

Chamblee Charter High School

Course Catalog



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Table of Contents

DeKalb County School District Program of Study	3
Chamblee Charter High School Course Sequences	4-5
English Course Descriptions	6
Social Studies Course Descriptions	9
Science Course Descriptions	12
Mathematics Course Descriptions	15
Foreign Language Course Descriptions	19
AP Capstone Program Course Descriptions	20
Visual Arts Course Descriptions	21
Fine Arts Course Descriptions	24
Business & Computer Science Course Descriptions	28
Engineering Course Descriptions	34
Family & Consumer Science Course Descriptions	36
Audio/Visual Course Descriptions	38
JROTC Course Descriptions	39
Physical Education Course Descriptions	41
DeKalb County School District Promotion Requirements	42

DEKALB COUNTY SCHOOL DISTRICT PROGRAM OF STUDY SELECTION/ADVISEMENT FORM

Student Last Name: _____ Student First Name: _____ Student Number: _____
 Counselor Name (Print): _____ Counselor Signature: _____ Date: _____

Courses	General Education Diploma (Check One) DIPLOMA SEAL: Select type of diploma seal by placing a ✓ in the appropriate box.				Transition Diploma
	Students with Disabilities (GAA)	College Preparatory Seal	Career Technology Seal	Honors /Distinction Seal †	Required course work determined by Individualized Educational Program (IEP)
ENGLISH* Literature 9 World Literature American Literature British Literature	4	4	4	4	
MATH* Coordinate Algebra or Algebra I Analytic Geometry or Geometry Advanced Algebra or Algebra One Additional Math unit	4	4	4	4	
SCIENCE* Biology Physical Science or Physics Chemistry, Earth Systems, Environmental Science or any AP/IB One Additional Unit	4	4 4 th science can meet science or elective requirement	4 4 th science can meet science or elective requirement	4 4 th science can meet science or elective requirement	
SOCIAL STUDIES* .5 Am Govt .5 World Geography World History US History *Economics	4	4	4	4	
HEALTH/PHYSICAL EDUCATION .5 Health .5 PE 1 **	2	2	2	2	
ELECTIVES *** Humanities *** World Languages* Career Technology***	6	6 *2 Units of the same World Language required ***3 Units of Career Tech In the same pathway required or 3 Units of Humanities 1 General Elective	6 *1 Unit of a World Language required ***3 Units of Career Tech in the same pathway required 2 General Electives	6 *3 Units of the same World Language required 3 General Electives	
Totals	24	24	24	24	

†Requires 3.5 Cumulative Grade Point Average (CUGPA) and a 3.0 Core Grade Point Average (CGPA)

*Core Courses

**One unit may be exempt through validated full-year participation in DeKalb County School District sponsored athletics, marching band, dance and/or JROTC.

***Students are required to select elective courses based on the area of concentration with a minimum of three (3) units within the area of Career Technology or a minimum of three (3) units within the area of Humanities. Career Technology units must be in one of the following areas: BUS ED, FCS, TE, T&I or JROTC. Humanities include the following areas: World Languages, *ESOL, Fine Arts, Visual Arts, Performing Arts, ELA and Social Studies.

*All identified ELL students must be enrolled in an ESOL course. Course level placement must be made per results of the ACCESS and/or WIDA Standards Language Proficiency Level. For approved ESOL delivery models, please refer to GaDOE ESOL Resource Guide.

*Transfer students who have earned 0.5 CU for Economics have met state requirements; therefore, transfer students must take another 0.5 CU social studies elective to meet local graduation requirements.

- Transfer students who have not successfully completed 0.5 CU of World Geography may substitute another 0.5 CU social studies elective to meet local graduation requirements.

Parent's/Guardian's Signature: _____ Date: _____
 Student's Signature: _____ Date: _____

CCHS Course Sequence for students entering 9th grade in 2018 & beyond

Diploma Seal: College Prep Seal Honors & Distinction Seal

ENGLISH	<i>9th</i>	Lit Comp 9	Lit Comp 9
	<i>10th</i>	Amer. Literature/AP Lang	American Literature/AP Lang
	<i>11th</i>	World Literature	World Literature
	<i>12th</i>	Brit Lit. /AP Literature	Brit Lit. /AP Literature
MATH**	<i>9th</i>	Coordinate Algebra <i>or</i> Accelerated Coordinate Algebra	Coordinate Algebra <i>or</i> Accelerated Coordinate Algebra
	<i>10th</i>	Anal. Geometry <i>or</i> Accel. Geometry/Adv. Algebra	Anal. Geometry <i>or</i> Accel. Geometry/Advanced Algebra
	<i>11th</i>	Adv. Algebra <i>or</i> Accel Pre-Calculus	Adv. Algebra <i>or</i> Accel Pre-Calculus
	<i>12th</i>	4 th Math Option	4 th Math Option
SCIENCE	<i>9th</i>	Physics	Biology
	<i>10th</i>	Chemistry/Earth Systems	Chemistry/Earth Systems
	<i>11th</i>	Biology	Physics
	<i>12th</i>	4th Science Option	4th Science Option
SOCIAL STUDIES	<i>9th</i>	Amer. Gov. /World Geo.	Amer. Gov. /World Geo.
	<i>10th</i>	World History/AP World History	World History/AP World History
	<i>11th</i>	U.S. History/AP US History	U.S. History/AP US History
	<i>12th</i>	Economics/AP Economics	Economics/AP Economics
WORLD LANGUAGE		2 units of same world language (Spanish, German, French)	3 units of same world language (Spanish, German, French)
HEALTH/P.E.	<i>9th</i>	Health/Personal Fitness	
	<i>10th</i>	2nd Year PE elective*	
Electives		3 units of Career Tech in the same pathway required or 3 units of Humanities, and 1 general elective.	3 General Electives
GPA Requirement		None	3.5 cumulative GPA; 3.0 core GPA
Total Credits		24	24

** Math sequence may vary depending on math course completed in the 8th grade

CCHS Typical Four Year Course Sequence (students enrolled prior to 2018)

Diploma Seal:	College Prep Seal	Honors & Distinction Seal	
ENGLISH	9th	Lit Comp 9	Lit Comp 9
	10th	World Literature	World Literature
	11th	American Literature./AP Lang.	American Literature./AP Lang.
	12th	British Literature/AP Literature	British Literature/AP Literature
MATH**	9th	Coordinate Algebra <i>or</i> Accelerated Coordinate Algebra	Coordinate Algebra <i>or</i> Accelerated Coordinate Algebra
	10th	Anal. Geometry <i>or</i> Accel. Geometry/Adv. Algebra	Anal. Geometry <i>or</i> Accel. Geometry/Advanced Algebra
	11th	Advanced Algebra <i>or</i> Accelerated Pre-Calculus	Advanced Algebra <i>or</i> Accelerated Pre-Calculus
	12th	4 th Math Option	4 th Math Option
SCIENCE	9th	Biology	Biology
	10th	Chemistry/Earth Systems	Chemistry/Earth Systems
	11th	Physics/AP Physics/Physical Science	Physics/AP Physics/Physical Science
	12th	4th Science Option	4th Science Option
SOC. STUDIES	9th	American Gov't./World Geo.	American Gov't./World Geo.
	10th	World History/AP World History	World History/AP World History
	11th	Amer. History/AP US History	Amer. History/AP US History
	12th	Economics/AP Economics	Economics/AP Economics
WORLD LANGUAGE		2 units of same world language (Spanish, German, French)	3 units of same world language (Spanish, German, French)
HEALTH/P.E.	9th	Health/Personal Fitness	Health/Personal Fitness
	10th	2nd Year PE elective	2nd Year PE elective
Electives	3 units of Career Tech in the same pathway required or 3 units of Humanities, and 1 general elective.		3 General Electives
GPA Requirement	None		3.5 overall; 3.0 core
Total Credits	24		24

** Math sequence may vary depending on math course completed in the 9th grade

ENGLISH/LANGUAGE ARTS

Ninth Grade

Literature/Composition

23.06100

This course focuses on a study of literary genres; 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. While the focus is technical writing in ninth grade literature, the student will also demonstrate competency in a variety of writing genres: narrative, expository, persuasive, and technical. 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 listening, speaking, and viewing skills for a variety of purposes.

Tenth Grade

American Literature/Composition

23.05100

This course focuses on the study of American literature, writing modes and genres, and essential conventions for reading, writing, and speaking. The student develops an understanding of chronological context and the relevance of period structures in American 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 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 a variety of writing genres: narrative, persuasive, and technical. The student 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 listening, speaking, and viewing skills for a variety of purposes.

Eleventh Grade

World Literature/Composition

23.06300

This course focuses on a study of World Literature; 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. Depending on which grade level this course is taught, the teacher will follow strands from the Georgia Performance Standards for that grade level for composition, conventions, and listening, speaking, and viewing.

Advanced Placement Language Composition

23.05300

This course focuses on the study of American literature, 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 affect 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, speaking, and viewing skills 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. An AP syllabus must be submitted and approved by the College Board. (This literature module must be taught in the 11th grade and is recommended as a designated substitute for American Literature.)

Twelfth Grade

British Literature/Composition

23.05200

This course focuses on the study of British literature, 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 a variety of writing genres: narrative, persuasive, and technical. 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 listening, speaking, and viewing skills for a variety of purposes.

Advanced Placement English (Literature and Composition)

23.06500

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. An AP syllabus will be submitted and approved by College Board.

Electives

Writer's Workshop

23.03100

This course offers opportunities for students to explore different writing genres: narrative, descriptive, persuasive, and expository modes of discourse. The students will study different writers and their writing styles. The students will have opportunities to improve writing proficiency through a complete study of the components of solid writing: fluency, style, diction, mechanics, grammar, imaginative expressions, and details. The course allows students to utilize the writing process to write independently to improve their writing.

SOCIAL STUDIES

Ninth Grade

Citizenship (American Government)

45.05110

An in-depth study of the American political system. This course focuses on the foundation, principles and structure of the American system of government, examines the role of political parties, social factors as they relate to the role of the citizen, and analyzes the decision-making process that are a part of the system of American political behavior. This course meets the state's Citizenship requirement for graduation.

World Geography

45.07110

Investigates regions of the world and how these regions influence the historical, economical, political and cultural development in an interdependent world. It includes geographic concepts, physical phenomena and the relationship of people to their environment. This course also covers environmental issues and decision-making skills, while covering regions, location (position on earth's surface), place (physical and human characteristics), relationships within places and movement (human interaction on the earth).

Tenth Grade

World History

45.08300

A survey course beginning with the earliest civilizations and highlighting important developments throughout the world until the early 21st century. The course includes topics related to Early Civilizations and Classical Empires; Growth, Expansion, and the Emergence of the Modern World; Global Interaction and Conflict; and the Contemporary World.

AP World History

45.08200

This course rigorously examines the past 10,000 years of human historical development ranging from the Agricultural Revolution to modern world historical events. The course will promote a greater understanding of the evolution of global activities & themes in different societies by utilizing primary and secondary sources, analytical skills and activities, and factual information. Conforms to the College Board topics for Advanced Placement World History. Includes study of cultural, political, social and economic history. Stresses research and writing skills.

Eleventh Grade

United States History

45.08100

Examines the history of the United States beginning with the British settlement of North America. The course's main focus is the development of the United States in the 20th and 21st centuries. The course includes topics related to Colonization through the Constitution; New Republic to Reconstruction; Industrialization, Reform, and Imperialism; Establishment as a World Power; and the Modern Era.

AP United States History

45.08200

The AP U.S. History course focuses on the development of historical thinking skills (chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and an understanding of content learning objectives organized around seven themes, such as identity, peopling, and America in the world. In line with college and university U.S. History survey courses' increased focus on early and recent American history and decreased emphasis on other areas, the AP U.S. History course expands on the history of the Americas from 1491 to 1607 and from 1980 to the present.

Twelfth Grade

Principles of Economics

45.06100

This is an introductory course into the principles of economics. The course includes topics related to Fundamental Economic Concepts, Microeconomics Concepts, Macroeconomics Concepts, International Economics, and Personal Finance Economics.

AP Microeconomics

45.06300

This course conforms to College Board topics for the Advanced Placement Microeconomics Examination. Covers basic economic concepts, the nature and functions of product markets, factor markets and efficiency, equity and the role of government. First semester course paired with AP Macroeconomics second semester. (may substitute for 45.06100)

AP Macroeconomics

45.06200

This course conforms to College Board topics for the Advanced Placement Macroeconomics Examination. Covers basic economic concepts, measurement of economic performance, national income and price determination and international economics and growth. (may substitute for 45.06100)

Social Studies Elective Courses

Sociology

45.03100

This course investigates principles of sociology, the individual in groups, social institutions, social control, and the use of research methods to examine social problems. The following topics are covered: religious, economic, and political institutions; social change; crime and juvenile delinquency; poverty; human rights; population; and ecology. This one semester course is open to junior and seniors only and is paired with Psychology second semester.

Psychology

45.015000

Investigates the principles of psychology, developmental psychology, heredity and environmental aspects of psychology, learning theory, personality, intelligence, social disorders and research methods used in the study of psychology. Integrates and reinforces social studies skills. This one semester course is open to junior and seniors only and is paired with Sociology first semester.

AP Psychology

45.01600

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. This course is open to seniors.

AP Human Geography

45.07700

The purpose of the AP course in Human Geography is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice.

AP US Government/Politics

45.05200

AP U.S. Government and Politics provides a college-level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behavior. They also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. In addition, they complete a political science research or applied civics project. There are no prerequisite courses for AP U.S. Government and Politics. Students should be able to read a college-level textbook and write grammatically correct, complete sentence.

SCIENCE

Ninth Grade Options

Biology I (*Gifted/Magnet/Accelerated Students*)

26.01200

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.

Physics I

40.08100

This course is an overview of major physics concepts. 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.

Tenth Grade Options

Chemistry I (*Gifted/Magnet/Accelerated Students*)

40.05100

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.

Biology I

26.01200

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.

Eleventh – Twelfth Grade Options

Physics I (*Gifted/Magnet/Accelerated Students*) **40.08100**

This course is an overview of major physics concepts. 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.

Chemistry I **40.05100**

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. ***CCHS recommends Chemistry for any student who plans to attend a four college or university.***

Earth Systems **40.06400**

This course develops the explanations of phenomena fundamental to the sciences of geology and physical geography, including the early history of the Earth, plate tectonics, landform evolution, the Earth's geologic record, weather and climate, and the history of life on Earth. Instruction should focus on inquiry and development of scientific explanations, rather than mere descriptions of phenomena. *This course may be taken in lieu of Chemistry, however, CCHS recommends Chemistry for any student who plans to attend a four year college or university.*

Anatomy & Physiology **26.07300**

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; protection, support and movement; providing internal coordination and regulation; processing and transporting; and reproduction, growth and development. Chemistry should be integrated throughout anatomy and not necessarily taught as a standalone unit. Whenever possible, careers related to medicine, research, health-care and modern medical technology should be emphasized throughout the curriculum. Case studies concerning diseases, disorders and ailments (i.e. real-life applications) should be emphasized.

Environmental Science **26.06110**

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. Instruction should focus on student data collection and analysis. Some

concepts are global; in those cases, interpretation of global data sets from scientific sources is strongly recommended. It would be appropriate to utilize resources on the Internet for global data sets and interactive models. Chemistry, physics, mathematical, and technological concepts should be integrated throughout the course. Whenever possible, careers related to environmental science should be emphasized.

AP Courses

AP Biology**26.01400**

Prerequisite: Successful completion of Biology I and Chemistry I

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.

AP Physics B**40.08300**

Prerequisite: Successful completion of Biology and Chemistry

This second year Physics course is a college level course. The curriculum is set by The College Board. Students study in-depth topics introduced in Physics I. Laboratory experiences are a part of the curriculum. Students may be able to receive college credit as a result of achieving an appropriate score on the Advanced Placement test administered in the spring.

AP Physics C**40.08400**

AP Physics C: Mechanics is equivalent to a one-semester, calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Introductory differential and integral calculus is used throughout the course. Students should have taken or be concurrently taking calculus.

AP Environmental Science**26.06200**

Prerequisite: Successful completion of Biology and Chemistry

This course is a college level course. The curriculum is set by The College Board. Students study topics related to the ecological sciences. Data is processed mathematically, and students are expected to be able to do independent research both in media and field laboratory. Students may be able to receive college credit as a result of achieving an appropriate score on the Advanced Placement test administered in the spring.

MATHEMATICS

Foundations of Algebra

27.048100

Foundations of Algebra is a first year high school mathematics course option for students who have completed mathematics in grades 6 – 8 yet will need substantial support to bolster success in high school mathematics. The course is aimed at students who have reported low standardized test performance in prior grades and/or have demonstrated significant difficulties in previous mathematics classes. Foundations of Algebra will provide many opportunities to revisit and expand the understanding of foundational algebra concepts, will employ diagnostic means to offer focused interventions, and will incorporate varied instructional strategies to prepare students for required high school mathematics courses. There are specific eligibility requirements for enrollment in this course.

GSE Coordinate Algebra

27.09710

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. The final unit in the course ties together the algebraic and geometric ideas studied. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

(The Georgia Milestones exam will be administered for this course.)

GSE Analytic Geometry

27.09720

The focus of Analytic Geometry on the coordinate plane is organized into 6 critical areas. 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. The need for extending the set of rational numbers arises and real and complex numbers are introduced so that all quadratic equations can be solved. Quadratic expressions, equations, and functions are developed; comparing their characteristics and behavior to those of linear and exponential relationships from Coordinate Algebra. Circles return with their quadratic algebraic representations on the coordinate plane. The link between probability and data is explored through conditional probability. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

(The Georgia Milestones exam will be administered for this course.)

GSE Advanced Algebra**27.09730**

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. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

GSE Pre-Calculus**27.0974001**

Pre-Calculus is a fourth mathematics course designed to prepare students for calculus and other college level mathematics courses. High school course content standards include Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. Conceptual categories portray a coherent view of high school mathematics content; a student's work with functions, for example, crosses a number of traditional course boundaries, potentially up through and including calculus.

Advanced Mathematical Decision Making**27.08500**

This is a course designed to follow the completion of Advanced Algebra. 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 use network models for making informed decisions. (Prerequisite: Successful completion of Advanced Algebra)

Calculus**27.07800**

This is a fourth two-semester mathematics course option for students who have completed GSE Pre-Calculus, GPS Pre-Calculus, Mathematics IV or its equivalent. It includes problem solving, reasoning and estimation, functions, derivatives, applications of the derivative, integrals, and application of the integral.

ACCELERATED MATH TRACK

Accelerated GSE Coordinate Algebra/Analytic Geometry A

27.09750

(May substitute for 27.09710)

The fundamental purpose of Accelerated GSE 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. Coordinate Algebra uses algebra to deepen and extend understanding of geometric knowledge from prior grades. The next unit in the course 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. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. *The Georgia Milestones exam will be administered for this course.*

Accelerated GSE Analytic Geometry B/Advanced Algebra

27.09760

(May substitute for 27.09720)

The focus of Accelerated GSE Analytic Geometry B / Advanced Algebra is organized into 10 critical areas. The need for extending the set of rational numbers and real and complex numbers are introduced so that all quadratic equations can be solved.

Quadratic expressions, equations, and functions

Are developed; comparing their characteristics and behavior to those of linear and exponential relationships from Coordinate Algebra. Circles return with their quadratic algebraic representations on the coordinate plane. The link between probability and data is explored through conditional probability. 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. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. *The Georgia Milestones exam will be administered for this course.*

Accelerated GSE Pre-Calculus

27.09770

Pre-Calculus 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. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Advanced Placement Calculus AB

27.07200

Pre-requisite: Calculus or teacher recommendation

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. The curriculum for AP Calculus AB is equivalent to that of a first semester college calculus course.

Advanced Placement Calculus BC

27.07300

Pre-requisite: Calculus or teacher recommendation

Conforms to College Board topics for the Advanced Placement Calculus BC Examination. Covers Advanced Placement Calculus AB topics and includes vector functions, parametric equations, conversions, parametrically defined curves, tangent lines, and sequence and series. The curriculum for AP Calculus BC is equivalent to that of a first semester college calculus course and the subsequent single-variable calculus course.

Advanced Placement Statistics

27.07400

Pre-requisite: Advanced Algebra or teacher recommendation

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes: 1. Exploring Data: Describing patterns and departures from patterns 2. Sampling and Experimentation: Planning and conducting a study 3. Anticipating Patterns: Exploring random phenomena using probability and simulation 4. Statistical Inference: Estimating population parameters and testing hypotheses

Multivariable Calculus

Prerequisite: Successful completion of AP Calculus BC

27.077000

Multivariable Calculus is a fourth-year mathematics course option for students who have completed AP Calculus BC. It includes three-dimensional coordinate geometry; matrices and determinants; eigenvalues and eigenvectors of matrices; limits and continuity of functions with two independent variables; partial differentiation; multiple integration; the gradient; the divergence; the curl; Theorems of Green, Stokes, and Gauss; line integrals; integrals independent of path; and linear first-order differential equations. (Prerequisite: Successful completion of AP Calculus BC)

FOREIGN LANGUAGES

Spanish for Native Speakers I

60.07900

This course focuses on the development of communicative competence in reading, writing, speaking and listening and viewing, as well as on understanding Hispanic cultures and issues of identity of heritage speakers of Spanish in the United States. Students will also develop an awareness and understanding of Hispanic cultures, including language variation, customs, geography, history, and current events. During this course, students will gain confidence using Spanish to express their own thoughts on social and academic themes, interact with other speakers of the language, understand oral and written messages, make oral and written presentations, reflect on language variation, and critically view and evaluate media resources and web sites. Students will be able to understand material presented on a variety of topics related to contemporary events and issues in Hispanic communities.

Spanish for Native Speakers II

60.07910

This course focuses on the development of advanced communicative competence in reading, writing, speaking and listening and viewing, as well as on understanding Hispanic cultures and issues of identity of heritage speakers of Spanish in the United States. Students will also continue to develop awareness and understanding of Hispanic cultures, including language variation, customs, geography, history, and current events. During this course, students will gain proficiency in using Spanish in increasingly complex ways to express thoughts on social and academic themes, interact with other speakers of the language, understand oral and written messages, make oral and written presentations, reflect on language variation, and critically view and evaluate media resources and web sites. Students will be able to understand material presented on a variety of topics related to contemporary events and issues in Hispanic communities.

Additional Foreign Languages Offered:

Spanish I, II, III, and AP Spanish Language

French I, II, III, and IV

German I, II, III, IV, V, VI, and AP German

AP CAPSTONE

AP Capstone™ is an innovative diploma program from the College Board that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. AP Capstone is built on the foundation of two AP courses — AP Seminar and AP Research — and is designed to complement and enhance the in-depth, discipline-specific study experienced in other AP courses. Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing receive the AP Capstone Diploma™. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams receive the AP Seminar and Research Certificate™.

AP Seminar

35.090000

In AP Seminar, students investigate real-world issues from multiple perspectives, gathering and analyzing information from various sources in order to develop credible and valid evidence based arguments. AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments

AP Research

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year-long research-based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of 4000-5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.

VISUAL ARTS

Visual Arts I

50.02110

Prerequisite: None

NOTE: This class is the prerequisite for all courses in the Art Department

This course introduces art history, art criticism, aesthetic judgment and studio production. Visual Arts I emphasizes the ability to understand and use elements and principles of design through a variety of media, processes and visual resources. Students will explore master artworks for historical and cultural significance. There is a \$15 lab fee for this course.

Drawing and Painting I

50.03110

Drawing and Painting II

50.03141

Prerequisite: Visual Arts

This is a studio course that builds upon drawing content areas and drawing techniques introduced in visual arts. This course is designed to provide experiences that contribute to the development of the four content areas of art that will enable the student to attain higher levels of performance, critical thinking and aesthetic judgment. The emphasis of the course will be the production of a body of work (drawing portfolio) encompassing a broad range of medium, techniques and expressive outcomes that are related to the area of drawing. Sketchbook assignments will be used to reinforce learning in the studio and provide independent practice at home. There is a \$15 lab fee for this course.

Photography I

50.07110

Prerequisite: Visual Arts

Photography I is an introductory, film-based course focusing on black and white analog photography. This course will familiarize students with photographic equipment, materials, methods, traditional and alternative printing processes, as well as give a brief introduction to digital photography. Students will construct their own pinhole camera and create a photographic portfolio as they learn the technical and artistic aspects of photography. Later in the course, students will learn the fundamentals of working with manual, 35mm cameras to shoot assignments dealing with a variety of subject matter and compositional considerations addressing the elements and principles of design. All aspects of photography will be taught: artistic perception, creative expression, historical and cultural context, aesthetics and real-life application. Students will be responsible for required readings, homework, journaling of ideas, participating in critiques, matting their work for display purposes and shooting images outside of class time. A class fee of \$65 pays for film and print developing chemicals, printer photo paper, ink, pre-cut mats, large 16x20 and 11x14 photo paper, pinhole making supplies, and more! Students will spend an average of \$125 during the course of the school year on photo development.

Sculpture Design I**50.06110***Prerequisite: Visual Art.*

This is a studio course that builds upon sculpture content areas and sculpture techniques introduced in Visual Art. The emphasis of the course will be the production of a body of work (portfolio) encompassing a broad range of medium, techniques and expressive outcomes that are related to the area of sculpture and three-dimensional work. Engaged critical thinking skills will encourage student growth and personal style, in response to master sculptors and artistic styles/periods. There is a lab fee for this course.

Photography II**50.07120****Photography III****50.07130***Prerequisite: Photography I*

Photography II and III are an advanced courses. Students must know all aspects of black and white photography, including the use and proper handling of the 35 mm camera, light reading as a creative tool, developing and printing film, and mounting and preparation of photographs for exhibition. Instruction will advance in difficulty, scaffolding on the prerequisite courses, to include digital media, alternative processes and personal exploration of photography used as both a creative tool as well as for documentary/journalistic purposes. Later in the course, students will be given more freedom to determine and fine tune their artistic voice using the medium of photography. All aspects of photography will be taught: artistic perception, creative expression, historical and cultural context, aesthetics and real-life application. Students will be responsible for required readings, homework, journaling of ideas, participating in critiques, matting their work for display purposes and shooting images outside of class time. There is a lab fee for these courses.

Advanced Placement Art: Studio Art Drawing**50.08110****Advanced Placement Art: Studio Art 2-Design****50.08130***Prerequisite: AP Pathway and recommendation of art teacher*

The Advanced Placement Drawing/2D Portfolio is designed to assist students in preparing a portfolio for the performance based National College Board AP Portfolio exam. The AP Drawing Portfolio is intended for the highly motivated, college bound or career-oriented art student. The course is designed to offer the student college level curriculum in the high school environment. The Drawing Portfolio encompasses a broad interpretation of drawing issues and media. Light and shade, line quality, rendering of form, composition, surface manipulation and illusion of depth are drawing issues that can be addressed through a variety of means, which could include painting, printmaking and mixed media. Students submitting a 2-D design portfolio may also work in the area of photography and computer-generated art. Students who successfully complete the course may request credit from the college or university they will attend. The awarding of credit is at the discretion of the individual school upon review of the portfolio's score.

Advanced Placement Art: Studio Art 3-Design**50.08130***Prerequisite: AP Pathway Sequence and recommendation of art teacher*

The AP Studio 3D Design course is designed for students who are seriously interested in the practice of art. Students will create a portfolio is intended to address sculptural issues using the elements and principles of art in an integrative way. Students are asked to demonstrate their understanding of design principles as they relate to the integration of depth and space, volume and surface while demonstrating mastery of 3-D design through any three-dimensional approach, including, but not limited to, figurative or nonfigurative sculpture, architectural models, metal work, ceramics, glass work, installation, assemblage, and 3-D fabric/fiber arts.

Ceramic Design**50.041100***Prerequisite: Visual Arts or teacher recommendation*

Introduces the characteristics of clay and design in clay using various techniques of construction and decoration. Emphasizes hand building and introduces other forming techniques, surface decoration and glaze applications. Covers styles of ceramic works from Western and non-Western cultures.

Introduction to Graphics and Design**48.56100**

The goal of this course is to provide all students with an introduction to the principles of graphic communications and design and its place in the world. This course should also help students to use computers effectively in their lives, thus providing a foundation for successfully integrating their own interests and careers with the resources of a technological society. In this course, high school students can acquire a fundamental understanding of the graphic communications and design world. They can learn the theories behind creating aesthetically pleasing designs and how to work with consumers. Exposure to career possibilities and discussion of ethical issues relating to graphic communications and design should also be important threads in this course.

FINE ARTS

Drama Art/Fund I

52.021000

Dramatic Arts/Fundamentals I and serves as prerequisite for other theater/drama courses. Develops and applies performance skills through access to basic vocal, physical and emotional exercises; includes improvisation and scene study and related technical art forms.

Musical Theatre I

52.031000

Introduces the style and characteristic elements of modern musical theater. Covers production staging, orchestration, voice and dance; offers an opportunity for team teaching through interdisciplinary collaboration with the chorus, band, art, technology, physical education and dance instructors. Offers opportunity for performance.

Musical Theatre II

52.032000

Enhances level-one skills with a focus on voice production and provides opportunities for performance.

Beginning Mixed Chorus

54.02110

Provides opportunities to develop performance skills and knowledge in mixed choral singing. Covers performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music and appreciation of music. Organizes objectives for self-paced progress through all four levels. Stresses individual progress and group experiences.

Advanced Mixed Chorus I/II/III

54.023100/54.023200/54.023300

Provides advanced-level performers opportunities to increase performance skills and knowledge in mixed choral singing. Covers performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music and appreciation of music. Organizes objectives for self-paced progress through all four levels. Stresses individual progress and group experiences. Levels II and II enhance previous level skills and provides advanced-level performers further opportunities to increase performance skills and knowledge in mixed choral singing. 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 and group experiences.

Advanced Women's Chorus I/II/III**54.026100/54.026200/54.026300**

Provides opportunities for advanced-level female performers to increase performance skills and knowledge in all-female choral singing. 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 and group experiences. Levels II and II enhance previous level skills and provides further opportunities for advanced-level female performers to increase performance skills and knowledge in all-female choral singing. 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 and group experiences.

Intermediate Orchestra I**53.057100**

Provides opportunities for intermediate-level performers to increase performance skills and precision on orchestral stringed instruments. Covers performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music and appreciation of music. Organizes objectives for self-paced progress through all four levels. Stresses individual progress and group experiences.

Advanced Orchestra I**53.058100**

Provides opportunities for advanced-level performers to increase performance skills and precision on orchestral stringed instruments. Covers performance and production, analysis and theoretical studies, historical and cultural contributions and influences, creative aspects of music and appreciation of music. Organizes objectives for self-paced progress through all four levels. Stresses individual progress and group experiences.

Advanced Orchestra II**53.058200**

Enhances level-one skills and provides further opportunities for advanced-level performers to increase performance skills and precision on orchestral stringed instruments. 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 and group experiences.

Advanced Orchestra III**53.058300**

Enhances level-two skills and provides further opportunities for advanced-level performers to increase performance skills and precision on orchestral stringed instruments. 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 and group experiences.

Advanced Orchestra IV**53.058400**

Enhances level-three skills and provides further opportunities for advanced-level performers to increase performance skills and precision on orchestral stringed instruments. 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 and group experiences.

Beginning Band**53.036100**

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 through all four levels. Stresses individual progress and group experiences.

Intermediate Band I**53.037100**

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.

Intermediate Band II, IV**53.037200/53.037400**

Enhances prior level skills and provides further opportunities for intermediate-level performers to increase performance skills and precision with increasingly difficult literature. 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.

Advanced Band I**53.038100**

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 through all four levels. Stresses individual progress and learning strategies and ensemble experiences.

Advanced Band II, III, IV**53.038200/53.038300/53.038400**

Enhances previous level 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.

Intermediate Instrumental Ensemble I/II**53.075100/53.075200**

Level I Offers intermediate-level performers an alternative ensemble experience to large band and orchestra. Emphasizes the performance style and literature of the instrumental chamber group medium. Includes brass, woodwind, percussion, and string ensembles. Covers performance and production, analysis and theoretical studies, creative aspects of music, historical and cultural influences and music appreciation. Level II enhances level one skills and provides further opportunities for intermediate-level performers to increase performance skills and knowledge in ensemble music. Emphasizes the performance style and literature of the instrumental chamber group medium. Includes brass, woodwind, percussion and string ensembles. Covers performance and production, analysis and theoretical studies, creative aspects of music, historical and cultural influences and music appreciation.

AP Music Theory

53.023000

Conforms to College Board topics for the Advanced Placement Music Theory Examination. Covers terminology and notational skills, writing skills, visual analysis and aural skills and advanced levels of understanding.

BUSINESS & COMPUTER SCIENCE

Programming Pathway

Introduction to Digital Technology

11.41500

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.

Computer Science Principles

11.471000

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.

Program, Games, Apps & Society

11.47200

Are you ready to design and develop? 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.

Computer Science Pathway

Introduction to Digital Technology

11.41500

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. 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.

Computer Science Principles

11.471000

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.

AP Computer Science

11.01600

The AP Computer Science A course is an introductory course in computer science. Because the design and implementation of computer programs to solve problems involve skills that are fundamental to the study of the computer science, a large part of the course is built around the development of computer programs that correctly solve a given problem. These programs should be understandable, adaptable and, when appropriate, reusable. At the same time, the design and implementation of computer programs is used as a context for introducing other important aspects of computer science, including the development and analysis of algorithms, the development and use of fundamental data structures, the study of standards algorithms and typical applications, and the use of logic and formal methods. In addition, the responsible use of these systems is an integral part of the course.

AP Computer Science Principles

11.01900

The AP Computer Science Principles course is designed to be equivalent to a first- semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world.

Entrepreneurship Pathway

Intro to Business & Technology

07.441300

Introduction to Business & Technology is the foundational course for Business and Technology, Entrepreneurship, and Human Resources Management pathways. The course is designed for high school students as a gateway to the career pathways above, 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.

Legal Environment of Business

06.41500

Legal Environment of Business 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.

Entrepreneurship

06.416100

How do you turn an idea into a business? Experience just that in this course! Entrepreneurship 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.

Work-Based Learning (11th and 2th grade students only)

06.711500

The Work-Based Learning Program (WBL) is a structured educational experience that integrates classroom learning with productive, structured work experiences that typically relate to the student's career goal. Students in this course must be employed and maintain employment throughout the school year. The program will increase the student's knowledge, skills, and abilities for obtaining employment and/or entering post-secondary education. WBL provides an opportunity for seniors to start preparing for a career while still in high school. When students complete their Career Technology Education pathway, they will be prepared for a successful Work-Based Learning experience.

Biotechnology Pathway

Intro to Healthcare Sciences

25.52100

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.

Essentials of Health Information Technology

25.49500

Health IT is a growing and expanding industry in Georgia and across the country; therefore, the course takes an overall look at the current state of healthcare in the United States. Students will analyze the larger role that technology and information technology play in the healthcare system, the impact that technology has on the healthcare field, and which careers will be available due to these changes.

Applications of Biotechnology

25.56900

This course further introduces students to the fundamentals of biotechnology. Included in this course are additional applications and techniques in biotechnology that expand and increase the student's comprehension of how biotechnology utilizes living systems to create products and enhance lives. In addition, laboratory applications learned in this course form the pivotal component distinguishing science theory from application in bioscience, like that of engineering and mathematics.

Sports Medicine Pathway

Intro to Healthcare Sciences

25.52100

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.

Essentials of Healthcare

25.44000

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.

Sports Medicine

25.44600

The course is appropriate for students who wish to pursue a career in healthcare with a focus on the musculoskeletal system, injury assessment, injury prevention, or rehabilitation including careers in Sports Medicine and Rehabilitative Services. This course will enable students to receive initial exposure to therapeutic services skills and attitudes applicable to the healthcare industry. The concepts of anatomy and physiology, assessment, preventative and rehabilitative care are introduced. Fundamental healthcare skills development is initiated, including medical terminology, kinesiology, patient assessment, record keeping, and basic life support. The prerequisites for this course are Introduction to Healthcare and Essentials of Healthcare. Mastery of these standards through project-based learning, technical-skills practice, and leadership-development activities of the career and technical student organization will provide students with a competitive edge for entry into either the healthcare global marketplace or a postsecondary institution to pursue further education and training.

Cybersecurity Pathway

Introduction to Digital Technology

11.41500

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. 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.

Introduction to Cybersecurity

11.48100

Introduction to Cybersecurity is designed to provide students the basic concepts and terminology of cybersecurity. The course examines how the concept of security integrates into the importance of user involvement, security training, ethics, trust, application of cybersecurity practices and devices, and best practices management. The fundamental skills cover internal and external threats to network security and design, how to enforce network level security policies, how to protect an organization's information, and a broad range of other topics. Introduction to Cybersecurity is the second course in the Cybersecurity career pathway of the Information Technology Career Cluster and primarily focuses on the National Cybersecurity Workforce Framework category Protect and Defend and the Computer Network Defense work roles. Students enrolled in this course should have successfully completed Introduction to Digital Technology.

Advanced Cybersecurity**11.48200**

Advanced Cybersecurity is designed to provide students the advanced concepts and terminology of cybersecurity. The course explores the field of cybersecurity with updated content including new innovations in technology and methodologies. It builds on existing concepts introduced in Introduction to Cybersecurity and expands into malware threats, cryptography, organizational security, and wireless technologies. Advanced Cybersecurity is the third course in the Cybersecurity career pathway in the Information Technology Career Cluster. Students enrolled in this course should have successfully completed Introduction to Digital Technology and Introduction to Cybersecurity.

Engineering

Engineering & Technology Pathway

Foundation of Engineering and Technology

21.42500

The Foundations of Engineering and Technology is the introductory course for the Engineering and Technology Education pathways. This STEM driven course provides the students with an overview of engineering and technology including the different methods used in the engineering design process developing fundamental technology and engineering literacy. Students will demonstrate the skills and knowledge they have learned through various project based activities while using an engineering design process to successfully master the “E” in STEM.

Engineering Concepts (Level 2)

21.47100

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 (Level 3)

21.47200

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.

Research Design/Project Management (Level 4)

21.46100 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.

Engineering Drafting and Design Pathway

Introduction to Drafting and Design

48.54100

Introduction to Drafting and Design is the foundational course for the Architectural Drafting and Design pathway. Emphasis is placed on safety, geometric construction, fundamentals of computer aided drafting, and multi-view drawings. Students learn drafting techniques through the study of geometric construction at which time they are introduced to computer-aided drafting and design. The standards are aligned with the national standards of the American Design Drafting Association (ADDA).

Survey of Engineering Graphics

48.54200

Survey of Engineering Graphics is the second course in the Engineering Drafting and Design Career Pathway. The course is designed to build student skills and knowledge in the field of engineering graphics/technical drafting. The course focus includes

employability skills, career opportunities, applied math, working drawings that include sectional, auxiliary, detail and pictorial views, and pattern developments. In addition, elements in applied mathematics are integrated throughout the course. The prerequisite for this course is Introduction to Drafting & Design.

3-D Modeling & Analysis

48.54300

Three-Dimensional (3D) Modeling and Analysis is a one-credit course that completes the pathway in Engineering Drafting and Design. Reverse engineering strategies are recommended for third level working drawings. Computer-aided design (CAD) is recommended for use extensively with each standard in the course. Focus is on employability strategies, career studies, applied math, fasteners, working drawings, and assembly drawings. The final culmination is a presentation project that contains information mastered throughout the three courses. The prerequisite for this course is Survey of Engineering Drafting & Design.

FAMILY AND CONSUMER SCIENCE

Food and Nutrition Pathway

Food, Nutrition and Wellness

20.41610

Food, Nutrition and Wellness is the foundational course in the nutrition and food science pathway. The focus of the course is centered on healthy food and lifestyle choices. Students will investigate the interrelationship of food, nutrition and wellness to promote good health.

Food for Life

24.14000

Food for Life is an advanced course in food and nutrition that addresses the variation in nutritional needs at specific stages of the human life cycle: lactation, infancy, childhood, adolescence, and adulthood including elderly. The most common nutritional concerns, their relationship to food choices and health status and strategies to enhance well-being at each stage of the lifecycle are emphasized. This course provides knowledge for real life and offers students a pathway into dietetics, consumer foods, and nutrition science careers with additional education at the post-secondary level.

Food Science

20.418100

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. Related careers will be explored.

Teaching as a Profession Pathway

Examining the Teaching Profession

13.01100

The Examining the Teaching Profession is the foundational course under the Teaching as a Profession pathway and prepares students for future positions in the field of education. Teaching as a Profession students study, apply, and practice the use of current technologies, effective teaching and learning strategies, the creation of an effective learning environment, the creation of instructional opportunities for diverse learners and students with special needs, and plan instruction based on knowledge of subject matter, students, community, and curriculum performance standards. Pre-requisite for this course is adviser approval.

Contemporary Issues in Education

13.01200

This course engages the candidate in observations, interactions, and analyses of critical and contemporary educational issues. The candidate will investigate issues influencing the social and political contexts of educational settings in Georgia and the United States and actively examines the teaching profession from multiple vantage points both within and outside of the school. Against this

backdrop, the candidate will reflect on and interpret the meaning of education and schooling in a diverse culture and examine the moral and ethical responsibilities of teaching in a democracy

Teaching as Profession Practicum

13.01300

The practicum offers a candidate in the Teaching as a Profession career pathway a field experience under the direct supervision of a certified teacher (mentor teacher). The practicum stresses observing, analyzing and classifying activities of the mentor teacher and comparing personal traits with those of successful teachers. The candidate intern will develop a portfolio of their skills, plan and teach a lesson or lessons, understand and practice confidentiality as it pertains to the teaching profession, meet the needs of students with special needs, maintain the safety of the students, practice professionalism, and demonstrate ethical behavior.

Arts, A/V Technology & Communications

Audio-Video Technology & Film Pathway

Audio and Video Technology and Film I

10.51810

This course will serve as the foundational course in the Audio & Video Technology & Film pathway. The course prepares students for employment or entry into a postsecondary education program in the audio and video technology career field. Topics covered may include, but are not limited to: terminology, safety, basic equipment, script writing, production teams, production and programming, lighting, recording and editing, studio production, and professional ethics. Skills USA, the Georgia Scholastic Press Association, Technology Student Association (TSA) and Student Television Network are examples of, but not limited to, appropriate organizations for providing leadership training and/or for reinforcing specific career and technical skills and may be considered an integral part of the instructional program. All material covered in Audio & Video Technology & Film I will be utilized in subsequent courses.

Audio and Video Technology and Film II

10.51910

This one credit course is the second in a series of three that prepares students for a career in Audio Video Technology and Film production and/or to transfer to a postsecondary program for further study. Topics include Planning, Writing, Directing and Editing a Production; Field Equipment Functions; Operational Set-Up and Maintenance; Advanced Editing Operations; Studio Productions; Performance; Audio/Video Control Systems; Production Graphics; Career Opportunities; and Professional Ethics. Skills USA, the Georgia Scholastic Press Association, Technology Student Association (TSA) and Student Television Network are examples of, but not limited to, appropriate organizations for providing leadership training and/or for reinforcing specific career and technical skills and may be considered an integral part of the instructional program.

Audio and Video Technology and Film III

10.52010

This one-credit transition course is designed to facilitate student-led projects under the guidance of the instructor. Students work cooperatively and independently in all phases of production. Skills USA, the Georgia Scholastic Press Association, Technology Student Association (TSA), and Student Television Network are examples of, but not limited to, appropriate organizations for providing leadership training and/or for reinforcing specific career and technical skills and may be considered an integral part of the instructional program.

Government & Public Administration

JROTC Pathway

JROTC I

28.03100

This course includes classroom instruction and laboratory instruction in the history, customs, traditions and purpose of Army JROTC. It contains the development of basic leadership skills to include leadership principles, values and attributes. Development of core skills students should master, an appreciation for diversity, and active learning strategies are integrated throughout the course. Emphasis is placed on writing skills and oral communications techniques. Financial planning is introduced. Physical fitness, diet, nutrition, healthy lifestyles and awareness of substance abuse and prevention and basic first aid measures are additional content areas. An overview of geography and the globe are incorporated. Also included is a study of the U.S. Constitution, Bill of Rights, responsibilities of U.S. citizens and the federal justice system. The performance standards in this course are based on the performance standards identified in the curriculum for the US Army JROTC. Successful completion of at least three units of credit in the Army JROTC program will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

JROTC II

28.03200

This course includes classroom instruction and laboratory instruction expanding on skills taught in LET 1. This course introduces equal opportunity and sexual harassment. It provides instruction on leadership styles and practical time to exercise leadership theories as well as the basic principles of management. It provides self-assessments that help students determine their skill sets and opportunities to teach using accepted principles and methods of instruction. It emphasizes community projects to assist in drug prevention efforts, includes dietary guidelines and fitness and introduces map-reading skills. It discusses the significant events that helped shape and develop the Constitution and government and teaches the role of political parties in the election process. The performance standards in this course are based on the performance standards identified in the curriculum for the US Army JROTC. Successful completion of at least three units of credit in the Army JROTC program will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

JROTC III

28.03300

This course includes classroom instruction and laboratory instruction expanding on the skills taught in LET 1 - 2. This course allows cadets to investigate the interrelationships of the services while it continues to build their leadership development and decision making skills. It includes negotiation skills and management principles. It emphasizes staff procedures and provides leadership situations and opportunities to handle various leadership situations as well as preventing violence and managing anger. The research, identification, planning, and execution of service learning activities are included. This course gives cadets the opportunity to apply basic concepts of career exploration strategies and planning. It teaches how to create a career portfolio and plan for college or work. Financial management principles are studied further. Skills for orienteering and/or land

navigation are developed. Includes studies in the federal judicial system and how historical events shaped social systems. The performance standards in this course are based on the performance standards identified in the curriculum for the US Army JROTC. Successful completion of at least three units of credit in the Army JROTC program will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

JROTC IV

28.03400

This course includes classroom instruction and laboratory instruction expanding on the skills taught in LET 1-3. It focuses on creating a positive leadership situation, negotiating, decision-making, problem solving, planning, team development, project management, and mentoring. It provides the opportunity to demonstrate leadership potential in an assigned command or staff position within the cadet battalion organizational structure. It includes how to use emotional intelligence in leadership situations as well as how to maintain a positive attitude. It provides instruction on etiquette, daily planning, financial planning, and careers. It includes requirements for the practical application of leadership duties. It emphasizes physical fitness through healthy individual and group competition. The interactions between groups of people and how they affect the area's cultural, economic, and political characteristics are discussed. It explores various methods on determining distance, direction, and locations as well as environmental issues. Concepts of democracy and freedom and how to influence local governments are discussed. The performance standards in this course are based on the performance standards identified in the curriculum for the US Army JROTC. Successful completion of at least three units of credit in the Army JROTC program will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

PHYSICAL EDUCATION

Personal Fitness

36.05100

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

Health

17.01100

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.

Physical Education

36.01100

Focuses on any combination or variety of team sports, lifetime sports, track and field events, aquatics/water sports, outdoor education experiences, rhythmic/dance, recreational games, gymnastics, and self-defense. Provides basic methods to attain a healthy and active lifestyle.

Intro to Lifetime Sports

36.02200

Introduces fundamental skills, strategies, and rules associated with lifetime sports such as bowling, golf, tennis, racquetball, baseball, badminton, roller skating, and skiing.

Intro to Recreation Games

36.02700

Introduces recreational games suitable for lifetime leisure activities; may include table tennis, shuffleboard, Frisbee, deck tennis, new games, horseshoes, darts and croquet. Emphasizes the rules of each game and the skills necessary to play.

Introductory Aquatics/Water Sports

36.02400

Introduces basic swimming and safety skills; includes water games and sports.

Advanced Aquatics

36.04400

Provides opportunities to practice a variety of swimming strokes, to improve endurance and versatility in the water and to refine skills.

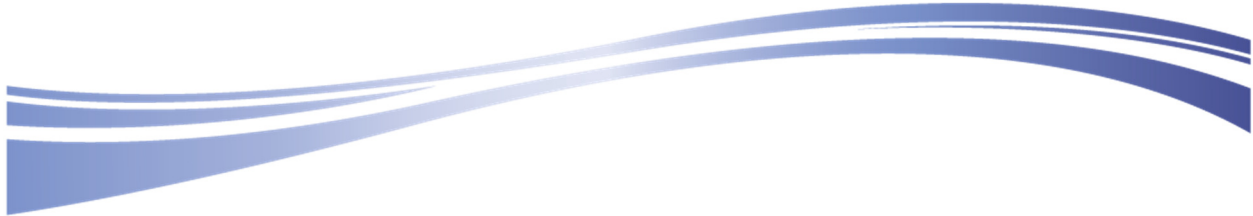
Weight Training

36.05400

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

Body Sculpting**36.05600**

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

**DeKalb Promotion & Retention Policy****Promotion and Retention**

Students who enter the ninth grade in 2005–2006 and beyond are required to complete 360 hours (24 units) in order to meet the requirements for graduation. The requirements for promotion are as follows:

1. to the tenth grade: 90 hours (6 units), three (3) of which must be core courses† and three (3) elective courses
2. to the eleventh grade: 180 hours (12 units), six (6) of which must be core courses† and six (6) elective courses
3. to the twelfth grade: 270 hours (18 units), nine (9) core courses† and nine (9) elective courses

† core courses include English, mathematics, science, social studies, and world language

