GADSDEN CITY HIGH SCHOOL

Course Descriptions

English

English 9:

Prerequisite: English 8

This course integrates listening, speaking, reading, writing, and grammar skills. Students will study a variety of literary genres. Research skills will be introduced.

Advanced English 9:

Prerequisite: English 8

This advanced course is designed to prepare motivated students for college. This course expands and integrates listening, speaking, reading, writing, and grammar skills. Students will write a research paper using MLA format. Students will study a variety of literature genres including some world literature. Outside readings are required.

Pre AP English 9:

Prerequisite: English 8

This rigorous honors course is designed for highly motivated students who have already acquired the language arts skills expected of ninth graders. It is designed for students who plan to take AP English in 11^{th} & 12^{th} grades. This course expands and integrates listening, speaking, reading, writing, and grammar skills. Students will write a research paper using MLA format and numerous essays. Students will study a variety of literature genres including some world literature. This course is weighted 5 points on a 100-point scale. Summer work and outside readings are required.

English 10:

Prerequisite: English 9

This course expands listening, speaking, reading, writing, research, and grammar skills. Students study early American literature to 1900.

Advanced English 10:

Prerequisite: Advanced English 9

This advanced course is designed to prepare motivated students for college. This course expands listening, speaking, reading, writing, research, and grammar skills. Students study early American literature to 1900. Students will write a research paper using MLA format. Outside readings are required.

Pre AP English 10:

Prerequisite: Pre AP English 9

This rigorous honors course is designed for highly motivated students who have already acquired the language arts skills expected of tenth graders. It is designed for students who plan to take AP English in 11th & 12th grades. This course expands and integrates listening, speaking, reading, writing, and grammar skills. Students will write a research paper using MLA format and numerous essays. Students study early American literature to 1900. This course is weighted 5 points on a 100-point scale. Summer work and outside readings are required.

English 11:

Prerequisite(s): English 9 & 10

This course continues to expand listening, speaking, reading, writing, research and grammar skills. Students will read and study twentieth-century American literature.

Advanced English 11:

Prerequisite: Advanced English 9 & 10

This advanced course is designed to prepare motivated students for college. This course expands listening, speaking, reading, writing, research, and grammar skills. Students will read and study twentieth-century American literature. Students will write a research paper using MLA format. Outside readings are required.

AP English 11 - Language & Composition:

Prerequisite: Pre AP English 9 & 10

This course, equivalent to college English, focuses on language arts skills and nonfiction literature. Students will write a research paper using MLA format. Students will engage in timed writing, analysis of writers' style and diction, and preparation for the AP Language and Composition exam. Students may receive college credit and/or qualify for advanced standing upon entering college. Students must pay for and take the AP exam to receive the 10 quality points added to the final average. Summer work and outside readings are required.

English 12:

Prerequisite(s): English 9, 10, & 11

This course continues to expand listening, speaking, reading, writing, research, and grammar skills. Students will read and study British literature.

Advanced English 12:

Prerequisite: Advanced English 9, 10, & 11

This advanced course is designed to prepare motivated students for college. This course expands listening, speaking, reading, writing, research, and grammar skills. Students study British literature analyzing themes and literary devices. Students will write a research paper using MLA format. Outside readings are required.

AP English 12 – Literature & Composition:

Prerequisite: Pre AP English 9, 10, and AP English 11 - Language & Composition

This course, equivalent to college English, focuses on close reading skills, literary analysis, and composition on world literature from the 17th century to the present. Students will write a formal, analytical research paper using MLA format. Frequent timed writing on poetry and prose is a vital part of this course as these assignments prepare students to score well on the AP Literature and Composition exam. Students may receive college credit and/or qualify for advanced standing upon entering college. Students must pay for and take the AP exam to receive the 10 quality points added to the final average. Summer work and outside readings are required.

Science

Biology and PreAP Biology

This course is laboratory-based science class in which students will study the cell, the molecular basis of heredity, biological evolution, interdependence of organisms, matter and energy, and organization in living systems and the behavior of organisms.

Grade Level : 9th

Prerequisites : NONE

AP Biology

This course is laboratory-based science class which is an intensive course designed to be the equivalent of an introductory biology course taken in college. The emphasis is on developing an understanding of biological concepts rather than an accumulation of facts. The student should understand and appreciate the science of biology as a process and a personal experience in scientific inquiry that develops their problem solving and critical thinking skills.

Grade Level : 11th or 12th

Prerequisites: Biology and Chemistry

Human Anatomy and Physiology

This course studies the structure and function of the human body with emphasis placed upon the concepts that help correlate the principals of structure and function.

Grade Level : 10th-12th

Prerequisites : Biology

Physical Science

This course is hands on-based science class in which students will study the principals of chemistry and physics that include matter, energy, structure of atoms, chemical reactions, forces, and motion.

Grade Level : 10th

Prerequisites : Biology

Chemistry, PreAP Chemistry

This course is a laboratory-based science class in which students will study the structure and properties of matter as they explore chemical reactions, the structure of atoms, conservation and interactions of energy and matter.

Grade Level : 10th-12th

Prerequisites: Biology and Algebra 1

AP Chemistry

This course is a laboratory-based science class in which students will study the structure and properties of matter as they explore chemical reactions, the structure of atoms, conservation and interactions of energy and matter.

Grade Level : 11th-12th

Prerequisites: Biology, Chemistry or PreAP Chemistry and Algebra 1

Physics and AP Physics

This course is a laboratory-based science class in which students will study the fundamentals of the physical world of matter, energy, basic mechanics and particle physics.

Grade Level : 11th-12th

Prerequisites : Biology, Physical Science or Chemistry and Algebra 1

Environmental Science

This laboratory-based science class emphasizes the application of scientific concepts to the understanding and solution of environmental problems and solutions.

Grade Level : 11th -12th

Prerequisites : Biology and Physical Science or Chemistry

Earth and Space

This course is laboratory-based science class emphasizing the function of the earth's system. Emphasis is placed on the human interactions with the Earth's geologic and environmental systems, predictability of a dynamic Earth, origin and evolution of the Earth system and universe, geochemical cycles and energy in the Earth system.

Grade Level : 11th-12th

Prerequisites : Biology and Physical Science or Chemistry

Forensic Science

This course surveys key topics in forensic science, including the application of the scientific process to forensic analysis, procedures and principles of crime scene investigation, physical and trace evidence, and the law and courtroom procedures from the perspective of the forensic scientist. Through online lessons, virtual and hands-on labs, and analysis of fictional crime scenarios, students learn about forensic tools, technical resources, forming and testing hypotheses, proper data collection, and responsible conclusions.

Grade Level : 11th-12th

Prerequisites : Biology and recommends Chemistry

Fine Arts

Concert Band – This course is designed for students with intermediate musical ability. This class reinforces instruction on musical knowledge and aptitude on each instrument. Concert Band participates in the Alabama Bandmasters Music Performance Assessment as well as a Spring Concert.

Symphonic Band – Designed for the advanced instrumental music student. Membership is determined by auditions out of Concert Band in the spring. This band also participates in the Alabama Bandmasters Music Performance Assessment as well as a Spring Concert.

Marching Band – The GCHS Titan Marching Band is a co-curricular activity with extensive after-school rehearsals. It consists of the traditional band ensemble, as well as dance-line, colorguard, and percussion ensemble. Students in marching band have a variety of performance opportunities including football games, parades and marching band contests. NOTE: Students on danceline must complete a full year of band, both marching and concert. Prerequisite: Middle school band is preferred but not required.

Jazz Band - Auditioned ensemble that meets after school one day a week. Students in this ensemble must be able to attend rehearsals with no conflicts with other events. Standard jazz literature will be taught…as well as improvisational skills. Jazz instrumentation will be utilized. Prerequisite: audition.

Concert Choir

This is a year-long course that explores choral music from a wide variety of cultures and time periods through study and performance. The core curriculum emphasizes the basics of vocal technique, sight-reading, music theory. Students in Concert Choir are expected to participate in one evening concert each semester as a major part of their grade.

***Audition required.**

Titan Chorale

This is a year-long, upper-level performance opportunity offered to experienced music students who are accomplished in vocal performance. It meets after school one day a week. Students will continue to develop vocal technique and musicianship as well as develop critical thinking skills through the analysis of musical elements, including form and text. Students are expected to participate in two evening concerts in the fall semester and one evening concert in the spring as a major part of their grade as well as a few other performance opportunities that arise throughout the year.

***Audition required.**

Chamber Choir

This is a year-long, upper-level performance group of sixteen to twenty people auditioned out of Titan Chorale and meets after school on day a week. Students will continue to build on all techniques learned in Titan Chorale, and will perform in Solo and Ensemble Festival as well as all other concerts.

***Audition required.**

***Apollon Show Choir**

This is a year-long course that meets both during school and at least one day a week after school. In this course, students perform pop, jazz, and Broadway music with choreography. This course does require

travel on weekends in January through March, and does perform when needed for civic events. All students must me in good standing with the school and Choral Department.

***Audition required.**

Orchestra – String Orchestra is a co-curricular class of string students who meet daily during the school day. Wind and percussion players will also meet with these string students periodically to form a Symphonic Orchestra. Instruction is given in string technique as well as music reading skills and music history.

Prerequisite: Middle or elementary strings preferred but not required.

Piano I – Class for beginning piano students. In this class students will learn to read music notation, identify notes on the piano keyboard and play simple songs on the piano. No at home practice is required since the class meets daily. Students progress at their own ability level.

Piano II – Serves as either a continuation of Piano I or for those students who previously have taken privately. Students are assigned to this class based on teacher recommendation. This class teaches a more in-depth study of music theory and piano technique.

***Prerequisite: Piano I / Teacher recommendation.**

Music Appreciation

Music Appreciation is open to all students. The purpose of this course is to increase students' musical awareness and give students the tools to actively listen to, discuss, and critique various styles of music. The first portion of the course will focus on learning the basic elements of music: Melody, Rhythm, Harmony, Form, Texture, Tempo, and Dynamics. Using appropriate music vocabulary, students will study and discuss a variety of musical genres, including Classical, Jazz, Rock, Opera, Musicals, etc.

Broadcast Journalism -

Broadcasting offers hands-on training to become proficient with industry standards with tools and practice in the field of broadcasting. Students develop an understanding of the concepts behind the production of film and video. The broadcasting class combines hands-on training from and live broadcasting from fully equipped studios. The class includes instruction in commercial production, news, voice over, sports casting, programming, station management, and editing.

Drama I - Productions; respond to producers; vocal, kinesthetic, emotional, analytical, and intellectual elements; dramatic structure; acting process; collaborative nature of a theatrical production and role of production staff; theatre history; theatre vocabulary; aesthetics; evaluating artistic choices

Drama II - PREREQUISITE: THEATRE LEVEL I OR APPROVAL OF THE INSTRUCTOR. Produce; character development; script analysis; collaboration; role of technical theatre; self-evaluation; legal and ethical issues; theatre history; concepts of theatre; elements of theatre; styles of performance; stage combat; improvisation; playwriting; technology.

Fine Arts Foundations -

Visual Arts

Ceramics - Students will learn basic techniques and processes of working with clay, including hand-building and wheel throwing methods, glazes and firing.

Drawing - Students will learn about the materials, techniques and subject matter of observation drawing in pencil. Subject matter includes the still life and landscapes. One and two point perspective is also introduced.

Graphic Design - Students will learn the basic graphic design principles while they learn Adobe Illustrator to explore typography, layout, advertising and logo design. 10th - 12th grade

Photography - Students will learn the basics of photographic techniques. Lighting, camera settings, and Photoshop processes will be covered. 10th - 12th grade

Printmaking - Students will learn the methods and materials of printmaking. A variety of printmaking techniques will be introduced including woodblock printing, etching, etc.

Yearbook - Assisting in production/maintenance of school publications, e.g., Yearbook, Newspaper, E-papers, Web site maintenance, Newsletter.

Career Tech

HVAC

HVACR Technology - provides classroom and laboratory experiences utilizing current and emerging technologies to enable students at entry level to perform the installment; repair; and maintenance of commercial, industrial, and domestic air conditioning systems.

ACM- Introduction to HVACR – This is a Core curriculum of the National Center for Construction Education and Research. Basic Safety and Hand tool usage with performance tasks of industry association. Basic copper usage and soldering practices are utilized. This class is the first class to take as a Sophomore and Junior.

HVAC1- Introduction to Electricity - This course is designed to provide students with the basic knowledge and skills regarding electrical theory, circuitry, and computers as they relate to HVACR. Students will learn basic understanding of safety including definitions of electrical terms, symbols, laws, circuits, testing, instrument usage, and wiring diagrams and symbols. This is the second course to be taken as a Junior 1st semester.

HVAC2- Compression Refrigeration- This course introduces students to different components of a refrigeration system and the functions of each component. Emphasis is placed on recovery and recycling of refrigerants and hard soldering brazing techniques. This is the second course to be taken as a Senior 1st semester.

HVAC3- Electrical Components and Controls- This course introduces students to electrical components and controls for the HVACR systems. Topics include electrical motors, window air conditioners, and wiring diagrams. Upon successful completion of this course, students demonstrate knowledge of types of motors, relays, and controls in HVACR equipment. This is the second course to be taken as a Junior 2nd semester.

Senior Pathway for HVAC- Heating and Heat pumps- This course introduces students to the fundamental concepts of heating systems with emphasis on components, operations, general service procedures, and basic installation procedures. Special emphasis is placed on heat pumps. Topics include refrigeration cycle operations, system components, and troubleshooting. This is the second course to be taken as a Senior 2nd semester.

Electronics/Robotics

10th Grade- First Class Taken:

DIGITAL ELECTRONICS - DC - This course introduces DC circuit analysis. Topics include: voltage, current, and power in series, parallel, and series parallel. AC - A study of Alternating Current.

10th Grade - Second Class Taken:

INTRODUCTION TO ROBOTICS - This course provides an introduction for students preparing to work in the environments using Robotics. Topics include Safety, Service, Repair, and Programming Applications.

11th Grade - Third Class Taken:

ROBOTICS APPLICATIONS - This course is the continuation of Intro, and applies the basic concepts to Industry.

11th Grade - Fourth Class Taken:

INTRODUCTION TO MANUFACTURING - This course provides entry level exposure and career exploration in the Manufacturing Industry.

CERTIFICATIONS - Robotics - Workforce Ready (Skills USA)
Electronics - Basic DC ETA (Electronics Association)
Basic AC ETA (Electronics Association)

Automotive Service

Maintenance and Light Repair A - Maintenance and Light Repair (MLR) A is a one-credit course that provides students with a foundational knowledge and skills regarding Safety, Engine Repair, Automatic Transmission, and Manual Drive Trains. Strong emphasis is placed on system and component operations. Upon successful completion of the course, students are able to diagnose and repair engine performance related systems. This course incorporates all personal and environmental safety practices associated with clothing, eye protection; hand tools; power equipment; proper ventilation; and the handling, storage, and disposal of chemicals and materials in accordance with local, state, and federal safety and environmental regulations.

Maintenance and Light Repair B - Maintenance and Light Repair (MLR) B is a one-credit course that provides students with a foundational knowledge and skills regarding Safety, Suspension & Steering and Brakes. Strong emphasis is placed on system and component operations. Upon successful completion of the course, students are able to diagnose and repair engine performance related systems. This course incorporates all personal and environmental safety practices associated with clothing, eye protection; hand tools; power equipment; proper ventilation; and the handling, storage, and disposal of chemicals and materials in accordance with local, state, and federal safety and environmental regulations.

Maintenance and Light Repair C - Maintenance and Light Repair (MLR) C is a one-credit course that provides students with a foundational knowledge and skills regarding Safety, Brakes, and Electrical/Electronics Systems. Upon successful completion of the course, students are able to diagnose and repair engine performance related systems. This course incorporates all personal and environmental safety practices associated with clothing, eye protection; hand tools; power equipment; proper ventilation; and the handling, storage, and disposal of chemicals and materials in accordance with local, state, and federal safety and environmental regulations.

Maintenance and Light Repair D - Maintenance and Light Repair (MLR) D is a one-credit course that provides students with a foundational knowledge and skills regarding Safety, Engine Performance, Electrical/Electronics, and Heating and Air Conditioning. Upon successful completion of the course, students are able to diagnose and repair engine performance related systems. This course incorporates all personal and environmental safety practices associated with clothing, eye protection; hand tools; power equipment; proper ventilation; and the handling, storage, and disposal of chemicals and materials in accordance with local, state, and federal safety and environmental regulations.

MLR A, B, C, & D comprehensively meet the requirements for the National Automotive Technicians Education Foundation (NATEF) MLR accreditation and prepare students for the Automotive Service Excellence (ASE) student credential. These courses are for 10^{th}, 11^{th} and 12^{th} grades and may be taken in any order without prerequisite. The content standards, task lists, tools and equipment, program hours, and safety standards must meet NATEF requirements.

Career and technical student organizations are integral, co-curricular components of each career and technical education course. These organizations serve as a means to enhance classroom instruction while helping students develop leadership abilities, expand workplace-readiness skills, and broaden opportunities for personal and professional growth.

Cosmetology

Intro to Cosmetology - A one-credit course designed to provide students with a study of concepts related to the cosmetology profession. Students gain initial practical experience in sanitation, shampooing, hair shaping, and hairstyling.

Chemical Methodology - A one-credit course designed to provide students with the study and experience in hair coloring and lightening. Emphasis is placed on color application, laws, and levels and classifications of color. The prerequisite for this course is Introduction to Cosmetology.

Chemical Methodology Color - A one-credit course designed to focus on the theory of chemical services related to chemical hair texturing. Students gain initial, practical experience in performing various chemical texturing activities. The prerequisite for this course is Introduction

Nail Art and Cosmetology Boards - A one-credit culminating course designed to provide students with a comprehensive study of State Board procedures and practical applications in cosmetology and nail care. The course consists of Pathway A—Cosmetology (content standards 1-17) and Pathway B—Nail Care Services (content standards 1-11 and 18-20). The prerequisites for this course depend upon the licensure the student is pursuing.

Salon Management/Nail Care Applications- A one-credit course designed to provide students with a study and experiences in advanced nail techniques. Students apply procedures and techniques for nail sculpturing and nail art. This course is a prerequisite for State Board Practicum Pathway B.

Electrical

Digital Electronics - A one-credit course that introduces students to digital fundamentals and number systems. Emphasis is placed on characteristics of digital circuit signals, logic gates, logic devices, and digital circuits.

Electrical Construction and Manufacturing - A one-credit course that introduces students to core knowledge and skills in the areas of design, preconstruction, construction, maintenance, operations, and installation and repair which are foundational to courses related to careers in the architecture and construction and manufacturing industries. This course is not a prerequisite for entering a specific pathway.

Electrical Level I - This is the first of 3 required one-credit courses in the Electrical Technologies Pathway. It is designed to complete all core requirements for NCCER Core credentialing and to provide students with fundamental knowledge and skills emphasizing use of hand tools, power tools, and electrical theory for use in the construction industry and required for NCCER Electrical Level I Credentialing.

Electrical Senior Pathway Level III - A one-credit course designed for students who have completed a minimum of two career and technical education courses to select an area of interest; engage in in-depth exploration of the area; employ problem-solving, decision-making, and independent learning skills; and present a culminating pathway project before a selected audience.

Electrical Level II - This is the second of 3 required one-credit courses in the Electrical Technologies pathway. It is designed to provide students with theory, practice, and skills development. Emphasis is placed on fundamental knowledge and skills in basic wiring, understanding circuitry, performing basic wiring patterns, and using the National Electric Code (NEC) leading to NCCER Electrical Level I Credentialing.

HVAC Architectural Construction and Manufacturing - A one-credit course that introduces students to core knowledge and skills in the areas of design, preconstruction, construction, maintenance, operations, and installation and repair which are foundational to courses related to careers in the architecture and construction and manufacturing industries. This course is not a prerequisite for entering a specific pathway.

Intro to Manufacturing - A one-credit course designed to provide students with the fundamental knowledge and skills needed in the manufacturing industry with emphasis placed on job safety, use of manufacturing materials, primary manufacturing processes, secondary manufacturing processes, and manufacturing systems.

Intro to Robotics - A one-credit course designed to introduce students to the fundamentals of robotics. The course emphasizes fundamentals of electrical current, digital circuits, electronic control systems, and the design and operation of robotic systems.

Robotic Applications - A one-credit course with emphasis placed on the applications of a variety of robotic systems. Students will design and construct a robotic system with peripheral devices.

History

AP-Prep United States History - (10th Grade) spans from pre-Columbian America to 1900 and enhances critical reading, writing, and thinking skills.

AP European History - provides an in-depth of study of European history since the Renaissance while enhancing critical reading, writing and cognitive skills.

AP United States History - (11th Grade) continues critical skill building and analyzes American society in the twentieth century and beyond.

AP United States Government - (12th Grade) combines the study of American government and politics with the critical thinking skills required by the College Board.

World History - (9th Grade) This course explores western history from the Renaissance to the Modern Era.

World History/Geography AP Prep - Advanced work in the chronological history of the world: the emergence of a global age; the Age of Revolutions; the Age of Isms; era of global war; the world from 1500 to present

United States History I - (10th Grade) - Explores the history of the United States from the Pre-Columbian Era to the Industrial Revolution (1900)

United States History II - (11th Grade) - Spans the modern era of United States History from the age of imperialism to the late 20th century.

United States Government - (12th Grade) - details the origins and operations of the United States government.

Economics - (12th Grade)- overviews micro and macroeconomics with practical applications.

African American History - NOTE: DOES NOT FULFILL ANY OF THE FOUR SOCIAL STUDIES CREDITS REQUIRED FOR GRADUATION. Current issues from historical and geographical perspectives; knowledge of key contemporary personalities and events that impact lives

Psychology - Elective Course which studies the observed and theoretical principles of human psychology.

JROTC

JROTC Staff - A one-credit course designed to provide advanced instruction in leadership and citizenry, communication, history and career opportunities, and technology awareness. Students will have hands-on experiences as teacher/leaders within the cadet battalion.

JROTC - This course is designed to develop an understanding of leadership traits and principles, citizenship, oral communication, physical fitness, health/wellness including drug prevention and CPR, motivational techniques such as “Unlocking Your Potential” and an awareness of military history.

Mathematics

Algebra A - The Algebra A course builds on foundational mathematics content learned by students in Grades K-8 by expanding mathematics understanding to provide students with a strong mathematics education. Algebra A is the first half of the Algebra I content and is taught at a slower pace. Content is designed to engage students in a variety of mathematical experiences that include the use of reasoning and problem-solving skills, which may be applied to life situations beyond the classroom setting. This course serves as the cornerstone for all high school mathematics courses; therefore, all subsequent mathematics courses require student mastery of the Algebra A content standards. Algebra A should focus on rational numbers, arithmetic sequences, and linear functions

Algebra B - The Algebra B course builds on foundational mathematics content learned by students in Grades K-8 by expanding mathematics understanding to provide students with a strong mathematics education. Algebra B is the second half of the Algebra I content and is taught at a slower pace. Content is designed to engage students in a variety of mathematical experiences that include the use of reasoning and problem-solving skills, which may be applied to life situations beyond the classroom setting. This course serves as the cornerstone for all high school mathematics courses; therefore, all subsequent mathematics courses require student mastery of the Algebra B content standards. Algebra B should focus on irrational numbers, geometric sequences, and quadratic and exponential functions.

Algebra I - The Algebra I course builds on foundational mathematics content learned by students in Grades K-8 by expanding mathematics understanding to provide students with a strong mathematics education. Content is designed to engage students in a variety of mathematical experiences that include the use of reasoning and problem-solving skills, which may be applied to life situations beyond the classroom setting. This course serves as the cornerstone for all high school mathematics courses; therefore, all subsequent mathematics courses require student mastery of the Algebra I content standards. Algebra I should focus on rational numbers, arithmetic sequences, linear functions, irrational numbers, geometric sequences, and quadratic and exponential functions.

Geometry - The Geometry course builds on Algebra I concepts and increases students' knowledge of shapes and their properties through geometry-based applications, many of which are observable in aspects of everyday life. This knowledge helps develop visual and spatial sense and strong reasoning skills. The Geometry course requires students to make conjectures and to use reasoning to validate or negate these conjectures. The use of proofs and constructions is a valuable tool that enhances reasoning skills and enables students to better understand more complex mathematical concepts. Technology should be used to enhance students' mathematical experience, not replace their reasoning abilities. Because of its importance, this Euclidean geometry course is required of all students receiving an Alabama High School Diploma.

Algebra Connections - Algebraic Connections is a course designed for students who wish to increase their mathematical knowledge and skills prior to enrollment in the Algebra II course or the Algebra II With Trigonometry course. Algebraic Connections expands upon the concepts of Algebra I and Geometry, with an emphasis on application-based problems. This course provides opportunities to incorporate the use of

technology through its emphasis on applying functions to make predictions and to calculate outcomes. The prerequisites for Algebraic Connections are Algebra I and Geometry.

Algebra with Finance - Algebra with Finance is a one-credit college and career preparatory course that integrates algebra, pre-calculus, probability and statistics, calculus and geometry to solve financial problems that occur in everyday life. Real-world problems in investing, credit, banking, auto insurance, mortgages, employment, income taxes, budgeting and planning for retirement are solved by applying the relevant mathematics that are taught at a higher level. Students are encouraged to use a variety of problem-solving skills and strategies in real-world contexts, and to question outcomes using mathematical analysis and data to support their findings. The course offers students multiple opportunities to use, construct, question, model, and interpret financial situations through symbolic algebraic representations, graphical representations, geometric representations, and verbal representations. Math concepts and skills are applied through study and problem-solving activities in workforce situations in the following areas: banking, investing, employment and income taxes, automobile ownership and operation, mathematical operations, consumer credit, independent living, and retirement planning and budgeting. Prerequisites for this course are Algebra I and Geometry.

Algebra II - Algebra II is a terminating course designed to extend students' algebraic knowledge and skills beyond Algebra I. Students are encouraged to solve problems using a variety of methods that promote the development of improved communication skills and foster a deeper understanding of mathematics. To help students appreciate the power of algebra, application-based problems are incorporated throughout the course. The use of appropriate technology is also encouraged for numerical and graphical investigations. In contrast to the Algebra II With Trigonometry course, Algebra II does not meet the graduation requirements for the Alabama High School Diploma with Advanced Academic Endorsement due to the fact that it does not contain trigonometry content. Algebra II With Trigonometry or Algebra II is required to complete the graduation requirements for the Alabama High School Diploma. This course does not provide sufficient background to prepare students to pursue higher-level mathematics courses. The prerequisites for Algebra II are Algebra I and Geometry.

Algebra II with Trigonometry - Algebra II With Trigonometry is a course designed to extend students' knowledge of Algebra I with additional algebraic and trigonometric content. Mastery of the content standards for this course is necessary for student success in higher-level mathematics. The use of appropriate technology is encouraged for numerical and graphical investigations that enhance analytical comprehension. Algebra II With Trigonometry is required for all students pursuing the Alabama High School Diploma with Advanced Academic Endorsement. Prerequisites for this course are Algebra I and Geometry. If a student chooses to take the Algebraic Connections course, it must be taken prior to the Algebra II With Trigonometry course.

Pre-calculus – Pre-calculus is a course designed for students who have successfully completed the Algebra II With Trigonometry course. This course is considered to be a prerequisite for success in calculus and college mathematics. Algebraic, graphical, numerical, and verbal analyses are incorporated during investigations of the Pre-calculus content standards. Parametric equations, polar relations, vector operations, and limits are introduced. Content for this course also includes an expanded study of polynomial and rational functions, conic sections, trigonometric functions, and logarithmic and exponential functions. Application-based problem solving is an integral part of the course. Instruction should include appropriate use of technology to facilitate continued development of students' higher-order thinking skills

Analytical Mathematics - Analytical Mathematics is a course designed for students who have successfully completed the Algebra II With Trigonometry course. It is considered to be parallel in rigor to Precalculus. This course provides a structured introduction to important areas of emphasis in most postsecondary studies that pursue a concentration in mathematics. Linear algebra, logic, vectors, and matrices are topics that are given more in-depth coverage than in previous courses. Application-based problem solving is an integral part of this course. To assist students with numerical and graphical analysis, the use of advanced technological tools is highly recommended. While this course may be taken either prior to or after Precalculus, it is recommended that students who are interested in postsecondary studies in engineering successfully complete the Precalculus course as well as, where available, an Advanced Placement or International Baccalaureate calculus course.

AP Calculus - AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. You'll learn how to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and how to make connections amongst these representations. You will learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

AP Statistics - The Advanced Placement Program offers a course description and exam in statistics to secondary school students who wish to complete studies equivalent to a one semester, introductory, non-calculus-based, college course in statistics. Develop analytical and critical thinking skills as you learn to describe data patterns and departures from patterns, plan and conduct studies, use probability and simulation to explore random phenomena, estimate population parameters, test hypotheses, and make statistical inferences.

Physical Education

Fitness and Dance / PE - NOTE: THIS COURSE FULFILLS THE GRADUATION REQUIREMENT FOR PHYSICAL EDUCATION. Individualized fitness plan for lifetime fitness

Health - Develops skill for accessing personal health information

Computer Technology

Advanced Business Tech Applications - A one-credit course that provides students with project-based applications of concepts learned in Business Technology Applications or Business Essentials. Students will use various software applications to prepare documents for publication and generating information. The prerequisite for this course is Business Technology Applications or Computer Applications.

Career Prep - A one-credit course that is taught in Grades 9-12. The course prepares students with content knowledge and skills in the areas of career development and academic planning, computer skill application, and financial literacy. Also, this course is designed to meet the required 20-hour online experience.

Management Principles - A one-credit course designed to provide students with an understanding of the organizational functions of businesses, including quality concepts, project management, and problem solving. Specific content standards to be included in each of the courses are indicated in the Course of Study chart.

Multimedia Design - A one-credit course designed to provide students with hands-on skills involving graphic design, digital photography, Web publishing, and digital video production. Students use various hardware peripherals and software for completing documents.

Multimedia Publications - A one-credit course designed to provide students with the ability to utilize digital equipment and multimedia digital imaging software, produce interactive media projects, and develop publication layouts. Students use various hardware peripherals as well as the Internet for integrating skills to create a variety of publications.

Fundamentals of Information Technology - A one-credit course that introduces students to the knowledge base and technical skills for information technology careers. Students study the nature of business and demonstrate knowledge of the functions of information systems in business.

Computer Tech and Support - A one-credit course that provides students with skills necessary to manage a stand-alone computer on a home network.

Networking - A one-half credit course designed to introduce students to networking peer-to-peer and client/server networks. The course guides students through all phases of implementing and troubleshooting common TCP/IP Ethernet networks using network hardware connected with CAT 5/6

cable; network components, cables, and connectors; OSI model, protocols, and topologies; and implementing and troubleshooting a LAN and WANs. Students explore the history of networks and network-related careers.

Drivers Education

Safe driving theory; in class study; driving hazards; boating safety; behind the wheel experience; safety practices

Family and Consumer Sciences

Education and Training - A one-credit foundation course designed for students who are interested in pursuing a career in education. The required school-based laboratory is a well-equipped classroom. This course is a prerequisite for Early Childhood Education I, Teaching I, Educational Leadership, and Professional Support Services in Education.

Teaching I - A one-credit course that aids students in implementing the teaching and learning processes. The prerequisite for this course is Education and Training. The required school-based laboratory is a well-equipped classroom.

Fashion Design - A one-credit course designed for students interested in pursing a career in fashion design. It provides students with knowledge and skills for application of artistic expression related to textiles, apparel, and fashion design. A fashion design studio is the required school-based laboratory for this course.

Sports Nutrition - Sports Nutrition is a one-credit course taught in grades 9-12. This course is designed for students interested in health, fitness, and sports performance. This course examines the relationship between nutrition, physical performance, and overall wellness. Students will learn how to choose nutritious foods for healthy lifestyles and peak performance of athletes. Health and disease prevention through nutrition, physical activity, and wellness practices are essential components of the course. This course emphasizes the metabolic process and management of food choices for optimal health and physical performance. Students are challenged to develop personal fitness and nutrition plans.

Food Innovations and Media - Food Innovations and Media is a one-credit course taught in grades 9-12. This course is designed to introduce students to the process of developing new food products for marketing, or adapting traditional ones to meet specific nutrition and marketing needs, and to follow consumer trends while utilizing a variety of technology. Course content provides opportunities for students to explore global food systems; examine trends in food processing and food innovations; research influences on purchasing behavior of consumers; develop and analyze recipes for new food products through experimental food labs; apply social media and digital design techniques, photographic styling applications, and journalism skills; and explore career options in this specific food industry.

Event Planning - This is a one-credit course taught in grades 9-12. Students will learn to organize and plan all aspects of business and social events including the food, location, and décor associated with hiring an event planner. Concepts taught in the course to meet the needs of clients include planning for the event with activities, establishing a budget, determining the theme, planning the guest list, determining the location, developing an event plan schedule, planning transportation needs, training of staff, staging the event, calculating room and space requirements, providing necessary technology and equipment, planning food and beverage services, securing entertainment, understanding legal issues in event

planning, and conducting post-evaluations of event. Students demonstrate leadership characteristics and make decisions based on integrating knowledge of financial, human resources, promotion, and event management principals. Students are prepared for various career opportunities in event planning.

Foreign Languages

AP Spanish III - Listening and speaking skills including understanding and responding to factual and interpretive questions; paraphrasing, explaining, and giving cause; interpreting main ideas and supporting details from authentic texts; creati

ng presentations; increased understanding of Spanish-speaking culturesCollege-level advanced language course following the curriculum established by the College Board Advanced Placement (AP) Program for Spanish; performance in listening, speaking, reading, and writing for a variety of situations with emphasis on vocabulary, structure, fluency, and accuracy; extensive writing of compositions

Spanish I - Listening and speaking skills including understanding and responding to simple directions, expressions of courtesy, and questions related to daily routines; reading and writing skills including words and phrases used in basic situational contexts; beginning understanding of Spanish-speaking cultures

Spanish II - Listening and speaking skills including understanding and responding to directions, commands, and questions; reading with comprehension main ideas from simple texts; writing with comprehension short presentations; further understanding of Spanish-speaking cultures

Health Occupations

Clinical Spectrum - A one-credit foundational course that introduces students to integrated academics, employability and career development skills, legal and ethical issues, communications, safety, and life skills. This course is a prerequisite to all courses in the Health Science cluster.

Health Science Internship I - A one-credit course focusing on basic knowledge and skills necessary for beginning health care workers. Health Science Internship reinforces and applies knowledge learned in classroom and laboratory settings. Content Standards 1,3,4,5,6, and 9 must be taught for this one-credit course.

Health Science Internship II - A two-credit course focusing on basic knowledge and skills necessary for beginning health care workers. Health Science Internship reinforces and applies knowledge learned in classroom and laboratory settings.

Cooperative Education

Business Essentials - Business Essentials is a one-credit foundation course. Students develop an understanding of how academic skills in mathematics, economics, and written and oral communications are integral components of success in commerce and information technology careers. Students examine current events to determine impact on business and industry and legal and ethical behavior, acquire knowledge of safe and secure environmental controls to enhance productivity, determine how resources are managed to achieve company goals, and identify employability and personal skills needed to obtain a career and be successful in the workplace. Career and technical student organizations are integral, co-curricular components of each career and technical education course.

Entrepreneurship - Entrepreneurship is a one-credit course designed to provide students with skills needed to effectively organize, develop, create, and manage a business. This course includes business management and entrepreneurship, communication and interpersonal skills, economics, and professional development foundations. Career and technical student organizations are integral, co-curricular components of each career and technical education course. These organizations serve as a means to enhance classroom instruction while helping students develop leadership abilities, expand workplace-readiness skills, and broaden opportunities for personal and professional growth.

Marketing Principles - Marketing Principles is a one-credit course designed to provide students with an overview of in-depth marketing concepts. Students develop a foundational knowledge of marketing and its functions, including marketing information management, pricing, product and service management, entrepreneurship, and promotion and selling. Students examine the need for sales and marketing strategies. Students practice customer relationship skills, ethics, technology applications, and communicating in the workplace. Career and technical student organizations are integral, co-curricular components of each career and technical education course.

Sales and Promotion - Sales and Promotion Planning is a one-credit course that provides the tools necessary for the development, implementation, and management of promotional programs. The focus of this course is on utilizing promotional knowledge and skills for communicating information to achieve a desired outcome. Students develop skills related to advertising, publicity, special events, visual merchandising, displays, promotional campaigns, and advertisements to aid in promotional planning (School Store). Career and technical student organizations are integral, co-curricular components of each career and technical education course.

Sports and Entertainment Marketing - Sports and Entertainment Marketing is a one-credit specialized course designed to offer students an opportunity to gain knowledge and develop skills related to the growing sports and entertainment industry. Sports Marketing addresses such diverse products as the sporting event itself, its athletes, sports facilities or locations, sporting goods, personal training, and sports information. Entertainment Marketing includes events such as fairs, concerts, trade shows, festivals, plays, product launches, causes, etc. Career and technical student organizations are an integral co-curricular component of each career and technical education course.

Cooperative Education - Cooperative Education is a structured component of the Career and Technical Education (CTE) curriculum that integrates classroom instruction with productive, progressive, supervised, work-based experiences/apprenticeships (Paid) and internships (Unpaid), related to students' career objectives. Content is planned for students through a cooperative arrangement between the school and employer as a component of work-based learning. The purpose of Cooperative Education is to provide work-based experiences in approved training stations that typically cannot be obtained in the classroom.