

2018/2019

Abby Kelley Foster Charter High School
Course Description Guide



ACADEMICS Grades 9-12

Abby Kelley Foster Charter Public School offers a classical liberal arts education. We believe our graduation requirements ensure the academic, artistic, and character-building experiences that reflect our commitment to this goal.

Students must pass the Massachusetts Comprehensive Assessment Test as mandated by state law.

Class rank is determined by grade point average, based on final grades in all subjects for all students. Grades are weighted against two measures: frequency and difficulty.

Rank is based on all four years but is computed at the end of the sophomore year and after each semester of the junior and senior years.

A student failing a core subject must repeat the work in a program approved by the School Principal. Individualized academic plans may be developed through the office of the Executive Director.

	Subject	Credits	Completed In
Core Courses	English Language Arts (ELA)	4	4 years
	Mathematics	4	4 years
	History (Civics is mandatory)	4	4 years
	Science	4	4 years
	Foreign Language	3	2 years
Non-Core Courses			
	Visual/Theater Arts	3	3 years
	1 Art 1 Music and 1 choice		
	Physical Education/Health	4	4 years
	Total	26	

Note: 1 full school year = 2 semesters

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ENGLISH LANGUAGE ARTS

9th Grade:

English I Length: 2 semesters

This ninth-grade course is an overview of excellent literature across the major forms and genres (short story, novel, poetry, drama, epic poetry, and literary nonfiction). Each unit focuses on a genre and related theme: for instance drama and fate. In their essays, students might compare the use of symbolism in a short story and a painting, or examine the role of free will in a certain play. They begin to read and respond to literary criticism. In formal seminar discussion, students further investigate the philosophical and literary questions that arise in texts. In addition to discussing and writing, students memorize poems and excerpts of speeches and learn to deliver them with expression. By the end of ninth grade, students are prepared for focused literary study.

10th Grade:

Survey of American Literature Length: 2 semesters

The ELA course for tenth grade is devoted to a study of American literature from the colonial period to the late twentieth century. Because much of the early literature is nonfiction (diaries, letters, sermons, almanacs, speeches and foundational documents), there are many opportunities to analyze historical and informational texts. Students come to see the fluid relationship between fiction and nonfiction: for instance, the literary devices in Jonathan Edwards's *Sinners in the Hands of an Angry God*, or the multiple and social and historical contexts of Arthur Miller's *The Crucible*. In seminars, students discuss questions such as "Does Ann Bradstreet's work serve as an example or steer away from other Puritan literature you have read?" and "How do Willy Loman and Tommy Wilhelm contend with being 'unimportant?'" Throughout the year, students have opportunities to make connections with history, art, and other subjects. Essays range from the analytical to the creative: students might write a narrative essay in the style of Thoreau's *Walden* or compare the treatment of a given theme in works from different genres. Students build on their writing skills from previous years, integrating multiple sources and perspectives into their work, reading literary criticism, and writing longer and more complex essays. To build appreciation of the sounds and cadences of American literature, students continue to recite poems and speeches and refine their expressive delivery. By the end of the year, students have a foundation in American literature and are ready to branch out into European literature.

11th Grade:

World Literature Length: 2 semesters

This course will consist of a study of a diverse selection of literature and primary source material from different cultural traditions throughout the world. The purpose of this examination will reveal how our cultural tradition may either mirror or diverge from other traditions. Through the study of these similarities and differences students will be able to readily take part in today's global reality. Throughout the year, students will take part in seminars, write essays, and deliver

speeches. Also, as part of an effort to improve SAT scores, we will complete an accelerated SAT preparation unit for the Critical Reading and Writing sections of the SAT exam.

12th Grade: Survey of British Literature Length: 2 semesters

This is the study of European Literature from the Middle Ages to the present: from Chaucer's *Canterbury Tales* and Dante's *Inferno* to twentieth-century works such as Huxley's *Brave New World* and Orwell's *1984*. Students will consider prominent themes for each time period and how earlier themes and ideas have influenced later works. Students will also hone their literary analysis and writing skill in preparation for college through discussion and writing, relating works to their historical circumstances, tracing a symbol through a work or works, considering moral and philosophical questions presented, etc.

Grade 9 Writing I Length: 2 semesters

This course will be broken into two sections that will coincide with the two semesters. The first semester will focus on effective study strategies, aiding in an easier transition into high school. It will be broken into four sections: Note-taking Strategies, Summarizing Strategies, Research Strategies, and Test-taking Strategies.

Note-taking Strategies will teach students how to discern key words, main ideas, and relevant facts from the irrelevant, insignificant, and immaterial. The lessons will include general information and different formats.

Summarizing Strategies will help students understand how to reduce information, yet still capture the important information. The lessons will help strengthen students' abilities to summarize information effectively and improve their analytical and critical-thinking skills.

Research Strategies will give students fundamental skills to do basic research better, helping with the research paper required of all freshmen.

Test-taking Strategies will help students become better test takers by learning how to answer objective and subjective questions, take a standardized test, and manage test-taking stress.

Second semester will focus on the writing process. The focus will be on analyzing a prompt and writing an effective response. Special attention will be paid to thesis statements, transitions, supported details in the body paragraphs, and conclusions. Students will be writing several drafts of each assignment, with both peer and teacher feedback.

Throughout the year, students will also be exposed to vocabulary words that coincide with texts from their literature classes, following proper MLA format while writing, and MCAS test taking strategies.

Grade 10 Writing II Length: 2 semesters

The tenth grade Writing Workshop II is the second part of the Abby Kelley Foster Charter Public School High School writing program. The writing workshops, as distinguished from creative writing electives and literature, focus on discrete skills with the overall aim of teaching students to write well. Writing well requires good critical thinking skills, the ability to create logical, factual, and coherent arguments, along with careful attention to style and syntax. By the end of

the second year of the program students will be able to recognize that texts may be interpreted in a variety of ways (literary criticism) and that writers, consciously or unconsciously, are affected by prevailing literary conventions.

Tenth grade students will continue building on the portfolio created in the ninth grade. The portfolio will consist of seven major products: an annotated bibliography consisting of 5-7 articles on a topic of choice (using the scholarly databases available in the media center); write critical thinking response papers; participate in an oral communication project; write a substantive series of poems based on art pieces or photography; participate in a “real life writing” project, consisting of editorial writing, business letters and a college essay; participate in a SAT/MCAS test preparation project, consisting of grammar and writing reviews focused on test taking skills; create a defining portfolio piece of their own design to exemplify his or her own writing in a self chosen area and complete his or her portfolio.

Test-taking skills will be integrated into the Workshop throughout the academic year and will generally be taught in the classroom one day per week. Students will write intensively in the classroom. Homework assignments will support in-class writing assignments.

Students taking this course at the college preparatory level will be expected to write well-crafted works using standard English grammatical conventions and grade level appropriate vocabulary. Additionally, students will be expected to understand that there are a number of ways to interpret and analyze writing and literature (literary criticism). Writers, including young writers like themselves, are influenced by the prevailing schools of thought in the literary world whether they are conscious of it or not. Students will learn that writing, like music and the visual arts, is also an art form and that becoming proficient at it can contribute to their future success in college and/or in their future vocations.

Creative Writing Length: 1 semester

This course will introduce students to writing in the genres of drama, poetry, novel and short story, and prose other than the novel and short story (essay, travelogue, satire, autobiography). Acknowledging that good writing always begins with good reading and in order to understand the milieu in which today’s writers work, students will study present-day examples in the various genres, analyze the methods that today’s authors employ, and attempt to model those methods in their own writing. Rather than a casual forum for self-expression, this will be an intensive study of effective “creative” writing, of what it means and what it takes.

Journalism Length: 1 semester

In this course, students will study and practice the techniques of writing various journalism pieces including straight news stories, sports stories, and features. These pieces will be timely and real world based, involving the students in interacting with their communities. Furthermore, students will study and practice the journalistic skills of news gathering, interviewing, writing leads, and using quotations. In addition, to give the students a realization of the importance of being literate media consumers and the relevancy of issues covered in the media, students will be required to read the daily newspaper and/or watch the daily news.

MATH

Algebra I Prerequisite: Pre-Algebra(Middle School) Length: 2 semesters

Algebra I takes students from previous experience with numbers, operations, numbering systems, and estimating to understanding patterns, relations, and functions, representing and analyzing mathematical situations, using models to represent and understand quantitative relationships, and analyzing change in various contexts. Through full implementation of the 2011 Massachusetts State Standards for Mathematics, students investigate concepts through standards of mathematical practice. This course connects learning to real-world skill application, prepares students for success on state assessments, and lays the foundation for *Algebra II*.

Geometry Prerequisites: Algebra I Length: 2 semesters

Geometry focuses on expanding on the basic geometrical concepts students have already learned as well as introducing new ones. Topics covered include: Angles and Angle Relationships, Triangles, Quadrilaterals, Polygons and Circles as well as Solids and Trigonometry.

Algebra II Prerequisites: Algebra I, Geometry Length: 2 semesters

Algebra II is the third step in the natural mathematics progression for high school students. Prerequisites for this course should include Algebra I and Geometry. The focus of this course will be to ensure a continuation of mathematical learning that will build prior knowledge and extend concepts toward more advanced mathematical thinking. The assessments will be in line with the Massachusetts state and newly established Common Core frameworks and will help to evaluate the progress of the students, as they become both critical thinkers and problem solvers. Algebra II is designed to provide students with a balanced approach to mathematics, allowing the students to become successful through a variety of teaching modalities. Each lesson will contain higher order thinking problems, as well as, problem solving and test taking strategies.

Business Math Length: 2 semesters

The focus of the Business Math is to provide the students with the tools that they will need to solve the mathematical problems that they will encounter in both their personal and business lives. The math presented in the course is the math needed for everyday business transactions, as well as, the math necessary for making important financial decisions. The Business Math course will prepare the students to manage their personal finances, by providing examples, exercises and concept analysis questions that require them to learn how to effectively manage money, and make intelligent decisions. The

course also includes an on-line program provided by *Everfi*. This program provides a platform to teach the students the core concepts of financial literacy. The course is designed to provide learning opportunities that are integrated directly into a series of interactive activities, customized explorations and detailed feedback designed to target specific learning objectives. Some of the lessons included in the *Everfi* program include credit reports, banking personal & commercial lending, as well as, a look into how the students might finance college tuition. The system tracks and assesses each student and guides them from topic to topic based on how they are assessed and the decisions that they make. Each of the 10 lesson covered by *Everfi* are also reinforces in the Business Math curriculum.

Pre-Calculus Prerequisite: Algebra I, Algebra II Length: 2 semesters

Pre-Calculus reinforces Algebra and Trigonometry using real world applications. Graphing calculators and SAT/Prep will be integrated throughout the lessons. The course direction can be geared toward calculus or discrete math.

Statistics Length: 2 semesters

Probability & Statistics is designed as a beginning statistics course for students who have completed algebra. The course spans a range of topics to appeal to the interests of students and covers problems in business, sports, health, architecture, education, entertainment, political science, psychology, history, criminal justice, the environment, transportation, physical sciences, demographics, eating habits and travel and leisure. The course focuses on using technology as an aid for solving statistical problems while also understanding the underlying concepts being applied.

HISTORY/SOCIAL SCIENCE

U.S. History I Length: 2 semesters

U.S. History I examines the development of the United States from the founding of the first English colonies through the post Civil War Reconstruction Era. The course provides an understanding of important historical events and their impact on the development of our country, as it exists today. Students utilize critical and analytical thinking, cause and effect relationships, primary documentation and alternative views to build comprehensive theories based on historical information.

U.S. History II Prerequisite: US History I Length: 2 semesters

U.S. History II covers topics spanning from the end of Reconstruction (approx. 1876) to more recent developments in US foreign relations in the Middle East. The course uses a combination of primary and secondary source materials. Students will apply critical thinking skills to historical data and practice writing clear, convincing, and comprehensive thematic essays on topics covered by the course.

20th Century World History Prerequisite: U.S. History II Length 2 semesters

This will be considered a "Global Conflicts" course that will analyze the buildup prior to WWI through the end of WWII and the resulting Cold War. This is a course that explores conflicts at the macro-level. The focus is on understanding the concept of international conflict as well as the sources of and responses to international conflict. We will also explore the different methods of conflict intervention and resolution in the international arena. This class will be an examination of conditions and developments that led to the outbreak of war in 1914 and of differing interpretations of the causes of the Great War. The course should make students aware of questions that historians ask and further students' skills in critical thinking, in the analysis of various kinds of sources, and in scholarly writing. Employing several types of sources and techniques, participants in this course will examine the origins of World War I from a variety of

perspectives; will become aware of key issues, geographical boundaries and historical controversies.

Following WWII, The United States, the Soviet Union and China were engaged in the Cold War. But only recently has it become possible to study this global stalemate in its entirety: from the beginning to end. This course will examine the historical events that preceded it, increased tensions during it and the series of events that ended the Cold War. It will also explore the role of science and technology in shaping the global arms race and the way in which the war affected the Third World. The course will also address new perspectives arising from recently published archival sources through lecture and discussion.

Civics Grade 12 Requirement Length: 2 semesters

Civics consists of the study of the US Constitution and its application to the life of the citizen. The Constitution as a living document will be evaluated through specific case studies focused on the interpretation and application of the Constitution and the corresponding changes to government and civic life throughout the history of the United States. The need for an informed electorate and the rights and duties of citizens to actively engage with society through voting, community involvement, and other political and social activism will be explored. Students will be expected to pass assessments on the structure of the US, state and local governments, the separation and delegation of powers within the federal, state, and local governments and the rights retained by citizens in the bill of rights.

Psychology Length: 2 semesters

Psychology involves the study of people. It involves asking questions and solving problems. Students taking Introduction to Psychology will study and participate in discussions about the processes of learning, emotion, intelligence, heredity, motivation, perception, environment, the causes for differences between individuals as well as the nature and development of personality and how all these factors influence us. We will also inquire into how the body relates to and affects human behavior. All of our explorations will serve as an introduction to this fascinating subject and also seek to sharpen the students' critical thinking skills.

In this course students will study how people perceive the world; how they think, how they see themselves and why they behave the way they do. Students will examine the basis and history of psychology, how the body and mind operate, the nature and functions of learning and cognition and the development and personality. Students will learn from a variety of different educational methods including lecture, group work, experimentation, and multimedia presentations.

Constitutional Law Length: 1 semester

Constitutional Law is a one semester elective that serves as an introduction to the United States judicial system. Students will look at creation of the judicial system and the way in which the Supreme Court has interpreted the Constitution. A significant emphasis will be placed on looking at the interpretation of the First Amendment, due process, and the equal protection clauses. Students will gain the ability to read legal briefs and formulate their own ideas for interpreting the Constitution.

Global Issues Length: 1 semester

Analyzing Global Issues involves more than a simple description of events reported in the news. In a continually shrinking global community information is transmitted rapidly and infinitely. It is vitally important to get students involved in analyzing the events of the world. It must be the responsibility of the student to become an active observer and, more importantly, an active participant in the events of the world. Students must learn to look beyond their communities and realize there is a complex, rapidly changing and multifaceted world to make sense of.

In this course students will learn that they are a part of a larger global community. Students will acquire the skills to interpret events that occur within that world from a variety of international perspectives. Students will regularly analyze news stories, both foreign and domestic, and study major course units on elections, the environment, wars and global conflicts, racism, education, health care, media bias, immigration and the economy. Students will analyze points of view—both of our own country and that of all the nations of the world. Students will also complete a major debate and research project as part of the course requirements.

FINE ARTS

ART 9 Length: 1 Semester

This course is intended to provide students with experience in medium, and enrich common visual arts skills. Rooted in the Elements and Principals of Art, the course provides project-based instruction that provides familiarity in common art supplies such as paint, colored pencil, pastel, graphite, and digital imaging. The course challenges students to be independently creative, allowing students to take advantage of innovative opportunities, often requiring students to “think outside the box”. Art 10 provides the initial foundation for the International Baccalaureate program. The course also incorporates and develops skills utilized in visual arts-based occupations such as graphic design. Art 10 provides rubric-based feedback for all students.

Art 10 Length: 1 Semester

Art 10 is a 2-semester art elective for students in grades 10 designed to provide higher-level, project-based visual arts instruction. The course material will build on many of the skills learned in Art 9. Elements and Principles of Art will be central to all instruction. Mediums such as pen-and-ink, ceramics, oil paint and acrylic paint, charcoal, and watercolors will be explored on a deeper level, with instruction directed towards mastery of each medium. Digital media will be used to assist in the creation of some of the works. The course is designed to provide a comprehensive portfolio for the visual arts student. The work of several famous artists and art movements will be reviewed to assist in learning the aforementioned mediums. Students are encouraged to critique their own work and that of peers through formal and informal critique sessions. A final, open-ended project will be part of individual final assessment. Art 10 provides rubric-based feedback for all students.

Music 9 Length: 1 Semester

Students enrolled in Music 9 will be engaged in a multi-faceted approach to the study of the musical arts. Units on Music Theory will teach students the use of notation as it applies to the compositional process. Through units on Music History, students will be engaged in the study of music across time and culture. Students will be able to use musical analysis and apply understanding of musical aspects to foreign and familiar musical styles.

High School Orchestra (Strings, Woodwinds, Brass, and Percussion.) Length: 2 Semesters

Students who have built upon the previous skill levels of beginning and intermediate will be successful in the grades 9-12 High School Orchestra program. The instrumental student will perform, discuss, and critically evaluate characteristics of their performance of more elaborate music compositions. The students will analyze, and utilize concepts common to instrumental music, and will be involved in the study of aural examples of music representing a variety of cultures, styles, and historical periods to be performed in the High School Concert Band. Orchestra students will practice daily in Concert Band, or Strings and will come together to play as a full Symphonic Orchestra.

High School Choir Length: 2 Semesters

The High School Choir is a vocal ensemble which performs a varied repertoire at school and community events. High School Choir members develop their vocal skills through solo opportunities, regular assessment, and participation in the extra-curricular group the Select Singers. The High School Choir adheres to the High School student code of conduct and the AKFCS Music Performance Handbook. Students who participate in this ensemble must attend all performance events throughout the school year.

Music of the 20th Century Length: 1 semester

This is a course of study of musical development, composers and technology of American popular and art music during the 1900's. Listening to a broad spectrum of music styles: Musical Theater, Jazz, Rock, Pop, band, chamber, chorus, orchestral, vocal and various sub-genres Art Music. Music composition styles, techniques and comparisons will be emphasized as well as music being a historic reflection of the discourse in America.

Materials needed for study: This course will rely heavily on handouts and recorded listening materials. All materials will be supplied by the instructors. From time to time students will be asked to supplement these materials with independent study materials that are readily available, such as newspapers and internet websites.

This course, when successfully completed, will give students:

Upon successful completion of this course, the student will have:

- 1) A basic knowledge of the major works of music in the twentieth century
- 2) A basic knowledge of the major composers of art music in the twentieth century

- 3) A basic knowledge of the major stylistic developments of art music in the twentieth century
- 4) An increased awareness of different compositional styles
- 5) A more open attitude toward unfamiliar musical styles
- 6) An understanding of the interrelationship between different musical genres
- 7) Opinions on music based on reason
- 8) An increased awareness of the presence of twentieth-century music in her or his life

Introduction to Keyboarding Length: 1 Semester

Intro to Keyboarding is a Music Department elective for Grades 11 and 12. In this group piano class, students will learn piano playing or keyboard basics in a “workshop” style setting. Topics and skill sets will be introduced weekly, such as reading piano music on the grand staff, right and left hand independence, roles of chords and melodies, and many more. Students will be able to advance and learn at their own pace. They will be encouraged to challenge themselves through independent song study during class time. This course supports the school’s mission of Musical Competence by allowing the beginning or novice musician an opportunity for real hands on instrumental experience.

SCIENCE

Biology Length: 2 semesters

Biology is the exploration of life. The course begins with what it means to be living. Students will study life on the smallest level, the cell. This includes cell structure, respiration, photosynthesis, cell growth and cell division. Students will gain an in depth understanding of heredity and genetics and view firsthand how modern technology plays an integral part in biology today. The course will cover the classification of organisms, and life on a larger scale by introducing the concepts of ecology, i.e. the interactions of organisms with their environment, both biotic and abiotic factors and the effects each has on the other. Students will learn the modern theory of evolution, population genetics, speciation, and classification. The course will conclude with a look into the human body, its eleven systems and how they work together to function as one living organism. Students will be assessed on presentations laboratory reports, written examinations, quizzes, participation, and study skills.

Chemistry Length: 2 semesters

The purpose of this course is to give students an understanding of the mechanisms of matter and chemical reactions. The course will cover an introduction to the field of Chemistry including atomic structure, the elements, the Periodic Table, chemical equations and reactions, types of bonds, acids and bases, the Mole, gases, and Stoichiometric calculations. Chemistry students perform experiments in the laboratory. The experiments allow the students to observe and apply concepts studied in class. They are required to write lab reports analyzing the results of their experiments. Upon completion of this course, the students will have an understanding of the history of chemistry; will have explored the uses of chemistry in various careers, gained an ability to cope with chemical questions, and an understanding of laboratory safety. Students will

be assessed on laboratory performance and lab reports, written examinations, quizzes, participation, and both independent and group projects.

Physics Length: 2 semesters

Physics explains life! In Physics, students will study motion, forces, energy, waves, sound, light, and electromagnetism. Students will also learn the important skill of complex problem solving. The solutions to problems require first understanding the concepts and then determining how to apply the concepts to solve complex problems. To master this skill requires extensive practice. Students will perform experiments in the laboratory. The experiments allow students to observe and apply concepts studied in class.. Students will be assessed on laboratory performance and lab reports, written examinations, quizzes, participation, and both independent and group projects.

Anatomy & Physiology Length: 2 semesters

Anatomy and Physiology is the study of the structural and functional characteristics of living things. The course will cover the organization and function of the human body from atoms and cells to tissues, organs, and finally organ systems. The course will include animal dissections as a means to learn body orientation, structure, and function. The skin, skeletal, muscular, endocrine, digestive, respiratory, nervous, circulatory, and reproductive systems will all be covered. Students will be given a practical look into how Anatomy and Physiology applies to their everyday life. The course is an intensive course and success in depends on the full and active participation of students, good attendance, completion of assignments, and preparation for class. Students will be assessed on laboratory reports, practical examinations, written examinations, oral reports, quizzes, and project presentations.

Forensics Length: 2 semesters

Forensics by the very nature of its definition includes the study of both science and the law. It is literally science as it applies to the law. The course begins with the historical events and the advances made in various scientific fields which have allowed them to be consider accurate and reliable enough to provide facts in an investigation and in a court of law. As a cross curricular course it covers frameworks found in biology, physics, chemistry, math and English. This course examines the significance of science in our legal system as it is used to provide evidence in both civil and criminal matters not only in the field of investigation and evidence procurement, but also in determining the facts of an event. Students will learn what is considered objective, i.e. eye witness testimony, and explore how science can often refute what seems at first glance to be fact. The course discusses each aspect of the legal system; the legal process, the steps involved in pursuing justice, admissibility of evidence and the expectation along with specific examples of ethical and unethical behavior within the system. The course compares and contrasts civil and criminal law by examining the O.J. Simpson case, and discussing why it is possible for someone to be found innocent in criminal court yet guilty in civil court. This case will also be used as an example of errors made on the part of law enforcement, crime scene technicians, the prosecutor, and defense attorney, and how each of these affected the outcome of the case. Students are taught

to recognize various types of evidence –physical, class, individualized, direct, and indirect and determine their probative value.

The course covers many disciplines within the realm of science including pathology, toxicology, serology, entomology, odontology, and anthropology. Students will recognize the techniques used in each discipline and be able to apply that knowledge to labs specifically designed to promote accuracy and attention to detail. After becoming proficient in the specific laboratory technique students will conduct an investigation that incorporates from 3 to 5 of the previously learned skills in an attempt to determine a series of events. Techniques include but are not limited to chromatography, microscopy, spectrophotometry, and anthropometry. Using the afore mentioned techniques as well as those found in the fields of chemistry, biology, and physics students will analyze fingerprints and documents, perform accident reconstruction applying Newton's laws and the Torts of Negligence to determine fault, compare and contrast skeletal remains to determine age, race, and gender, determine time of death using the life cycle of the blow fly, and apply the principles of physics to determine blood and ballistic significance in spatter patterns. Each part of the course is a lesson in using the skills of scientific thinking and the scientific method. The course completes with the analysis of 2 historically significant cases and a teacher designed investigative scenario. Students will be assessed on laboratory reports, practical examinations, written examinations, quizzes, group activities and projects, participation, and a final research project.

Astronomy Length: 1 semester

Astronomy is the study of the universe. The universe is made up of many galaxies. Our galaxy is the Milky Way. The Milky Way is made up of many stars. Our star is the Sun. The Sun has eight planets orbiting it. Our planet is the Earth. Students will study the effects of the Sun and Moon on the Earth, the planets in the Solar System, the stars in the Milky Way Galaxy, and the galaxies in the universe.

FOREIGN LANGUAGE

Latin II Prerequisite: Latin I Length: 2 semesters

The overview of Latin grammar in the second year of study covers more advanced constructions: the five noun declensions, advanced case usage, the ablative absolute, adjectives and adverbs in all degrees, the six verb tenses, including participles and infinitives, the supine verb, and gerunds. Roman Republican history from the founding of the Republic through to the death of Caesar is reviewed through a series of supplemental readings. The main textbook is *Oerberg's Lingua Latina Familia Romana*. Students have the option of taking Level Two of the National Latin Exam in March.

Latin III Prerequisite: Latin I, Latin II Length: 2 semesters

Students complete intermediate Latin, studying subjunctive verbs in subordinate clauses, the future passive periphrastic, and extended indirect discourse. Additional Readings are drawn from the selection of primary prose sources about Roman history included in *Oerberg's Lingua Latina Roma Aeterna*. Students also will study the history of the Roman Empire from the ascent

of Augustus to the reign of Constantine. Students enrolled in this course may choose to take the Level Three National Latin Exam.

Spanish I Length: 2 semesters

Spanish I is the first part of a two year program. First year Spanish students complete *Avancemos I*, an eight unit book that introduces the culture and language of the Spanish-speaking world. Each unit contains two thematic lessons through which the student will experience authentic culture and meet the “telehistoria” characters who will accompany the students through the unit. Students will learn important facts and figures about the target country, and they will also compare the target culture with their own. They will also be learning vocabulary, grammar and reading strategies to set them on a path to become semi-fluent in the Spanish language.

Spanish II Prerequisite: Spanish I Length: 2 semesters

Spanish 2 is the second part of a two year program of study. Students will complete *Avancemos II*, also an eight unit book. As with text *Avancemos I* used in Spanish I, each unit contains two thematic lessons through which the student will experience authentic culture and meet new “telehistoria” characters who will accompany the students through the unit. Students will continue to learn important facts and figures about the target country, and they will also compare the target culture with their own. They will build upon the acquired vocabulary, grammar and reading strategies learned in Spanish I to help them become semi-fluent in the Spanish language.

TECHNOLOGY

Alice Animation Length: 1 semester

This class will introduce students to Computer Science using Alice Animation. Alice is an innovative 3D programming environment that makes it easy to create an animation for telling a story, playing an interactive game, or a video to share on the web. Alice is a freely available teaching tool designed to be a student's first exposure to object-oriented programming. It allows students to learn fundamental programming concepts in the context of creating animated movies and simple video games. In Alice, 3-D objects (e.g., people, animals, and vehicles) populate a virtual world and students create a program to animate the objects. In Alice's interactive interface, students drag and drop graphic tiles to create a program, where the instructions correspond to standard statements in a production oriented programming language, such as Java, C++, and C#. Alice allows students to immediately see how their animation programs run, enabling them to easily understand the relationship between the programming statements and the behavior of objects in their animation. By manipulating the objects in their virtual world, students gain experience with all the programming constructs typically taught in an introductory programming course.

Adobe Flash Animation Length: 1 semester

Adobe Flash CS4 Professional is a development environment tool that allows students to create compelling interactive experiences, often by using animation. In this course students will learn the most important topics of Adobe Flash CS4. Students will start off with a brief introduction to the beginnings of Flash. They will then learn about creating graphics and text and how to use symbols and the Library Panel. From there students move on to learning how to create animation. Students also learn about optimizing and publishing movies, creating buttons and using media and using Action Script 3.0. They will wrap up the course with a unit on integrating Flash with other programs. Once students complete this semester course, they can create entire websites, including e-commerce, entertainment, education, and personal use sites if they chose to continue to learn Flash. Flash is an excellent program for developing animations that are used in websites, such as product demonstrations, banner ads, online tutorials, and electronic greeting cards.

Digital Photography Length: 1 semester

Digital Photography focuses on using a variety of tools and techniques to enhance/create digital art and printed media. Students will learn the most important topics of Adobe Photoshop CS4. First, they will be presented with an overview of Photoshop CS4. Then they will learn the basics of selecting pixels and working with layers. From there they move on to working with type and gradients. Students will learn about improving images with adjustment layers as well as working with brushes and color effects. Students will create holiday cards, posters, vector art images, 3D posters, and much more.

Tech Advanced Length: 1 Semester

In this course students learn the art of creating websites. Websites are created using Hypertext Markup Language HTML, Adobe Dreamweaver CS4, WIX or Weebly. The beginning of this course will cover the basics of HTML code. The student will learn about common web page formats and functions, and how to use tables to create a formatted web page. Then the student will apply this knowledge to build a web site for a fictitious restaurant. The use of notepad and Internet Explorer will be used to create, edit, and view the website results. The student will learn how to add links, insert images, format text, create image maps, create forms, and utilize style sheets. After this course, students will be able to build their own website using HTML. There will be tests and projects required throughout the length of the course.

The first half of the year students code in HTML, the second half they move on Graphical User Interface tools such as Weebly or Wix. They will learn to become a web designer by coding and building websites.

Film Editing Length: 1 semester

Film editing is a course that takes the student through the entire process of creating, editing, and producing a film/video. Film Edit course provides the student the ability to edit film/movies created as projects in class. Students learn how to Adobe Premiere CS4, the industry's leading

film editing tool. Students use the cameras provided by the school, film a topic as decided by the class, edit the video and present it to the class. Students are also given the opportunity to edit school programs such as the Wiz, Strings Box Concert etc... Students will also acquire skills in doing sound editing, software animation, integrating audio with video, creating DVDs, and composing video/still/text effects using *Adobe After Effects*.

PHYSICAL EDUCATION AND HEALTH

Physical Education Length: 1 semester

The focus of High School Physical Education is to promote healthy living and knowledge of lifetime activities. The student will take responsibility for apply their learning to their personal lifetime health and wellness. Individual, dual and team activities continue to condition, refine skills, and become proficient in a variety of recreational activities whereby the student will continue these activities after high school.

INTERNATIONAL BACCALAUREATE

IB English SL/HL

This course will include studies in literary analysis, critical thinking, vocabulary expansion, oral presentation, and composition. The focus of this course will be honing students' critical analysis and formal writing skills. Students will achieve this goal through close readings of assigned texts, daily class discourse, and demonstration of comprehension through larger written projects. The students will compose scripts and reader-response assignments as well as keep a journal for weekly practice and to track their verse growth.

Elevated thinking and writing skills with the intention of preparing students for college courses is the main focus of this course.

IB Latin SL/HL

This course will serve as a review of Latin grammar and an introduction to epic poetry. Students will expand and deepen their Latin vocabulary and understanding of advanced Latin grammar. Students will learn to scan and read Latin poetry and to recognize figures of speech as well as analyze the literary text.

IB Biology HL

This class is equivalent to a college level Biology Course that focuses on four unifying themes: Structure and function, universality versus diversity, equilibrium within systems, and evolution. This course is aimed at understanding, as well as implementing, the scientific process to form, test, and modify hypotheses through observation, experimentation, collection and analysis of data under controlled conditions. In addition, development of investigative and analytical skills are an important component of the class where students are required to complete 60 hours of lab work over the two course of two years of study. Laboratory exercises have been designed to allow students to apply learned biological principles through investigation and experimentation. Topics that will be covered through laboratory exercises include, but are not limited to, enzymes, cell respiration, photosynthesis, genetics, microbiology, human physiology, and biotechnology. Students will also be required to complete a minimum of four research investigations on their own. In these investigations, the student will be given a prompt from which they must plan an investigation; collect, process and present data; draw conclusions; and evaluate the scientific outcomes. Through this process, students will come to understand the process of scientific investigation.

IB Spanish B SL

A two year course focusing on the acquisition and improvement of language skills and the refinement of the core skills of reading, writing, speaking and listening. Students taking this course will acquire the necessary skills to produce effective communication in a variety of situations and an appreciation of the relevance of Spanish in the world community. Students will be exposed to Spanish and Latin American literature, music, food, language and customs. Students will also be required to maintain a dossier of materials and work done each year including items required by the teacher as well as those chosen by the student. Topics to be explored during this course will reflect themes: Communication and the media, Global issues, Social relationships, Leisure, Customs and traditions and Health.

IB 20th Century World And History Of The Americas SL/HL

Through an exploration and understanding of the prescribed topic, the 20th Century World Topics and the History of the Americas options, students will explore major events, themes, and peoples and come to a greater understanding of history. Some of the aims of the history course are to have the students understand how historical sources are collected and interpreted. They will come to a greater understanding of the present through an understanding of the past. Students will also understand how events can have an impact at the national, regional, and international level which will help them to develop an awareness of their own identity through an understanding of other cultures. The students will be assessed on their knowledge and understanding of history, being able to recall information, show understanding of context, show cause and effect as well as continuity and change, understand sources and deploy in-depth knowledge. They must also be able to apply knowledge as evidence, show awareness and different approaches to and interpretations of history, compare, contrast and understand importance of sources, and summarize evidence clearly. The students will also be assessed on their ability to evaluate and synthesize sources and background knowledge and present an analysis of their summary of evidence. Lastly, students will be assessed on their ability to demonstrate research skills, organization and referencing through historical essays which support relevant, balanced and focused historical arguments.

IB Math Studies SL

The Math Studies course is separated into seven distinct disciplines. Each topic will be explored in depth, in an effort to create a deeper understanding of each discipline, as well as to make a real world connection that will allow opportunities for critical thinking. The International nature of mathematics will be presented by using examples from various countries and cultures. Today's fluctuating economic situation provides a wide range of topics that are currently happening across the globe. By exploring different economic situations we will be asking the students to apply critical thinking skills that will allow them to form reasoned and ethical decisions of their own. References to ancient mathematicians as well as the recognition of various contributions by multiple cultures throughout history will be acknowledged and explored during the course, in an effort to provide the students with a deeper understanding of what they are studying. They will be asked to be open minded about the values and traditions of other individuals and cultures. Cross curriculum examples will be used whenever applicable. The objective of the Math Studies course will be to create an inquisitive mind that is willing to deal with the challenge of difficult problems and to gain a better understanding of how mathematics has been an integral part of various cultural changes throughout history, and has in fact, played a large part in the shaping of today's world. We hope to make the students aware of the ideas and issues that have local, as well as, global significance.

IB Math SL

This course caters students who already possess knowledge of basic mathematical concepts, and

who are equipped with the skills needed to apply simple mathematical techniques correctly. The majority of these students will expect to need a sound mathematical background as they prepare for future studies in subjects such as chemistry, economics, psychology and business administration.

The course focuses on introducing important mathematical concepts through the development of mathematical techniques. The intention is to introduce students to these concepts in a comprehensible and coherent way, rather than insisting on mathematical rigor. Students should wherever possible apply the mathematical knowledge they have acquired to solve realistic problems set in an appropriate context.

IB Visual Arts SL

This course gives each student the exciting opportunity to explore the world of art personally, globally, and historically. Each student will develop her or his own individual style of artistic expression through in-depth research, critical insight, and self-reflection. Students will explore artistic creation as being both culturally relevant and self-expressive. Students enrolled in Visual Arts SL will be required to create a collection of individual artistic pieces in various media reflecting their own artistic self-awareness in relation to the world around them. Their artwork must reveal a passion for learning. Only through research and external exploration will the student gain an appreciation for the world around them, and thereafter, find the motivation to improve their own artistic techniques and broaden the subjects of their artwork. Students will prepare their finished artwork in a comprehensive portfolio, and show their artwork publically at the end of the course.

IB Spanish Ab Initio SL

This course is designed for students with aspirations above and beyond the typical student. They will accomplish a higher competence level in foreign language. Also, they will have the tremendous opportunity to explore a different culture throughout the International Spanish speaking community. Through the learning process of this course, the student will be aware of these changes and will know how to react in different situations. In order to develop the 4 areas of this IB course the student must speak Spanish during the class in different situations. For example: debate, formal and informal sceneries, focus on daily routines, among others. The student will be asked to take into consideration the Spanish-speaking culture in forming their answers. This requires the student to use language at a higher level and be prepared to respond to spontaneous questions made from the audience. The successful student will develop a novice-mid to intermediate proficiency in the language by engaging in a variety of communicative activities that focus on developing reading, writing, speaking and listening skills in the foreign language. In addition, the student will develop cultural awareness and become prepared to

encounter real life situations outside of the classroom through discussions of cultural customs and behavior and by reading authentic materials written in Spanish

IB Physics SL

IB SL students study nuclear physics, world energy sources and climate change. Students also have the exciting opportunity to study astrophysics and digital technology. Students must master the important skill of complex problem solving. The solutions to problems require first understanding the concepts and then determining how to apply the concepts to solve complex problems. To master this skill requires extensive practice. Therefore, it is vital that students commit to thoroughly completing all assignments. IB SL Physics students are also required to complete forty hours of investigations (labs) and projects. Students must design experiments, gather experimental data and analyze the data with very limited directions from the teacher.

IB Music SL/HL

Students enrolled in IB Music will be engaged in a multi-faceted approach to the study of the musical arts. Through the IB standards, students will apply theoretical knowledge to the compositional process. Musical analysis will allow students to accurately describe and identify genres and styles both foreign and familiar. The study of musical cultures will give the IB student a more worldly view of the purpose of music from place to place and time to time.

IB Theory Of Knowledge

Theory of Knowledge is designed to examine the origins and validity of various forms of knowledge. At the center of this examination is you, the individual “knower,” around whom swirls a complex combination of emotion, reason, language and sense perception, all of which affect what it is and how it is you “know.” Equally instrumental in guiding what it is and how it is you “know” are the various areas of knowledge to which you have been subjected as a student, including Mathematics, Natural Sciences, Human Sciences, History, The Arts, Ethics, Religious Knowledge Systems, and Indigenous Knowledge Systems. It is through the consideration of all of these interrelated systems that you will be able to do three things: unify what it is that you have learned in your previous/current coursework by comparing knowledge claims across disciplines; develop an awareness of bias and prejudice on knowledge processes; and critically analyze how it is that you came to acquire knowledge and what problems various forms of knowledge present.

IB SPORTS, EXERCISE, AND HEALTH SCIENCE

The attainment of excellence in sport is the result of innate ability or skill and the dedicated pursuit of a programme of physical and mental training accompanied by appropriate nutrition. Training programme design should not be left to chance. Rather, it should be designed thoughtfully and analytically after careful consideration of the physiological, biomechanical and psychological demands of the activity. This is the role of the sport and exercise scientist who, regardless of the athletic event, should be equipped with the necessary knowledge to be able to perform this task competently. Furthermore, in a world where many millions of people are physically inactive and afflicted by chronic disease and ill health, the sport and exercise scientist should be equally proficient when prescribing exercise for the promotion of health and well-being.

The Diploma Programme course in sports, exercise and health science involves the study of the science that underpins physical performance and provides the opportunity to apply these principles.

The course incorporates the traditional disciplines of anatomy and physiology, biomechanics, psychology and nutrition, which are studied in the context of sport, exercise and health. Students will carry out practical (experimental) investigations in both laboratory and field settings. This will provide an opportunity to acquire the knowledge and understanding necessary to apply scientific principles and critically analyze human performance. Where relevant, the course will address issues of international dimension and ethics by considering sport, exercise and health relative to the individual and in a global context.

IB PSYCHOLOGY

Psychology is the systematic study of behavior and mental processes. Psychology has its roots in both the natural and social sciences, providing a unique approach to understanding modern society.

IB psychology examines the interaction of biological, cognitive and sociocultural influences on human behavior, thereby adopting an integrative approach. Understanding how psychological knowledge is generated, developed and applied enables students to achieve a greater understanding of themselves and appreciate the diversity of human behavior. The ethical concerns raised by the methodology and application of psychological research are key considerations in IB psychology.

IB psychology takes a holistic approach that fosters intercultural understanding and respect. In the core of the IB psychology course, the biological level of analysis demonstrates what all humans share, whereas the cognitive and sociocultural levels of analysis reveal the immense diversity of influences that produce human behavior and mental processes. Cultural diversity is explored and students are encouraged to develop empathy for the feelings, needs and lives of others within and outside their own culture.