

# Upper School Courses Division 1

2010-2011

## **ENGLISH**

### **4 credits required for graduation**

#### **English 9 (1.00)**

Reading, writing, grammar, and vocabulary are all parts of the whole called language. English 9 incorporates a wide variety of prose and poetry from popular American, English, as well as a unit on Caribbean Literature and West Indian writers. For drama, students will read the *Miracle Worker* by Gibson and *Romeo and Juliet* by Shakespeare. Reading, writing, grammar and vocabulary will be presented as an integrated whole. The primary objective will be to develop an appreciation for literature and effective skills for oral and written self expression.

#### **English 10 (1.00)**

English 10 incorporates a wide range of reading experiences, covering many types, styles, genres and periods. The course is basically organized around the major works that are read and studied. Writing and other assignments are generated through the reading material and include analysis of themes as well as analysis of the many and varied techniques that talented writers employ to get their messages across.

#### **American Literature (1.00)**

In 11<sup>th</sup> grade English, students study selections from a variety of time periods in American literature. The course moves chronologically through the early roots of American literature to such time periods as Puritanism, Romanticism, Realism, Transcendentalism, the Civil War, the Harlem Renaissance, and Post-Modernism. Students will read and study prose, poetry, non-fiction and drama looking specifically at how the social, political, and economic structures of the time influenced the literature of the day as well as how literature helped shape the social, political and economic landscapes of the time. Some of the works studied include *The Scarlet Letter*, *The Great Gatsby*, *The Glass Menagerie*, and *The Crucible*. In terms of writing, students focus on the essay in its many forms including analytical and persuasive essays, literary response and analysis as well as essay tests and timed writings. Students will also work on vocabulary in formal and informal ways. Extended projects as well as oral presentations allow the students to enhance their study of the American canon.

#### **Senior Seminar in Literature: World Drama (.50)**

This elective course immerses students in the study of plays as literary texts from the classical to contemporary periods from Greek Theatrical Traditions (Sophocles) to Elizabethan Theater (William Shakespeare) to Modern American Drama (Arthur Miller, Tennessee Williams). The course will provide a historical framework to enhance the appreciation and understanding of those works. The course work also includes review and instruction through a wide range of media including text, film, audio recording, and live performance. Reading, discussion, writing and performance will be included in the course.

#### **Senior Seminar in Literature: British Literature (.50)**

This class traces the evolution of British Literature from the Norse-based epic, *Beowulf*, through *The Canterbury Tales*, Elizabethan literature (Shakespeare, Marlowe, etc.) through the Victorian Age (*The Importance of Being Ernest*, *Pride and Prejudice*). Students will examine how English history and literature are essentially inseparable—one is both the cause and effect of the other at all times. Students will study a variety of genres including epic poetry, plays, novels, and non-fiction. In addition, students will write for a variety of purposes and do group projects and performances.

English, continued

**Senior Seminar in Literature: The Hero's Quest 1: A survey of heroic themes in World Literature from ancient times to the contemporary period (.50)**

This course will follow the thread of the hero's journey through a literary labyrinth winding from the Classical period to contemporary times. In addition to timeless myths of gods and heroes we will explore well-known national epics as well as samplings from sacred literature including the Bible, Ramayana and Quran. Extensive use of electronic texts (on-line) will facilitate access to an eclectic reading list, including but not limited to the following sources: *The Epic of Gilgamesh*; *Beowulf*; *The Trial and Death of Socrates: Four Dialogues* (Plato); *The Iliad and Odyssey* of Homer; *The Metamorphoses* (Ovid); *The Aeneid* of Virgil; *Eight Great Greek Tragedies*; *Cantar del mio Cid*; *Le Morte d' Arthur* (Sir Thomas Malory); *The Divine Comedy* (Dante Aleghieri); *Bullfinch's Mythology: The Age of Fable, The Age of Chivalry and The Legends of Charlemagne*.

**SOCIAL STUDIES**

4 credits required for graduation

**Caribbean History (.50)**

This semester-long course will provide an overview of the Caribbean beginning with its earliest inhabitants to the present, with a special focus on the U.S. Virgin Islands history and culture.

**Western Civilization (.50)**

Understanding our world and the forces that have shaped it, through the study of past civilizations including ancient Egypt, Greece, Roman, Medieval Europe and our modern world.

**World History (1.00)**

Beginning with the Renaissance and Reformation, students will study the people, cultures and events that have shaped our world. Units of study include Early Modern Times, Enlightenment and Revolution, Industrialism and a New Global Age, World Wars and Revolutions and finally, the World Today.

**U.S. History (1.00)**

This course relates past events in American history to present global realities. Students will: understand the historical development of the peculiar mix of democracy and capitalism in the US; relate the concept of democratic capitalism to the emergence of Hamiltonian capitalism; understand the conflicting forces that tend to both unite and divide the US and the US in the world; understand the pluralistic forces at work in the US that both temper and fail to temper unrestrained capitalism, democracy and personal liberty; understand the benefits and problems inherent in the democratic form of government and the capitalist economy as exported in US foreign policy. They will understand how the US affects and is affected by global events historically; understand the events of the 20<sup>th</sup> century that have had great impact on US empire building and the emergence of US national Security strategy in the post 9-11 Bush doctrine.

**U.S. History for the Advanced Placement Exam (1.00)**

Historical eras covered begin with the founding of Jamestown in 1607 and continue through to the present day. Emphasis is on critical thinking skills, analysis of historical patterns and constructing well-written essays. Students who take this class must commit to meeting 3 out-of-school hours every month (usually Saturday morning or after school). Students who are unable to make this commitment due to work or sports schedules are advised against signing up for this course. Consent of instructor required. \$50 on-line book fee; \$86 AP Exam fee.

Social Studies, continued

**Government (.50)**

This course is about the American political system. The focus is on the principles and beliefs upon which the United States was founded and on the structure, functions and powers of government at its different levels. Topics to be covered are: political philosophies, constitutional underpinnings of American government, political beliefs and behaviors, political parties and interest groups, branches of government, institutions and policy development and civil liberties.

**Sociology (.50)**

An introductory level course which studies group behavior. The sociological approach is used to identify and understand social patterns, to examine particular social groups and their behavior, and to apply the knowledge of human behavior gained through sociology to such specific social problems as racism, crime, aging, and other relevant areas.

**Art History 1 (.50) Art History for the AP Exam (1.00)**

This class explores the history of art from prehistoric paintings through the Renaissance. Open to all juniors and seniors, it is recommended for art students. Offered 1<sup>st</sup> semester; 2<sup>nd</sup> semester companion class is Art History 2, which will present art from the 18<sup>th</sup> century to the present.

**SCIENCE**

**3 credits required for graduation**

**\*Biology (1.00)**

Cell structure and function, chemical compounds of life, genetics, evolution, plants, invertebrates, vertebrates, human anatomy and system function. There is a strong emphasis on lab, field studies and research skills.

**\*Physical Science (1.00)**

An Introductory course to chemistry and physics. Topics include: scientific method, metric system, density, phases, atomic structure, periodic table, chemical bonding, types of reactions, acids and bases, nuclear physics, waves, light, sound, electricity, and magnetism.

**Chemistry (1.00)**

Chemistry is the study of the structure and composition of matter, how it changes, and the mechanisms of those changes. Topics include: metric system, scientific notation, significant figures, atomic structure, chemical bonding, chemical composition, equation writing, gas laws, thermodynamics, solutions, acid/base theory, equilibria, and electrochemistry. Prerequisites: Physical Science, Biology, enrollment in Algebra 2 or higher math.

**Physics (1.00)**

This Physics course will include the study of classical mechanics, electricity, magnetism, and modern physics. Mathematics will be an integral part of the course and the various mathematical disciplines will be stressed. "Hands-on" Physics is emphasized through labs, individual projects and the use of technology. Prerequisites: Successful completion of Physical Science, Chemistry and Algebra 2. **There is a \$70 Lab fee for this course.**

**Environmental Science (1.00)**

Students will study in depth the relationship between society and its environmental impact. Emphasis will be on nuclear waste, toxicology, oceanography and marine science. Field studies and research skills are required. Prerequisite ; Biology

## **MATHEMATICS**

**3 credits required for graduation (does not include Algebra 1 taken in the 8<sup>th</sup> grade)**

### **Algebra 1 (1.00)**

Algebra 1 is a student's first course in symbolic mathematics. It is within this course that students are first made aware of variable expressions as representations of real numbers. Students learn how to manipulate these variables using familiar arithmetic and exponential operations. Topics include: polynomials, fractions, an introduction to functions, quadratic functions, matrices, systems of linear equations, rational and irrational numbers and probability.

### **Geometry (1.00)**

Geometry is the study of shape and size. This course is based on Euclidean geometry and includes the following topics: points, lines, planes, angles, deductive reasoning, parallel lines and planes, congruent triangles, right triangles, circles, similar polygons, quadrilaterals, areas and volumes of solids, and coordinate geometry. Placement exam required for 9<sup>th</sup> grade students.

### **Algebra 2 (1.00)**

Algebraic operations with numbers, expressions and equations, matrices, polynomials, linear and quadratic equations, complex numbers, conics, exponential and logarithmic functions.

Prerequisite: Algebra 1

### **Statistics (1.00)**

Statistics is an activity-based course which exposes students to exploratory analysis, planning a study, modeling using probability and simulation, and testing hypotheses using statistical inference. Statistical computer software will be used, and the TI-84 + and TI\_Nspire graphing calculator will be important tools. Students will work on projects involving the gathering and analysis of real-world data. Prerequisite: Geometry

### **PreCalculus (1.00)**

Basic algebraic concepts, as well as linear, exponential, power and periodic, polynomial and rational functions. Introduction to trigonometric functions and their inverses trigonometric graphs and analytic trigonometry with additional topics. Prerequisites: Geometry, Algebra 2.

**There is a \$70 lab fee for this course.**

### **Advanced Mathematics for Math and Science Majors (1.00)**

Fast paced review of basic algebraic concepts, functions and their graphs, polynomial and rational functions, exponential and logarithmic functions and analytic geometry with challenging problems and applications designed for science and mathematics majors who intend to continue their math studies with Calculus. Introduction to trigonometric functions and their inverses, trigonometric graphs and analytical trigonometry with additional topics. Prerequisites: Geometry, Algebra 2, recommendation of teacher.

### **Calculus (1.00)**

A college level Calculus course including basic topics of Limits, Differentiation and Integration. Prerequisites: Minimum average of 75% in Advanced Mathematics (or equivalent course), teacher recommendation, consent of instructor.

## **WORLD LANGUAGES**

**2 credits required (does not include Spanish 1 or French 1 taken in the 8<sup>th</sup> grade)**

### **Spanish 1 (1.00)**

This course will introduce the student to the sound system and grammatical structure of the Spanish language. The focus will be on developing and increasing skill levels in the areas of aural comprehension, speaking, reading, and writing. At the end of one semester, the student will have a basic understanding of grammar, including word formation, verb conjugations, idiomatic expressions, and will recognize cognates. Students will study practical Spanish vocabulary and the essential rules of Spanish grammar during class. This course will introduce students to the customs, music and culture of the Hispanic world. The teaching method is based on questions, drills and speaking practices, writing activities, singing and composing situational dialogues in Spanish with Hispanic cultural themes interwoven into each unit. While correct grammar is emphasized, the fundamental component of this course is on speaking Spanish through vocabulary study, conversational practice and oral grammar skills.

### **Spanish 2 (1.00)**

This course develops Spanish comprehension and fluency to an intermediate mastery of conversational Spanish. It reviews basic Spanish vocabulary and structures in order to strengthen self-expression and basic communication skills in functional contexts. Listening comprehension, speaking, reading and writing are further developed through expanded application of vocabulary and linguistic structures. The teaching method is based on questions, drills and speaking practices, writing activities, singing and composing situational dialogues with Hispanic cultural themes that are interwoven into each unit. It is intended for students to improve their pronunciation skills and vocabulary proficiency. Communication is relevant to students by using youth-related themes and by personalizing content with Spanish being the language of the classroom, with use of English being limited to explanation of grammar and clarification of instructions, whenever they are needed.

### **Spanish 3 (1.00)**

This class is designed to build on intermediate skills to communicate in Spanish at a more advanced level. Students continually engaged in authentic communicative tasks. Students practice the language through in-class drills, listening activities and oral projects. They also read Spanish material from magazines and newspapers related to culture and literature and write compositions and dialogues to develop expressive skills. Students review concepts learned in the Spanish 2 course to reinforce the mastery of grammar and learn more advanced structures. Communication is relevant to students by using youth-related themes and by personalizing content with Spanish being the language of the classroom, with use of English being limited to explanation of grammar and clarification of instructions, whenever they are needed.

### **Spanish 4 (1.00)**

This course is open to advanced level students who have mastered Spanish grammar and can read and write in Spanish at least on an Intermediate level. It will review and perfect Spanish grammar and structure, focus on pronunciation, conversation and listening comprehension and will include reading of classic Spanish literature revised for Intermediate and Advanced Spanish students. More emphasis will be placed on reading, writing and oral communication as well as listening comprehension. The class will be conducted completely in Spanish and the students are encouraged to use the target language consistently, not only in the school setting but also in different situations outside the school.

World Languages, continued

**Spanish 5 (1.00)**

This will be a reading, composition and conversational class for students willing to fully communicate in Spanish. Students will be required to read works of Spanish literature and write weekly compositions as well as participate in, and occasionally lead, classroom discussions in Spanish related to current events in Latin America as well as other topics such as family, gender roles, education, racial issues, etc. Outside contact with Hispanic media, heritage speakers of Spanish and other authentic reading material is required during the course. Prerequisites: Successful completion of Spanish 4.

**French 1 (1.00)**

This course will introduce the student to modern French and enable him to begin to communicate orally as well as through reading and writing. We will stress communication among students and between the student and the teacher. Vocabulary and grammar will be introduced and reinforced daily through written, spoken, and listening drills. By the end of the year, we will have mastered regular and irregular verbs in the present tense and be introduced to *passé composé* tense.

**French 2 (1.00)**

This course will continue to enhance the student's ability to communicate in French. Major grammatical points and vocabulary from French 1 will be reviewed. We will continue to stress communication among students and between student and teacher. Vocabulary and grammar will be introduced and reinforced daily through written, spoken, and listening drills. We will aim toward a more in depth understanding of the language and various aspects of French life. By the end of the year the *passé composé* tense of regular and irregular verbs will be mastered and reflexive verbs will be introduced.

**French 3 (1.00)**

This course includes a review of vocabulary and grammatical points covered in previous years. The student will increase his ability to communicate orally in French and his reading, writing and listening skills. French history, culture, and literature will be introduced through supplemental readings and class discussions. We will aim toward a more in depth understanding of the language and various aspects of French life. By the end of the year the students will have learned imperfect, future simple, subjunctive, and conditional tenses.

**French 4**

This course will concentrate on preparing the students to take the AP exam the following year. Students will increase their ability to communicate orally in French and in their reading, writing and listening skills. French history, culture, and literature will be introduced through supplemental reading and class discussions. We will concentrate on reviewing all vocabulary and grammar learned in the previous years. Supplemental texts and reading selections will be used.

**French for the AP Exam**

This course is the continuation of the French 4 class and will concentrate on preparing the students for the AP Exam and the study of French in college.

**FINE ARTS**

**Art for the Advanced Placement Portfolio (1.00)**

This course offers students the opportunity to complete a portfolio for advanced placement college credit or for submission in the college application process. Consent of instructor required. Exam fee.

**Music Theory (.50)**

This course demands a lot of individual practice. It is designed for students who have a desire to learn how to read, arrange, compose and sing on piano. The program is heavily hands-on and stresses critical listening skills, critical thinking and analysis, and creativity. Students will be expected to work independently and to submit projects in the time frame required. Consent of instructor required.