



CHS High School Course Offerings

2018-19

Table of Contents (by department):

[Bible](#)

[English](#)

[Fine Arts](#)

[Foreign Language](#)

[Health and PE](#)

[Mathematics](#)

[Science](#)

[Social Sciences](#)

[Business and Technology](#)

CHS Graduation Requirements

English	4 units (must include American Literature and Composition)
Social Science	4 units (World Geography, United States History, World History, United States Government and Economics)
Science	4 units (to include physical science OR physics, biology, and chemistry)
Mathematics	4 units (Algebra I or higher)
Health/P.E.	1 unit
Bible	4 units (1 for each year at CHS)
Foreign Language	2 units
Elective	3 units (at least two must be Technology OR Fine Arts)

Note - Courses marked with an asterisk (*) may or may not be offered depending on student interest and instructor availability

Bible

Old Testament Survey | Grade 9 | 1 credit

This course is an overview of the Old Testament focusing on the developing story of man's sin and God's redemption through His promised Son. Students will gain a working knowledge of the

Old Testament books, their various genres, and structure as well as be able to articulate the place of Israel in history, the Law, the sacrificial system, the promises of the coming Messiah, and the relationship between the Old Testament and the New Testament.

New Testament Survey | Grade 10 | 1 credit

This course is an overview of the New Testament focusing on the continuing story of man's sin and God's redemption fulfilled through Jesus Christ. Students will gain a working knowledge of the New Testament books, their various genres, and structure as well as be able to articulate the place of the church in history, grace, atonement through Christ, the promises of Christ's return, and the relationship between the Old Testament and the New Testament.

Person and Works of Christ | Grade 11 | 1 credit

This course is an in depth study of the person and works of Christ. Students will use the four Gospels to retrace the story of our Savior by walking chronologically through His life. Through reading, writing and discussion, the students learn and utilize skills such as exegetical methodology and theological thinking. The students are challenged to understand basic philosophical perspectives and consequences, which are relevant to the current culture and modern ways of thinking about Jesus' saving work. Required for all 11th grade students.

Apologetics | Grade 12 | 0.5 credit

Senior year is a launching pad to life, which is why students need to be equipped with the tools necessary to navigate life outside the walls of CHS while instilling in them a passion to glorify God in all they do. The curriculum is topical in nature with an emphasis on apologetics. Through reading, writing and discussion students learn about defending their faith and how to converse with people of different belief systems. Required for all 12th grade students.

Current Issues | Grade 12 | 0.5 credit

This course is structured to give the student an understanding of current issues in many areas of a political, social, and economic nature. Focus will be on explicit statements and the implicit tones concerning identity, and meaning in life from a hands-on evaluative perspective. The course emphasizes research done by the student using film, TV, music, and journalism as a means to research and study some of the current issues in our society. The research findings are then examined and discussed in class through the lense of a biblical worldview so that students may see how the Bible speaks to each issue. This comparative analysis allows the student to develop skills necessary for living out their faith unapologetically in our current culture. Required for all 12th grade students.

English

Introduction to Literary Studies | Grade 9 | 1 credit | Regular or Honors

Freshman English is an introduction to reading, discussing, and writing about literature. Students study the various genres of literature, including novels, short stories, plays, and poetry. Literary selections focus on a wide range of literature, including classics and more recent novels from different parts of the world. Regular grammar exercises allow students to improve their proficiency in the building blocks of the English language and apply that knowledge to improve

their own writing. A study of vocabulary provides the students with knowledge and tools needed to increase and improve their vocabulary. Students write narrative, persuasive, and expository essays on a regular basis, and two abbreviated research papers are required in the second semester.

World Literature | Grade 10 | 1 credit

Sophomore English is a continuation of the study of complex literature from around the world. This survey features a variety of literary genres and an expanded study of literary terms and devices. Students continue to hone their writing skills with an emphasis on analytical writing. A research paper is also required in the second semester. An overview of grammar and an extension of vocabulary study enhance the students' ability to create a variety of compositions.

American Literature | Grade 11 | 1 credit

Junior English is a study of American literary tradition through the patterns of literature and the events of history. This exploration of American literature through the eyes of history exposes the unique nature of our nation. This genre-rooted and theme-based literature study includes short stories, poems, plays, essays, novels, and noteworthy nonfiction. This course also emphasizes vocabulary, grammar, and composition. Students focus on the development of critical thinking as well as precision in writing. A research paper is required in the first semester.

AP Language and Composition: American Language | Grade 11 | 1 credit

AP Language and Composition is a study of the rhetorical effects of language, focusing on nonfiction selections from a variety of American writers, supplemented by essential works of American literature. From the College Board: "The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments.... Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods." The course will correspond to a chronological study of American history with discussions and essay prompts targeting the themes and topics most important to American identity and ideology. Students will be required to spend approximately one hour outside of class reading and writing per class meeting. They compose on average one short essay per week and one longer, research-based essay, per quarter. Those who take the course are required to take the AP exam at the end of the year.

Prerequisite: Successful completion of English 10 and teacher recommendation

British Literature | Grade 12 | 1 credit

Senior English is a study of British literature. This survey is a journey through hundreds of years of literary endeavors from pre-Chaucerian England to the present day. Refining their analytical and critical thinking skills, students explore an eclectic collection of English literature including short stories, plays, poems, novels, and noteworthy nonfiction. Students apply understanding through discussion; through interpretive, analytical, and persuasive compositions; and through applicable projects. A research paper is required in the first semester.

AP Literature I Grade 12 | 1 Credit

AP Literature & Composition is designed to be a university-level course that introduces students to the intellectual stimulation and challenges of undergraduate study in English. The class concentrates on American and British texts from a variety of genres, including novels, short-stories, plays, and poetry. From the College Board: "The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works." Students will be required to spend approximately one hour outside of class reading and writing per class meeting. They compose on average one short essay per week and one longer, research-based essay, per quarter. Those who take the course are required to take the AP exam at the end of the year.

Prerequisite: Successful completion of English 11 or AP Language and teacher recommendation

Fine Arts

CHS Singers | Grades 9-12 | 0.5 credit (Fall Semester)

The CHS Singers is a musical ensemble which performs standard choral literature, contemporary pieces, sacred selections, and show tunes. Students are challenged to improve their singing abilities through sight reading and music theory, expressive singing and projection, proper vocal placement and control, as well as ensemble and solo opportunities. Students will perform at a variety of events, including concerts, chapels, and regional honor choirs. This is a fall semester class that pairs with Musical Theater. No audition required.

Concert Band | Grades 9-12 | 1 credit

High School Band is a year long performance based course that provides students with learning and performance opportunities on woodwind, brass, and percussion instruments. The primary focus is on the development, continuation, and expansion of skills that are necessary for effective instrumental music performance. In addition to the large group ensemble, individual growth and achievement are encouraged through participation in solo performances, honor bands, and private lessons. Students in the High School Band have several performance opportunities throughout the year, including (but not limited to): Christmas Concert, performances at local retirement homes, High School Chapel, GMEA Band Festival, Solo & Ensemble, and Spring Concert. Students are also encouraged to audition for All-District and All-State Band and to take private lessons.

Prerequisite: at least three years of school band or private lesson experience OR instructor approval.

Guitar I | Grades 9-12 | 1 Credit

This course is designed to teach the fundamentals of guitar. The class will address the basics of chords, scales, strumming, and rhythm. There will be a focus on playing in ensembles. Students will perform at a variety of events and school functions in conjunction with the Advanced Instrumental Ensemble class. No previous guitar training is required. Students must provide their own instrument.

Advanced Instrumental Ensemble | Grades 9-12 | 1 credit

This course has a two-fold focus: 1) to teach the principles of ensemble performance and 2) to teach the art of leading Praise and Worship in a worship service. The students in this course will have opportunities to perform at home athletic events and upper school chapels. Students will have the opportunity to audition for various honor bands as well.

Prerequisite: Completion of Guitar I or instructor approval.

One Act | Grades 9-12 | 0.5 credit (Fall Semester)

In this drama class, students will be trained in the fundamental skills of acting, including improvisation techniques, body control, voice projection, diction, pantomime, memorization, character development, creative expression, and the overall art of storytelling. It will emphasize artistic perception by promoting an understanding of aesthetic value, historical and cultural awareness, and the interconnection of the arts and other disciplines. This course touches on all aspects of theater arts, but heavily emphasizes the basics of acting with performance opportunities including One Act competitions and full-scale dramatic productions. This is a fall semester class that pairs with Musical Theater.

Prerequisite: Audition and instructor approval.

Musical Theater | Grades 9-12 | 0.5 credit (Spring Semester)

In this course, students will obtain training and skills associated with Musical Theater: singing, acting, and movement/choreography, as well as a working knowledge of correct theatrical terminology and vocabulary. Students will achieve a professional and personal understanding of the arts through auditions, rehearsals, and performances of a full-scale musical production. This is a spring semester class that pairs with either CHS Singers or One Act.

Prerequisite: Completion of CHS Singers or One Act OR instructor approval.

Technical Theater | Grades 9-12 | 0.5 credit

This course introduces students to stage equipment, safety procedures, power tool operation, set construction, scenic painting, stage management, costuming, make-up, sound, lighting, advertising, and public relations for a theatrical production. Out-of-school rehearsals and tech assistance for performances are required.

Drawing/Painting I | Grades 9-12 | 0.5 credit one semester

This class will begin with rudimentary skill building and drawing. Students will progress from drawing single symmetrical objects to a multiple object still-life drawing to elaborate long-term

projects. Media used in this course will include graphite, charcoal, colored pencils, and ink. Painting will begin with a review of drawing and then progress to painting from life for mastery of brush skills and control of values or tone of color. Styles attempted in this class will include a mix of abstract, impressionist, and realist/surrealist. The primary paint medium for this course is acrylics. After proving mastery in acrylics, students may experiment in oil or watercolor. During both semesters, students will view the works of their contemporaries, both from Christian Heritage and schools nationwide. Brief in-class critiques will follow the completion of each project. No prerequisite or former experience required.

Drawing/Painting II | Grades 10-12 | 0.5 credit one semester

Advanced Drawing is for the student who would like a more in-depth study of drawing. Students will create studio works that are original expressions of a personal aesthetic. Painting II will begin with a review of drawing and then progress to painting from life for mastery of brush skills and control of values or tone of color. The mediums for this course are watercolors, acrylics, and oil. Brief in-class critiques will follow the completion of each project.

Prerequisite: Drawing/Painting I and teacher approval.

Drawing/Painting III | Grades 11-12 | 1 credit independent study

This advanced course is for the student who would like a more in-depth study of drawing and painting, and design. Students will create studio works that are original expressions of a personal aesthetic. Painting III will begin with a review of drawing and then progress to painting from life for mastery of brush skills and control of values or tone of color. The mediums for this course are pencil, charcoal, watercolors, acrylics, and pastels. Brief in-class critiques will follow the completion of each project.

Prerequisite: Drawing/Painting I and II and teacher approval.

Foreign Language

Spanish I | 1 credit

The goal of the CHS Spanish program is acquisition of basic interpersonal communication skills (BICS) through various methods of Teaching with Comprehensible Input (TCI). Students listen to and understand, read, write, and speak Spanish as appropriate to their levels of study. Studies also include geography and culture. Students learn through classroom community building, listening, conversation, storytelling, writing, music, art, video, reading, and educational games.

Spanish II | 1 credit

Students continue to acquire basic interpersonal communication skills (BICS) through methods of Teaching with Comprehensible Input (TCI). Students listen to and understand, read, write, and speak Spanish at a more advanced level. Studies continue to include geography and

culture. Students learn through classroom community building, listening, conversation, storytelling, writing, music, art, video, reading, and educational games.

Prerequisite: Successful completion of Spanish I or teacher approval

Spanish III | 1 credit

Students continue to acquire basic interpersonal communication skills (BICS) with an increased focus on cognitive academic language proficiency (CALP) through methods of Teaching with Comprehensible Input (TCI). Studies focus on increased grammatical awareness and academic language, listening, reading, writing, and conversation. Studies continue to include geography and culture. Students learn through classroom community building, listening, conversation, storytelling, writing, music, art, video, reading, and educational games. Thematic units on the arts, science, literature, social issues, and more guide students into deeper proficiency in academic language.

Prerequisite: Successful completion of Spanish II or teacher approval

Spanish IV Honors | 1 credit *

Students continue to acquire basic interpersonal communication skills (BICS) with a heavier focus on cognitive academic language proficiency (CALP) through methods of Teaching with Comprehensible Input (TCI). Studies focus on increased grammatical awareness and academic language, listening, reading, writing, and conversation. Studies continue to include geography and culture. Students learn through listening, conversation, storytelling, writing, music, art, video, reading, and educational games. Thematic units on the arts, science, literature, social issues, and more guide students into deeper proficiency in academic language.

Prerequisite: Successful completion of Spanish III or teacher approval

Spanish V Honors | 1 credit *

Students continue to acquire basic interpersonal communication skills (BICS) with a heavier focus on cognitive academic language proficiency (CALP) through methods of Teaching with Comprehensible Input (TCI). Studies focus on increased grammatical awareness and academic language, listening, reading, writing, and conversation. Studies continue to include geography and culture. Students learn through listening, conversation, storytelling, writing, music, art, video, reading, and educational games. Thematic units on the arts, science, literature, social issues, and more guide students into deeper proficiency in academic language.

Prerequisite: Successful completion of Spanish IV or teacher approval

Advanced Placement Spanish Language and Culture | 1 credit *

Students continue to acquire Spanish while preparing for the tasks and subject matter required for success on the Advanced Placement Spanish Language and Culture exam in the spring semester. Students will read, listen, speak, and write in various formats, including those on the AP exam. The AP test requires reading comprehension, conversational speaking, a brief cultural comparison oral presentation, an e-mail response, and an essay using information from written and audio sources as well as personal experience and study. Students are required to take the AP exam in the spring.

Prerequisite: Teacher approval and successful completion of Spanish III or higher

Advanced Placement Spanish Literature and Culture | 1 credit *

Students continue to acquire Spanish while preparing for the tasks and subject matter required for success on the Advanced Placement Spanish Literature and Culture exam in the spring semester. Students will read, listen, speak, and write in various formats, including those on the AP exam. The AP test requires interpretive listening, reading analysis, text explanation, text and art comparison, and essays on analysis of a text and text comparison. Students are required to take the AP exam in the spring.

Prerequisite: Teacher approval and successful completion of Spanish III or higher

Health and PE

Health | Grade 9 or 10 | 0.5 credit

This course is designed to develop an understanding and appreciation for overall health and wellness (physical, mental, social, and spiritual). Areas of content include emotional wellness, nutrition, physical fitness, sexuality, general safety, and first aid. This course challenges students to apply learned knowledge to make godly thoughtful decisions about his/her health. Biblical perspective is shown in all areas with in-depth discussions designed to prepare students to take ownership of personal health choices. Male students and female students are taught separately for this course due to the sensitive nature of some topics that are covered.

Physical Education | Grade 9 or 10 | 0.5 credit

This course introduces students to the basic rules and principles of fitness and lifelong sports activities, as well as various team sports and the history of these sports. Rules, techniques, safety, and history are part of overall instruction. Christian sportsmanship is emphasized in each area of instruction.

Parisi Speed Class | Grades 9-12 | 0.5 credit

Christian Heritage has the unique opportunity to be the nation's first Parisi Speed School and offer the Parisi program as part of our curriculum. The Parisi Speed School is the nation's largest sports training company and currently has over 90 franchises located in 31 states. Over the last 20 years, the Parisi system has trained over 700,000 athletes from 7-18 years of age. Included in that list of athletes are over 130 NFL draft picks and countless Olympic athletes. Students will go through the 'Parisi Evaluation' and then focus on 'Linear Speed' and 'Change of Direction' drills and techniques. Class includes 3 Parisi Speed sessions and 1 Strength session each week.

*Those who play on CHS sports teams will take this class during their 'off season'.

Football/Volleyball/Softball players take during Spring. Basketball/Baseball/Soccer/Golf/Tennis players take during Fall. Multi sport athletes should talk to their coaches to formulate the best plan.

**Parisi will suffice for the required 0.5 Physical Education credit.

Health & PE - Summer Intensive | Grade 9 or 10 | 1 credit

This one-week summer intensive course is designed to meet the Health and PE graduation requirement for CHS and to take the place of the separate Health and Physical Education classes. The complete set of objectives for both classes will be addressed in this course. See the separate course listings for a complete description. This course will take place the week of June 4-8, 2018.

There is a separate fee required for this summer intensive course.

Mathematics

CCGPS Coordinate Algebra Honors | Grade 8 | 1 credit

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. This course will have a more strenuous workload that is part of being in an honors course. This course will have a particular emphasis on problem solving skills and applying the concepts of algebra to new and unfamiliar situations. The overarching skills will be collaboration, communication of math concepts, and the application of mathematical concepts to real life situations.

Technology required: TI-84 Graphing Calculator

Prerequisite: Successful completion of Math 7 and teacher recommendation

CCGPS Coordinate Algebra | Grade 9 | 1 credit

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. Students will experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Technology required: TI-84 Graphing Calculator

CCGPS Analytic Geometry | Grade 9 or 10 | 1 credit

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. Students will experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Prerequisite: CCGPS Coordinate Algebra

Technology required: TI-84 Graphing Calculator

CCGPS Analytic Geometry Honors | Grade 9 or 10 | 1 credit

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. In addition to the content of the CCGPS Analytic Geometry course, Honors Geometry delves deeper into the topics taught as well as adding more advanced concepts. Throughout the entire course there is a strong emphasis on logical reasoning skills, on problem solving, on communication, and mathematical writing skills. Students planning to eventually take AP Calculus should take Honors Geometry.

Prerequisites: Successful completion of CCGPS Coordinate Algebra and teacher recommendation

CCGPS Advanced Algebra | Grade 10 or 11 | 1 credit

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. Students will expand their repertoire of functions to include linear, quadratic, polynomial, rational, and radical functions. They also bring together all of their experience with functions and geometry to create models and solve contextual problems. Matrices and introductory probability and statistics will also be included. Students will experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of real world problems.

Prerequisite: Coordinate Algebra and Analytic Geometry

Technology required: TI-84 Graphing Calculator

CCGPS Advanced Algebra Honors | Grade 10 or 11 | 1 credit

In Honors Advanced Algebra the ability to apply knowledge to a new or unfamiliar situation is one of the most important skills that will be learned and practiced and will become essential to the student's success. Students will extend their knowledge, understanding and communication (verbally, numerically, graphically and analytically) of concepts by solving open-ended problems

and thinking critically. They will pull together and apply the accumulation of learning that they have from their previous courses, with content including linear, quadratic, polynomial, rational, radical and exponential functions, matrices and introductory probability and statistics. They will also bring together all of their experiences with functions and geometry to create models and solve contextual problems. Students will experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of real world problems.

Prerequisite: Coordinate Algebra, Analytic Geometry and Teacher Recommendation

Technology required: TI-84 Graphing Calculator

Statistics | Grade 11 or 12 | 1 credit

The purpose of statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics include interpreting graphical displays of distributions of univariate data (dotplot, stemplot, histogram), summarizing distributions of univariate data (mean, median, mode, range, interquartile range, standard deviation, quartiles, percentiles, standardized scores, boxplots), comparing distributions of univariate data, exploring bivariate data, exploring categorical data: frequency tables, methods of data collection, planning and collecting surveys, planning and conducting experiments, modeling using probability and simulations, probability as relative frequency, independent random variables, normal distributions, simulating sampling distribution, confidence intervals, and tests of significance.

Prerequisite: Advanced Algebra

Technology required: TI-84 Graphing Calculator

Advanced Mathematical Decision Making | Grade 12 | 1 credit

This 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. This course also reviews arithmetic and geometric sequences and series and introduces infinite series and sequences. Students explore topics as limits; sums, convergence and divergence of series; and sigma notation.

Prerequisite: Advanced Algebra

Technology required: TI-84 Graphing Calculator

Honors Pre-Calculus | Grade 11 or 12 | 1 credit

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. Students will experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Honors courses are for those who consistently exceed the objectives and expectations of the regular curriculum both in knowledge and application.

Prerequisite: Advanced Algebra and teacher recommendation

Technology required: TI-84 Graphing Calculator

AP Calculus AB | Grade 12 | 1 credit

This is a college level course for advanced students in mathematics. Those who take the course are required to take the AP exam at the end of the year. College credit for the first semester calculus course at many universities is given for scores of 3, 4, and 5 on the exam. The topics covered include functions, graphs, limits, as well as derivatives and integrals of a single variable.

Prerequisite: Pre-Calculus Students should be able to read a college-level textbook and should possess basic mathematics and graphing skills. Teacher recommendation is required.

Technology required: TI-84 Graphing Calculator

AP Calculus BC | Grade 12 | 1 credit *

This is a college level course for the most able students in mathematics. Those who take the course are required to take the AP exam at the end of the year. College credit for the first year of calculus courses at many universities is given for scores of 3, 4, and 5 on the exam. (Subscores for Calculus AB can be derived from Calculus BC.) Calculus BC covers topics beyond that of Calculus AB such as parametric, polar, and vector functions, polynomial approximations, and series.

Prerequisite: Pre-Calculus Students should be able to read a college-level textbook and should possess basic mathematics and graphing skills. Teacher recommendation is required.

Technology required: TI-84 Graphing Calculator

Science

Biology I | Grade 9 | 1 credit

This course addresses major subtopics of biological study including biochemistry, cellular and molecular biology, genetics, origins of life, ecology, plant and animal physiology, and human anatomy. Students will engage in laboratory exercises, Harkness discussions, research, and writing assignments to enrich their learning and synthesize real world applications and bioethical considerations in the classroom. They will gain a deeper appreciation of the creativity of our Creator and complexity of the biological world, as they learn to give God glory through the stewardship of His creation.

Honors Biology I | Grade 9 | 1 credit *

This course offers a more in-depth study of the principles of biology listed above. The main focus will be on microbiology, genetics, plant and animal physiology, and human anatomy. It will involve more advanced lab opportunities and lab reports. Students must be highly motivated and possess advanced writing and reading comprehension skills in order to succeed. Honors courses are for those who consistently exceed the objectives and expectations of the regular curriculum both in knowledge and application. Extra study time outside the classroom is expected. The course is considered a Pre-AP course and must be satisfactorily completed to participate in AP Biology during the senior year.

Prerequisite: Teacher recommendation from ALL middle school teachers

Physical Science | Grade 10 | 1 credit

This lab course, offered to tenth graders, serves as an introduction to the principles of chemistry and physics. Topics include; the Biblical foundation, the structure of matter, atoms, the basic elements, the periodic table, Newton's Laws of Motion, machines, heat, electricity and magnetism, sound, and light. Math skills (relating to scientific investigation), graphing, and test-taking strategies are included.

Honors Physical Science | Grade 10 | 1 credit *

This lab course is a more in-depth study of the principles of physical science listed above. It will involve more advanced mathematical topics and a deeper introduction to chemistry. Honors courses are for those who consistently exceed the objectives and expectations of the regular curriculum both in knowledge and application. Extra study time outside the classroom is expected.

Prerequisite: Teacher recommendation from Biology I and Math

Chemistry I | Grade 11 | 1 credit

This lab course involves a study of the composition, structure, and interactions of matter. Topics covered are the Biblical basis for science study, the mathematics of chemistry, properties of matter, atomic structure, the Periodic Table, bonding, nomenclature, balancing equations, and stoichiometry. The student is required to perform and document labs and keep an organized notebook of his or her work.

Prerequisite: Physical Science or Honors Physical Science

Honors Chemistry I | Grade 11 | 1 credit

This lab course is a more in-depth study of chemistry. In addition to the standard topics listed above, it will include more advanced mathematical topics, nuclear chemistry, modern structural theories, and redox reactions. Teacher recommendation is required. Honors courses are for those who consistently exceed the objectives and expectations of the regular curriculum both in knowledge and application. Extra study time outside the classroom is expected.

Prerequisite: Honors Physical Science and Teacher Recommendation from both Honors Physical Science and Math

Honors Chemistry II | Grade 12 | 1 credit *

This course is an extension of the Chemistry I course. It is designed to give students a deeper understanding of the principles of chemistry including gas laws, reaction rates, equilibrium, solutions, organic chemistry, and acids and bases. It is a good foundation for students entering a freshman level college chemistry course.

Prerequisite: Chemistry I or Honors Chemistry I

AP Chemistry | Grade 12 | 1 credit *

AP Chemistry is the equivalent of a college level general chemistry course. Students will gain a depth of understanding about the fundamental concepts of chemistry such as structure and states of matter, intermolecular forces, reactions, and calculations within the framework of the six big ideas. About 25% of the instructional time will be spent engaged in hands-on,

inquiry-based laboratory investigations. Extra study time outside the classroom is expected. Students are expected to take the AP Chemistry exam in the spring. This course is open to 12th grade students who have done exemplary work in Honors Chemistry I and Algebra II.

Prerequisite: Honors Chemistry I and teacher recommendation

Honors Biology II | Grade 12 | 1 credit

Biology II is a lab-based, second level biology course that gives students a chance to study advanced topics. It will provide excellent preparation for a college level biology course. Topics will include molecular biology, biochemistry, anatomy, physiology, and genetics. This course will closely follow the AP Biology guidelines and students will be expected to participate in AP Biology labs and complete AP level lab reports. Students must be highly motivated and possess advanced writing and reading comprehension skills in order to succeed. Honors courses are for those who consistently exceed the objectives and expectations of the regular curriculum both in knowledge and application. Extra study time outside the classroom is expected.

Prerequisite: Biology I, Chemistry I, and teacher recommendation from both Math and Chemistry I

Environmental Science | Grade 12 | 1 credit

Environmental Science is an introductory course designed to explore the physical world that God has created. In this class there will be an emphasis on hands-on activities and laboratory exercises that will promote problem solving, refine laboratory procedure, and reinforce reading, writing and math skills. In this course students will be involved in outdoor field studies and will be encouraged and rewarded for the exploration of personal avenues of interest in science.

**Does not count as a Hope Rigor course.*

AP Physics 1 | Grade 12 | 1 credit

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry based investigations that provide students with opportunities to apply the science practices.

Prerequisite: CCGPS Advanced Algebra and Physical Science or teacher recommendation

Physics I | Grade 12 | 1 credit *

Students in this course will examine the following physics topics: mechanics, electricity & magnetism and wave motion. Prerequisite math skills should include, but are not limited to those presented in Algebra II. An emphasis is placed on a mathematical understanding of the physics principles that are presented. Coursework involves laboratory activities, in-class assignments and formal assessments that require students to demonstrate problem-solving skills in the context of a science scenario.

Prerequisite: Physical Science & Chemistry I

Social Sciences

World Geography | Grade 9 | 1 credit

Using historical thinking skills, World Geography provides the skills and tools of spatial analysis to better understand the patterns of people, landscape, and natural phenomena of the Earth with a Christian worldview. These critical thinking and writing skills will help the students to become responsible and informed decision-makers. Topics of study will include: human systems – culture; political geography, population and demographics; movement; urban geography; economic development; current events; human environmental interaction; and geographic tools and skills.

World History | Grade 10 | 1 credit

The course is a survey of world history, which is a record of the past from creation to the present, revealing the actions of God and man. Students will have the opportunity to explore and/or investigate many fascinating people, places, and events. Using historical thinking skills, students will learn to think and write --assembling, organizing, and analyzing information in order to draw logical conclusions from this knowledge. These critical thinking and writing skills will help the students to become responsible and informed decision-makers.

AP World History | Grade 10-12 | 1 credit

This full-year course explores the expansive history of the human world with a Christian Worldview. This college-level course has students investigate the content of world history for significant events, individuals, developments, and processes in six historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides five themes (interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; development and transformation of social structures) that students explore throughout the course in order to make connections among historical developments in different times and places encompassing the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania. Those who take this course are required to take the AP exam at the end of the year. See teacher for contract, summer work, syllabus, and pacing guide.

Prerequisites: Teacher recommendation. Students must be able to read a college-level textbook.

United States History | Grade 11 | 1 credit

The United States History course is a survey of United States History from the Pre-Columbian period to the present day. United States History is intended to introduce students to the civic culture of this nation and focuses on the origins and development of its political, economic, and social institutions. The course will emphasize the importance of citizenship, the role that each student has as a good steward of the freedoms with which God has blessed Americans, and understand that “freedom is not free.” Students will enhance their thinking and writing using

historical thinking skills --assembling, organizing, and analyzing information in order to draw logical conclusions from this knowledge. These critical thinking and writing skills will help the students to become responsible and informed decision-makers.

AP United States History | Grade 11-12 | 1 credit

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 the development of students' abilities to think conceptually through a Christian Worldview about U.S. history from approximately 1491 to the present. Seven themes of equal importance – American and National Identity; Migration and Settlement; Politics and Power; Work, Exchange, and Technology; America in the World; Geography and the Environment; and Culture and Society – provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places. Those who take this course are required to take the AP exam at the end of the year. See teacher for contract, summer work, syllabus, and pacing guide.

Prerequisites: Teacher recommendation. Students must be able to read a college-level textbook.

US Government | Grade 12 | 0.5 credit

This one-semester course examines the institutional structure of government including the legislative process, the executive and bureaucratic structures, and the judicial process. Additional topics include civil rights and civil liberties, domestic policy, foreign relations, national defense, and state and local governments. The course will emphasize the importance of citizenship from a Christian perspective. Students will enhance their critical thinking and writing using historical thinking skills --assembling, organizing, and analyzing information in order to draw logical conclusions from this knowledge.

Economics | Grade 12 | 0.5 credit

Economics is a single semester course designed to introduce students to the basic concepts of both micro and macroeconomics. The course is designed to help students become responsible citizens and effective decision makers as they are exposed to economic issues at the personal, local, national, and international levels. Students will begin to understand the way economists think and the terminology they employ using historical thinking skills. Theoretical models are juxtaposed with real world events that unfold during the semester making each class a unique experience through a Christian perspective.

AP U.S. Government & Politics | Grade 12 | 0.5 credit

AP United States Government and Politics introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States and our Godly Heritage. The one-semester course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based

arguments. Each student is expected to take the AP United States Government Exam that is administered in May. See teacher for contract, summer work, syllabus, and pacing guide.

Prerequisites: Teacher recommendation. Students must be able to read a college-level textbook.

AP Macroeconomics | Grade 12 | 0.5 credit

AP Macroeconomics is a one-semester introductory college-level course that focuses on the principles that apply to an economic system as a whole as well as consumer economics from a Christian perspective. The course places particular emphasis on the study of national income and price-level determination; it also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students will learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. Each student is expected to take the AP Macroeconomics Exam that is administered in May. See teacher for contract, summer work, syllabus, and pacing guide.

Prerequisites: Teacher recommendation. Students must be able to read a college-level textbook.

Business and Technology

Introduction to Aviation and Aerospace | Grades 9 - 12 | 1 credit - *Minimum 5 students for class to make.

The course will provide the foundation for advanced exploration in the areas of flying, aerospace engineering, and unmanned aircraft systems. Students will learn about engineering practices, problem-solving, and the innovations and technological developments that have made today's aviation and aerospace industries possible. Students will look at the problem-solving processes and innovative leaps that transformed space exploration from the unimaginable to the common in a single generation. Students will also gain historical perspective, starting from the earliest flying machines and leading to the wide variety of modern aircraft and the integral role they play in making today's world work.

Exploration of Design and Prototyping (STEM I) | Grade 9-12 | 0.5 credit (can be taken twice for a full credit)

The primary focus of this course will be creating. Specifically, students will be introduced to and instructed in the use of a variety of tools and methods utilized to bring their ideas into the real world. Ranging from 3D printing to basic metal fabrication the included techniques are intended to give student an understanding of the processes and resources necessary to move from concept to quality, tangible object. While students will be offered a variety of projects to aid in their understanding of various design tools, they will be encouraged to utilize this course and its processes to complete projects for other classes. Space in this class is limited, and priority will be given to upperclassmen.

Introduction to Graphics/Design | Grade 10-12 | 1 credit * independent study

An introduction to elements of design, spatial relationships, typography, and imagery as they apply to practical visual solutions for self-promotion, resumes, logo design, Web design, and sequential systems. This course instructs the student in graphic design skills employing traditional and digital tools, materials, and procedures employed in the communication arts industry. The focus will be on finding creative visual solutions to communication problems using technical skills.

Prerequisites: Teacher approval

Digital Media Technology | Grade 9-12 | 1 credit full year

This course has been designed to provide students with the journalism skills and ability to apply those skills to the actual production of the school yearbook and/or the school newspaper, Heritage Times. Units of study include teamwork, responsibility, brainstorming, content coverage, concept, production, reporting, writing, headlines, captions, editing, photography, typography, design, graphics, and finances with the yearbook campaign, advertising, and distribution. Actual work results in the current volume of the school's yearbook as well as regular production of Heritage Times. The publications strive to maintain a tradition of excellence in which the school and the community can take pride. Mastery of the goals and objectives fully verse staff members in all areas of publication production, and students should be able to pursue journalism with a strong background either in their advanced studies or in a career.

Prerequisites: Application and teacher approval.

Newspaper Journalism | Grades 9 - 12 | 0.5 or 1 credit

Newspaper Journalism is designed for students interested in producing the *Crimson and Gold* school newspaper while developing their skills as writers. Students will learn leadership skills in a deadline-oriented, fast-paced news production environment. Students will learn the fundamentals of news, feature, editorial and sports writing. Copy reading, news style and editing will be stressed. Students will create numerous original stories using varied structures and writing techniques. Students will also learn principles of layout, design, photography, information graphics, and digital communication.

Internship | Grade 11-12 | 0.5 credit

Career Internship provides work-based learning experience as an extension of high school career exploration. Seniors have the opportunity to participate in a paid or unpaid internship at a business or institution while exploring a career through assessment and research. An internship offers students opportunities not available in the regular high school classroom. Students will be able to continue to explore and develop career interests and talents while participating in the internship setting, experience networking, learn workplace skills beneficial after high school and college, and earn academic credit. It is the responsibility of the student to arrange the placement. Students are expected to actively engage in the internship throughout the week. Students will be required to prepare and present reports about the internship throughout the year, and a grade will be given. **Note - the course is only available to juniors during their second semester.**

Prerequisite: Completed application, interview, and administrative approval. See Mrs. Poag for an application.

Audio-Visual Technology I Grades 10 -12 | 0.5 credit *This course can be taken twice pending teacher approval.

This course is designed to teach students the basics of using the audio-visual equipment at CHS. Students will learn how to operate the theater sound and projection equipment for various events including school theater productions, chapel, and other school-wide special events. Students will also be responsible for designing slides for chapel.

Sports Statistics and Management | Grades 10-12 | 0.5 credit - *Cannot be taken twice.

Sports Statistics and Management is a course where students will be immersed in the technological and statistical side of sports. Students will use HUDL as a tool to create statistics for our athletics programs. Theories of each sport will be taught so that students can understand what the statistical data means for the sport. Students will learn the basics of each sport so that they can accurately record stats for games and will also be responsible for uploading film after games. This class will have after school requirements to attend games at least once a week. Students will be required to attend games and other athletic events, and the course grade will be based in part on this attendance. A basic level of technological ability will be necessary for success in this course.

Other Electives

Aquaponics I Grades 9 - 12 | 0.5 Credit - *This course can be taken twice pending teacher approval. *Limited to 10 students

This course explores Aquaponics as a sustainable agricultural practice. Student will become familiar with the different types (Ebb and Flow, NFT and Deep Water Culture), design and maintenance of Aquaponic systems with hands on activities in our greenhouses. Students will also learn basic aquaculture practices and crop production in the greenhouse.