



Academic Curriculum

2017-2018

> **CHRIST SCHOOL IS A COLLEGE PREPARATORY SCHOOL.** At the start and heart of our mission is our charge to prepare our students for success and achievement in college and life beyond academia. Our curriculum is driven, in large measure, by the relevant knowledge and skills students will need in college and the global 21st century workplace.

> **CLASSES ARE SMALL BUT DEMANDING** and are built around critical thinking, thorough research, incisive analysis, and strong writing. Memorization is not a goal. We expect all students to become independent learners, to expand their intellectual curiosity, and to demonstrate improvement and mastery in the difficult material with which they are challenged.

> **ALL STUDENTS ARE ENCOURAGED TO CHALLENGE** themselves by taking demanding classes which push them intellectually. We offer twenty-seven honor level courses and fifteen Advanced Placement[®] courses, in all departments. Many students each year earn college credit for their performances on their Advanced Placement[®] exams.

> **THE CURRICULUM CENTERS ON THOROUGH PREPARATION** in the areas of English, History, World Languages, Math, Science, Religion, Technology, and Arts. Each student, working closely with his advisor and the Academic Office, picks a course of study which will challenge him and which is consistent with his intellectual development, previous course work, and his interests.

> **OUR EIGHTH-GRADE CURRICULUM** is built on the concept of “discovery.” Students follow a core of interdisciplinary programs in English, social studies, math, science, art, and experiential learning outside of the classroom that will challenge their leadership skills. There are opportunities to coordinate community service and academic classes with other area schools. Qualified eighth grade students may attend high school level classes and receive graduation credit for successful completion of courses in math, science, and World Languages.

> **WHILE MUCH OF OUR STUDENTS’ ACADEMIC SUCCESS** can be attributed to very bright teachers who understand boys and know how to communicate, inspire and excite them, students are given a variety of additional resources and support to foster success. While structure and consistency are foundations, extra help sessions in the mornings or afternoons, access to teachers and tutors at night, study halls, learning specialists, and remarkably small classes contribute to our young men finding more success than they thought possible.

> **STUDENTS ALSO TAKE THE ACT, PLAN, PSAT, SAT I and II, and/or Advanced Placement[®] Exams.**

> **ACADEMIC GOALS** Christ School seeks to provide an academic program that is rigorous, relevant, and enriching. We wish to prepare our students to be confident, self-directed, lifelong learners. Specifically, we strive to help our students be able to

- > Work collaboratively
- > Communicate effectively, both orally and in writing
- > Engage in complex, critical thought
- > Develop, state, and defend a point of view
- > Practice elements of good scholarship
- > Design, innovate, create, and solve problems
- > Manage information and develop understanding
- > Act as responsible citizens of the global community



Graduation requirements consist of 20 credits with specific unit requirements in certain content areas.

English	4 units	Required each year
Science	3 units	Credits are required in Biology, Chemistry, and a third lab science. A fourth year of science is strongly recommended.
Mathematics	4 units	Credits are required in Algebra I, Geometry and Algebra II additional math.
World Languages	2-3 units	Two credits are required in the same language, three or more credits are strongly recommended.
History	3 units	Requirements include 1 credit of US History and two additional credits in history course(s).
Fine Arts	1 unit	At least a .5 credit of your fine arts requirement must be in a music course.
Religious Studies	.5 unit	One semester is required (<i>Junior or Senior year</i>)
Electives	2.5-3.5 units	This can be any additional credits received in any departments after your requirements for that department have been met.

<u>Grading Scale</u>	<u>College Prep</u>	<u>Honors Weighting</u>	<u>AP® Weighting</u>
98-100 A+	4.33	4.87	5.41
93-97 A	4.00	4.50	5.00
90-92 A-	3.67	4.13	4.58
88-89 B+	3.33	3.74	4.16
83-87 B	3.00	3.37	3.75
80-82 B-	2.67	3.00	3.33
78-79 C+	2.33	2.62	2.91
73-77 C	2.00	2.25	2.50
70-72 C-	1.67	1.88	2.08
68-69 D+	1.33	1.50	1.66
63-67 D	1.00	1.12	1.25
60-62 D-	0.67	0.75	0.83
Below 60 F	0.00	0.00	0.00

NOTE: Grade Point Averages will be calculated on Christ School course work only. Courses and credits earned at other institutions not be included in the Christ School GPA.

Sample Course of Study

The majority of our courses are offered at an Honors level and we also offer 17 different AP® courses.

Grade 8

English 8	0.0	Credits
Math (Pre-Algebra or Algebra I)	1.0/0.0	Credits
Humanities 8	0.0	Credits
Integrated Science	0.0	Credits
World Languages I/Intro to World Languages and Fine Arts 8	1.0/0.0	Credits
	<u>2.0-0.0</u>	

Grade 9

Intro to Genres	1.0	Credits
Algebra I/Geometry	1.0	Credits
Biology	1.0	Credits
Empires & Encounters	1.0	Credits
World Languages I - II	1.0	Credits
Fine Arts (Art or Music)	.5	Credits
	<u>5.5</u>	

Grade 10

World Literature	1.0	Credits
Geometry/Algebra II	1.0	Credits
Chemistry	1.0	Credits
20th Century World History	1.0	Credits
World Languages I, II, III	1.0	Credits
	<u>5.0</u>	

Grade 11

American Literature or AP® English Language	1.0	Credits
Algebra II, Statistics, Advanced Functions & Modeling, or Pre-Calculus	1.0	Credits
Environmental Science, Physics or Science Elective	1.0	Credits
U.S. History or AP® U.S. History	1.0	Credits
World Languages II - IV	1.0	Credits
Religion	.5	Credits
	<u>5.5</u>	

Grade 12

British Literature, Honors Senior English Seminar or AP® English Literature	1.0	Credits
Pre-Calculus, Statistics, AP® Calculus or AP® Computer Science	1.0	Credits
Environmental Science, Physics or Science Elective	1.0	Credits
History Elective	.5	Credits
Fine Arts (Art or Music)	.5	Credits
Additional Course(s) from any Department	1.0	Credits
	<u>5.0</u>	

COURSE DESCRIPTIONS

ENGLISH

English 8

This course serves as an introduction to genre: short stories, plays, poems, essays and novels. Literature is studied through an integration of English and history at the eighth grade level, offering the students a survey of literature which emphasizes the themes of journey and discovery. The study of written expression offers practice in writing clear sentences and organized, coherent paragraphs. The grammar component stresses mastery of the parts of speech and the parts of a sentence. Vocabulary is enhanced through an SAT based program. *(Students do not receive high school credit for this course) 8th grade*

Intro to Genres

This ninth grade survey course introduces students to reading and writing practices on which they will build during their high school careers at Christ School. Students read, discuss and write about a variety of literary forms: novels, short stories, poetry, drama, and nonfiction. Students' study of grammar and composition emphasizes competency in mechanics, usage, paragraph writing, and vocabulary development, as well as the fundamentals of five paragraph thematic essays. Reading comprehension skills for standardized tests are introduced. *9th grade*

Honors Intro to Genres

This ninth grade survey course introduces students to reading and writing practices on which they will build during their high school careers at Christ School. Students read, discuss and write about a variety of literary forms: novels, short stories, poetry, drama, and nonfiction. They learn to analyze literature for its content and author's purpose, and convey their findings through oral presentations and the written word. Students' study of grammar and composition emphasizes competency in mechanics, usage, paragraph writing and vocabulary development, as well as the fundamentals of five paragraph, thematic essays. Reading comprehension skills for standardized tests are introduced. *9th grade*

World Literature

This course introduces the students to the "Coming of Age" theme through selections of world literature relevant to the lives of adolescent students. Students are taught important elements of literary criticism, including character development, style, setting, mood, point of view, and theme. Regular practice in writing leads to mastery of the five-paragraph essay and strength in expository writing. A systematic study of vocabulary in the form of reading comprehension and sentence completion skills completes this course. *10th grade*

Honors World Literature

In addition to the skills and themes explored in the World Literature course, Honors World Literature challenges the student to think critically every day, not only about literature but also about their own philosophies and values. This critical thought is fostered through lively class discussion and fast paced production of expository and analytical writing. *10th grade*

American Literature

This course is a survey of American literature from its early stages through the twentieth century. Emphasis is placed on close reading, stressing comprehension, analysis, and insight. Students explore the American Dream's relevance to a collective cultural identity, as well as to an individual identity. Students also engage in a rigorous regimen of analytical and expository essay writing. Mechanics and proper word usage are emphasized as the student completes a challenging study of college level vocabulary. Skills in research for a required research paper are developed. *11th grade*

Honors American Literature

The aim of this course is to challenge students with a rigorous study of pieces of American literature, their profound impacts on their respective historical contexts, and their enduring impacts on our contemporary roles as citizens and individuals. Design of the course mirrors American Literature with greater expectations of discourse, research, and written analysis. *11th grade*

British Literature

The objectives of this course are to expose students to influential authors and significant ideas in British Literature. There is an emphasis on close reading, interpretation, criticism, analysis, synthesis, and application. A literary research paper is required, which emphasizes the use of secondary sources and proper MLA formatting, and encourages imagination and creativity in writing. A working vocabulary is fostered within the context of assigned readings and compositions. *12th grade*

Honors British Literature

The objectives of this course are to expose students to influential authors and significant ideas in British Literature. There is an emphasis on close reading, interpretation, criticism, analysis, synthesis, and application. A literary research paper is required, which emphasizes the use of secondary sources and proper MLA formatting, and encourages imagination and creativity in writing. A working vocabulary is fostered within the context of assigned readings and compositions. The “Honors” section for the Survey of British Literature includes a “faster” syllabus; more reading; higher expectations for analysis, writing, and application; and more independent work. *12th grade*

Honors Independent Senior English Seminar

Are you tired of teachers telling you what to read? If so, then this is the English course for you. In this seminar, students will map the course of their reading over the entire academic year. For example, you might start your year by reading *Into Thin Air* by Jon Krakauer, a book about the tragic 1996 Everest Expedition, and from there you’ll discover Anatoli Boukreev’s *The Climb: Tragic Ambitions on Everest* and read it. Then you’ll find two articles about the tragedy and read those. Your first essay might be an argumentative piece on whether or not Krakauer’s criticism of Boukreev’s role in the tragedy was fair. And then... who knows where you’ll go from there? What do you want to read?

AP® English Literature and Composition, AP® Language and Composition

These Advanced Placement classes may be taken during the student’s junior and/or senior year. Concentration is placed on reading and writing skills necessary for successful completion of the College Board’s AP exam. Preparation is rigorous with the goal of developing intellectual curiosity and independence.

Prerequisites: Grade of A- or better in previous English class (B+ in honors) and at least a 50 Critical Reading or Writing score on the PSAT (500 SAT); serious interest in the subject and willingness to take on the additional challenges of an entry-level college course; approval of department chair.

Film as Literature

In this semester course, students investigate the connections between film and literature. A variety of genres of literature and styles of films are analyzed. Students compare literary devices with film and photographic techniques to synthesize how both mediums communicate meaning. Emphasis is placed on critical thinking, original analysis, collaborative problem solving and practical application. Just as an English class teaches a student to write with clarity, this course includes practice in video production in order to provide the student with basic skills needed to express meaning visually. Students are expected to generate both writing and video responses to the materials studied. Assessments include regular quizzes and tests, in addition to a major literary film analysis paper, an original screenplay, and an all-class video production. Reading and viewing assignments are rigorous in scope and content.

Hemingway and Fitzgerald

This English elective focuses on the careers and writings of two men: F. Scott Fitzgerald and Ernest Hemingway. Each played a major role in developing the American Novel and Short Story, and are, arguably, the two most recognizable American writers of all time. These two literary figures have become iconic, and the facts surrounding their lives are difficult to tie down. We know they enjoyed (briefly, at least) a friendship during the height of their literary powers, but this friendship dissipated. Why? Their friendship, their lives, and their works will be analyzed in this semester course.

Journalism

Modern culture bombards its population with images. Smart phones, cable television, video games, movies, and the internet are rich in pictures and text poor. Even print media such as USA Today and Time magazine have moved away from text rich structure to more visual formats. No wonder English teachers name writing as the weakest skill in high school, and increasingly, college students. This semester class is an intensive writing course for grades 10, 11, and 12 that builds upon the strong visual skills developed by lifelong media exposure. Moving from strength to weakness, the course is designed to teach the student the steps involved in decoding textual information present in visual imagery. Strong emphasis is placed on the writing process. This will include the basic rules of reporting, research, interviewing, developing an opinion on a topic, and more. The class will be responsible for generating a publication of their own design on a regular basis. This course may be taken in addition to a regular English class.

Personal Narrative

Every one of us is a deep, murky brew of stories. Peer into the pot and there's a long, raucous tale of daring and mischief; look again and a quiet moment of indecision surfaces. In this semester course, students will shape episodes from their lives into personal essays and short stories rooted in their varied experiences. Borrowing tools from bold essayists such as Phillip Lopate, Ann Hood, and Ian Frazier, and short fiction writers like Phil Klay, Zadie Smith, and Lewis Robinson, each student will craft pieces that entertain as well as reveal bits of the student's life. Reading and writing regularly, students will learn the fundamental building blocks of storytelling, such as characterization, plot development, and clarity of voice, as well as the finer elements of diction, syntax, grammar, and punctuation. Since good writing does not simply pour onto the page, students will look critically at their own work – and the work of their peers – to identify inconsistencies or errors, and improve the piece in multiple drafts. In lieu of a final exam, each student will prepare a portfolio and submit one essay or short story to a literary journal or magazine. For seniors, this course will offer an ideal opportunity to develop a series of personal essays for college applications. *This elective is for Juniors and Seniors.*

Sci-Fi and Fantasy

In this semester long course, students will experience major works of fiction in the genres of Science Fiction and Fantasy. We will study short stories, novels, graphic novels, radio broadcasts, television shows, and films. The emphasis on the course will be thorough reading and thoughtful discussion. Some classes will be dedicated to screen adaptations of texts. Students will contribute weekly to a discussion board as well as write short papers. Students will gain an understanding and, hopefully, an appreciation of these genres which will lead them to further studies. Some of the works studied include: *The Hobbit*, *Star Wars*, *Blade Runner*, and *Watchmen*.

War in Literature

For millennia, writers have told tales of war. Some have drawn from personal experience, others from their imaginations, but all wrestle with the ineluctable truth that civility, cooperation, and tolerance – the threads that knit us into a human family – snap far too easily when strained by jealousy, prejudice, greed, or religious extremism. In these war stories, some men behave very, very badly, surrendering to fear and the reflex to destroy, while others define heroism with their astonishing courage and self-sacrifice. In the 20th century, as the machinery of war became more efficient and conflicts raged across continents, the writer's task took on new urgency – and despondency. In this course, we will read literature related to three major conflicts from the 20th century: The Great War (World War I), World War II, and the Vietnam Conflict. As we read, we will get to know the authors and the historical context in which they wrote, as well as the lasting toll of these wars on individuals and institutions. What will we read? Novels, graphic novels, short stories, and poetry by authors such as Erich Maria Remarque (*All Quiet on the Western Front*), Rupert Brooke (“The Soldier”), Wilfred Owen (“Dulce et Decorum Est”), Ernest Hemingway (*A Farewell to Arms*), Kurt Vonnegut (*Slaughterhouse Five*), Art Silverman (“Maus I & II”), Randall Jarrell (“The Death of the Ball Turret Gunner”) and Tim O'Brien (*The Things They Carried*).

MATHEMATICS

Algebra I

Algebra I begins with a review of operations involving signed numbers. Topics introduced in Pre-Algebra are covered in more depth. Discussions and exercises include equations, inequalities, linear equations, functions, polynomial work, factoring, fractional expressions, systems, exponents, rational and irrational numbers, and quadratics. Problem solving and critical thinking skills are emphasized.

Algebra II

Algebra II is the stepping stone to higher mathematics and sciences. Problems investigated require stronger and more complex thinking. Linking of concepts are investigated and exercised. Areas discussed include functions, polynomials, rational and irrational expressions and equations, systems, imaginary and complex numbers. Situational and word problems promote higher degrees of problem solving skills. Consequently, calculators are an essential part of Algebra II. This course usually follows Geometry in the Christ School Math Department sequence.

Geometry

Geometry is a comprehensive course of study in which logical reasoning and spatial visualization skills are developed through a variety of teaching and learning methods. The goal is to have students understand plane and solid geometry and become capable of performing formal geometrical proofs. Topics covered include basic geometric definitions, parallel lines and planes, congruent and similar polygons, circles, area, volume, coordinate geometry, and proofs. This course usually follows Algebra I in the Christ School Math Department curriculum.

Honors Math

Honors courses in Algebra I, Algebra II, and Geometry are designed to prepare a student for the AP Calculus AB and BC courses. These three honors math courses move at an accelerated rate challenging the able and motivated student.

Statistics

This is a survey that will give a student a very broad background of how data is collected and then used to make predictions or observations. Students travel through Mean, Median, and Mode problems through Causation and Probability through to tests of accepting or rejecting. Statistics is an alternative course to Pre-calculus and Finite. Using TI-83 calculators is a must. (*Prerequisites: Algebra II and Geometry*)

Advanced Functions and Modeling

Advanced Functions and Modeling provides students an in-depth study of modeling and applying functions. Home, work, recreation, consumer issues, public policy, and scientific investigations are just a few of the areas from which applications should originate. (*Prerequisites: Algebra II and Geometry*)

After taking the course, the student will be able to:

1. Describe graphically, algebraically and verbally phenomena as functions; identify independent and dependent quantities, domain, and range, and input/output.
2. Translate among graphic, algebraic, numeric, and verbal representations of relations.
3. Define and use linear, quadratic, cubic, and exponential to model and solve problems.
4. Use systems of two or more equations or inequalities to solve problems.
5. Use the trigonometric ratios to model and solve problems.
6. Use logic and deductive reasoning to draw conclusions and solve problems.

Pre-Calculus and Honors Pre-Calculus

Pre-calculus reviews and extends concepts from Algebra and Geometry. It integrates them through intensive graphical analysis. Trigonometric topics are covered in depth with applications as the primary focus. Other areas studied include conic sections, sequence and series, statistics and limits. Functional notation is emphasized throughout the course. The honors level of this course is fundamental preparation for studying Calculus.

Calculus

This class is offered to those students who wish to learn Calculus but are not prepared for the Advanced Placement exam in the subject. Students learn to differentiate and to integrate various elementary functions, to evaluate limits, and to apply those skills in solving a variety of mathematical problems.

AP[®] Calculus: AB and BC

This Calculus class covers the material intended for a typical two-semester college freshman course. The approach used encourages visualization, and every effort is made to integrate current technology into the mainstream of the course. The emphasis is on presenting the calculus as a tool for the student in his later academic and professional life. Two calculus courses prepare students for the College Board's AP Calculus AB level or BC level exam. *Prerequisite: Approval of instructor based on recommendation of previous year's math instructor.*

AP[®] Statistics

The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes:

- Exploring Data: Describing patterns and departures from patterns
- Sampling and Experimentation: Planning and conducting a study
- Anticipating Patterns: Exploring random phenomena using probability and simulation
- Statistical Inference: Estimating population parameters and testing hypotheses

AP[®] Computer Science

This full-year course is designed to prepare students for taking the AP Computer Programming exam; emphasis focuses on C++ and Java Script language, syntax and rules. Course projects include creating programs to understand all aspects of programming for Windows based programs. *Prerequisite: Approval of instructor based on recommendation of previous year's math instructor.*

AP® Computer Science: Principles

AP Computer Science Principles introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. With a unique focus on creative problem solving and real-world applications, AP Computer Science Principles prepares students for college and career. *Prerequisite: Approval of instructor based on recommendation of previous year's math instructor.*

Multivariable Calculus & Graph Theory

Prerequisite: AP Calculus BC and Instructor recommendation

SCIENCE

Integrated Sciences

This is a one year course offered to eighth grade students only. It is designed to expose students to physical, life, and earth science while deepening their curiosity for science and strengthening their basic scientific process skills. Through hands-on activities, labs, field trips, and research, students will explore local and global weather, environmental science, human biology, botany, entomology, and ornithology throughout the year. *(Students do not receive High School credit for this course)*

Biology

Biology is a laboratory oriented course and uses a hands-on approach to learning about biological processes. It emphasizes the interrelationships between “abiotic” and “biotic” parameters that organisms must regulate. Specifically, cell structure and function, the chemical nature of organisms, biochemistry, genetics, behavior, ecological relationships, plant and animal structures, and energy mechanisms in organisms are highlighted. *Usually taken in 9th or 10th grade.*

Honors Biology

The Honors Biology course is an intensive year long introduction to the principles and patterns that govern life. Students participate in weekly laboratory activities and daily class preparation including independent reading and note-taking. The class progresses swiftly and covers the major topics of molecular and cellular biology, evolution, and anatomy and physiology. Students are required to conduct an independent research exercise in the second term. *The course is open to 9th and 10th graders.*

Chemistry

This course emphasizes underlying and unifying concepts upon which chemistry is based. The major topics are atomic theory, chemical nomenclature, balancing equations, precipitation reactions, acid-base reactions, redox reactions, and practical (applied) chemistry. Laboratory investigations emphasize a hands-on approach with write-ups being an integral part of the course work. Developing analytical thought processes and independent study is strongly encouraged.

Prerequisite: Biology.

Honors Chemistry

This course is designed to present to the introductory chemistry student essential topics concerning the actions and interactions of matter—both ionically and molecularly. Special emphasis is placed on chemical nomenclature, balancing equations, precipitation reactions, acid-base reactions, redox reactions, and on the practical application of chemistry.

Prerequisites: Honors Biology or Teacher approval.

Honors Environmental Science

Honors Environmental Science is a rigorous survey of natural systems, man's use of resources, and the issues that face our growing population. Students will explore these topics with a focus on the southeastern United States. Lab and field work will be a part of this course. This course will be a foundation course for AP Environmental Science. *Prerequisites: Biology & Chemistry*

Honors Physics

Physics uses a variety of methods and materials in order to strike a balance between understanding the concepts of physics and being able to solve problems using algebra, graphs, and trigonometry skills. The historical and sociological impacts of physics from Aristotle to Einstein are also incorporated into the course. Topics covered are Newtonian mechanics, vectors, forces, gravity, projectile motion, the conservation of energy, momentum and angular momentum, thermodynamics, engines, waves, sound, light, and electricity. *Prerequisite: Chemistry*

AP[®] Biology

Advanced Placement Biology is presented using a molecular approach and follows the College Board's AP course outline in preparation for the AP exam. Initial considerations of cell processes are based upon mastering an understanding of their biochemical relationships. In addition, genetics, photosynthesis, cell respiration, protein synthesis, cell structure, enzyme-substrate reactions, plant and animal physiology, and nucleic acids are studied in depth. Extensive laboratory investigations are used to further students' understandings of the principles studied. *Prerequisites: B or higher in Honors Biology and Honors Chemistry (or an A in the regular course) plus teacher approval.*

AP[®] Chemistry

AP Chemistry is an advanced level chemistry class that will primarily cover topics that are presented on the AP exam. Students will be required to perform multiple techniques in laboratory sessions, debate and discuss current theories in chemistry, create an independent research project and take the AP exam at the end of the year. *Prerequisites: B+ or higher in Honors Biology and Honors Chemistry (or an A in the regular course) plus teacher approval.*

AP[®] Environmental Science

AP Environmental Science integrates other scientific disciplines into a year-long study of the Christ School campus. Students prepare for the AP exam while collecting data on water, soil, biological diversity, waste, energy, land use, and human populations. Interpretation of the data and applying them to a global scale are essential parts of this rigorous college-level course. *Honors Biology and Honors Chemistry or Honors Environmental Science and discussion with Department chair for approval.*

AP[®] Physics I Algebra-Based

This course is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits. This course has a strong laboratory component and emphasizes student problem solving strategies. (Note to advisors: This course is designed for students interested in studying something outside of science or engineering in college. Algebra, geometry, and trigonometry principles are used to support the exploration of basic Newtonian Physics concepts. However, the emphasis of this course is developing a strong conceptual understanding of the subject. Laboratory investigations will involve basic uncertainty and error analysis.)

AP[®] Physics II Algebra-Based

This course is the equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; and atomic and nuclear physics. (Note to advisors: This course is designed for students interested in studying something outside of science or engineering in college. Algebra, geometry, and trigonometry principles are used to support the exploration of basic Physics concepts. However, the emphasis of this course is developing a strong conceptual understanding of the subject. Laboratory investigations will involve detailed uncertainty and error analysis.)

AP[®] Physics C Mechanics

The course follows the College Board syllabus for AP physics C Mechanics and is equivalent to one semester of university calculus based physics. The course covers Newtonian mechanics, has a strong laboratory component, and emphasizes student problem solving strategies. *Co-Requisite: Pre-Calculus, Calculus, AP Calculus, And Pre-Requisite: A in Honors Algebra II* (Note to advisors: This course is designed for students interested in studying science or engineering in college. The emphasis of this course is on using calculus and mathematical principles to comprehensively explain Newtonian Physics concepts. Students will need to be exceptional at problem solving to be successful in this course. Laboratory investigations will involve detailed uncertainty and error analysis.)

Honors Anatomy/Kinesiology

This elective class is offered for those students interested in learning anatomy and physiology with an emphasis towards sports. Specific topics would include: bones, muscles, tendons, ligaments, common injuries, and best practices for improving athletic performance through exercise, nutrition and recovery. *Prerequisite: Biology and Chemistry.*

Honors Biotechnology

Students will explore the fundamental principles of biotechnology, career pathways and biotechnology business applications (medical, pharmaceutical, and agricultural). Topics of study include: plant tissue culturing; DNA, RNA, and protein technologies; genetic diagnostics; healthcare and pharmaceuticals; food processing (GMO's); fermentation technology; energy and environmental management; forensic science; cloning; stem cells; and bioethics. Laboratory activities reinforce concepts and principles presented. Self-sufficiency and responsibility in work habits required.

Prerequisite: Biology and Chemistry

Honors Engineering Practices

Students learn and use a professional design process and the latest version of an industry standard computer aided design (CAD) program, Autodesk Inventor, to design solutions to problems of their choice. A 3D printer will produce their design in durable ABS plastic. The design process will be documented in a professional portfolio suitable for higher education and employment applications. *Prerequisite Algebra I.*

Honors Principles of Engineering

POE helps students understand the fields of engineering and engineering technology with Mechanical Engineering being emphasized throughout. Exploring various technology systems and manufacturing processes, students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. Topics covered include: definition and types of engineering, communication and documentation, design process, engineering systems, statics and strength of materials, materials and materials testing in engineering, engineering for reliability and an introduction to dynamics and kinematics. *Prerequisite or Co-requisite: Algebra II, Biology and Chemistry.*

Honors Research Topics in Sports Physics

This course examines the physics behind a wide variety of sports, including baseball, football, hockey, soccer, track, and swimming just to name a few. Students will explore how science concepts such as force, momentum and energy give us a deeper understanding of the sports we play and watch. Mathematical and analytical approaches will be used to analyze video footage and real life demonstrations. Students will conduct research and carry out in-depth investigations on a topic of their choice and present their research to the class. *Prerequisite: Biology and Chemistry.*

HISTORY

Humanities 8

This course is one facet of Christ School's Eighth Grade Experience that is taught in conjunction with English 8 and Integrated Science emphasizing the theme of discovery. Humanities 8 draws from the subjects of history, psychology, religion, literature, health, and fine arts to provide students with an interdisciplinary curriculum of "Men's Studies" centered around the program's eight themes: Preparing for the Journey, Explorers and Discoveries, Our World Today, Building Healthy Relationships, Personal Wellness, Personal Spirituality, Developing Leadership, and Becoming a Gentleman. While the course's content focuses on the experience of entering manhood, it also emphasizes development of academic, social, and problem solving skills necessary for success in high school as well as in life. *(Students do not receive High School credit for this course)*

Empires & Encounters

This ninth grade course serves as an introduction to the study of history through a broader social studies context that incorporates geography, culture, religion, and political and economic systems. You will explore the "awakenings" of cultures in East and South Asia, the Middle East and North Africa, Sub-Saharan Africa, and Latin America as well as the historical encounters of these traditions and those with the Western World. The course emphasizes historical periods where cultural awakenings and cultural clashes of the past have shaped present ways and contemporary issues. The subject areas covered are intended to give a basis for comparison in further studies of European and United States History. The material is also used to convey skills necessary for further high school academic work, especially those important to the study of history.

20th Century World History

This class is a comprehensive study of the key economic, political and social events of the 20th Century, with emphasis on the conflicts and major events that define the contemporary world and modern culture. Incorporating European, American and World history, the class will build upon the lessons from Empires and Encounters using a chronological format. Students will continue to develop their skills in research by analyzing primary sources.

Honors 20th Century World History

This class, a comprehensive study of the key developments of the 20th Century, will focus on the major events that define the contemporary world and modern culture. Incorporating European, American and World history, the class will build upon themes from Global Studies I using a chronological format. Doing research and analyzing primary sources, students will probe into the defining political, social, economic and military trends of the recent past

United States History

This required class surveys the major events in United States History from the Age of Discovery through Watergate. The course involves students in readings and discussion topics through political, economic, social, and diplomatic approaches to learning history. A thorough review of the mechanics of our governmental system of federal democracy is included. A research paper is required with full and complete use of primary as well as secondary source materials.

Honors United States History

This course uses a college-level text to explore American history in detail from 1400 A.D. to the present. It is designed for students who have high motivation and a strong interest in history, self-discipline, and a high level of reading ability. The topics covered represent a chronological survey of the major political, economic, and social themes throughout America's development. Essay writing, cumulative mastery of factual material and critical thinking skills are stressed.

AP[®] Art History

This course is a college-level survey of the history of art from prehistoric times through the 20th century. About half of the course will concentrate on art of western European culture, and the other half will be material concerning Ancient periods and non-European traditions (Asian, Islamic, African, pre-Columbian American, and Oceanic). The course will develop primarily chronologically, and will include discussion of political, economic, religious, social, philosophic, and military events; as these influence and are influenced by art.

AP[®] US Government and Politics

This course integrates history and current events to acquaint students with the systems and structures of the United States government. The course focuses on the historical foundations of US democracy, the Constitution, the three branches of government, civil liberties and rights, as well as the role of media, political parties and interests groups in today's electoral system. This course is designed to prepare students for the Advanced Placement examination to be given in May. Furthermore, the course gives students a greater appreciation of the system of government under which they live and the roles of US citizens. *Prerequisites: Grade of A- or better in previous history class (B+ in honors) and at least a 50 Critical Reading or Writing score on the PSAT (500 SAT); serious interest in the subject and willingness to take on the additional challenges of an entry-level college course; approval of department chair.*

AP[®] U.S. History

This course, offered in both the 11th and 12th grades, examines the development of the history of the United States from colonial times through the present in preparation for the College Board's AP exam. Political, cultural, economic, diplomatic, and social factors related to American history are covered. The course includes training students to think analytically about major historical themes, and exposing students to a variety of interpretations of critical events. Extensive use of primary source documents is integral to the course, as is considerable writing. *Prerequisites: Grade of A- or better in previous history class (B+ in honors) and at least a 50 Critical Reading or Writing score on the PSAT (500 SAT); serious interest in the subject and willingness to take on the additional challenges of an entry-level college course; approval of department chair.*

AP[®] World History

The AP World History is a survey of the global past from 8000 BCE to the present. The curriculum is laid out by the College Board's Advanced Placement program to prepare students for the AP Exam in the spring. The course is structured around five themes, four historical thinking skills, and 19 key concepts over 6 chronological periods. Along with exploring 10,000 years of world history, the course will emphasize utilizing historical sources to craft arguments about the past, historical causation, continuity and change, comparative history, as well as analyzing, synthesizing, and interpreting the past. These skills will prepare students for success on the multiple choice, essays, and document-based question on the AP Exam. *(11th & 12th Grade) Prerequisites: Grade of A- or better in previous history class (B+ in honors) and at least a 50 Critical Reading or Writing score on the PSAT (500 SAT); serious interest in the subject and willingness to take on the additional challenges of an entry-level college course; approval of department chair*

African American History

This is a one semester elective designed to explore the unique history and culture of Black America and its African roots. The course will examine the struggles and triumphs of Black Americans from the slave trade to the present day. The class will emphasize the Black leadership, social movements, philosophies, and approaches to attaining civil rights, as well as the distinct contributions Blacks have made to US culture in the fields of music, visual arts, literature, and sports. Significant readings will be required, as will regular analyses of these texts through formal papers and class discussions.

Applied Ethics

This course is an introduction to the philosophical study of morality, including the theory of right and wrong behavior, the theory of value (goodness and badness), and the theory of virtue and vice. Besides providing familiarity with the primary questions addressed within moral philosophy and the most influential answers given by well-known philosophers, this course is designed to help students develop their abilities to read, analyze, and evaluate case studies on ethical issues, write and express themselves well about their own ethical positions, and think critically and analytically about ethical issues.

Architecture of Leadership

The course will provide students with a better understanding of the nature of leadership, the leadership style of those who are effective in particular environments as well as a student's own leadership style. Biographies and films on leaders, past and present, guest speakers and discussions will form the basis for exploring the architecture of leadership.

Comparative Government & Politics

This course will introduce students to comparative government & politics—the study of the political institutions and processes of countries around the world. Emphasis is on how to make meaningful comparisons between systems in different countries. The course will cover conditions for and workings of democracy, with an emphasis on how important concepts operate both similarly and differently in different types of political systems. The course will provide a framework for comparison among specific countries. The United States will be considered in comparative perspective. Important topics to be covered include: The comparative method, sovereignty, authority, and power, political & economic change and Citizens, society & the state.

Economics

This course starts with an introduction to Economics before moving on to Macroeconomics and Microeconomics. We will begin by introducing the basic economic problem, some basic economic definitions, decision making in different economic systems, supply and demand, and the setting of prices. Once we establish a solid economic foundation, we will begin our study of Macroeconomics. We will study the problems and goals of the national economy, the structure of the national economy, the importance of total spending, the role of government and fiscal policy, and the role of money and monetary policy. The class will then be introduced to Microeconomics where we will focus on problems and goals of individual consumers and firms.

Introduction to Entrepreneurship

The purpose of this course is to introduce students to the basic ideas in starting and running a successful business. Students will learn how to create a successful business plan, a marketing strategy, and the importance of leadership in managing all aspects of the business successfully. Each student will create their own business during the semester, and as a class we will learn from each student's experience. *(11th & 12th Grade)*

Public Speaking, Rhetoric & Debate

This course will demonstrate the tradition, importance and power of public speaking and its many applications in today's world. We will examine great speeches in history, study the link between public speaking and critical thinking and focus on the importance of the ethical responsibility involved in the dissemination of information. Students will increase their fluency as speakers, and develop their self-confidence. The course also introduces oral interpretation of literature, and beginning argumentation and gives the student practical experience through participation. Students will begin by analyzing the rhetorical context of their discourse by asking themselves the following: Why are you speaking or writing? To whom? How will your message be delivered or received? What is your message about? Finally we will address confidence and nervousness, preparedness, delivery and public speaking in a multicultural world. *(11th & 12th Grade)*

RELIGION

Introduction to New Testament

This introductory course satisfies the Religion requirement for graduation. The course is intended to provide a one semester overview of the New Testament, building on themes of the Old Testament. Like its Introduction to the Old Testament counterpart, it is designed to provide the student with basic biblical literacy upon which to build. And like Old Testament, this course is intended to provide a forum in which students can explore their faith, ask questions openly, learn to respect different interpretations, see the connection between Bible and other academic disciplines.

Introduction to Old Testament

The Old Testament course at Christ School satisfies the Religion requirement for graduation. The course is intended to provide a one-semester overview of the Hebrew Scriptures, including also a brief discussion of the Apocrypha. It is designed to provide the student with basic biblical literacy upon which to build. In no way is it exhaustive in scope; it should be seen a beginning, not an end. Our hope is that the course will also provide a forum in which students can explore their faith, ask questions openly, learn to respect different interpretations, see the connection between Bible and other academic disciplines, and most importantly, be led by the Holy Spirit to see how the Holy Bible might inform their lives.

WORLD LANGUAGES

Introduction to World Languages

Eighth grade students spend approximately four weeks learning about each of the four languages taught at Christ School: Arabic, Mandarin, and Spanish. Students acquire basic speaking, listening, reading, and writing skills as they address everyday topics such as school, family, calendar, and leisure activities in a cultural context. *(Students do not receive High School credit for this course)*

Arabic I, II, III & IV

This class introduces students to the basics of Modern Standard Arabic through the study of the Arabic alphabet, calligraphy, vocabulary and common words and phrases. There is also a strong cultural component to this class with emphasis on the geography, art and history of North Africa and the Middle East using supplementary tools such as film, literary fiction and non-fiction, internet and personal travelogues.

Honors Latin III & IV

Honors Latin III & IV will be offered through an online course to students who are continuing their Latin studies.

Mandarin I

This is an introductory course in Mandarin Chinese Language and Culture. Students learn beginning listening, reading, speaking, and writing skills. They are introduced to basic Chinese syntax and vocabulary and are exposed to Chinese culture. This course is challenging and highly engaging for students interested in learning about Chinese language and culture.

Mandarin II

After a thorough review, students in this course will continue the study begun in Mandarin I. Students will continue to develop speaking, listening, reading and writing skills and become increasingly familiar with the cultures of Chinese-speaking countries and knowledgeable about the relationship between language and culture.

Honors Mandarin III

Honor Mandarin III aims to help students build practical skills in all of the four language areas: listening, speaking, reading, and writing. Students will learn to communicate in real-life situations through various thematic units such as dining, shopping, school life, housing, and other basic survival topics. There are many supplementary materials from magazines, films, newspapers and various online resources. Students will be encouraged to speak exclusively in Chinese in the classroom. They will be able to write short coherent paragraph and give oral presentations in Chinese.

Honors Mandarin IV

Honor Mandarin IV aims to help students build practical skills in all of the four language areas: listening, speaking, reading, and writing. Students will learn more advanced vocabulary and grammatical concepts. There are many supplementary materials from magazines, films, newspapers and various online resources. Students will be encouraged to speak exclusively in Chinese in the classroom. They will be able to write short coherent paragraph and give oral presentation in Chinese.

Spanish I

This course presents an introduction to Spanish and develops the four essential skills of language learning: speaking, listening comprehension, reading, and writing. The language vocabulary and structures are presented in a cultural context. Students use these tools to communicate effectively in spoken and written Spanish. Emphasis is placed on speaking and conversation and students are expected to participate in the target language.

Spanish II

This course is a continuation of Spanish I. After reviewing the fundamental structures of the level I course, Spanish II introduces several new grammatical forms. There is considerable emphasis on increasing vocabulary through thematic study. Cultural material about the Spanish-speaking world is also presented. Like Spanish I, emphasis is placed on speaking and conversation and students are expected to participate in the target language. Successful completion of this course prepares the student for Spanish III.

Spanish III

Spanish III is designed to further develop accuracy as well as spontaneity in the communicative skills of the students. At this level, class activities will continue to stress the four language skills, speaking, reading, writing, and listening through a variety of readings, role-play situations, in-class discussion, and oral presentations. By the end of the course, students will be able to share their thoughts in the future, present and past tenses. They will also develop a deeper cultural understanding of the Hispanic world. Class will be conducted in Spanish, and students will be encouraged to use the target language at all times. Successful completion of this course prepares the student for Spanish Culture and Conversation.

Honors Spanish IV

In Honors Spanish IV, students review the fundamentals of Spanish and round out their initial formal study of all verb forms and core grammatical structures. The students will explore the Spanish language in the context of thematically-oriented units that feature pertinent vocabulary and grammar. The students will engage with history, geography, and the arts in Spain and Latin America. Contemporary topics such as immigration and technology will be discussed together with various cultural traditions in the Spanish-speaking world. In addition, short writing assignments, longer essays, and grammar reviews will help students sharpen their ability to apply the grammar accurately. Class will be conducted in Spanish, and students will be encouraged to take risks and be creative in the target language at all times.

Spanish Language Culture and Conversation

Spanish Language Culture and Conversation is intended for students who have already completed three years of Spanish and wish to expand their knowledge of Spanish-speaking cultures around the world. This course will entail frequent discussions of current events, historical events, literary works, and artistic manifestations from the countries studied. Each topic or country covered will culminate in projects developed and presented by students. Students will take an active role in teaching materials that they have researched. This course will be taught in English and Spanish.

AP® Spanish Language and Culture

The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying the interpersonal, interpretive, and presentational modes of communication in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish.

The AP Spanish Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions).

Honors Levels

Honors level classes are offered in all specific levels of Arabic, Mandarin and Spanish, depending on student interest and qualification. Accelerated pace combined with advanced level readings, translations, rigorous dialogues, and writings are expected for those taking honors level World Languages.

FINE ARTS

Fine Arts 8th Grade

In the Spring an overview of studio art and an overview of the music program for eighth graders is offered in conjunction with the Humanities 8 program. *(Students do not receive High School credit for this course)*

Studio Art I

Studio Art I is a semester elective for all students, regardless of previous experience or training, who are interested in exploring their artistic abilities. Students will work with basic media (drawing, printmaking, painting, sculpture, and ceramics) in a variety of studio projects. Emphasis is on individual planning and decision making within the framework of fundamental principles of design.

Advanced Art

Advanced Art is a semester elective for students who demonstrate interest in and commitment to the creation of art. The focus is on two-dimensional (drawing, painting, printmaking) and three-dimensional (ceramics, sculpture, metalworking) art. This course is designed for each student to work independently under the instructor's supervision in developing his individual course of study.

Band/Instrumental Ensemble

This course is designed to give students, with previous band experience, the opportunity to continue their study of their chosen instrument. Band is an ensemble that provides students with learning and performance opportunities on wind and percussion instruments. The primary focus is on the development, continuation, and expansion of basic skills begun in previous years that are necessary for effective instrumental music performance. In addition to the larger ensemble, individual growth and achievement are encouraged through participation in adjudicated solo and ensemble contests, honors bands, and private lessons.

Choir

Previous experience is not required for participation in the Christ School Choir, but a decent voice, a reasonable ear, and a love and enthusiasm for music are important. The choir performs a spectrum of music, both sacred and secular, and sings daily.

Music Appreciation

Students will learn the piano keyboard and elements of music notation in this term course. Scales and their structures, intervals, chords, rhythmic notation, sight reading and ear training are explored so that the students gain an understanding of how music is written and printed notation is translated into sound.

Music Practicum

Private music lessons are offered on campus. Meeting times will be determined by the student and instructor. There is an additional fee.

Music Technology

Music Technology is an introduction to the recording studio and basic recording concepts. Topics include but are not limited to microphones, analog and digital recorders, sounds boards, signal processing, synthesizers, Podcasts and web radio.

ENGLISH AS A SECOND LANGUAGE (ESL)

ESL Beginner/Intermediate

Christ School is an ideal place for an international student to hone his English skills in preparation for attending a college or university in the United States. As the learning of a second language is a complex process, involving an infinite number of variables, students need adequate preparation if they are to be successful in academic classes. The ESL classroom is a safe-haven for risk-taking, and the curriculum is designed to ensure success at each level of achievement. And, the ESL Transition Course enables the international student to move successfully into regular classes in English or history.

This class has an additional fee per quarter.

NON-CREDIT COURSES

Learning Resources

Learning Resources focuses on organization, time management and study skills and strategies, as well as content area academic support. The intent in Learning Labs is for all students to become responsible, independent, diligent learners. Referral to the program originates from one of four sources; parent, student, school, or psychologist/ counselor/ physician. It is essential that a student enter the Program's environment with a willingness to enhance his academic success and to develop more responsible and intentional academic habits and skills. The Learning Resource Program's instructors communicate frequently with each student's teachers and his advisor to assess ongoing progress. A student may enter or exit the Learning Resource Program at any quarter. *(Students do not receive High School credit for this course)*

Test Prep

In the competitive world of college admissions, students should always be looking for ways to improve their application. One of the most effective ways to do so is by improving a student's test scores. In our Test Prep class, students will have the opportunity to learn the techniques and strategies to raise their SAT and ACT scores, with the potential for dramatic improvement. The class will cover all areas of both tests, involve in depth practice with real test questions, and give the opportunity to take full-length practice tests. Ultimately, students will be prepared with the knowledge and confidence necessary to attain their highest potential. *(Students do not receive High School credit for this course)*

ACADEMIC RESOURCES

The Information and Media Center, St. Dunstan's Library

St. Dunstan Library supports the curriculum and mission of the school by providing access to information resources in a variety of formats. The present library, opened in 1993, is in lower Wetmore Hall beside the computer lab and works closely with the school's technology department in providing instruction in the use of educational and information technology.

The library collection includes approximately 9500 books and 600 films (VHS and DVD) as well as subscriptions to 45 periodicals and to online research databases. The ten computers for student use provide software tools and high speed Internet access. The library is also a wireless Internet access point for students with laptop computers. Study tables and carrels, a comfortable reading area, and a conference room offer places for students and faculty to read, work, hold seminars, and view films.

The library also offers assistance and instruction in the research process and on topics such as copyright and maintaining integrity in academic work. In addition, St. Dunstan Library seeks to promote the practice and love of reading by offering a wide variety of both leisure and reading materials and by sponsoring reading programs such as the annual 8th grade North Carolina Battle of the Books.

Nichol's Innovation Lab

Extensive multi-media technology is currently located in the Innovation Lab This classroom equipment includes a powerful multi-media computer, a digital projector, distance learning equipment, a 3-D Printer and a "soft-board" which allows the teacher's lecture notes to be recorded onto the school's server for later study and review.

Learning Resource Program

An added support service, the Learning Resource Program provides additional academic structure. Taking the place of a study hall and taught by professionals, Learning Resource time is used to assure that students understand what is expected of them in each of their core subjects. The Learning Resource teacher, working with a class of no more than four students, teaches time management skills, study and class preparation tactics, as well as assists with writing assignments or other course-specific needs. Learning Resource can be prescribed as a condition of admission or it can be chosen at the discretion of the student's family. In either case, a student is assigned to Learning Resource on a quarter-by-quarter basis and uses the service for only the period of time deemed necessary. Not a cure-all, Learning Resource is simply one way to increase the odds for academic success. There is an additional fee for this service; charges are billed as incurred.

College Counseling

Christ School graduates are accepted by some of the finest colleges and universities in the region and the country. Formal planning for post-secondary studies begins during the freshman and sophomore years, but intensifies during the junior year when the student meets individually with the College Counselor to discuss both preparations for the standardized tests and college options which will best suit the student as an undergraduate.

Early in the senior year, students take the SAT I and/or the ACT for the second time and begin submitting their applications to selected colleges. The faculty supports each student's applications with extensive evaluations and written recommendations.

Every year college admissions officers visit our campus in the fall and winter to give 11th and 12th graders a chance to further familiarize themselves with colleges they may wish to consider through individual and small group discussions.