



CHAPELGATE

CHRISTIAN ACADEMY



2019-20
COURSE SELECTION GUIDE

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POLICY GUIDELINES

For a full description of CCA policies, please consult the Parent-Student Handbook.

Requirements for Sequential Courses

English, math, and foreign language courses are sequential in nature and a grade of C (70) or above will be required for a student to advance to the next level class. If a student does not earn a C, he or she may be retake the course or earn the grade in an approved summer school review course for one third of a credit. Students may earn a credit for a grade of D, but may not take the next level class. Students who earn a D and retake the course will only receive one credit for both classes taken. Some courses have pre-requisites, especially math and science courses. Some courses require teacher permission.

High School Courses Taken in Middle School

Students who take a high school level course in middle school need to earn a grade of “B” (80) or better to progress to the next level in high school. Students must take an additional four math credits and two foreign language credits in high school grades 9-12.

Advanced Placement Classes

Advanced Placement courses are college-level courses designed to allow highly able and motivated students to do college work in a high school setting. In the spring, AP students may sit for a national examination, which provides an opportunity to earn college credit. (Please note: colleges vary as to how much credit they will award for a given score.)

The value of AP courses goes far beyond the potential to earn college credit. Students learn valuable study skills, they frequently find the courses far more interesting than high school-level work, and they challenge themselves to perform at a very high level. These benefits do not come without cost; AP courses are considerably more difficult than typical high school courses, which is why students earn an extra 1.0 on the GPA for each AP course. Students should expect at least 5 hours of homework per week for each AP course.

Career-related Mentoring/Internship

A senior who needs fewer than five credits to graduate and has a cumulative GPA of 3.0 may attend school for part of the day and work off campus during the rest of the school day, provided the job is career enhancing. (Example: an internship or a mentoring study program under proper oversight) The job must fit into the student’s schedule and follow policies stated previously. The school counselor must approve all mentorship programs. Students who are eligible for the mentoring program in their senior year must make all necessary arrangements with their mentor and guidance counselor by June 1st of the junior year. Such a student will pay full tuition. A student may receive pay at the work place, and may earn either 1 or 2 credits.

Transferring Home School Credits

Students who have been home schooled may receive credits toward graduation for courses successfully completed at home. Parents of these students must provide the school with an evaluation, portfolio or other evidence of the work done. An administrator or school counselor will evaluate the evidence to determine whether credit is warranted. Like all other entering students, home school transfer students will be given placement tests to help the staff determine which course would be most appropriate for them.

Requirements for Graduation

A minimum of 24 credits is required for graduation (for class of 2021 and beyond, it is 25 credits). Students and parents should remember that many colleges may have particular requirements beyond those required by CCA. Students should review the entrance requirements for the colleges which they may wish to attend. Some colleges may require additional foreign language or lab science classes.

Students should select academically challenging courses in which they are capable of being successful. Colleges look for students who have taken advantage of the courses offered at their high school. Seniors should carefully consider what courses they choose to maintain a strong academic course load during the school year.

Credit Requirements for the class of 2020:

English	4	9, 10, 11, 12
History	3	World History, US History, + 1 History Elective
*^Math	3	Algebra I, Geometry, + 1 Math Elective
Science	3	Biology + 2 Science Electives
Bible	3	Bible 9, Bible 10/11, Western Civ/World Views
Physical Education/Health	1	PE 9 (.5 credit), Health 9 (.5 credit)
**Foreign Lang.	2	Credits must be earned in the same language
Fine Arts	1	Elective from Fine Arts Department
Electives	4	
Total Credits:	24	

Credit Requirements for classes of 2021 and beyond:

English	4	9, 10, 11, 12
History	3	World History, US History, + 1 History Elective
Math	4	Algebra I, Geometry, + 2 Math Electives
Science	3	Biology + 2 Science Electives
Bible	3	Bible 9, Bible 10/11, Western Civ/World Views
Physical Education/Health	1	PE 9 (.5 credit), Health 9 (.5 credit)
**Foreign Lang.	2	Credits must be earned in the same language
Fine Arts	1	Elective from Fine Arts Department
Electives	4	
Total Credits:	25	

*It is required that three additional math credits be earned in high school for those students taking high school courses in middle school from the class of 2020.

**It is required that two additional foreign language credits in the same language be earned in high school for those students taking high school courses in middle school.

^While only 3 credits of math are required to graduate, 4 credits are required for admission to the University of Maryland and UMBC.

Suggested Schedules

9th Grade

English 9 or Honors English 9

World History

Math (Algebra I or Algebra II)

Science (Physical Science or Biology)*

Bible 9

*Students taking Algebra I must take Physical Science

Physical Education/Health
Foreign Language I or II

10th Grade

English 10 or Honors English 10
History (most students take Modern European History or AP European History as a history elective)
Math (Algebra II or Geometry)
Science (Biology or Chemistry)
Bible 10/11 (students may choose to take this during their junior year)
Foreign Language II or III
Elective

11th Grade

English 11 or Honors English 11
US History or AP US History
Math (Geometry or Trig/Pre-Calculus)
Science (Chemistry, Physics, or AP science course – see Science Scope and Sequence)
Elective
Elective
Elective

12th Grade

English 12, Honors English 12, or AP English Literature
Western Civilization World Views
Math (for classes 2021 and beyond)
Elective
Elective
Elective
Elective

Students need to consult the required courses for graduation that do not indicate a specific course such as the third math class, third history class, and fine arts credit.

AP classes are college level classes taught in high school. Students will have more difficult course work than a typical high school class and can expect about one hour of homework per night in each AP class. Students do earn an extra weight of 1.0 added to the GPA for each AP class. Some AP classes have a prerequisite grade. Students may elect to take a test in the spring which provides an opportunity to earn college credit. Colleges vary as to how much credit they will award for a given score. Credits can range from 3 to 8 per course. We offer the following AP classes:

AP English Literature (12th grade only)
AP European History
AP US History
AP Government and Politics
AP Calculus AB and BC
AP Chemistry
AP Biology
AP Physics

Adding Classes:

A student may add a course up to three weeks after the first quarter begins.

Dropping Classes:

Students may drop a course up to two weeks after they receive their first quarter grades. Students dropping classes after the first three weeks of school will be given a “W” (withdrawal) on their report cards and transcripts. *A student who drops a course after the first three weeks will not be able to substitute a course for that dropped course. Students who withdraw from a class after the deadline for dropping classes will receive a “WF” (withdrawal failure) on their report card and transcripts.*

Grade Point Averages

The grade point average (GPA) is computed at the end of the junior year and is based upon grades in all subjects for grades 9-11. The GPA is based on a 4.0 scale. The advanced placement (AP) courses are given an extra weighted grade of 1.0. Honors courses are given an extra weight of .5. GPA is computed by multiplying each credit or part of a credit by the quality points.

Grades	Grade-Points	Numeric
A	4.0	90-100
B	3.0	80-89
C	2.0	70-79
D	1.0	60-69
F	0	0-59

The sum of the grade points is divided by the number of credits attempted.

Credit Status of High School Students

Freshmen	0 - 5 high school credits
Sophomores	6 - 11 high school credits
Juniors	12-17 high school credits
Seniors	18+ high school credits

A maximum of one credit earned in the summer can be applied to a student’s class status.

Ranking

We do not rank due to the diversity of our student’s academic selections. Additionally, our smaller class size may not truly reflect the academic standing of the student or the difficulty level of courses selected.

MAG Program

Chapelgate is pleased to offer the MAG (Mentoring for Academic Growth) program, which is designed for talented and bright students who need assistance with:

- academic coaching
- organizational /executive function support
- diagnosed learning differences

MAG offers students:

- Supervision of school accommodations in support of academic success
- Alternate test taking environment
- Individualized approach to their academic program

Within the MAG classroom, students receive help in all of their subjects in a supportive environment that utilizes creative, multisensory techniques to develop student's reading, writing, and organizational skills.

The name MAG for this program has two very significant meanings for our community. It is an acronym, and stands for "mentoring academic growth". Mr. Mag was also the nickname of Mr. Tim Magnusson, a beloved CCA teacher who passed away in April 2013. Mr. Mag was a passionate teacher and understood that each child had tremendous academic, personal and spiritual worth regardless of what "labels" or "differences" they may have. This program is a fitting honor to a man committed to coming alongside students who struggled.

Our MAG program director is also certified in the Orton-Gillingham Approach, which is most often associated with a one-on-one teacher-student instructional model. Its use in small group instruction is proven effective. A successful adaptation of the approach has demonstrated its value for class-room instruction. Reading, spelling and writing difficulties have been the dominant focus of the approach although it has been successfully adapted for use with students who exhibit difficulty with mathematics.

Our MAG program is always is focused upon the learning needs of the individual student. Students with learning differences need to master the same basic knowledge about language and its relationship to our writing system as any who seek to become competent readers and writers. However, some students often need more help than most people in sorting, recognizing, and organizing the raw materials of language for thinking and use.

Our MAG director works closely with teachers to ensure each MAG student is set up for academic success. Due to the intense interventions offered by MAG, there is an additional charge for students who participate. Parents interested in enrolling their students in the MAG program should contact the Guidance office.

ENGLISH

English - Grade 9 (19)

English 9 will study both composition and literature, with emphasis given to the academic writing process and literary concepts. Students will practice the writing process, composing and revising various types of narrative, informative, analytical, persuasive, and research writing. The course will include study of English grammar as it relates to mechanics and usage as well as syntax and style. Students will also study literary elements through short stories, poetry, drama, and novels. A research paper will be assigned. **In order to advance to the next year's grade level a student must pass English with a C.**

Texts: *Literature, Course 5* – Glencoe
Writer's Choice 9 – Glencoe
Vocabulary Workshop Level D – Sadlier-Oxford

Novel choices: *To Kill a Mockingbird* – Harper Lee
Julius Caesar – Shakespeare

English 9 – Honors (19H)

This course will closely parallel the regular 9th grade English, but works will be added so the pace will be faster. Excellent reading and writing skills are required. Students will also practice the writing process more, particularly analytical writing. A research paper will be assigned. Students earn a .5 added to grade weight. **In order to advance to the next year's grade level a student must pass English with a C.**

Prerequisite: Grade of B or better in English 8.

Texts: *Literature, Course 5* – Glencoe
Writer's Choice 9 – Glencoe
Vocabulary Workshop Level D – Sadlier-Oxford

Novel choices: *The Book Thief* – Markus Zusak
To Kill a Mockingbird – Harper Lee
Julius Caesar – Shakespeare

English – Grade 10 (110)

Tenth grade students will study representative selections of world literature in thematic units. Selections will be from European, Russian, American, African, and Asian literature. Students will read variations on the Cinderella story and will also study different poetic forms. Emphasis is placed on close, careful reading, narrative writing, expository writing, and vocabulary development. Grammar/usage emphasis will be on sentence structure, fragments and run-ons, phrases and clauses, sentence combining, and errors commonly found in student writing. A research paper will be assigned. **In order for a student to advance to the next year's grade level a student must pass English with a C.**

Texts: *Writer's Choice 10* – Glencoe
Vocabulary Workshop Level E – Sadlier-Oxford
Responding to Literature – McDougal Littell

Novel choices: *Cry the Beloved Country* – Alan Paton
Antigone – Sophocles
Cyrano de Bergerac – Edmond Rostand
All Quiet on the Western Front – Erich Maria Remarque
Animal Farm – George Orwell
The Curious Incident of the Dog in the Night – Mark Haddon

English 10 – Honors (110H)

This course will parallel the regular 10th grade English, but additional works will be added so the pace will be faster. Excellent reading and writing skills are required. Students will practice more writing, especially literary analysis. Additional texts are listed below. This course aids in preparation for English 11 Honors and AP English and adds .5 to student's GPA. **In order to advance to the next year's grade level a student must pass English with a C.**
Prerequisite: Grade of B or better in English 9 or C or better in English 9 Honors.

Texts: *Writer's Choice 10* – Glencoe
Write for College—Houghton Mifflin
Vocabulary Workshop Level E – Sadlier-Oxford
Responding to Literature – McDougal Littell

Novel choices: *Cry the Beloved Country* – Alan Paton
Antigone – Sophocles
Cyrano de Bergerac – Edmond Rostand
All Quiet on the Western Front – Erich Maria Remarque
Animal Farm – George Orwell
One Day in the Life of Ivan Denisovich – Aleksander Solzhenitsyn

English – Grade 11 (111)

A survey of American literature will be the major emphasis of the course. Beginning with Colonial and Revolutionary literature and continuing through Modern and contemporary pieces, students will study the progression of American literature and its relationship to American history. Emphasis will be placed on various world views evident in the literature and philosophies will be compared to Christian thinking. Students will practice various types of writing, including personal writing, research writing, analytical writing, writing about literature, persuasive writing, and writing the college application essay. Students will also study SAT-based vocabulary. **In order to advance to the next year's grade level a student must pass English with a C.**

Texts: *Writer's Choice 11* – Glencoe
Vocabulary Workshop Level F – Sadlier-Oxford
American Literature – Glencoe

Novel choices: *The Great Gatsby* – F. Scott Fitzgerald
The Adventures of Huckleberry Finn – Mark Twain
The Crucible – Arthur Miller
The Red Badge of Courage – Stephen Crane

English 11 – Honors (111H)

Students will read at least three novels from the summer reading list before entering English 11 Honors. This course will closely parallel the regular 11th grade English, but several works will be added so the pace will be faster. Excellent reading and writing skills are required. Students will practice more writing, especially literary analysis. Students earn a .5 added to grade weight. **In order to advance to the next year's grade level a student must pass English with a C.**

Prerequisite: Grade of B or better in English 10 or C or better in English 10 Honors.

Texts: *Writer's Choice 11* – Glencoe
Vocabulary Workshop Level F – Sadlier-Oxford
American Literature – Glencoe

Novel Choices: *Of Mice and Men* – John Steinbeck
The Scarlet Letter – Nathaniel Hawthorne

English – Grade 12 (112)

Students will read a specific novel the summer before entering 12th grade English. This course will be predominately

a survey of British literature and its major literary movements and influences such as Early Modern English and the Victorian Age. Major selections will be *Beowulf*, *Canterbury Tales*, *Rime of the Ancient Mariner*, *Macbeth*, plus others. Composition lessons will include a review of expository, narrative, and persuasive writing. Students will also write a product review, resume, cover letters, and a research paper. Grammar usage will be integrated with the composition.

Texts: *British Literature* – Glencoe
Write for College – Houghton Mifflin
Grammar for College

Novel choices: *Frankenstein* – Mary Shelley
Dr. Jekyll and Mr. Hyde – Robert Louis Stevenson
Lord of the Flies – William Golding
Macbeth – Shakespeare
The Importance of Being Earnest – Oscar Wilde

AP English Literature (1AP)

This course will prepare students to take the advanced placement tests for college credit. Therefore, it is a college-level course that concentrates on literary analysis and critical writing. Drama, novels, and poetry will be studied in depth, as well as selections from British literature, mainly poetry. These titles may vary year to year. Over the summer, prior to taking this course, students will be required to read several novels, which will then be discussed the first month of school.

Prerequisite: Grade of B or better in Honors English 11 or grade of A in English 11.

Texts: *Write for College* – Houghton Mifflin
British Literature – Glencoe
Cracking the English Language AP

Novel choices:

Waiting for Godot – Samuel Beckett
Pride and Prejudice – Jane Austen
Their Eyes Were Watching God – Zora Hurston
Heart of Darkness – Joseph Conrad
Oedipus – Sophocles
The Death of a Salesman – by Arthur Miller
Othello and Midsummer Night's Dream – Shakespeare
Mere Christianity – by C.S. Lewis

Intermediate ESL English (1ESL)

This class is for the student whose TOEFL scores from the test taken at Chapelgate and teacher recommendations show the student needs to strengthen their English language skills before moving into Advanced ESL English. We work hard to find the right placement for our ESL students for them to be the most successful at CCA and in college. American colleges often require a great deal of writing even for students in math and sciences so our goal for all our students is to have them prepared to excel in that area. This class will focus on developing English skills in reading comprehension, writing, listening and speaking. There will be more work with literature including *Romeo and Juliet* as well as poetry. Students will use the following textbooks: *Vocabulary Workshop*, *Reading for Today*: *Issues and Reading for Today: Insights*, as well as *Great Writing 3*.

Advanced ESL English (2ESL)

This course will parallel the English 9 curriculum in studying both composition and literature, with emphasis given to the academic writing process. In addition, this course will emphasize vocabulary development, reading comprehension skills, and listening and speaking skills. The difference in this course is that it is geared toward the

specific needs of the student learning English as a second language. This course will use the same literature and vocabulary texts as the regular English 9 course, but will use the text *Great Writing Level 3: From Paragraphs to Great Essays (Heinle)* which targets the needs of English language learners. Incoming international students are expected to begin their Chapelgate English coursework with this class. Although this class parallels some material in the English 9 class, it is designed to meet the needs and English requirement of all incoming international students. This is a 1- credit course. Because this course serves as a bridge between the study of English as a foreign language and the standard CCA English classes, students who do not receive a final grade of B or higher may be required to schedule ESL Support in addition to their regular English class.

HISTORY

World History - 9th Grade (2WH)

This course covers the history of mankind from creation through the Middle Ages. The course emphasizes how man's ideas, thoughts, and beliefs have influenced the progress and decline of civilizations in history. These ideologies are explained from a Christian perspective.

Text: *World History: Connections to Today*, Pearson, Prentice-Hall

Modern European History - 10th Grade (2EH)

Modern European History is a survey of the political, cultural/intellectual, social, and economic history of Europe beginning in 1450 and continuing to the 1990s. Special attention is given to intellectual currents that have a continuing influence on Western culture, especially as they illuminate the spiritual heritage and condition of the 21st century western mind. As a college preparatory course that uses college-level materials, the course is designed to promote growth in "professional student" skills.

Text: *The Western Heritage*, Kagan et al., Prentice Hall

Advanced Placement European History (2AE)

AP European History is a college level course designed to provide a survey of the political, cultural/intellectual, social and economic history of Europe from 1450 to the present. Since the course is designed to prepare students for the Advanced Placement exam in European History, significant attention is given to essay writing.

Texts: *A History of the Modern World*, Palmer and Colton, McGraw-Hill

The Western Tradition, Weber, Heath

World Civilizations - Sources, Images, and Interpretations, Sherman, et al, McGraw-Hill

Prerequisite: Grade of B or better in World History (or other grade-level history) and current English course.

U.S. History - Grade 11 (2US)

This is a required eleventh grade course covering the history of the United States from the early explorers to modern times. Emphasis is placed upon the events, personalities and processes that have shaped the United States. Students will understand the relationship between these events, people and processes and recognize their significance in the history of the United States.

Text: *The American Pageant* - Houghton Mifflin

Advanced Placement U.S. History (2AU)

AP U.S. History is a college level course designed to provide an in-depth overview of the political, social, cultural and economic history of the United States. This course is designed to prepare students to take the Advanced Placement exam in U.S. History. A strong emphasis is placed on primary source work and essay writing. This course fulfills the US History graduation requirement.

Texts: *America's History*, Henretta et al., Bedford St. Martin's

Constructing the American Past, Vol. I & II, Gorn, et al., Harper Collins

A More Perfect Union, Vol. I & II, Boller & Story

After the Fact: The Art of Historical Detection, Davidson & Lytle, McGraw/Hill

Prerequisite: Grade of C or better in APEH or B or better in MEH (or other grade-level history) and a grade of B in English 10 or 11.

Advanced Placement US Government & Politics/US Social Problems (2AG)

AP US Government & Politics/US Social Problems is an upper level (grades 11-12) elective social science course and an Advanced Placement course. It is the intent of this course to prepare students for the AP Government & Politics exam and to familiarize the students with the basic structure and workings of America's federal system of government. It will help students develop skills of political analysis as well as reading and writing skills; class discussion is an important part of the course. Students are strongly recommended to have completed United States History or AP United States History prior to enrolling.

Texts: *American Government: Institutions and Policies*, Wilson et al., Houghton Mifflin Harcourt

Prerequisite: Grade of C or better in APEH or APUSH B or better in MEH (or other grade-level history) and a

grade of B in current English course.

History through the Arts (also called Humanities) (2HM)

The Scriptures teach us that “as a man thinks, so is he”; this course is designed to see how that truth works itself out in human history. Using a chronological approach, the course will explore the interplay of faith/philosophy, historical events, and culture as expressed in art, literature, and music. Beginning with the Greco-Roman culture of the Roman Empire, students will study cultural expressions to learn about their philosophic content. Periods covered will be the time of the Roman Empire, the Middle Ages, the Renaissance, the Reformation, the Scientific revolution, the Enlightenment, the Romantic period, the Modern era, and the time of Post-modernism.

Because the course is by design interdisciplinary and because it is project-based, students can take the course as a history or fine arts class. Students seeking history credit will complete readings and other assignments designed to give them a broad overview of the history that serves as a backdrop for Western culture. Students desiring to take this as a fine arts course should sign up for Humanities and should consult the description in the Fine Arts section of the course guide. This course is designed for juniors and seniors.

Text: *How Should We Then Live*, Schaeffer, Crossway Books

Civics (2CIV)

In Civics/Economics, students will consider topics selected to engage them in examining the legal, political, and economic systems of our society. They will develop practical understanding of these systems that affect their lives as consumers and citizens. In the class, students will apply acquired knowledge to real life issues, preparing students to be responsible and effective citizens. Materials for the class are drawn from the disciplines of political science, history, economics, geography, and jurisprudence.

ESL US History (2ESL)

This is a course on the foundations of American history along with American government for English language learners. It is designed to provide the background knowledge needed for further coursework in the History Department as well as further study in high school and college. This course is best taken along with ESL English class to focus on developing more advanced skills in reading, writing, listening and speaking.

Text: *United States History and Geography*, McGraw Hill

Gateway to Social Studies, National Geographic

MATHEMATICS

Pre-Algebra (3P9)

The purpose of this course is to build a firm foundation for the study of algebra and geometry on the high school level. Algebraic topics include fundamental work with variable expressions, integers, real numbers, equations and inequalities, and continued work with fractions, decimals and percents. Topics from geometry include concepts of figures, congruence, similarity and measurement. Also, topics from data analysis (use of tables and graphs and their interpretations) are integrated where appropriate.

Text: *Algebra Readiness*, Prentice Hall Mathematics Charles, McNemar, Ramirez – Pearson Boston, MA

Prerequisite: If taken before 8th grade must have a B or better in previous course

Algebra I (3L9)

The Algebra 1 course teaches the foundational algebraic operations necessary for all high school mathematics courses. Students use higher-level thinking skills to create and solve algebraic models for real-world situations. Course topics include solving linear equations, inequalities, and systems of equations; functions; exponents; polynomial operations; and quadratic equations. Use of the graphing calculator is introduced in this course.

Text: *Big Ideas Math Algebra 1: A Bridge to Success*, 2015 Larsen & Boswell

Prerequisite: Pre-Algebra with a grade of C or better (B or better when taken as a middle school student) AND a satisfactory score (as determined by the school) on the Algebra aptitude test.

Intermediate Algebra (3IA)

This course serves as a bridge from Algebra 1 to Algebra 2 for students who completed Algebra 1 with only a partial understanding of basic algebraic concepts. Prerequisite skills will be reviewed at the beginning of the course. Then algebra topics such as mathematical modeling, solving and graphing linear equations and inequalities, data analysis, functions and their representations, estimating linear models, systems of equations and inequalities, exponential functions, polynomials and factoring, quadratic functions, rational expressions, and radicals will be covered. Optional topics such as probability and other non-linear functions will be reviewed as time allows.

Text: *Modeling with Mathematics: A Bridge to Algebra II*, 2nd Edition, 2012, W.H. Freeman and Company, New York, NY

Prerequisite: Recommendation by instructor and approval of academic advisor.

Algebra II (3L2)

This course continues the development of linear equations and linear inequalities. It then proceeds to quadratic equations and their graphs, functions, rational exponents and radical equations, exponential and logarithmic functions, polynomials and polynomial functions, rational functions and the conic sections. Opportunities are also provided for students to continue to develop skills with graphing calculators.

Text: *Big Ideas Math Algebra 2: A Bridge to Success*, 2015 Larsen & Boswell

Prerequisite: Algebra I with a grade of C or better.

Geometry (3GM)

This course provides the student with a thorough study of Euclidean Geometry, learning formal proofs and the axiomatic structure of mathematics. Students are introduced to the use of definitions, postulates, and theorems in deductive reasoning. Topics include the properties of lines, planes, and angles; parallel lines; congruent and similar polygons; triangles; circles; areas and volumes of solids; and constructions. The course integrates coordinate Geometry where appropriate.

Text: *Big Ideas Math Geometry A Bridge to Success*, Big Ideas Learning, LLC (2015)

Prerequisite: Algebra I with a grade of C or better, Algebra II (if completed) with a grade of C or better.

Statistics (Honors) (3SH)

This course will introduce the student to a wide range of statistical found in the social and physical sciences and the humanities as well as in education, business, economics and engineering. Topics covered include probability distributions, sampling and hypothesis testing, correlation and regression analysis, multinomial experiments and statistical process control. Students may elect to take the AP Statistics exam in the spring.

Text: *5 Steps to a 5* by Duane C. Hinders
Prerequisite: *Algebra II with grade of C or better.*

Trigonometry/Pre-Calculus (3TP)

This course continues the development of polynomial, rational, exponential and logarithmic functions, conic sections, vectors and parametric equations and polar coordinates and complex numbers. It also includes the radian measure, trigonometric functions and their inverses, trigonometric identities, and some work with sequences and series. This course is designed to prepare students for AP Calculus or to serve as the final course of mathematical study if no further study is anticipated.

Text: *Functions Modeling Change, A Preparation for Calculus*, John Wiley & Sons, Inc.

Prerequisite: *Algebra II and Geometry with grades of C or better.*

AP Calculus - (AB) (3AB)

The Advanced Placement Calculus syllabus is designed to give students the opportunity to experience a college-level math course in high school. The (AB) course covers the material of a first semester calculus course: limits, differentiation, related rates, integration, and finding areas and volumes. In May, the students are prepared to take the Advanced Placement examination in calculus (AB), which may make them eligible to receive college credit for their efforts, depending on college guidelines.

Text: *Calculus, Graphical, Numerical, Algebraic, AP Edition* - Prentice Hall, 2007

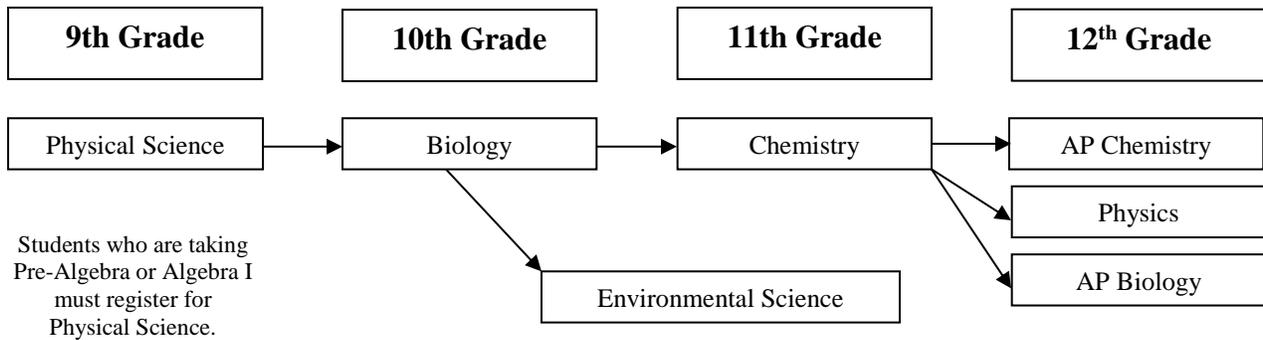
Prerequisite: *Trig/Pre-Calculus with a grade of B or better*

AP Calculus - (BC) (3AC)

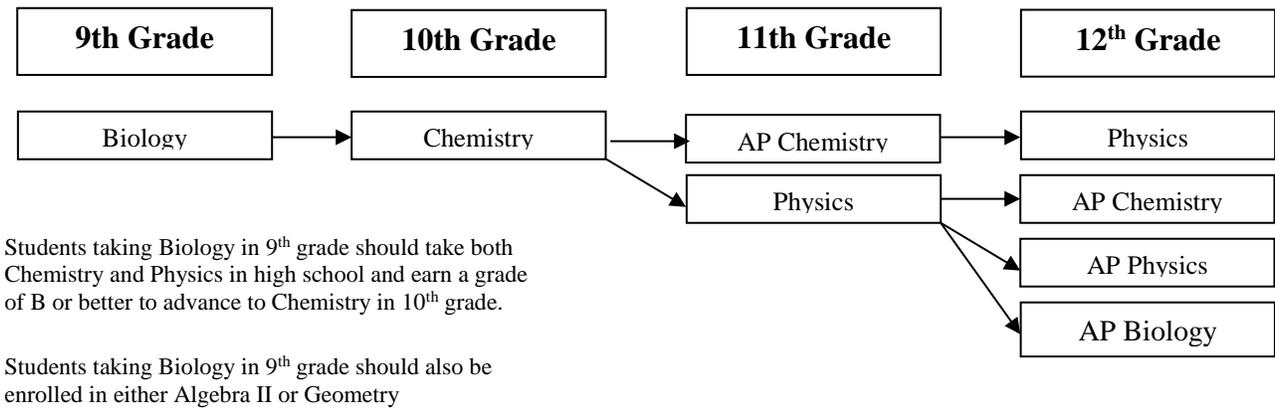
The Advanced Placement Calculus syllabus is designed to give the student the opportunity to experience a college-level math course in high school. The (BC) course covers the material of first and second semester calculus courses: limits, differentiation, related rates, integration, finding areas and volumes, integration techniques, sequences and series, polar coordinates and vector valued functions. This course is designed to prepare students to take the AP Calculus (BC) exam.

Prerequisite: *AP Calculus AB with a grade of C or better.*

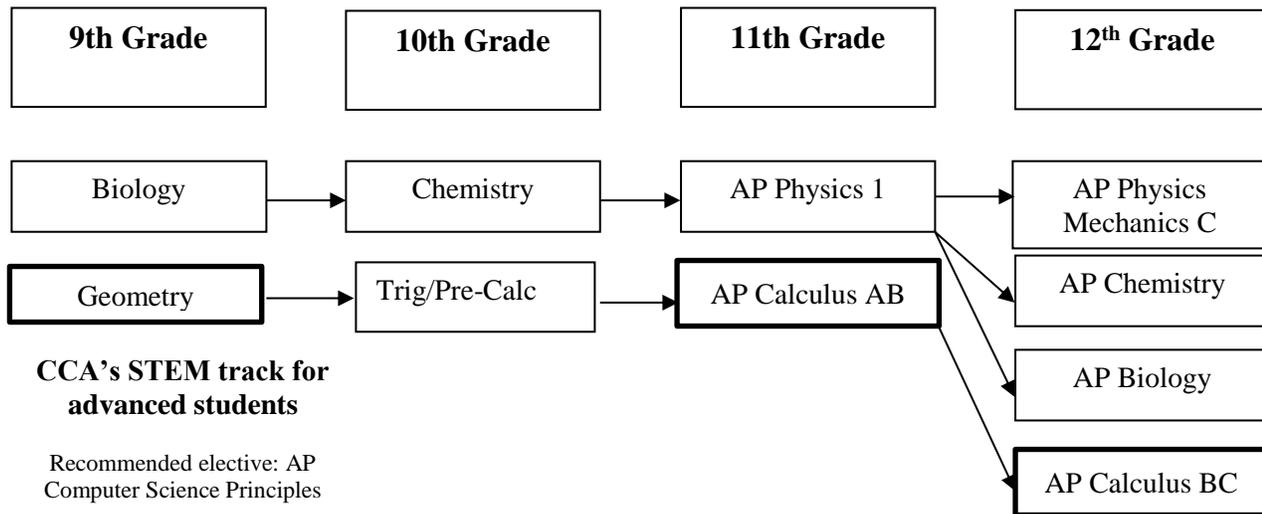
SCIENCE SCOPE AND SEQUENCE



-OR-



STEM SCOPE AND SEQUENCE



SCIENCE

Physical Science (4PS)

This course is designed as a basic foundation for Physics and Chemistry. Many demonstration and mini-lab activities provide students with opportunities to learn by doing and to engage in learning concepts. The class will study matter, interactions of matter, matter in motion, and energy at work. Supplemental materials and games are used in every lesson to help the students enjoy and learn, and to reinforce the concepts studied in class.

Biology (4BI)

The biology course is designed to help students understand the order and complexity in God's creation of living organisms. The course focuses on molecular biology, cell structure and function, genetics, creation and evolution, organisms (with emphasis on the human), and ecology. Many lab activities are performed throughout the year. Students taking Biology in 9th grade should take both Chemistry and Physics in high school.

Text: *Biology* Miller and Levine, Pearson Education, Inc.

Physical Science – Christian Schools International

Environmental Science (4EN)

The first commandment given to man in the Bible was to “fill the earth and SUBDUE it”. Environmental Science is a course designed to help us as Christians to accomplish this ecological command. Using a variety of field investigations, laboratory experiments, and projects, the student will acquire an increased level of appreciation for God's creation. They will also have the background to analyze for themselves the many issues and challenges concerning the environment that we face today.

Text: *Environmental Science* – Houghton Mifflin

Prerequisite: Physical Science and Biology

This course is for students who have not taken Chemistry.

Chemistry (4CH)

Chemistry is designed to give the student an introduction to the study of the composition of matter and the changes matter undergoes. In class and in the lab, chemistry students learn about the basics of chemical reactions, physical properties of matter, and some of the reasons behind those properties. Students will learn basic lab techniques and how to apply dimensional analysis to scientific methods.

Text: *Chemistry* – Prentice Hall

Prerequisite: Completion of or concurrent enrollment in Algebra II and grade of B or better in biology if taken as a 9th grade student.

AP Chemistry (4AC and 4AL – Lab)

Advanced Placement Chemistry is for students who enjoy science and love a challenge. In this course, we investigate and analyze the materials of the universe, both in the lab and on the chalkboard. The course covers the material of a typical college freshman course in chemistry. Topics include stoichiometry, gas laws, electron configurations, equilibria, reaction kinetics, acid-base reactions, and electron transfer reactions. The course prepares students to take the Advanced Placement Chemistry Examination in May. This is a double period class.

Text: *Chemistry: A Molecular Approach, AP Edition* by Nivaldo J. Tro

Prerequisite: Completion of Chemistry with an 85 or better.

Physics (4PY)

Physics is a course designed to give students a general background in the areas of mechanics, thermodynamics, and electricity and magnetism. Students encounter the material in various forms: lecture, labs, explorations. An end-of-year project allows students to pursue their own interests. An emphasis is placed on developing an understanding of the role of physics in students' everyday lives so that they are better prepared to put their faith into action.

Text: *Physics*, Giancoli

Prerequisite: Completion of or current enrollment in Trigonometry is required.

AP Physics 1 (4AP)

Advanced Placement Physics 1 is a course designed to teach students how to reason through and investigate scientific questions. Through labs and inquiry-based investigations, students learn the fundamentals of mechanics, wave motion, and electricity used algebra-based analysis techniques. Students also learn how to construct their own experiments to generate and test hypotheses. At the end of the year, students prepare for the Advanced Placement Physics 1 exam.

Text: *Physics*, Giancoli

Prerequisite: Completion of or current enrollment in trigonometry.

AP Physics Mechanics C (4APC)

The Advanced Placement Physics C course is for students who have a strong desire to find out how things work. It teaches students how to analyze mechanical systems using calculus. It also teaches them how to construct their own experiments to generate and test hypotheses. At the end of the year, students prepare for the Advanced Placement Physics (Mech C) exam.

Text: *Physics for Scientists and Engineers*, Saunders

Prerequisite: Completion of Physics or AP Physics 1 with grade of B or better AND completion of or current enrollment in Calculus AB.

AP Biology (4AB)

The AP Biology course is designed to be the equivalent of a college introductory biology course and to prepare students to pass the AP Biology exam for college credit. The major topics covered in the course include molecules and cells, heredity, creation and evolution, organisms and populations. The course differs significantly from the entry level biology course in high school with respect to the kind of textbook used, the range and depth of topics covered, the type of lab work done which emphasizes seven Science Practices, and the time and effort required by the students. This is a double-period class.

Text: *Biology in Focus - AP Edition* – Campbell -Pearson Education

Prerequisite: A Biology grade of B or better. Chemistry strongly recommended.

BIBLE

Bible 9 (59)

Covenant Theology

This class is a Bible Survey that will cover the story of Redemption through the Old and New Testaments. It will cover the various covenants in the Old Testament and their fulfillment in Christ. It will cover the major people and events of the different eras in the Bible. This class is designed to develop the student's knowledge of the "big picture" of Scripture. Students will gain a greater understanding of the Scriptures and the Gospel as it applies to our lives.

Bible 10/11 (5HSE)

Culture and Ethics (Offered in alternate years)

Culture and Ethics: This semester course is intended to develop in students the ability to think critically about the culture they live in so that they can discern the false teachings of the culture and live in a distinctively Christian manner in the world. It is intended to help students learn how they can be "in the world, but not of it". The first semester will be an analysis of what culture is, and what our current culture's values are (both modern and postmodern culture) with a goal towards developing a distinctively Christian approach to culture. The second semester will be an application of these principles to current issues of our day, such as abortion, euthanasia, divorce, politics, etc.

Foundations of the Christian Faith (Offered in alternate years) (5HSF)

This course assists students to develop a Christian world-view by teaching the fundamental truths of the Christian faith. Also, this course challenges students to relate the Christian principles to everyday life and encourages students to have a personal relationship with God through Jesus Christ. This course includes a study of God's attributes, man, the trinity. Also included is a study in Eschatology that includes such topics as: Physical Death, the Intermediate State, Final Judgment, and the New Heaven and New Earth. An in-depth study of the book of Romans that includes such topics as: Man's Depravity, the Gospel –Justification by Faith Alone and God's Righteousness for Sinners, Living by the Spirit, Sin's Power is Broken for the Believer, Correct Motivation for Service to God and Others, How to Use God-given Gifts for the Purpose of Building Up His Church, and Knowing When and When Not to Submit to Authority.

Ministry and Missions (Junior/Senior Elective) (5HSM)

This course is for students who have an interest in learning about the different types of ministries and missions. This course would assist students in developing a Christian world-view by teaching the basic call of the great commission (Matthew 28:18-20). This course includes: (1) a study of the elements of the Gospel (2) how the early church spread the Gospel (3) the history of missions (4) learning the principles of contextualizing the Gospel (5) practicing the skills of communicating the Gospel with others (6) current philosophies of ministry in the areas of the pastorate, biblical counseling, college campus ministry, and youth ministry.

Western Civilization World Views (Bible 12) (512)

This is a required senior course that explains the ideas of the six major world philosophies and worldviews. The course exposes the error of many worldviews and establishes the authority and logic of Christianity. The theme of this course is to learn to think as God thinks. Video lectures by experts in their field provide much of the curriculum information.

Bible for International Students (5ESL)

This course is designed for the international student who is new to Chapelgate. We will study the Gospel of John in depth while touching on some of the main themes of the Old Testament. Bible memory will be required. This course will work extensively on developing listening and speaking skills. While strictly not an ESL class, academic writing skills also will be developed

Text: *In & Out Precept Upon Precept: Gospel of John Parts 1, 2, &3*, Precept Ministries, International

PHYSICAL EDUCATION/HEALTH

This is a combination course of physical education and health, which fulfills the graduation requirement of ½ credit of physical education and ½ credit of health.

High School Health Education helps students develop the knowledge, attitudes, and skills they need to avoid risky behavior and maintain and improve their health. Scripture is clear that we are to honor God with our bodies. Health instruction gives students opportunities to practice skills that result in health-promoting behaviors. The standards for health education are designed to help students become health literate, obtain, interpret, and understand basic health information and services, and use such information and services in ways that enhance health. This course will focus on the health standards of the Maryland state curriculum which include: alcohol, tobacco and other drugs; nutrition and fitness; social and emotional health; disease prevention and control; safety, first aid, and injury prevention; family life and human sexuality; and personal and consumer health. In accordance with Maryland's education regulations, parents have the option of having their children excused from instruction in human sexuality and HIV/AIDS prevention education.

High School Physical Education provides rigorous instruction for all learners to have the knowledge, skills and confidence to live a physically active and healthy lifestyle in a Christ-centered loving community. God wants us to care for our body that He created. The course is designed to help students develop physical literacy through the application of health and skill-related concepts of fitness while engaging in lifelong physical activities. Students will explore physical literacy concepts through the cognitive, affective and psychomotor domains. Students set short-term and long-term fitness goals based on physiological assessments. Students will use movement concepts and principles(e.g. force, motion, rotation) to analyze and improve performance of self and/or others in a variety of selected activities.

FOREIGN LANGUAGES

Because foreign language courses are sequential, a grade of a “C” will be required to advance to the next course in the language. Teacher recommendation is required to advance to an honors course. 8th graders need a B to advance to level II. Students who started a language in 8th grade must take two additional foreign language credits in the same language in high school. Competitive colleges require three years of foreign language in high school. French and Spanish classes require iPads. Texts for levels I, II, and III are web-based.

French I (7F1)

This course emphasizes proficiency in oral communication through the active participation of the student in a variety of activities designed to enhance both learning and application of the language. The exercises in the text integrate the skills of listening, speaking, reading and writing with various aspects of French culture. Students are introduced to the basic grammar structures of the French language. Language skills are reinforced through frequent group and partner practice.

Text: *Discovering French Today!* (Bleu) Heath, Valette – Valette

French II (7F2)

This course continues to emphasize proficiency in oral communication with an increased emphasis on reading and writing. Students are encouraged to use the language with greater spontaneity and proficiency in a variety of situations.

Text: *Discovering French Today! (Blanc)*, Heath, Valette – Valette

French III (7F3)

This course emphasizes greater proficiency in writing and in oral communication. French is used almost exclusively in the classroom. Students use the text, *Discovering French Today!* (Rouge), Heath, Valette-Valette, which presents cumulative summaries of the communicative functions, vocabulary and grammar points. Students utilize the language with a greater degree of independence and explore the culture in greater depth.

French IV Honors (7F4)

This course will continue proficiency in written and oral communication from French III. Various sources, including film, are used to provide a variety of reading selections from French and Francophone literature, but the primary text is *En Bonne Forme* (Houghton Mifflin). This course alternates with the French V course, as the French IV and V class is taught together. This course is an honors course.

Prerequisite: Grade of B or higher in French III.

French V Honors (7F5)

This course will be joined with French IV and is offered on alternating years focusing on a survey of French literature. Grammar review will be tied to literature. Reading selections from French and Francophone literature will not duplicate those previously studied in French IV. Various sources, including film, are used but the primary text is *Moments Littéraires* (McDougall Little). This course is an honors course.

Prerequisite: Grade of C or higher in French IV.

Spanish I (7S1)

This course emphasizes proficiency in oral communication through the active participation of the student in a variety of activities designed to enhance both learning and application of the language. The exercises in the text, *Realidades I*, Pearson, Prentice Hall, integrate the skills of listening, speaking, reading and writing with various aspects of Spanish culture. Students are introduced to the basic grammar structures of Spanish. Language skills are reinforced through group and partner practice.

Spanish II (7S2)

This course continues to emphasize proficiency in oral communication with an increased emphasis on reading and

writing. Students are encouraged to use the language with greater spontaneity and proficiency in a variety of situations.

Text: *Realidades II*, Pearson, Prentice Hall

Spanish III (7S3)

In this course, students utilize the text *Realidades III*, Pearson, Prentice Hall, which presents cumulative summaries of the communicative functions, vocabulary and grammar presented in the texts of previous levels. Students will utilize the language with a greater degree of independence and explore the culture in greater depth.

Spanish IV/V (7S4)

Students will engage in a variety of activities designed to sharpen skills in listening, speaking, reading, and writing. The course will include authentic reading selections to improve competency and to broaden knowledge of the diverse Hispanic culture. Students will continue to utilize grammar and vocabulary as tools for communicating at an increasingly higher level. In order to accommodate levels IV and V in one class, different text programs will be used during a two year rotation. This is an honors course.

Primary texts: *Conversaciones creadoras*, Cumbre

Prerequisite: Grade of B or higher in Spanish III/Grade of C or higher in Spanish IV.

FINE ARTS

Studio Art (8SA)

This course is designed for advanced art students. Under the teacher's direction, students will create their own course of study. Goals and objectives will be incorporated into the plan as well as deadlines for the completion of the projects. In addition to the studio work that allows the serious student to investigate media and concepts, this discipline-based art education includes the exploration of criticism, history and aesthetics.

Studio Art II and III (8SA2 & 8SA3)

This course follows the same format as that of Studio I. It is intended to allow time for further investigation and development of the student who plans to take their art career beyond the high school level.

Prerequisite - Studio Art I or II and permission of the teacher.

Dance (8DA)

Students will study and learn various dance techniques such as: ballet, modern, jazz, musical theater, dance composition, tap, ballroom, and dance history. Students will also participate in a variety of performances throughout the year as well as learning from watching professional performances.

Drama (8D)

The drama course, which meets five days a week, is intended to introduce high school students to the many facets of theater and to develop fundamental skills in the areas of acting, directing, design, development and critique.

Drama II and III (8D2 & 8D3)

Continued exploration of the fundamentals presented in Drama I.

Prerequisite: Drama I or II and permission of the teacher.

Symphonic Band (8BA)

A high school fine arts elective offered before school, the Symphonic Band is Chapelgate Christian Academy's premier instrumental performing ensemble. Open to students with adequate instrumental experience, advanced instruction is offered on flute, oboe, bassoon, clarinet, bass clarinet, alto, tenor, or baritone saxophone, trumpet, French horn, trombone, euphonium, tuba, and percussion. Students with experience on orchestral string instruments (violin, viola, cello, string bass) are also welcome to join. The Symphonic Band enjoys many musical appearances throughout the year including school concerts, community performances, and music festivals.

Choir (8CE)

This is a high school fine arts elective open to any student who enjoys singing. It is a performing group that sings in chapels, school programs, and other events including performances outside of school. In addition to performance technique, the curriculum includes sight reading, ear training, rhythm skill development, music reading, and historical musical study.

Chamber Choir (8CC)

Chamber Choir is a performance-based class and a high school fine arts elective that meets during zero period. This ensemble performs a wide variety of music ranging from classical, contemporary, musicals, spirituals, and pop music while fostering and expanding musical leadership gifts to the glory of God. In addition to performance technique, curriculum includes sight reading, ear training, and rhythm skill development, as well as music "theory, along with historical significance. Attention is given to improving vocal abilities, stage presence, understanding and performing challenging harmony. Performances include but are not limited to venues such as school programs, CCA fine arts festival, chapel, and retirement homes. This class is open to 9th through 12th grades and meets daily at 7:35 a.m. Audition may be required at the teacher's request

Prerequisite: Ability to move pitch.

Chamber Choir II (8CC2)

This course is a continuation of Chamber Choir I.

Prerequisite: Chamber Choir I and permission of teacher.

Chamber Choir III (8CC3)

This course is a continuation of Chamber Choir II.

Prerequisite: Chamber Choir II and permission of teacher.

Chamber Choir IV (8CC4)

This course is a continuation of Chamber Choir III.

Prerequisite: Chamber Choir III and permission of teacher.

Creative Writing (8CW)

In this course high school students will explore and develop their creative writing skills, and produce a large sample of work that will show their progress as writers. Using the writing process, students will write short stories, mysteries, sci-fi, legends, tall tales, historical fiction, allegories, poetry, character studies, parodies and other genre learning to use their writing to inform, to entertain, and to gift the reader.

Prerequisite: a grade of B or better in English. Writing samples may be requested.

Creative Writing II, III (8CW2, 8CW3)

Students will continue to develop as mature writers, will create a portfolio of work, and will find their own voice. Creative Writing II and III students set their own objectives for written work under the guidance of the teacher.

Prerequisite: Creative Writing I, II and permission of the teacher.

Music Theory (8MT)

Music Theory is a music theory course that addresses rhythm notation, pitch notation, keyboard, simple meter, major scales and keys, intervals, compound meter, minor scales and keys, introduction to form, triads, chords, and symbols, tonality, and harmonization. Additionally, students learn aural skills such as interval identification, chord identification, scale identification, and simple melodies. There are a variety of in class projects that encompass the above learning objectives as well. There is no prerequisite for students to join, both non-musicians and musicians will benefit from this class.

Theater Appreciation (8TA)

This course is a combination of History of the Theater and Stagecraft. Students will read and/or view a number of plays beginning with the Greek tragedies and comedies and ending with modern plays. Along with academic instruction, the students will create various projects reflective of each of these time periods. The elements of stagecraft (building flats, collecting or constructing props, mastering lighting techniques, etc.) will be taught, and the students will have an opportunity to exercise their skills before, during, and after school productions. Students will be required to see one outside production during the school year and to write a critique on the various aspects of the play or musical. Some after-school work, such as serving on the stage crew for the spring production, will also be required of each student.

Humanities (8HM)

The Scriptures teach us that “as a man thinks, so is he”; this course is designed to see how that truth works itself out in human history. Using a chronological approach, the course will explore the interplay of faith/philosophy, historical events, and culture as expressed in art, literature, and music. Beginning with the Greco-Roman culture of the Roman Empire, students will study cultural expressions to learn about their philosophic content. Periods covered will be the time of the Roman Empire, the Middle Ages, the Renaissance, the Reformation, the Scientific revolution, the Enlightenment, the Romantic period, the Modern era, and the time of Post-modernism.

Because the course is by design interdisciplinary and because it is project-based, students can take the course as a history or fine arts class. Students seeking fine arts credit will study Christian classic *How Should We Then Live?* and will do projects appropriate to their course emphasis. Students desiring to take this as a history course should sign up for History through the Arts and should consult the description in the History section of the Curriculum Guide. This course is designed for juniors and seniors.

Text: *How Should We Then Live?* Francis A. Schaeffer

Digital Photography (8DP)

This class exposes students to the basic principles of digital photography, and the proper acquisition of custom imagery for use in artistic multi-media projects. Photography is a medium in which students can utilize their creative aptitudes to tell their stories in a visual way. Elements of composition in creating landscapes, portraits, brand imagery & related topics are discussed in lecture form and demonstrated in lab procedures. Students will create a photographic portfolio and Journal of imagery to demonstrate their understanding of this medium. Students will be exposed to Adobe Photoshop the visual communications industry digital darkroom software and its unique capabilities.

A lab fee of \$45.00 is required for this course which covers expendables (i.e., camera repairs, memory cards, photo paper, and ink) needed to complete student projects.

Digital Photography II (8DP2)

Students will explore advanced photography techniques in both still and video projects. They will examine contemporary photographers for inspiration, explore video special effects and complete a series of community-oriented projects. By the end of the course, students will have developed a digital portfolio of their work. *This course follows the same format as that of Photography I. It is intended to allow time for further investigation and development of the student who plans to take their photography career beyond the high school level.*

Prerequisites: Digital Photography and permission of teacher.

Digital Audio and Video (8DAV)

Students learn the fundamental skills of digital video production from preliminary steps, such as script creation, through the film editing process. Coursework provides an overview of digital camera operation as well as basic techniques in lighting, sound and editing. Basic theory is taught through demonstration, hands-on learning and class discussion. Film studies and reviews introduces students to the basics of film analysis, cinematic formal elements, genre, and narrative structure and helps students develop the skills to recognize, analyze, describe and enjoy film as an art and entertainment form.

Yearbook (9Y)

Students receive a practical, "hands-on" introduction to yearbook. Students learn the skills necessary for writing, designing, and evaluating the school yearbook. Students will use an online desktop publishing program to create yearbook pages. Students will take digital photographs for use in the book and will learn basic Photoshop skills for enhancing their photographs. Knowledge of photography is useful but not necessary. Good work habits, the ability to meet deadlines, and the ability to manage multiple projects are essential. Enrollment is limited and by permission of the administration and the yearbook advisor.

Yearbook II, III (9Y2, 9Y3)

Students continue practical experiences in publications through production of the yearbook and further develop their skills in photography, layout, and management. Students continue to sharpen their skills in desktop publishing using eDesign. In addition, they assume greater responsibility for various assignments and tasks related to yearbook production. They will assist in the orientation and training of less experienced staff. Enrollment is limited and by permission of the administration and the yearbook advisor. Students chosen to be editor must attend Herff Jones Summer Yearbook Camp.

Prerequisites: Yearbook I,II and permission of teacher.

ELECTIVES

Psychology (9PS)

The Psychology Elective at CCA introduces the students to the scientific study of human behavior and mental processes. The course examines the history of psychology, the relationship between our bodies and our minds, stages of development (infancy, childhood, adolescence, and adulthood), personality, learning and cognition, psychological disorders and other related topics. With a foundation upon God's revelation in the Bible, the student learns to compare and contrast the differences and distinctions between God's view of man with the perspectives of Modern Psychology. The class is designed to focus upon discussion, interaction, and projects among the students. This course is open to 10th, 11th, and 12th grade students.

Text: *Holt Psychology Principles in Practice*-Holt, Rinehart and Winston, 2003

Popular Culture (9PCM)

Mass Media and Popular Culture have developed into one of the biggest influences in our lives. This is at the same time a very exciting and very scary premise. This class is designed to help students evaluate this. We believe that communication and technology are both gifts from God. Consequently, they must be evaluated and practiced from a Christian worldview. In addition to evaluating specific examples of popular culture, we will also learn about technical aspects of mass media. Examples of this include filmmaking techniques, mass-market practices, and financial pressures. A distinctive emphasis will be brought to how, in doing all of this, we can help fulfill the cultural mandate of Genesis 1:28. Popular Culture is offered only to seniors.

Computer Science Principles (9CA)

High school students are introduced to the computer by discussing terms, history, the Internet, and Windows operating system. Students will learn how to use Microsoft Word to create and enhance word processing documents, Microsoft PowerPoint to create multi-media presentations, Microsoft Excel for design and creation of spreadsheets. Students will also learn about the Adobe Creative Suite to extend their knowledge into page layout and design. This course is foundational to other technology related courses such as web design, digital photography and video.

Robotics/Programming (9RO)

Robotics teaches beginning and intermediate programming and construction skills. Students learn how to design, build, and instruct machines to complete well-defined tasks. The class participates in the FIRST FTC competition, a robotics competition that uses Textrix equipment.

Robotics/Programming II (9RO2)

Students will focus on FTC competition in this Robotics course. They will develop advanced strategies for the regional FTC qualifiers including the build and programming component of this program. Students will also provide leadership and expertise to Robotics I students.

Prerequisites: Robotics I and permission of teacher.

Robotics/Programming III (9RO3)

Robotics III is a continuation of Robotics I and II with an emphasis on learning leadership, design, and coding principles. Robotics III students will take on leadership roles on the FTC team and will train rookies in tool use and coding, as well as participate in the leadership functions such as planning, organization, and communication.

Prerequisites: Robotics II and permission of teacher.

Web Design (9WD)

In this course students are introduced to planning and designing effective web pages; implementing web pages by writing HTML and CSS code; enhancing web pages with the use of page layout techniques, text formatting, graphics, images, and multimedia; and producing a functional, multi-page website.

Blender 3D Design (9B)

The 3D Design Blender course is intended to offer students an introduction to the world of computer generated 3-D modeling. As an introductory course, it provides a basic understanding of the skills and techniques employed by 3-D

designers in a wide range of applications. In this online course we will explore basic mesh modeling, applying textures and materials to 3-D objects, lighting, animation and rendering. This course should provide a good basis for further independent study in architectural, engineering, game, theatrical and character modeling.

Speech/Debate (9SP)

Debate is a competition speech class. The class teaches skills for augmentation, research, critical thinking, persuasion, interpretation, and current events. Students participate and learn about extemporaneous speaking, debate and National High School debate topics. Classical and contemporary theories of analysis and performance are discussed and applied to current event topics. Classroom activities prepare students for interscholastic competitions in debate, public speaking, and interpretation.

Real World Money Management (9MM)

This course introduces the student to the world of business and personal finance. Students will learn the basic vocabulary used in business and get a grasp on how businesses work. Topics discussed include: Needs and Wants, Economic Systems, Business Ethics and Social Responsibility, and Entrepreneurship and Small Business. Students will also learn the basics of personal finance. Topics discussed include: Saving, Budgeting, Debt, Credit Cards, Debit Cards, Investing and Retirement, Insurance, Money and Relationships, Careers and Taxes, and Giving. This course is designed for juniors and seniors.

Text: *Introduction to Business* (Glencoe) and *Foundations in Personal Finance* (Dave Ramsey)

STUDENT ASSISTANT ELECTIVES

Students may earn a maximum of 2 credits in high school for any type of assistant except for teacher assistant. However, a student who is a teacher assistant one year may earn a credit another year as an office assistant or a media assistant.

Office Assistant (90A)

Working under the direction of the office personnel, students gain work experience in the paraprofessional aspects of working in a school office. Office aides will assist in the answering of telephones, greeting and assisting visitors, duplicating and collating materials, assisting in mailings and numerous other routine office tasks. Enrollment is limited and by permission of the administration.

Office Assistant II (90A2)

Students further their work experience and expand their routine office responsibilities. Second year office assistants will assist in duplicating, using different types of photocopying machines, doing mailings using the postage meter, doing morning announcements using the intercom-system and numerous other routine office tasks.

Prerequisite: Office Assistant I with B or better and administration approval.

Teacher Assistant (9FA)

Students assist teachers with duplicating materials. The student may receive credit for this course or receive no credit and perform the course as a service to the school. A student may only earn one credit in high school as a teacher assistant.

Media Assistant (9MA)

In this work study program, students are trained in the use of the Master Library System. Other responsibilities include cataloging and shelving Media Center materials as well as providing various services that support teachers, staff and students.

Media Assistant II (9MA2)

Students perform Media Center tasks as listed above. *Prerequisite: Media Assistant I with B or better and Media Specialist approval.*

Preschool Assistant (9PA)

Working under the direction of the Preschool staff (Teacher, Aide and Director), students gain experience working in a preschool. Students will assist with hands-on activities with the children as well as preparing crafts, snacks and school communications. Infant/Child First-aid and CPR course is recommended, but not required.