also be studied. Explores use of technology for composition.

#### **Music Appreciation I**

Introduces production and performance, covering terminology and idioms, elements of music, perceptive listening

and attitudes, and appreciation. Stresses the ability to become a literate consumer along with the ability to speak and write fluently about music.

## Visual Art

### Visual Arts/Comprehensive I

Introduces art history, art criticism, aesthetic judgment, and studio production. Emphasizes the ability to understand and use elements and principles of design through a variety of media, processes, and visual resources. Explores master artworks for historical and cultural significance.

### Visual Arts/Comprehensive II

Enhances level-one skills in art history, art criticism, aesthetic judgment, and studio production. Emphasizes and reinforces knowledge and application of the design elements and their relationship to the principles of design. Explores different two- and three-dimensional art media and processes. Investigates master artworks to increase awareness and to examine the role of art and the artist in past and contemporary societies.

### Drawing I

Explores a variety of drawing techniques and media. Emphasizes development of basic drawing skills and critical analysis skills for responding to master drawings. Examines solutions to drawing problems through student drawings and those of other artists. Covers Western and non-Western cultures.

### Photography I

Introduces photography as an art form. Covers the historical development of photography and photographic design and its cultural influences. Emphasizes the basics of exposing and processing photographs by introducing traditional and digital photography. Stresses appropriate processing techniques and safe use of photographic materials and equipment.

### AP Drawing

Conforms to College Board topics for the Advanced Placement Studio Art Drawing Portfolio Examination. Requires submission of original works and slides to be evaluated on quality. Provides experiences using different drawing media and approaches; designed for students interested in the practical experiences of art.

### AP 2-D Art and Design

Conforms to College Board topics for the Advanced Placement Studio 2D Design Portfolio Examination. Requires submission of original works and slides to be evaluated on quality. Provides experiences using different drawing media and approaches; designed for students interested in the practical experiences of art.

# CTAE Electives

## Course Name/Description

### Business

#### **Introduction to Business and Technology**

This is a foundational course and provides an overview of business and technology skills required for today's business environment. Knowledge of business principles, the impact of financial decisions, and technology proficiencies demanded by business combine to establish the elements of this course. Emphasis is placed on developing proficient fundamental computer skills required for all career pathways. Students will learn essentials for working in a business environment, managing a business, and owning a business. The intention of this course is to prepare students to be successful both personally and professionally in an information-based society. Students will not only understand the concepts, but apply their knowledge to situations and defend their actions/decisions/choices through the knowledge and skills acquired in this course. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of both the employability skills standards and content standards for this course. Various forms of technologies will be highlighted to expose students to the emerging technologies impacting the business world. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are taught in this course as a foundational knowledge to prepare students to be college and career ready.

#### **Legal Environment of Business**

This course addresses statutes and regulations affecting businesses, families, and individuals. All students will benefit with the knowledge of business law as they will eventually assume roles as citizens, workers, and consumers in their communities and in society at large. Students will get an overview of business law while concentrating on the legal aspects of business ownership and management. Legal issues addressed include court procedures, contracts, torts, consumer law, employment law, environmental law, international law, ethics, and the role of the government in business. Students will not only understand the concepts, but will also apply their knowledge to situations and defend their actions, decisions, and choices.

**(prerequisite: Introduction to Business & Technology)**

#### **Entrepreneurship**

This course focuses on recognizing a business opportunity, starting a business, operating and maintaining a business. Students will be exposed to the development of critical thinking, problem solving, and innovation in this course as they will either be the business owner or individuals working in a competitive job market in the future. Integration of accounting, finance, marketing, business management, legal and economic environments will be developed throughout projects in this course. Working to develop a business plan that includes structuring the organization, financing the organization, and managing information, operations, marketing, and human resources will be a focus in the course. Engaging students in the creation and management of a business and the challenges of being a small business owner will be fulfilled in this course.

### Computer Information Technology

#### **Introduction to Digital Technology**

This course is designed for high school students to understand, communicate, and adapt to a digital world as it impacts their personal life, society, and the business world. Exposure to foundational knowledge in hardware, software, programming, web design, IT support, and networks are all taught in a computer lab with hands-on activities and project-focused tasks. Students will not only understand the concepts, but apply their knowledge to situations and defend their actions/decisions/choices through the knowledge and skills acquired in this course. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of both the employability skills standards and content standards for this course. Various forms of technologies will be highlighted to expose students to the emerging technologies impacting the digital world. Professional communication skills and practices, problem-solving, ethical and legal issues,

and the impact of effective presentation skills are taught in this course as a foundational knowledge to prepare students to be college and career ready. The knowledge and skills taught in this course build upon each other to form a comprehensive introduction to digital world. Introduction to Digital Technology is a course that is appropriate for all high school students.

## Engineering

### Foundations of Engineering and Technology

Foundations of Engineering and Technology is the introductory course for all Georgia Engineering and Technology Education pathways. This course provides students with opportunities to develop fundamental technological literacy as they learn about the history, systems, and processes of invention and innovation.

### Engineering Concepts

Engineering Concepts is second course in the engineering pathway. This course introduces students to the fundamental principles of engineering. Students learn about areas of specialization within engineering and engineering design, and apply engineering tools and procedures as they complete hands-on instructional activities.

### Engineering Applications

Engineering Applications is the third course in the engineering pathway. Students have opportunities to apply engineering design as they develop a solution for a technological problem. Students use applications of mathematics and science to predict the success of an engineered solution and complete hands-on activities with tools, materials, and processes as they develop a working drawings and prototypes.

## Food Science

### Food Science

Food science integrates many branches of science and relies on the application of the rapid advances in technology to expand and improve the food supply. Students will evaluate the effects of processing, preparation, and storage on the quality, safety, wholesomeness, and nutritive value of foods. Building on information learned in Nutrition and Wellness and Chemistry, this course illustrates scientific principles in an applied context, exposing students to the wonders of the scientific world. Careers will be explored.

## Biotechnology

### Essentials of Biotechnology

This is the second course in the career pathway that introduces students to the broad understanding of the fundamentals of biotechnology and the impact on society. The knowledge and skills in this course provides a basic overview of current trends and careers in biotechnology, with an emphasis on basic laboratory skills, along with the business, regulatory, and ethical aspects of biotechnology. The prerequisite for the course is Introduction to Healthcare Science Technology.

## JROTC

### Naval Science I Cadet Field Manual

The purpose of this course is to combine all information on military drill and ceremonies, uniform regulations, physical fitness, orienteering, principles of health, first aid, survival, leadership, and communications. Minimum performance requirements of this course are in accordance with current Chief of Naval Education Training instruction, NAVEDTRA 37128. Successful completion of three courses of credit will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

### Naval Science Introduction to NJROTC

The purpose of this course is to help students understand the mission, goals, and opportunities available as members of the NJROTC program. This course will also introduce students to the basic principles of leadership, which combined with the many opportunities for practical experience in the NJROTC program will prepare them for leadership roles in school and upon graduation. More importantly, this course will assist students in developing an understanding of our nation, our values, traditions, heritage, respect for our laws, and becoming informed responsible citizens.

### Naval Science: Maritime History

The purpose of this course is to build on the general introduction provided in Naval Science I, to further develop the traits of citizenship and leadership in students and, introduce cadets to the maritime history of the world and the

United States from the American Revolution through the present time. The material includes Bosnia, the demise of the Soviet Union, and the September 11, 2001 terrorists' attacks upon the United States.

**Naval Science II Nautical Sciences**

The purpose of this course is to introduce the various nautical sciences through classroom work and some laboratory time. The development of core skills that students should master is integrated throughout the course and includes geography, oceanography, astronomy, physical science, meteorology, and weather. Minimum performance requirements of this course are based on successful completion accordance with and based on current Chief of naval Education Training instructions. The cadet will be expected to illustrate an understanding of maritime geography as it relates to our national resources, landforms, climate, soil bodies of water, people governments, military, and geopolitics.

**Naval Science III Naval Knowledge**

The purpose of this course is to further the foundation in citizenship and leadership established in Naval Science One and Two and to expound upon the virtues of United States citizenship with knowledge of uses of the world's waterways through the viewpoint of National power and International law.

**Naval Science III Naval Orientation and Skills**

The purpose of this course is to further the foundation in citizenship and leadership established in Naval Science One and to provide classroom and practical application in Naval Organization and ship.

**Naval Science IV Naval Leadership and Ethics**

The purpose of this course is to take a more in-depth look at what leadership is and to learn how to maximize leadership abilities. More importantly, this course will assist the student in adding the polish necessary to be a truly effective leader in the NJROTC unit, school, community, and, in life.

**Naval Science IV Effective Communications**

The purpose of this course is to teach the students the techniques of effective communication, which is one of the most important skills that a good leader must develop in order to be successful.

**Work Based Learning (application & pre-approval required)**

**Internship I-IV**

To qualify for a WBL placement, a student must be in grades 11 or 12 and at least 16 years old. Students must also have a defined Career Pathway in order to participate in the Work-Based component of Career-Related Education. Students will leave campus during 3rd and/or 4th block to gain work experience. You may select an internship as the 4th course in any Career Tech Pathway

11th-12th  
 Good discipline and attendance record, have transportation and insurance  
 Complete application

# Dekalb High School of Technology North Options (application & pre-approval required)

Course Name/Description
<b>Automotive Technology</b>
<p><b>Basic Maintenance and Light Repair</b></p> <p>Students in this course will learn the basic skills needed to gain employment as a maintenance and light repair technician. Students will be exposed to courses in automotive preventative maintenance and servicing and replacing brakes, and steering and suspension components. In addition, student will learn how to do general electrical system diagnosis, learn electrical theory, perform basic tests and determine necessary action. In addition, students will learn how to evacuate and recharge air-conditioning systems using the proper refrigerant. The hours completed in this course are aligned with ASE/NATEF standards and are a base for the entry-level technician.</p>
<p><b>Maintenance and Light Repair 2</b></p> <p>Students will learn the basic skills needed to gain employment as a maintenance and light repair technician and will expose students to automotive preventative maintenance and servicing, as well as replacing brakes, and steering and suspension components. Students will also learn general electrical system diagnosis, electrical theory, basic test requirements, and determining necessary action. In addition, students will learn how to evacuate and recharge air-conditioning systems using the proper refrigerant. Standards for this course are aligned with ASE/NATEF standards and are an excellent foundation for the entry-level technician. The prerequisite for this course is Basic Maintenance and Light Repair.</p>
<p><b>Maintenance and Light Repair 3</b></p> <p>Students will learn the basic skills needed to gain employment as a maintenance and light repair technician and will expose student to automotive preventative maintenance and servicing, replacing brakes, as well as steering and suspension components. Students will learn about general electrical system diagnosis, electrical theory, basic tests that are required, and determine the necessary action. In addition, students will learn how to evacuate and recharge air-conditioning systems using the proper refrigerant. The standards in this course are aligned with ASE/NATEF standards and are an excellent foundation for the entry-level technician. The prerequisite for this course is Maintenance and Light Repair 2.</p>
<p><b>Engine Performance Concepts</b></p> <p>The course will help students build a strong scientific knowledge base and develop skills related to vehicle engine performance in the logistics and transportation sector. Mastery of these standards through project-based learning and leadership development activities of the Career and Technical Student Organizations will help prepare students with a competitive edge for the transportation logistics marketplace. Note: For a more comprehensive and authoritative report of national academic related skills please refer to the National Automotive Technicians Education Foundation’s document “APPLIED ACADEMIC &amp; WORKPLACE SKILLS FOR AUTOMOBILE TECHNICIANS” available at <a href="http://www.natef.org">www.natef.org</a>.</p>
<b>Computer Information Technology (Programming and Game Design)</b>
<p><b>Introduction to Digital Technology</b></p> <p>This course is designed for high school students to understand, communicate, and adapt to a digital world as it impacts their personal life, society, and the business world. Exposure to foundational knowledge in hardware, software, programming, web design, IT support, and networks are all taught in a computer lab with hands-on activities and project-focused tasks. Students will not only understand the concepts, but apply their knowledge to situations and defend their actions/decisions/choices through the knowledge and skills acquired in this course. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of both the employability skills standards and content standards for this course. Various forms of technologies will be highlighted to expose students to the emerging technologies impacting the digital world. Professional communication skills and practices, problem-solving, ethical and legal issues,</p>

and the impact of effective presentation skills are taught in this course as a foundational knowledge to prepare students to be college and career ready. The knowledge and skills taught in this course build upon each other to form a comprehensive introduction to digital world. Introduction to Digital Technology is a course that is appropriate for all high school students.

### **Computer Science Principles**

This course emphasizes the content, practices, thinking and skills central to the discipline of computer science. Through both its content and pedagogy, this course aims to appeal to a broad audience. The focus of this course will fall into these computational thinking practices: connecting computing, developing computational artifacts, abstracting, analyzing problems and artifacts, communicating, and collaborating.

### **Web Development**

This course, with Hypertext Markup Language (HTML) and Cascading Style Sheet (CSS) as its foundation, will teach students to develop and design responsive web sites through coding, testing, debugging and implementation of web-based services. This course will also allow students to learn about content management systems, client side languages, server side languages, and database concepts. The course is designed to give students foundational knowledge of "front-end" and "back-end" development to address the presentation and data access layers of web site development. After mastery of the standards in this course, students should be prepared to earn an industry-recognized credential in this career area. Students enrolled in this course should have successfully completed Introduction to Digital Technology and Computer Science Principles.

### **Programming, Games, Apps, and Society**

The course is designed for high school students to strategize, design, and develop games and mobile and desktop applications that can be produced in the real world. Students will learn about life-cycles of project development and use models to develop applications. Attention will be placed on how user interfaces affect the usability and effectiveness of a game or an application. Programming constructs will be employed which will allow students' applications to interact with "real world," stimuli. The course exposes students to privacy, legality, and security considerations with regards to the software industry.

## **Construction/Industry Fundamentals (Carpentry, Plumbing Electrical and Masonry)**

### **Industry Fundamentals and Occupational Safety**

This course is the foundational course that prepares students for a pursuit of any career in the field of construction. It prepares the student for the basic knowledge to function safely on or around a construction site and in the industry in general. It provides the student with the option for an Industry Certification in the Construction Core. This course explains the safety obligations of workers, supervisors, and managers to ensure a safe workplace. Course content discusses the causes and results of accidents and the dangers of rationalizing risks. It includes the basic content of OSHA 10-hour safety standards. It also includes the basic knowledge and skills needed in the following areas: construction math, hand and power tools used in the field, general blueprints, and basics of rigging safety.

### **Introduction to Construction**

This course is preceded by the Occupational Safety and Fundamentals course. This course offers an opportunity for students to build on their knowledge and skills developed in Occupational Safety. It introduces them to four construction craft areas and is also the second step towards gaining a Level One Industry Certification in one of the craft areas. The goal of this course is to introduce students to the history and traditions of the carpentry, masonry, plumbing, and electrical craft trades. Students will explore how the various crafts have influenced and been influenced by history. The student will also learn and apply knowledge of the care and safe use of hand and power tools as related to each trade. In addition, students will be introduced to, and develop skills to differentiate between blueprints, as is related to each individual craft area.

### **Carpentry I**

This course is preceded by Introduction to Construction. This course is the third course that provides the student a solid foundation in carpentry skills and knowledge. It is the third step in gaining a Level One Industry Certification in Carpentry. This course provides an overview of the building materials used in the carpentry craft. It teaches techniques for reading and using blueprints and specifications especially as related to the carpentry craft. It provides

specific knowledge and skills in site layout and floor and wall framing systems. It includes the basic industry terminology for a carpentry craftsman.

### **Carpentry II**

This course is offered after pathway completion and provides the student advanced skills in carpentry. This course provides the knowledge of various kinds of roof systems. It provides knowledge and skills for layout and cutting of the various types of roof rafters. It provides knowledge and skills for installing exterior doors, windows, and skylights. It also provides the student with knowledge and skills to layout, cut, and install various types of stairs and the code requirements needed to properly do so.

### **Plumbing I**

This course is preceded by Introduction to Construction and provides the student a solid foundation in plumbing skills and knowledge. It is the third step in gaining a Level One Industry Certification in Plumbing. This course provides basic skills and knowledge needed to apply OSHA and EPA safety concepts and practices as related specifically to the plumbing trade. It includes the use of plumbing tools and materials. The student is introduced to the basic knowledge and application of plumbing codes. Also included is the basic skills and knowledge required to handle, estimate, and store materials used in the plumbing trade. Involved in this process is the correct interpretation and application of basic information from architectural and construction working drawings, especially as related to plumbing installation.

### **Plumbing II**

This course is offered after pathway completion and provides the student advanced training in plumbing skills and knowledge. This course provides the basic skills and knowledge to install water supply systems as well as drain, waste, and ventilation systems. This involves basic installation from rough-in through trim out of a variety of fixtures. It involves practice with the skills and knowledge necessary to apply plumbing codes to specific circumstances. This course also builds on the skills and knowledge of the student to be able to read, interpret, and apply information from architectural and construction working drawings, especially as related to plumbing installation.

### **Electrical I**

This course is preceded by Introduction to Construction and is the third course that provides the student a solid foundation in electrical skills and knowledge. It is the third step in gaining a Level One Industry Certification in Electrical. This course builds on the concepts of electrical safety introduced in Occupational Safety. It provides knowledge of the hardware and systems used by an electrician and the basic skills to install them. It provides a general knowledge of electrical systems including series, parallel, and series-parallel circuits. It provides the basic skills and knowledge to navigate and use the National Electrical Code. It provides an introduction to the skills and knowledge of conduit bending and installation.

### **Electrical II**

This course is offered after pathway completion. The course provides the student advanced training in electrical construction. This course focuses on proper selection, inspection, use, and maintenance of common electrical test equipment; introduces the types and applications of raceways, wire-ways, and ducts; focuses on the types and application of conductors and covers proper wiring techniques, electrical prints, drawings and symbols; covers the electrical devices and wiring techniques common to commercial and industrial construction and maintenance, and covers the electrical devices and wiring techniques common to residential construction and maintenance.

### **Masonry I**

This course is preceded by Introduction to Construction and provides the student a solid foundation in masonry skills and knowledge. It is the third step in gaining a Level One Industry Certification in Masonry. This course provides knowledge and skills needed to operate hand tools, power tools, and equipment used in mixing mortar safely. It provides the knowledge and skills needed for cutting, laying, and finishing masonry units. It provides the math knowledge and skills needed to calculate distances, areas, and volumes common in masonry work. It also provides the knowledge of the types and properties of mortar and materials used in a concrete mixture.

### **Masonry II**

This course is offered after pathway completion and offers students advanced masonry skills and knowledge. This course provides the basic knowledge needed for all types of concrete and masonry units and their applications. It provides additional skills needed for cutting, laying, and finishing masonry units. It provides the knowledge and skills to use ties and reinforcing materials while installing masonry units. It also provides knowledge and skills related to the



processes used in placing masonry units.

## Cosmetology

### Introduction to Personal Care Services

This course introduces both fundamental theory and practices of the personal care professions including nail technicians, estheticians, barbers, and cosmetologists. Emphasis will be placed on professional practices and safety. Areas addressed in this course include: state rules and regulations, professional image, bacteriology, decontamination and infection control, chemistry fundamentals, safety, Hazardous Duty Standards Act compliance, and anatomy and physiology. Students will experience basic hands on skills in each area to help them determine the pathway they are most interested in pursuing. By completing courses in the personal care services pathways, students can potentially earn credit toward the hours required by the Georgia State Board of Barbering and/or Cosmetology or hours toward their license as an esthetician or nail technician. Pre-requisite for this course is advisor approval.

### Cosmetology Services II

After exploring the different areas of Personal Care Services in the introduction course, students may choose to pursue further training in cosmetology services. This course as well as additional advanced cosmetology courses is aligned with the Georgia State Board of Cosmetology requirements and licensure, and with the Technical College System of Georgia. This course is designed to enhance the understanding of anatomy of the skin and hair relating to the Cosmetology Industry. Students will master shampooing, permanent waving, haircutting, basic skin care, and make-up application while maintaining safety and sanitation in the workplace set forth by OSHA standards. The prerequisite for this course is Introduction to Personal Care Services.

### Cosmetology Services III

This course will cover haircutting, hair color, and relaxers. Both theory and practical work will be implemented for students to have basic entry level skills in the field of cosmetology. Safety and infection control will be applied throughout this course. Professional work ethics, communication skills, critical thinking skills, soft skills and professional image will be utilized during this course. This course aligns to the regulations and requirements of the State Board of Cosmetology. The prerequisites for the course are Introduction to Personal Care Services and Cosmetology Services II.

### Cosmetology Service Core IV

This course provides more in-depth competencies in the use of chemical procedures on the hair, specifically in permanent waving, chemical relaxing and hair coloring techniques. Competencies for the co-curricular student organization SkillsUSA are integral components of both the core employability skills standards and the technical skills standards, and SkillsUSA activities should be incorporated throughout instructional strategies developed for the course.

## Dental Science

### Introduction to Healthcare Science

Introduction to Healthcare Science is the foundational course for all Health Science pathways and is a prerequisite for all other Healthcare Science pathway courses. This course will enable students to receive initial exposure to the many Healthcare Science careers as well as employability, communication, and technology skills necessary in the healthcare industry. The concepts of human growth and development, interaction with patients and family members, health, wellness, and preventative care are evaluated, as well as the legal, ethical responsibilities of today's healthcare provider. Fundamental healthcare skills development is initiated including microbiology, basic life support and first aid. This course will provide students with a competitive edge to be the better candidate for either entry into the healthcare global marketplace and/or the post-secondary institution of their choice to continue their education and training.

### Essentials of Dental Science

Students will receive initial exposure to dental health science technical skills applicable to all dental health occupations. This course provides an overall framework of basic skills utilized in the dental field. Students are required to meet both national and intrastate professional guidelines as designated by applicable regulatory agencies such as the Occupational Safety and Health Administration (OSHA), Center for Disease Control (CDC) and the Georgia Board of Dentistry. Competencies for the co-curricular student organization HOSA are integral components of both core

employability standards and technical skills standards. HOSA activities are incorporated throughout the instructional strategies developed for the course. The prerequisite for this course is Introduction to Healthcare Science Technology.

### **Dental Science II**

This course is designed to offer students (preferably upper classmen - juniors or seniors) an in-depth study and practical applications of dental charting, office procedures, chair-side assisting, anatomy and physiology, and tooth morphology. Academics and other related science are integrated throughout the course. Competencies for the co-curricular student organization, HOSA, are integral components of both core employability standards and the technical standards. HOSA activities should be incorporated throughout the instructional strategies for the course. The prerequisites for this course include Introduction to Healthcare Science Technology and Essentials of Dental Science.

### **Health Info MGMT/Medical Off**

This course will orient the student to health information management and working in a medical office. Topics include introducing students to skills and knowledge utilized in a medical office, the structure of healthcare in the United States, healthcare providers, and the structure and function of professional organizations. The course provides students with medical office computer and software skills that include hardware and software components of computers for medical record applications; database software and information management; specialized information management systems in healthcare; methods of controlling confidentiality and patient rights; and accuracy and security of health information data in computer systems. Prerequisites for this course are Introduction to Healthcare and Essentials of Healthcare.

## **Healthcare Science (Patient Care and Allied Health & Medicine)**

### **Introduction to Healthcare Science**

Introduction to Healthcare Science is the foundational course for all Health Science pathways and is a prerequisite for all other Healthcare Science pathway courses. This course will enable students to receive initial exposure to the many Healthcare Science careers as well as employability, communication, and technology skills necessary in the healthcare industry. The concepts of human growth and development, interaction with patients and family members, health, wellness, and preventative care are evaluated, as well as the legal, ethical responsibilities of today's healthcare provider. Fundamental healthcare skills development is initiated including microbiology, basic life support and first aid. This course will provide students with a competitive edge to be the better candidate for either entry into the healthcare global marketplace and/or the post-secondary institution of their choice to continue their education and training.

### **Essentials of Healthcare**

Anatomy and Physiology is a vital part of most healthcare post-secondary education programs. The Essentials of Healthcare is a medical-focused anatomy course addressing the physiology of each body system, along with the investigation of common diseases, disorders and emerging diseases. The prevention of disease and the diagnosis and treatment that might be utilized are addressed, along with medical terminology related to each system. This course provides an opportunity to demonstrate technical skills that enforce the goal of helping students make connections between medical procedures and the pathophysiology of diseases and disorders. The pre-requisite for this course is Introduction to Healthcare.

### **Allied Health and Medicine**

This course is designed to offer students (preferably upper classmen - juniors or seniors) the opportunity to become effective and efficient multi-skilled healthcare providers as they develop a working knowledge of various allied health opportunities. Students focusing on a career path in the healthcare field may apply classroom/lab knowledge and skills in the clinical setting as they participate in direct or simulated client care. The curriculum allows instructors to provide options for classroom/student growth opportunities in area(s) of interest to the student. These options may be determined by community need, available resources, and/or student interest, etc.

### **Health Info MGMT/Medical Off**

This course will orient the student to health information management and working in a medical office. Topics include introducing students to skills and knowledge utilized in a medical office, the structure of healthcare in the United States, healthcare providers, and the structure and function of professional organizations. The course provides students with medical office computer and software skills that include hardware and software components of

computers for medical record applications; database software and information management; specialized information management systems in healthcare; methods of controlling confidentiality and patient rights; and accuracy and security of health information data in computer systems. Prerequisites for this course are Introduction to Healthcare and Essentials of Healthcare.

## **Law, Public Safety, Corrections and Security (Criminal Investigations)**

### **Introduction to Law, Public Safety, Corrections and Security**

Pre-requisite for all other courses within the Career Cluster. This course provides students with career focused educational opportunities in various LPSCS fields. It examines the basic concepts of law related to citizens' rights and the responsibilities, and students will receive instruction in critical skill areas including: communicating with diverse groups, conflict resolution, ethics, CERT (Citizens Emergency Response Training, or similar program), basic firefighting, report writing, terrorism, civil and criminal law. Career planning and employability skills will be emphasized.

### **Criminal Justice Essentials**

Criminal Justice Essentials provides an overview of the criminal justice system. Starting with historical perspectives of the origin of the system, the course reviews the overall structure. Students will become immersed in criminal and constitutional law and will review basic law enforcement skills. The course ends with a mock trial to provide participants with a first-hand experience of the criminal justice system. The course will also provide in-depth competencies and components for the co-curricular SkillsUSA student organization that should be incorporated throughout instructional strategies of the course. Participation in additional student organizations that align with Law, Public Safety, Corrections and Security pathways (i.e. mock trial) is encouraged to enhance standards addressed in the curriculum. The prerequisite for this course is Introduction to Law, Public Safety, Corrections and Security.

### **Criminal Investigations**

This course is designed to provide students with an opportunity to explore the basic processes and principles of a criminal investigation. Students will learn the legal responsibilities and challenges of the patrol officer, investigator, and crime scene technician at a crime scene. Students will learn the importance of preserving and documenting the crime scene along with the identification, collection, and processing of evidence and the contribution to the criminal investigation. This course is one of two choices that may be selected for the law enforcement pathway. The prerequisites for this course are Introduction to Law, Public Safety, Corrections and Security, and Criminal Justice Essentials.

### **Forensic Science and Criminal Investigations**

Forensic Science and Criminal Investigations is a course designed to contextualize scientific principles within the career studies of students interested in criminal justice. The course will utilize scientific equipment; therefore, instructors should have access to a science lab if their Career and Technical Education lab is not equipped. Students will study the forensic application of principles of chemistry, biology, physics and other disciplines. Students will utilize chromatography, electrophoresis, microscopic observation, and other scientific techniques in their studies. Students will also learn some investigative techniques and crime scene investigation skills through the lens of the scientific method. The prerequisites for this course are Introduction to Law, Public Safety, Corrections and Security and Criminal Justice Essentials.

## **Manufacturing & Technology**

### **Foundations of Manufacturing and Materials Science**

Foundations of Manufacturing and Materials Science is the introductory course for the Manufacturing career pathway. This course provides students with opportunities to become familiar with related careers and develop fundamental technological literacy as they learn about the history, systems, and processes of manufacturing. In addition, the course will provide an overview of the safe use of tools and equipment used in the industry.

### **Robotics and Automated Systems**

Upon completing this course, students will be able to apply their knowledge of computer aided design (CAD), computer numerical control (CNC), robotics, computer assisted manufacturing (CAM), programmable logic controllers, automated guided vehicles (AGV), and computer integrated manufacturing (CIM).

### **Production Enterprises**

The purpose of this course is to give students an understanding of how to design and implement a production system.

Students learn how businesses engage in the production of products beginning with pre-production activities and continuing through post-production activities. Additionally, students will learn about the historical and societal impact of production. Students will also develop an understanding of careers available in manufacturing and the skills and education required for those careers.

**Research Design, & Project Management**

Research, Design, and Project Management is the fourth course in the engineering pathway. This course provides students with opportunities to work with students from other pathways as a member of a design team. Research strategies, prototype testing and evaluation, and communication skills are emphasized.