

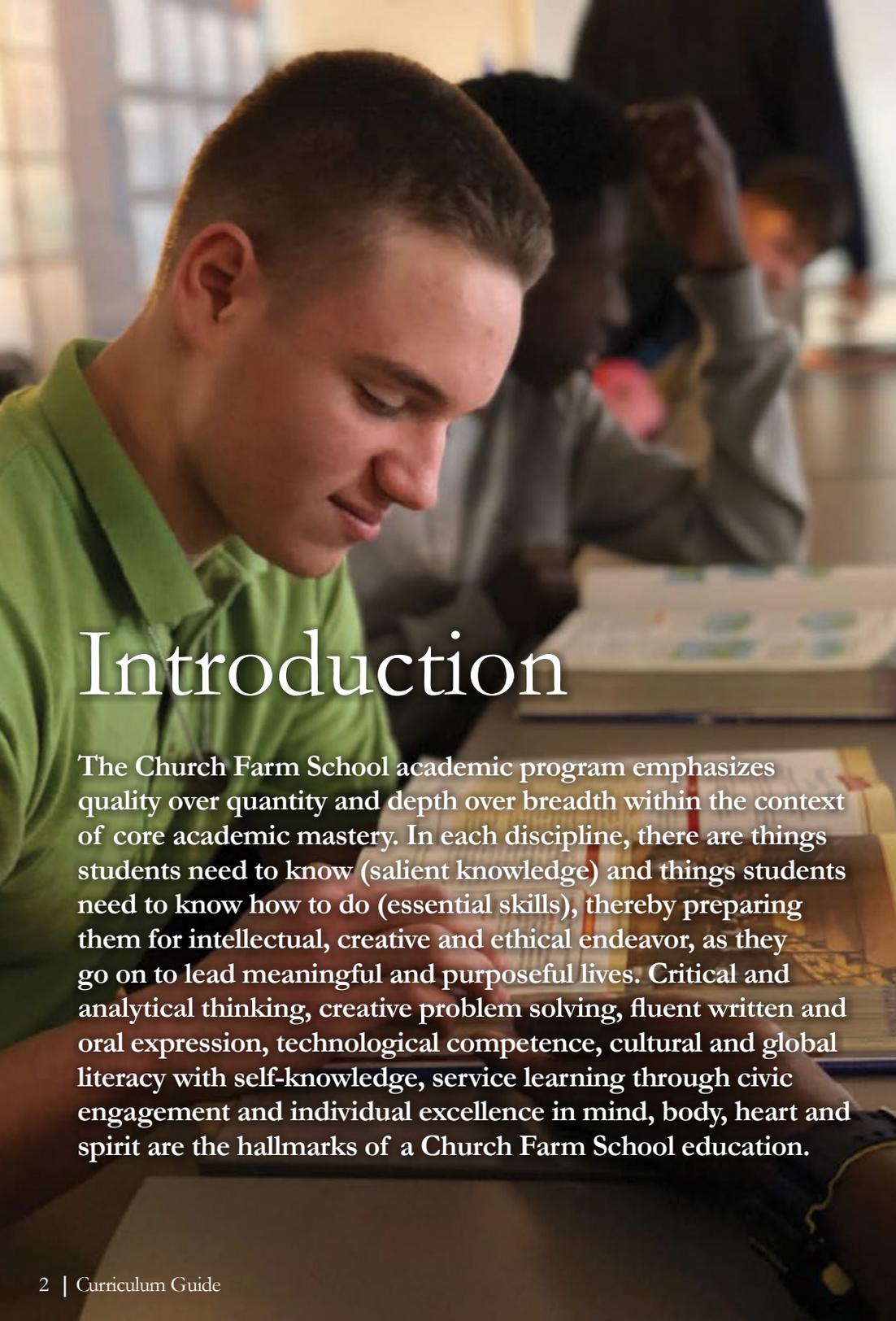


Curriculum Guide

Church Farm School



Inspiring Boys • Fulfilling Dreams



Introduction

The Church Farm School academic program emphasizes quality over quantity and depth over breadth within the context of core academic mastery. In each discipline, there are things students need to know (salient knowledge) and things students need to know how to do (essential skills), thereby preparing them for intellectual, creative and ethical endeavor, as they go on to lead meaningful and purposeful lives. Critical and analytical thinking, creative problem solving, fluent written and oral expression, technological competence, cultural and global literacy with self-knowledge, service learning through civic engagement and individual excellence in mind, body, heart and spirit are the hallmarks of a Church Farm School education.

Church Farm School Graduates Are:

Curious and Passionate Learners

A CFS Graduate is a highly engaged, lifelong learner who is driven by inquiry, views learning as a process, embraces a growth mindset and has a zeal for exploration and discovery.

Compelling Communicators

A CFS Graduate recognizes the power of his voice and embraces his ability to influence the thinking, experiences and actions of others.

Healthy in Mind, Body and Spirit

A CFS Graduate is self-aware and self-reflective, is attuned to his physical and emotional health and pursues the spiritual dimension of life.

Persistent in the Pursuit of Excellence

A CFS Graduate is committed to both individual and collective excellence, is tenacious in its pursuit, and is undeterred by obstacles.

Ethical Agents of the Common Good

A CFS Graduate seeks to understand issues of importance from multiple perspectives, and utilizes his talents and moral reasoning to effect meaningful and positive change in the world around him.

Committed to Global Responsibility

A CFS Graduate recognizes his duty to others, embracing his role as a steward of natural and common resources, and as a leader of his community and within the greater society.

CFS GRADUATION REQUIREMENTS

All students must register for at least six classes per semester. There are two official marking periods each semester, with a total of four during the school year.

Total credits: 22.0

Credit distribution as follows:

English (4)

English 9 – Elements of Literature & Composition (1.0)
English 10 – World Literature (1.0)
English 11 – American Literature (1.0)
Two senior electives (0.5 each)

Mathematics (3)

Algebra I (1.0)
Geometry (1.0)
Algebra II (1.0)

*Students entering CFS above the level of Algebra 1 are required to complete a minimum of three years of high school math.

History (4)

History 9 – World History (1.0)
History 10 – Modern Global History (1.0)
History 11 – United States History (1.0)
Two senior electives (0.5 each)

Science (3)

Engineering Essentials (STEM-9) (1.0)
Biology (1.0)
Chemistry (1.0)

Modern Foreign Language (2)

Spanish I & II or French I & II

* Students entering high school above level one must complete a minimum of two sequential years in the same language.

** Though not required, CFS recommends at least one additional year of foreign language study, as well as math and science, through senior year.

ADDITIONAL REQUIREMENTS

Visual & Performing Arts (1.0)
Religion (.5)
Health (.5)
General Electives (4.0)
Co-curricular

- Athletics (at least two sports per school year)
- Community Service (minimum five hours per school year)

TYPICAL FOUR-YEAR CURRICULAR PLAN

9th Grade (6 credits)

English
World History
Algebra I
Engineering Essentials (STEM-9)
Foreign Language I
Fine Arts / Health

10th Grade (6 credits)

English
Modern Global History
Geometry
Biology
Foreign Language II
Fine Arts / World Religions

11th Grade – (6 credits)

English
United States History
Algebra II
Chemistry
Foreign Language III or General Elective
World Religions/other semester electives

12th Grade (6 credits)

English Elective(s) – 1 credit
History Elective(s) – 1 credit
Pre-Calculus and/or other Math Elective
Physics and/or other Science Elective
Foreign Language IV or General Elective
Fine Arts or other Electives

Total = 24 credits

(includes two general elective credits beyond usual graduation requirements)

Please note that the 22.0 credits required for graduation represent a minimum. Most students graduate with additional credits.

Faculty advisors work with each student to plan their class schedule. Incoming students receive their initial schedules at orientation, and may be tested for appropriate course placement.

Minimum promotion requirements

- To Grade 10: successful completion of 5 credits in grade 9.
- To Grade 11: successful completion of 11 credits in grades 9, 10.
- To Grade 12: successful completion of 17 credits in grades 9, 10, 11.

CFS GRADING SYSTEM

Students are graded on a 0-100 scale in all academic courses. The table below reflects the equivalent letter grade and points on a 4.0 scale, which has been adopted beginning with the Class of 2021.

CFS Scale	Equivalent letter grade	Equivalent points on 4.0 scale
95 – 100	A	4.0
92 – 94	A -	3.7
89 – 91	B +	3.3
86 – 88	B	3.0
83 – 85	B -	2.7
80 – 82	C +	2.3
77 – 79	C	2.0
74 – 76	C -	1.7
71 – 73	D+	1.3
68 – 70	D	1.0
65 – 67	D-	0.7
0 – 64	F	0.0

Effort Grades: Effort is graded from 1 through 5. The degree of achievement realized by a student in a course is the result of the amount of work, study, interest and attentiveness exhibited both in and outside the classroom. Effort grades recognize student intent, including attitude, responsibility and accountability.

MARK EVALUATION

- 5 **Excellent, above and beyond the required**
- 4 **Above average**
- 3 **Average**
- 2 **Below average, needs improvement**
- 1 **Unacceptable**

ACADEMIC HONORS

Honor Roll

Students with an overall average of 92 or above, and no grade below 83 (B) are recognized for achieving academic honors. Honor Roll is based on averages for the first quarter, first semester, third quarter and second semester.

Demonstrated Extra Effort

Students with an effort grade average of 4.5 or above, with no individual effort score below a 4, are recognized each official marking period. (Quarters 1-4)

ACADEMIC ADVANCEMENT POLICY

The following process will be used for approval of Honors and Advanced Placement (AP) courses. This policy is designed to best support these students, while working in accordance with our curriculum and graduation requirements.

Academic advancement is a privilege. Plans for academic placement are developed with the Director of Academics. Students are required to submit a written plan that must be approved by the department chair for the subject, as well as the Director of Academics. Serious consideration will be given to the overall difficulty of a student's schedule to help maintain a healthy balance of all responsibilities.

Student advancement may include classes during the school year and/or summer, and may also include testing out of a subject, simultaneously completing two or more courses in a subject area, summer and/or online course completion. Students may also have the option of completing college level courses. Any costs to enroll in classes not part of the CFS program will be at the expense of the student's family.

In order for a student to qualify for advancement, the student must, during the previous school year, maintain a minimum of an 87 average overall and a minimum of a 92 in the requested subject for advancement. In addition, he must maintain an average of 87 overall and in the specific course or his schedule may be reevaluated, and the student rescheduled into regular course(s).

HONORS AND ADVANCED PLACEMENT POLICY

In order to be approved for Honors and AP courses, students should:

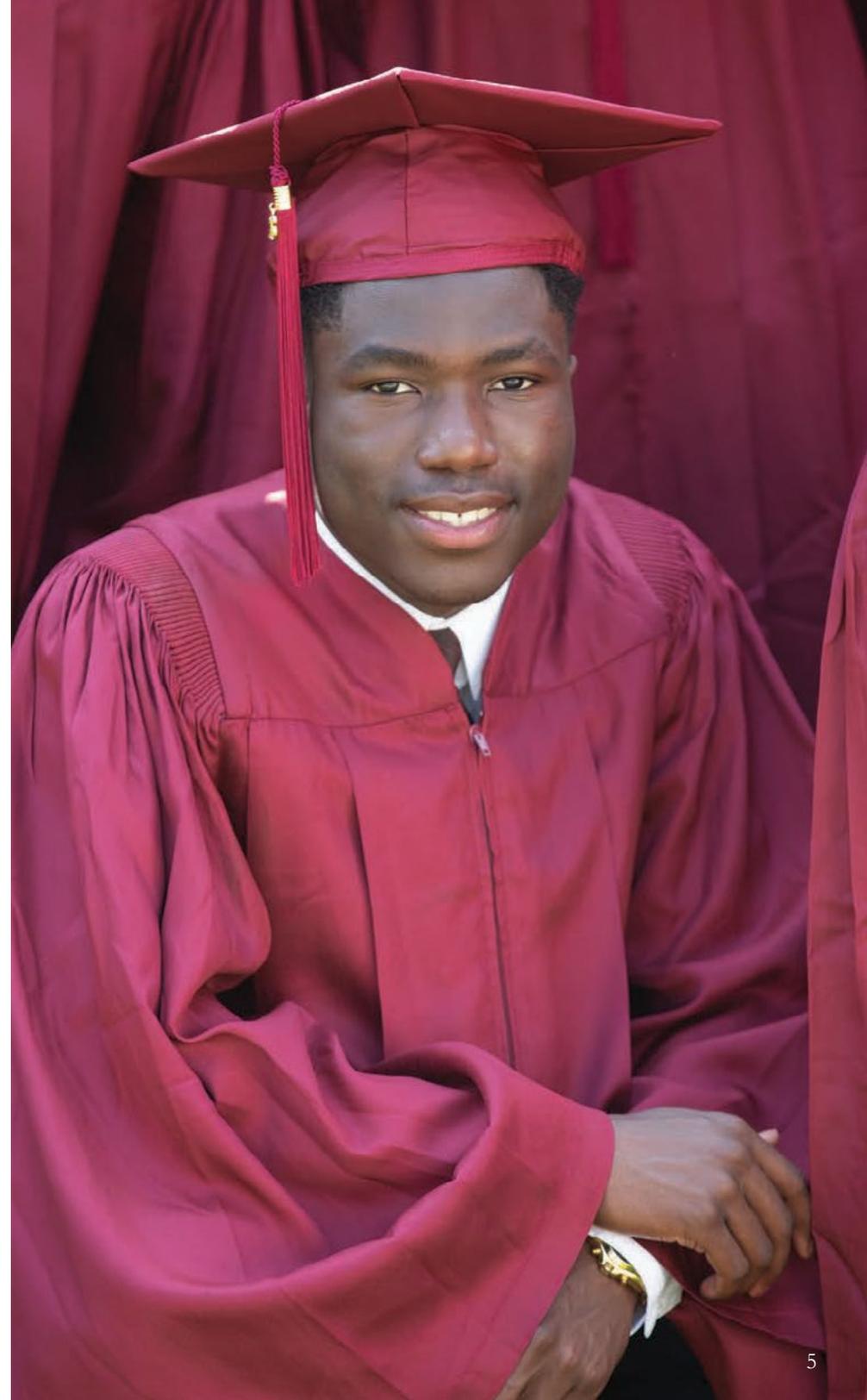
- be strongly recommended by their current teacher in the subject area
- have maintained at least a 92 average in the subject coursework
- achieved an effort grade of 4 or higher
- have an overall minimum average of 87.

Students currently in an honors class, progressing to AP or other honors courses, must have at least an 87 in the current class. Other factors, including standardized test scores and writing ability are also considered.

Permission must be obtained from both the student's current and prospective teacher. Once enrolled, students may not drop an Honors/AP course after the regular drop-add period without specific teacher recommendation and approval from the Director of Academics.

Students taking AP courses are not mandated to take the AP exams, but are strongly encouraged to do so. Students/families are responsible for paying for the cost of the exams. If a student opts not to sit for the AP exam once the exam has been ordered, the cost for the exam will be the responsibility of the student/parent and will be charged to the student's account.

NOTE: Any exceptions to this policy are at the discretion of the chair of the specific department and the Director of Academics.



COURSE DESCRIPTIONS

The course descriptions that follow represent the full spectrum of classes offered at Church Farm School. Each year a subset of these classes are chosen for student enrollment based on the current level of interest and scheduling considerations.

Humanities

The Humanities Department provides students with a global outlook and cultural understanding of historical and modern trends and issues facing the world today. Students must be able to demonstrate an understanding of and empathy for cultures, societies and faith traditions outside of their own in order to succeed in today's world. The Humanities Department uses both fiction and nonfiction sources to analyze and interpret world cultures past, present and possible.

ELEMENTS OF LITERATURE AND COMPOSITION (1.0)

Grade 9 | Required

Both semesters focus on intensive units in vocabulary, grammar (from parts of speech to clauses) and literature from short stories. The second semester encourages creative writing and the writing process involved in completing a term paper utilizing the APA format.

WORLD HISTORY (1.0)

Grade 9 | Required

How did the universe begin? Are humans still evolving? What does the future hold? This course takes on these questions, which originate with the dawn of time, and gives you a framework to tell the story of humanity's place in the universe. This course will help students see the overall picture and make sense of the pieces: it looks at the past from the Big Bang to modernity, seeking out common themes and patterns that can help us better understand people, civilizations and the world we live in.

WORLD LITERATURE (1.0)

Grade 10 | Required | College Prep or Honors

This inquiry-based course is designed to enhance literary analysis and composition skills by employing close readings of world texts. Students develop an appreciation for other cultures, their ideals and their contributions to the human record. This course is intended to challenge students, be a catalyst for critical thinking, reading and writing, and to allow course participants to employ what is learned through student-centered projects, creative and formal writing assignments and other assessments. Grammar and vocabulary development is an integral part of this course. The Honors section of this course must be taken in conjunction with Honors Modern Global History 10.

MODERN GLOBAL HISTORY (1.0)

Grade 10 | Required | College Prep or Honors

This is a year-long course for 10th graders that will delve into global history from the 20th to 21st centuries. The course will examine how the expansion of the western world and globalization has led to a connected global society in the 21st century. The Students will examine a variety of countries, cultures, beliefs, ideologies, political skirmishes, military excursions and social changes. The Students will utilize varying sources including primary documents, articles, maps, textbooks and novels. This course will allow each student to grow as a member of a global society and interact in the ever-changing world. The Honors section of this course must be taken in conjunction with Honors World Literature 10.

AMERICAN LITERATURE AND COMPOSITION (1.0)

Grade 11 | Required | College Prep

This survey course introduces students to America's literary heritage, with a thematic focus on freedom and bondage, heroes/heroines, identity/coming of age and expansion. The content includes fiction, nonfiction, poetry and drama selections representative of the major literary periods. Students are expected to read, write, discuss and think critically about the selections, which include at least four novels, a play, short fiction, essays and poetry. During this writing-intensive course, students will develop their expository, persuasive, critical and creative writing skills.

ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION (1.0)

Grade 11 | Qualifying students may take instead of American Literature

The AP Language and Composition course is a college-level course in which students will closely examine rhetoric as "the art of finding and analyzing all the choices involving language that a writer, speaker, reader or listener might make in a situation so that the text becomes meaningful, purposeful and effective" (David Joliffe, AP exam creator). Students will develop a discerning appreciation for a variety of texts, through careful examination of rhetoric and literary devices. This is a writing-intensive course that seeks for students to develop their personal style through drafting analytical and persuasive essays. Students will study a variety of literary genres, including non-fiction, historical fiction, plays and poetry. There is an expectation that students will take the AP Language and Composition exam.

UNITED STATES HISTORY (1.0)

Grade 11 | Required | College Prep

This course focuses on the growth of the U.S. from Post-Reconstruction to the present day, offering an issue-oriented approach in the study of the people of the United States and their history. Major themes and traditions that make America exceptional will be explored in great detail. The course is designed to acquaint students with core characteristics and values found throughout the history of the United States and its people. Events and significant individuals will be analyzed on a daily basis.

ADVANCED PLACEMENT UNITED STATES HISTORY (1.0)

Grade 11 | Qualifying students may take instead of United States History

This course covers U.S. History from the colonial period up to present day, offered to juniors who meet the requirements of the Honors/AP policy. The course will be treated as a college level course, and the amount of material covered throughout the year is considerable and will require the students' willingness to perform many tasks outside of the classroom. The course will take an in-depth look into the themes of American history from its founding to the present. Students will need to read from the assigned text and supplemental reading sources, as well as primary sources. Writing skills will also be a necessity, and we will develop the essential elements for historical writing with several essay assignments for each unit of study. Students will need to use critical thinking and evaluative skills, while interpreting documents, charts, pictures and graphs. Students will be prepared to take the AP US History exam in May.

ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION (1.0)

Grade 12 | Elective

This is an Honors English course offered to selected seniors who will have an opportunity to take the College Board AP Exam in May. Students will be engaged in the careful reading and critical analysis of all types of literature. Through the close reading of selected texts, students will examine the ways writers use language to provide both meaning and pleasure for their readers. Students will study structure, style and themes, as well as the use of figurative language, imagery, symbolism and tone. Writing will be an integral part of the AP English Literature and Composition course, including the critical analysis of literature, and will include expository, analytical and argumentative essays. Our goal is to increase students' ability to clearly explain what they understand about literary works and why they interpret them as they do. After developing their own ideas about a work of literature, students will refine and deepen their insights through classroom discussion.

COLLEGE WRITING (0.5)

Grade 11-12 | Elective

This course is designed to enhance the writing skills students will need as they apply for and gain admission to college. The focus of the course is on academic writing and all steps of the writing process – students should know what to expect when they begin writing at the collegiate level. Students will be exposed to and work with the major styles of citation, including MLA and APA. Critical thinking will be emphasized; students will write their own essays, but will also discuss, closely read and analyze works of fiction and nonfiction in response texts. Students will be reminded of the major genres, and sample expository, persuasive and poetical texts. The instructor may also select short stories or works of fiction for analysis/comparison.

CREATIVE WRITING (0.5)

Grade 11-12 | Elective

This course focuses on the invention and development of imaginative writing in both form and content. Creative writing genres include fiction, poetry and drama written in various forms, such as allegories, short stories, odes, children's poetry, limericks, one-act plays and epitaphs. Students will improve their writing, grammatical and analytical skills. The oral recitation of these works will also be integral to enhance public speaking skills. Each student develops a portfolio designed to fulfill his goals and will include work reinforcing the relevant principles.

LITERATURE, FILM AND SOCIETY (0.5)

Grade 11-12 | Elective

This semester-long course will focus on articles, essays, scholarly papers, short works, book chapters and videos/films – the types of media frequently assigned in college courses. Works will be from a variety of sources and will be drawn from the worldwide dialogue on societal issues and experiences. During the course, students will a) be exposed to readings/films about current domestic and international issues and points of view, exploring how humanity relates and reacts to them; b) develop techniques to better comprehend, understand and appreciate what they are reading; and c) learn how to more skillfully respond both verbally and in writing. The course will culminate with a visual, oral and/or written capstone project.

IMAGINATIVE LITERATURE (0.5)

Grade 11-12 | Elective

This course features a survey of four sub-genres of Imaginative Literature: Mythology, Science Fiction, Fantasy Literature (including fables and fairy tales) and Horror. Students will learn the key attributes of each through critical inspection of works of classic and modern literature, comic books, graphic novels, television and film. To promote student engagement and because the body of work for each sub-genre is so immense, students will help choose which literary and visual works will be used. The course will culminate with a visual, oral and/or written capstone project.

PHILOSOPHY & LITERATURE (0.5)

Grade 11-12 | Elective

In this course we will examine how philosophical ideas are presented in significant texts. We will discuss the terminology of philosophy, understand its origin, and examine how these ideas exist in novels and other pieces of literature. This discussion-based class will require students to read the literature, come to class with ideas and questions, and write essays analyzing the texts in conjunction with the philosophies discussed.

LITERATURE & SPORTS (0.5)

Grade 11-12 | Elective

In this course we will analyze the evolution and importance of athletics in our society through significant texts. We will discuss and write about why sports has become a major part of our culture, and how the human condition is connected to these ideas. This discussion-based class will require students to read the literature, come to class with ideas and questions, and write essays analyzing the texts in conjunction with the concepts discussed.

CONTEMPORARY HUMAN RIGHTS AND REVOLUTIONS (0.5)

Grade 11-12 | Elective

Our contemporary age possesses progressive technology and globalization; meanwhile, international political revolutions and human rights violations remain. This semester-long humanities course allows for the investigation and close examination of these global violations through historical and literary lenses. This course will be co-taught by English and History faculty and offered as either a History or English credit. Students will experience new and interesting topics not explored in a survey course that will challenge them to use higher level critical thinking skills in order to complete problem-based projects, work collaboratively, research issues effectively and communicate findings clearly.

GREAT IDEAS OF HUMANITY (0.5)

Grade 11-12 | Elective

This course is an interdisciplinary exploration of the “Great Ideas” and great writings that form the basis for human civilization. Students will study a diverse selection of readings from a wide array of thinkers who have contributed to shaping our world and culture. This course will address essential themes in philosophy, literature and history, and is offered for either History or English credit. In a seminar environment, students will learn to think critically, question their assumptions and biases, consider different points of view, practice the art of dialogue and take responsibility for their learning and opinions. Throughout the course students will be presenting their own original ideas through written essays, class presentations, debates and discussions.

MICROECONOMICS: Economics & the Individual (0.5)

Grade 11-12 | Elective

This course examines the behavior, decision-making and satisfaction of individuals, households and firms in consumer and producer markets. Emphasis is placed on the structures of private markets in relation to the provision of public goods and services. Students will develop an understanding of fundamental economic concepts, interactive and collaborative simulations, project-based inquiry, critical review of current events and individual and group presentations. We will also consider personal finance topics such as credit and interest, insurance, budgeting and money management, risk tolerance, saving and investing.

MACROECONOMICS: Economics & Government (0.5)

Grade 11-12 | Elective

This course examines how society prioritizes and organizes decision-making through economic and governing systems. Domestic, cross-cultural and international economic development is examined, with an emphasis on understanding how governments’

monetary and fiscal policies and the provision of public goods and services are used to influence economic growth and markets. We will also address employment/unemployment, inflation, international trade, poverty, budget deficits and public debt by developing an understanding of fundamental economic concepts and business cycles on a systemic level. Students will participate in interactive and collaborative investigation, critical review of current events and individual and group presentations.

PSYCHOLOGY (0.5)

Grade 11-12 | Elective

Psychology is defined as the “scientific study of the mind and behavior” (National Standards for the Teaching of High School Psychology, 1999). In this course, students will be introduced to a range of topics in the field of psychology, to provide students with an understanding of human thought and behavior. Content will be derived from the seven primary domains of psychological study, with the possibility of studying individual variation (motivation, emotion, personality, psychological disorders), sociocultural context (social interaction, sociocultural diversity), cognition (memory, thinking, intelligence), development and learning (lifespan development, learning, language development), and biopsychology (biological bases of behavior, consciousness). Student interests and preferences will be considered in the choice of course topics.

SOCIAL AND CULTURAL ANTHROPOLOGY (0.5)

Grade 11-12 | Elective

This course focuses on the comparative study of culture and human societies. Students will seek an understanding of humankind and all of its diversity by examining culture and society. Students will learn the general principles of culture and society, and then apply these principles to explore problems and issues associated with the complexity of modern societies in local, regional and global contexts. The study of anthropology offers critical insight into the continuities as well as the dynamics of social change and the development of societies, and challenges cultural assumptions. Students will study these elements while also participating in observations and empirical studies of social groups throughout the course.

WORLD RELIGIONS (0.5)

Grade 10-12 | Required

In this course, students will study the beliefs, practices and scriptures from major world religions, comparing and contrasting them to each other. The fundamental beliefs of Judaism, Christianity, Hinduism, Islam and Buddhism will be examined.

Foreign Language Department Philosophy

The study of a modern world language will enable students to communicate effectively in real-life situations. Students will make connections and comparisons between the culture studied and their own, by developing appropriate skills for social and cultural competence. This will prepare them to function effectively in diverse work and living environments and to become a more integral member of the global community. Students will also acquire vital problem-solving and critical thinking skills that will enhance their learning in other core subject areas.

CFS requires all students to complete a minimum of two consecutive years in the same language. This is generally levels I and II; however, if a student enters CFS in 9th or 10th grade above level I, he is expected to complete at least two years at the appropriate course level. Competitive colleges seek students who have achieved competency, or a minimum of level 3, within a given language.

FRENCH I (1.0)

Grade 9-12

Students will study the culture of various French-speaking parts of the world, while learning to communicate with a practical, proficiency-oriented program. Culture, grammar and vocabulary are presented in a communicative manner, enabling students to speak, read, write and understand authentic French.

FRENCH II (1.0)

Grade 9-12

Students in Level II will continue to review, reinforce and expand their knowledge of the culture, grammar and vocabulary of the French-speaking world. Students will further develop their skills in reading, writing, speaking and listening to French presented in a culturally authentic manner.

FRENCH III (1.0)

Grade 9-12 | Recommended

Students in Level III continue to explore the more intricate grammatical structures of the French language through listening, speaking and, to an increasing extent, reading and writing. The study of various works of literature, songs and films will allow students to have a better understanding and appreciation of this language and the culture of those who speak it.

FRENCH IV (1.0)

Grade 9-12 | Elective

Students in Level IV will demonstrate knowledge of the advanced grammatical structures of French. In addition to improving their speaking facility, they will demonstrate their abilities through reading, writing and discussing excerpts from significant works of French literature and cinema.

SPANISH I (1.0)

Grade 9-12

Students will study the culture of the various Spanish-speaking parts of the world while learning to communicate with a practical, proficiency-oriented program. Culture, grammar and vocabulary are presented in a communicative manner, enabling students to speak, read, write and understand authentic Spanish. Diverse topics stimulate students to look beyond the classroom.

SPANISH II (1.0)

Grade 9-12

Students in Level II continue to review, reinforce and expand their knowledge of the culture, grammar and vocabulary of the Spanish-speaking world. Students learn to comprehend spoken Spanish, and to speak, read and write in a culturally authentic manner.

SPANISH III (1.0)

Grade 9-12 | Recommended

Students in Level III continue to explore the more intricate grammatical structures of the Spanish language through listening, speaking and, to an increasing extent, reading and writing. The study of various works of literature allows students to have a better understanding and appreciation of this language and its cultures.

HONORS SPANISH III (1.0)

Grade 10-12 | Recommended

This course is designed for students with a keen interest and enthusiasm for Spanish language and culture. The primary objective of the course is to achieve communicative and cultural competence with an emphasis on developing greater proficiency of the four essential skills of listening, speaking, reading and writing introduced in Spanish 1 & 2. The course will be conducted only in Spanish and will include the use of language acquisition skills in a variety of settings – discourse, multimedia resources and authentic selections from literary works and current events in Spanish. *Students successfully completing this course will be eligible to take Advanced Placement Spanish in the following year.*

SPANISH IV (1.0)

Grade 11-12 | Elective

Students in Spanish IV will demonstrate knowledge of the grammatical structures of Spanish. They will demonstrate their abilities through reading, writing and discussing significant works of Hispanic literature, current events and film in the Spanish Language. Students will also focus on using advanced communication skills in all activities.

ADVANCED PLACEMENT SPANISH (1.0)

Grade 10-12 | Elective

This course is conducted almost exclusively in Spanish. All students are encouraged to practice Spanish in a variety of settings, through a variety of tasks. The four main skills (listening, reading, writing and speaking) are stressed on a regular basis through classroom activities. AP Spanish students should be able to use the Spanish language to:

- Understand dialogues and conversations, oral presentations, lectures and narratives, newspaper and Internet articles, formal and informal letters and short stories from a variety of authors.
- Express themselves orally through persuasive arguments, debate, circumlocution, asking questions and providing accurate, detailed descriptions.
- Write in a variety of styles for different audiences.

Spanish Advanced Placement stresses accuracy in language use to produce work comparable to that of a native speaker or advanced second language student. Each student will possess superior knowledge of all aspects of language learning.

STEAM

Science Department Philosophy

The Science Department recognizes the increasing demand for scientific and technological literacy in the workforce and society as a whole. The rapid advancements in technology, medicine, energy production and conservation, as well as engineering, continue to impact societal issues and career pathways. We endeavor to provide students with an understanding of key concepts and skills needed to prepare them for future academic experiences, and to provide a basis to evaluate applications to real-world problems.

ENGINEERING ESSENTIALS

Grade 9 | Required for students entering CFS in 9th grade

This course serves as an introduction to engineering and technological studies, with a special emphasis on the interrelationships of STEM disciplines and 21st century knowledge and skills in the pursuit of solving real-world problems. Students will learn about safety while working with tools, machines, materials and processes as they develop their engineering and technological literacy through lessons and hands-on activities.



BIOLOGY (1.0)

Grade 9-10 | Required

This course emphasizes the concepts and skills that apply to the study of living organisms. Units of study explore areas as small as biological molecules including all the way up to entire ecosystems around the world. Students will study the mechanisms involved in cell function, energy conversion, genetics, reproduction, evolution and ecology. Particular emphasis will be placed on application of concepts and skills to laboratory experiments and real-world problems.

CHEMISTRY (1.0)

Grade 10-11 | Required

This course emphasizes the concepts and skills that apply to the study of matter and energy. Units of study explore areas such as atomic structure, types of matter, chemical compounds, thermochemistry, chemical reactions, chemical quantities, gases, solutions, acids and bases. Students will study the mechanisms involved in chemical and physical changes to matter and energy conversions. Particular emphasis will be placed on application of concepts and skills to laboratory experiments and real-world problems.

PHYSICS (1.0)

Grade 11-12 | Recommended

A recommended course for students who have advanced through Biology and Chemistry. This course emphasizes the concepts and skills that apply to the study of forces. Units of study explore areas such as kinematics, mechanics, gravitation and energetics, and includes application of algebraic, trigonometric and graphical methods to problem solving. Particular emphasis will be placed on application of concepts and skills to real-world problems. Physics is offered at both a regular and advanced level, to accommodate students at varying levels of math ability.



ADVANCED PLACEMENT BIOLOGY (1.0)

Grade 11-12 | Elective

This course is designed to be the equivalent of an introductory college-level course, usually taken by biology majors during their first year. It will include topics such as molecules and cells, heredity and evolution, and organisms and populations. The aim of the course is to provide students with the conceptual frame-work, factual knowledge and analytical skills necessary to deal critically with the rapidly changing science of biology.

ADVANCED PLACEMENT CHEMISTRY (1.0)

Grade 11-12 | Elective

This course is designed to be the equivalent of the general chemistry course usually taken during the first college year. This is an academic, quantitative chemistry course and involves the study of atoms and molecules and how they interact according to physical laws. Some of the subjects covered include the atom, stoichiometry, solutions, thermochemistry, periodic properties, chemical bonding, gases, intermolecular forces, kinetics, equilibrium, oxidation-reduction, electrochemistry and nuclear chemistry. Students interested in taking this class must be willing to commit the time necessary to completing labs and extensive outside work.

ENVIRONMENTAL SCIENCE & SUSTAINABILITY (1.0)

Grade 12 | Elective

This course emphasizes the concepts and skills that apply to the study of the environment. Units of study explore areas such as matter cycles, human impact on environmental resources, renewable/non-renewable energy resources, global change, and engineering sustainability. Particular emphasis will be placed on application of concepts and skills to laboratory experiments and real-world problems.

HEALTH (0.5)

Grade 9-10 | Required

The course is designed to reinforce students' ability to make healthy decisions throughout their lives. Study begins with a review of body systems and decisions regarding tobacco, alcohol and drugs. Emphasis is placed on making healthy decisions in college and beyond. Topics include nutrition, fitness, healthy relationships, birth control and sexually transmitted infections. Health concludes with the study of first aid and emergency care.

COMPUTER SCIENCE PRINCIPLES (0.5)

Grade 10-12 | Elective

The course introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. Topics covered include: understanding the structure of the Internet, using digital information, introductory programming and app development, as well as issues of privacy, security and big data.

INTRODUCTION TO COMPUTER-AIDED DESIGN (0.5)

Grade 10-12 | Elective

Introduction to CAD will introduce students to both 2D and 3D modelling concepts through the use of multiple pieces of software including *Adobe Illustrator*, *Tinkercad* and *Autodesk Fusion360*. Students will learn how to take real world items and render them in 3D space as well as design models from the ground up for export. Students will design with final output in mind, and will explore AR (augmented reality), VR (Virtual reality), 3D printing and laser cutting throughout the course.

Mathematics Department Philosophy

The Mathematics Department endeavors to convey the beauty of mathematics while developing the analytical and descriptive skills necessary to meet the challenges of a professional life.

ALGEBRA I (1.0)

Grade 9 | Required, if not taken prior to high school

This is the first of three courses required for graduation. It is designed for students of average or above average ability and covers the traditional syllabus of numbers, variables, equations and factoring.



GEOMETRY (1.0)

Grade 9-10 | Required | College Prep

The first semester, “Classical Geometry,” is spent developing a systematic body of knowledge using deductive proof. The value of indirect reasoning is demonstrated and used. While geometric relationships are the focus, the rational skills developed are applicable anywhere in the educational process. In the second semester, “Applied Geometry,” the relationships found in basic geometric shapes are algebraically analyzed. Transformational geometry is used to investigate similarity along with traditional algebra of proportionality. The course concludes with an extensive study of areas and volumes.

ALGEBRA II (1.0)

Grade 9-11 | Required | College Prep or Honors

This course covers standard algebra topics, as well as the development of the trigonometric ratios and functions and an introduction to sequences and series. It is designed for those students who have demonstrated aptitude and interest in mathematics. A solid foundation will be established for continued study in the advanced elective courses offered by the department.

PRE-CALCULUS (1.0)

Grade 11-12 | Recommended | College Prep or Honors

Coordinate geometry is reviewed followed by polynomial functions and their graphs, and a review of exponents and logarithms. The trigonometric functions are studied in-depth and applications of the laws of sines and cosines are developed. Polar coordinates are introduced and used to graph complex numbers. Parametric equations of a line are developed in the study of geometric and algebraic representations of vectors. The course concludes with the development of the concept of a limit and the derivative as the slope of a curve.

AP CALCULUS AB (1.0)

Grade 11-12 | Elective

This course is designed to cover all the topics normally covered in a traditional college level Calculus I course. After a review of the concepts of functions and their graphs, the topics of limit and continuity are introduced. The derivative concept is developed and its applications studied. The integral is developed as an anti-derivative and, through the introduction of Riemann Sums, the definite integral is studied as a consequence of the Fundamental Theorem of Calculus. We conclude with techniques of integrations and application of the integral to volumes of solids.



AP CALCULUS BC (1.0)

Grade 11-12 | Elective

This course provides a deeper understanding of the concepts and methods of single-variable calculus developed in AP Calculus AB. There is continued emphasis on calculus applications and techniques, with the use of multiple representations including graphic, numeric, analytic, algebraic, verbal and written responses. Technology is an integral part of the course and includes the use of graphing calculators. Main topics include limits, derivatives, integration and graphing of these functions from the AB exam. Students are expected to solve problems in a variety of ways as required by the AP Calculus program: graphically, numerically, analytically and verbally.

STATISTICS (1.0)

Grade 11-12 | Elective

The purpose of the Statistics course is to encourage student awareness of the importance of mathematics in the modern world. This course is an introduction to the study of probability, interpretation of data and fundamental statistical problem solving. The course will cover basic statistical concepts that will prepare the student to take a college-level statistics course in the future. Students will explore and analyze data by observing patterns or the absence of patterns, interpret information from graphical and tabular displays, apply appropriate statistical models to infer information from data and learn to use technology in solving statistical problems.

Art Department Philosophy

We respect an individual's right for artistic expression. We value each student's thoughtful response to artistic challenges and support him as he develops an awareness and appreciation for other's methods of artistic expression. We encourage high creative and technical standards and personal growth within one's own work. Exhibition opportunities are arranged both within the school and in the community.

INTRODUCTION TO ART (0.5)

Grade 9-12 | Elective

General art students explore a variety of two- and three-dimensional mediums such as drawing, painting, printmaking, sculpture and clay. The fundamental principles of art and design are covered. Emphasis is on individual artistic growth and creative expression. This class is intended to be an introduction to visual art, but also preparation for more advanced art classes. Open to all.

DRAWING & PAINTING (0.5)

Grade 9-12 | Elective

Drawing and Painting students explore various ways to develop skills in drawing and painting. They are encouraged to develop observational drawing skills through still life, figure, and landscape, then use this work as preparation for assignments in other media. Materials and processes may include graphite, charcoal, crayon, pastels, inks, watercolor, tempera, acrylic and oil. There is an opportunity for additional work of the student's choice to help enhance each student's individual uniqueness as an artist. Each student will have a final gallery show of their body of work.

PRINTMAKING (0.5)

Grade 9-12 | Elective (offered in '20-21, then alternate years)

This course is designed to introduce students to the techniques of fine art printmaking. We will explore monotype, block printing, collagraph, and screen printing. This course covers the distinctive nature of printmaking including proper use of inks, paper, plate preparation, registration, and printing processes. The goal is for students to develop personal visual expression while learning the skills to produce imagery in multiples.

SCULPTURE (0.5)

Grade 9-12 | Elective (offered in alternate years)

This course offers an exploration of sculpture through a variety of mediums such as clay, stone, paper, wood and wire, as well as non-traditional materials. Emphasis is on design,



composition and creative expression in an open atmosphere. Students will be required to present a digital portfolio at the end of the semester.

CLAY I (0.5)

Grade 9-12 | Elective

Students will explore clay construction techniques through handbuilding and throwing on the potter's wheel. Surface treatments include glazing as well as non-traditional methods. Emphasis is on sound construction, personal growth, and creativity. All are expected to participate in studio cleanliness and maintenance, group discussions and to develop an individual portfolio.

CLAY II (0.5)

Grade 9-12 | Elective

This is an advanced class designed for students who have successfully completed Clay I or who can demonstrate equivalent artistic and technical competency. Advanced students may choose to work on independent assignments and/or class assignments in consultation with the teacher. They are expected and encouraged to develop personal areas of interest.

DIGITAL PHOTOGRAPHY I (0.5)

Grade 10-12 | Elective

Students will learn how to use shutter, aperture and ISO to control lighting and exposure of their photographs. We will explore what makes an interesting and expressive photograph through assignments, group discussion and individual presentations. Post-production editing and photo management will also be covered. Equal emphasis will be placed on technical skill and creative expression.

DIGITAL PHOTOGRAPHY II (0.5)

Grade 10-12 | Elective

This is an advanced class designed for students who have successfully completed Digital Photography I or who can demonstrate equivalent artistic and technical competency. Students will build on prior technical and artistic skills. This class includes still life, low light, action and candid photography challenges, along with on and off-campus field trips. Advanced editing will use *Lightroom* and *Photoshop*. Students are expected to exhibit creativity and develop an individualized portfolio.

WOODWORKING I (0.5)

Grade 9-12 | Elective

This class is designed for students who have little or no prior experience in woodworking. It introduces basic building techniques with hand and machine tools, accurate measurement, and safety skills. All are expected to follow safety instructions and protocol. Students will also explore how to design their own projects and express creative vision through wood.

WOODWORKING II (0.5)

Grade 9-12 | Elective

Students will build on the skills and knowledge learned in Woodworking I. The students will be assigned more advanced projects, as they will have an understanding of how the shop operates and how to safely use all of the heavy duty machines and tools. Students have the opportunity to create side tables, chairs and lathe spun bowls, along with various other projects that they desire. Students are encouraged to be creative in designing and planning independent projects.

Music Department Philosophy

The goal of the music department is to provide a comprehensive outcome-based music curriculum that includes all styles and aspects of music, for students of all ability levels and interests. In addition, the department seeks to develop and nurture an aesthetic awareness of music and the arts in all students. We believe it is important to allow for the outlet of musical creativity in all students by equipping them with the necessary rudiments.

BAND (1.0)

Grade 9-12 | Elective

The Church Farm School Band rehearses and performs all styles of instrumental music for concerts, school functions such as pep rallies and outside engagements. It is understood that extra rehearsals can be anticipated close to an upcoming performance. Dedication and commitment to Band are required for the entire year in order to maintain a high standard of excellence. All members are eligible to audition for participation in PMEA band, orchestra and jazz ensemble festivals. Course may be taken for credit in multiple years.



CHOIR (1.0)

Grade 9-12 | Elective

The Church Farm School Choir rehearses and performs all styles of sacred and secular choral music for chapel services, school functions and outside engagements. The Choir presents annual Christmas and spring concerts, and collaborates with other school choirs as well as professional musicians. Students will learn how to develop strong vocal and choral singing technique as well as fundamental music reading skills. Dedication and commitment to the Choir are required for the entire year in order to maintain a high standard of excellence. All members are eligible to audition for participation in the PMEA choral festivals and the CFS Singers. Course may be taken for credit in multiple years, and students are encouraged to do so.

INTRODUCTION TO MUSIC (0.5)

Grade 9-12 | Elective

This course introduces students to active listening, discussing, analyzing and participating in a wide variety of musical styles. Students will learn the basics of musical notation and composition, as well as the fundamentals of music in order to develop skills for exploring genres including jazz, world, classical, and music for film and the stage. Students will also learn how music is connected to the world in which it was created in order to enhance their understanding and appreciation. This is recommended as a first course for students with little or no background in music, or for those who are interested in developing skills in listening to and participating in creating music.

MUSIC TECHNOLOGY I (0.5)

Grade 9-12 | Elective

This course provides a real-world application of technologies currently in use in the music industry. The class will offer a combination of hands-on exploration, creative projects, group discussions and readings. We will also study current music industry trends and topics. The course will include sound reproduction, electronic composition and investigation of audio equipment, including *NoteFlight* and *GarageBand* as well as in-depth mixing using *VirtualDJ*.

MUSIC TECHNOLOGY II (0.5)

Grade 9-12 | Elective

Music Technology II is an advanced class designed for students who have successfully completed Music Technology I or who can demonstrate equivalent artistic and technical competency. We focus on larger projects relating to advanced topics in music technology. Projects may include services to the CFS community and cross-curricular topics in other school subject areas. Students will explore music and film, songwriting, lyricism,

equipment studies, composition through *NoteFlight* and *GarageBand* as well as in-depth mixing using *Virtual DJ*.

PIANO I (0.5)

Grade 9-12 | Elective

This course is designed for the student with little or no prior keyboard study, with emphasis on the development of basic keyboard skills and fluency in music reading. The class includes an introduction to note and rhythmic reading, harmonization and scales, as well as basic music theory terms through exploring standard keyboard repertoire. Students will also develop a general knowledge of music, the history of the piano and important individuals in the world of piano composition and performance. All students will prepare and present a recital for the class.

PIANO II (0.5)

Grade 9-12 | Elective

This is an advanced Piano course designed for students who have successfully completed the Piano I course or who can demonstrate equivalent technical and musical reading competency. Students will continue to develop their keyboard skills and musical knowledge through score reading, identifying all major keys and key signatures, chords and inversions, while also playing scales and chord progressions. This course focuses specifically on teaching students how to practice efficiently and effectively, while using their skills to listen critically to other performances. The course will culminate in each student playing in a public recital.

GUITAR I (0.5)

Grade 9-12 | Elective

This course is designed for the student with little or no prior guitar study. Students will develop fundamental skills in music reading and conceptual understanding. This course will also introduce transposition, harmonization, sight reading, improvisation, and basic guitar repertoire. Students will experience writing through assigned papers and will develop knowledge of general music, they will also learn to play chords and notes, develop guitar applications, study music theory, and practice instrument care and maintenance. All students will prepare and present a recital for the class.

GUITAR II (0.5)

Grade 9-12 | Elective

This is an advanced Guitar course designed for students who have successfully completed the Guitar I course or who can demonstrate equivalent technical and musical reading competency. Students will continue to develop their chord and scale technique and musical knowledge through score reading, identifying all major keys and key signatures, chords and inversions, while also playing scales and chord progressions. This course focuses specifically on teaching students how to practice efficiently and effectively, while using their skills to listen critically to other performances. The course will culminate in each student performing in a public performance.



Athletics Department Philosophy

At CFS, athletic participation is an important part of our total program, and athletics plays an integral role in each student's experience at school. Our coaches serve as teachers and mentors, working closely with our student-athletes to pursue excellence while developing leadership, sportsmanship, teamwork, and an appreciation for lifelong fitness. We are proud of our championship-caliber teams as well as our range of offerings, to provide the opportunity for each student to participate at an appropriate level.

CFS offers a range of both team and individual athletic opportunities. Participation in our athletic program or other after-school options is required for every student each season. Opportunities include interscholastic teams and club programs.

FALL

Soccer: Varsity, JV and JV B
Cross Country: Varsity and JV
Golf: Varsity and JV
Club Options: Strength/Fitness, Community Service, Career Experience, Team Sports, Theatre

WINTER

Basketball: Varsity, JV, JV B and 9th Grade
Wrestling: Varsity and JV
Winter Track: Varsity
Bowling: Varsity and JV
Club Options: STEAM, Strength/Fitness, Community Service, Robotics

SPRING

Baseball: Varsity and JV
Tennis: Varsity and JV
Track & Field: Varsity and JV
Lacrosse: Varsity and JV
Club Options: Strength/Fitness, Community Service and Team Sports

Participation/attendance:

All CFS students are required to participate on an interscholastic team a minimum of two seasons each year. The third season may be spent on an interscholastic team, as a manager or with an after-school club. Club options may vary by year. Seniors who are unable to participate on two interscholastic teams due to roster limits may apply for a waiver of the two-season rule with the Director of Athletics.

Students must attend all team practices and competitions, including Friday afternoon and weekend obligations. Any student choosing to take part in a non-school program (evenings or weekends) must still attend all Church Farm School practices and contests. Interscholastic athletes are subject to all PIAA eligibility rules.

Community Service Department Philosophy

A vital component of the curriculum at Church Farm School is our community service program, which is intended to involve students in the process of helping others and contributing meaningfully to the greater community. By interacting with others inside and outside of Church Farm School, these programs teach our students practical skills while promoting self-worth and self-confidence, as well as continuing our long tradition of service.

Participation in community service is a requirement, with a minimum of five hours annually. Opportunities for participation are promoted well in advance, and are available almost every weekend of the school year at places such as: local animal shelters, homeless shelters, Episcopal churches, community and township gardens and parks and others.





Curriculum Guide