

# 11TH- AND 12TH-GRADE ELECTIVES

## FALL 2011

**Recommended pre-requisite for all AP classes:** a cumulative B+ average or above (3.25 GPA). Other pre-requisites may apply. See course description for further details.

### 1ST-HOUR ELECTIVES

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**ACCOUNTING** (*Mr. John Rasmussen*) Accounting covers the fundamentals of double-entry bookkeeping and the debit/credit method of recording transactions. The course covers the entire accounting cycle from journal entries to trial balances to financial statements for sole proprietorships. Taxes and payroll preparation are also introduced.

**AP CALCULUS AB** (*Mrs. Oh*) This class prepares students to take the AP Calculus AB exam. Topics include (but are not limited to) limits, continuity, derivatives, integrals, and their applications. (*Pre-requisite: a minimum grade of "B" in pre-calculus [or a minimum grade of "B" in the Trigonometry/Math Analysis sequence] and an AP-approved graphing calculator—list available on the AP Central website*)

**AP SPANISH LANGUAGE** (*Mrs. Herrera*) AP Spanish Language prepares students to demonstrate their level of Spanish proficiency across three communicative modes (interpersonal, interpretive, and presentational), as well as the five goal areas outlined in the *Standards for Foreign Language Learning in the 21st Century* (communication, cultures, connections, comparisons, and communities). The course is comparable to fifth- and sixth-semester college courses that focus on speaking and writing in Spanish at an advanced level. (*Pre-requisite: minimum grade of "B" in Spanish III*)

**ANNUAL** (*Mr. Coleman and Mrs. Grewal*) Using reporting, photography, editing, and design, students work under strict deadlines to create a book that informs and chronicles the current school year. Only those serious about these elements need apply.

**PHYSICS** (*Mrs. Burton*) Physics is a problem-solving, applied-science class designed to give an understanding of God's creation and the application of His physical laws. Included in these laws is "Newton's" laws of motion relating to velocity, acceleration, and gravity. Force and velocity vectors will be analyzed with the influence of friction. In addition to linear motion, circular and rotary motion will be introduced with cyclic and harmonic motion. Principles of conservation of momentum and conservation of energy will be included in all phases of our study. Phases of matter and fluids in motion are included as well as principles of thermodynamics and heat engines. Wave physics including sound and light will be studied with applications to mirrors and lenses. Electricity (static and dynamic) will constitute a large part of the curriculum. Included in the study of electricity will be its application to thermodynamics, magnetism, electromagnetic induction, and direct current circuitry. (*Pre-requisite: minimum grade of "B" in Algebra II required*)

### 2ND-HOUR ELECTIVES

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**ANNUAL** (*Mr. Coleman and Mrs. Grewal*) Using reporting, photography, editing, and design, students work under strict deadlines to create a book that informs and chronicles the current school year. Only those serious about these elements need apply.

**AP CALCULUS BC** (*Mrs. Oh*) Students will review functions, graphs, and limits; derivatives; integrals; the Fundamental Theorem of Calculus; and techniques of anti-differentiation. Additionally, students will learn polynomial approximations and series; applications of anti-differentiation, and numerical approximations to definite integrals. (*Pre-requisite: a minimum grade of "B" in AP Calculus A/B and an AP-approved graphing calculator—list available on the AP Central website*)

**AP GOVERNMENT AND POLITICS: UNITED STATES** (*Mr. Misseijer*) AP Government will give students and analytical perspective on government and politics in the United States. This course includes both the study of the general concepts used to interpret US government and politics and the analysis of specific examples. Students will also learn the typical patterns of political processes and behavior and their consequences (including the components of political behavior, the principles used to explain or justify various government structures and procedures, and the political effects of these structures and procedures). Students will also be taught to analyze and interpret basic data relevant to US government and politics.

**BIOLOGY** (*Mrs. Packer*) Biology is a survey course covering all of the facets of life science. First semester begins with cellular biology and continues with cellular reproduction and inheritance. During second semester the course covers the biology of plants and animals. The final course unit is one on ecology. Biology is a laboratory science and many hours are spent in the completion of lab work. These labs require both extensive microscope study and the dissection of animal specimens.

**FINANCE** (*Mr. John Rasmussen*) Finance teaches students God's plan for managing the resources He has given us. Topics include budgeting, real estate transactions, vehicle purchases, credit cards, and bank accounts.

**SPANISH III** (*Mrs. Herrera*) Spanish III students will refine the speaking, listening, and writing skills learned in Spanish I and Spanish II. The students will speak only Spanish the moment they walk into the classroom and will use a dictionary for help with words or phrases they do not already know in Spanish to help them communicate. The students will also be introduced to some Hispanic authors through poetry and short stories and will need to write journal topics on what they have read. They will continue to learn different cultural aspects from countries that speak Spanish through a variety of activities offered in the textbook. (*Pre-requisite: minimum grade of "C" in Spanish II*)

### 3RD-HOUR ELECTIVES

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**NOTE:** Seniors will select AP Government or Government.  
 Juniors will select AP English Language and Composition or Junior English.  
 Seniors who would like to take AP English Language and Composition must select AP Government (Fall) and AP Economics (Spring).

**AP ENGLISH LANGUAGE AND COMPOSITION** (*Mrs. Herrera*) AP English Language and Composition engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, as well as in becoming skilled writers who compose for a variety of purposes. Through their writing and their reading students will become aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way generic conventions and the resources of language contribute to effectiveness in writing. (*Pre-requisite: minimum grade of "B" in the last English class.*)

**JUNIOR ENGLISH** (*Miss Rollema*) Junior English includes American literature and poetry, grammar, composition and vocabulary. The literature portion is a survey course of American literature since its origin. It is divided into time periods in which students learn basic historical facts that influenced the literature of the time. Students will cover the basic writing styles that were characteristic of each time period and focus on the most prominent literary figures of that period. The students will compose essays discussing what they have learned regarding particular works. The grammar portion reviews the basic rules of grammar, insuring a mastery of the rules and expanding them in practical use. The vocabulary portion is structured to enrich a student's speech with words that will assist him to articulate exact thoughts.

**GOVERNMENT** (*Mr. Misseijer*) This course is a thorough study of the American constitutional system of government and how the system works today. Included in the course is the study of America's Christian heritage and that heritage's contribution to the United States Constitution and the American judicial system. The course begins with a study of the basic principles of government and the beginnings of American government. From there it moves into a study of the Constitution and federalism. The student will then examine political behavior and participation. After this study, the student will take a look at the institutions of national government. From there the student will move into an examination of civil liberties and civil rights. The course concludes with a study of public policy and comparative government.

### 4TH-HOUR ELECTIVES

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**NOTE:** Seniors will select AP English Literature and Composition or Senior English.  
 Juniors will select AP US History or US History, unless the student has already fulfilled their US History requirement through summer school.

**AP ENGLISH LITERATURE AND COMPOSITION** (*Miss Rollema*) Advanced Placement English Literature and Composition is a college-level course that will engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students will deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. Grammar and vocabulary will also be formally covered.

**AP US HISTORY** (*Mr. Parmelee*) The AP US History course is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials in US History. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students will learn to assess historical methods—their relevance to a given interpretation problem, reliability, and importance—and to weigh the evidence and interpretations presented in historical scholarship. The AP US History course will develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format.

**SENIOR ENGLISH** (*Mrs. Herrera*) Senior English includes British literature and poetry, grammar, composition, and vocabulary. The literature portion is a survey course of British literature since its origin. It is divided into time periods in which students learn basic historical facts that influenced the literature of the time. Students will cover the basic writing styles that were characteristic of each time period and focus on the most prominent literary figures of that period. The students will compose essays discussing what they have learned regarding particular works. The grammar portion reviews the basic rules of grammar, insuring a mastery of the rules and expanding them in practical use. The vocabulary portion is structured to enrich a student's speech with words that will assist him to articulate exact thoughts.

**US HISTORY** (*Mr. Misseijer*) Students will examine the major turning points in American history from the Explorer Age until Modern Times. They will study the nation's history and ideals from a Christian perspective.

### 5TH-HOUR ELECTIVES

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**ADVANCED COMPUTER APPLICATIONS** (*Mr. Elder*) Advanced Computer Applications continues work with the Microsoft Office suite, in preparation for the Microsoft Office User Certification program. In this course, students will learn the intermediate features of Microsoft Word, Excel, and PowerPoint. (*Pre-requisite: minimum grade of "C" in business computer or instructor approval*)

**AP STUDIO ART** (*Mrs. Grewal*) AP Studio Art is an advanced class where the students will be required to develop a portfolio of artwork (drawing or 2D Design) for submission to the College Board for review. **Instruction in technique is not provided in this class.** Additional time outside of the classroom will be required to adequately prepare the portfolio. **DRAWING PORTFOLIO:** The class requires that the students already know how to work well with a variety of art media. The goals of this class are to use a variety of media, combine a range of conceptual approaches, and combine the physical means of creating art. **2D DESIGN PORTFOLIO:** For this portfolio, students are required to demonstrate mastery of 2D design through any two-dimensional medium or process, including, but not limited to, graphic design, photography, digital imaging, collage, fabric design, weaving, illustration, painting, and printmaking. (*Pre-requisite: minimum grade of "B" in a one-year studio art course or instructor approval*)

**AP MUSIC THEORY** (*Mrs. Sibol*) AP Music Theory introduces the student to musicianship, theory, musical materials, and procedures. The course integrates aspects of melody, harmony, texture, rhythm, form, musical analysis, elementary composition, and, to some extent, history and style. The ultimate goal of this AP Music Theory course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of

music that are heard or presented in a score. This goal will be reached using integrated approaches to the student's development of aural skills, sight-singing skills, written skills, composition skills, and analytical skills. *(Pre-requisite: ability to read and write musical notation and previous instruction on an instrument or voice lessons PLUS instructor approval)*

**MARINE BIOLOGY** (*Mrs. Packer*) Marine Biology encompasses four major themes: a thorough review of basic science as applied to the marine environment; an emphasis on marine organisms; their diversity in structure, function, ecology; and taxonomy; the organism's diversity with the challenges imposed by the surrounding environment; and the interaction of humans with the marine environment.

**PRE-CALCULUS** (*Mrs. Connors*) Pre-Calculus is a comprehensive course incorporating the entire level of lower mathematics courses, thoroughly preparing a student for AP Calculus AB. In the first semester, the student will cover basic algebra, functions and graphs, polynomial and rational functions, exponential and logarithmic functions, trigonometry, and analytic trigonometry. During second semester, there is a continuation of trigonometric topics, systems of equations and inequalities, matrices and determinants, sequences, counting principles and probability, and analytic geometry. *(Pre-requisite: minimum grade of "B-" in both semesters of Algebra II)*

**SPANISH III** (*Mrs. Herrera*) Spanish III students will refine the speaking, listening, and writing skills learned in Spanish I and Spanish II. The students will speak only Spanish the moment they walk into the classroom and will use a dictionary for help with words or phrases they do not already know in Spanish to help them communicate. The students will also be introduced to some Hispanic authors through poetry and short stories and will need to write journal topics on what they have read. They will continue to learn different cultural aspects from countries that speak Spanish through a variety of activities offered in the textbook. *(Pre-requisite: minimum grade of "C" in Spanish II)*

**STATISTICS** (*Mrs. Oh*) This non-AP level course introduces the students to the science of statistics. Areas covered include graphical analysis, distribution, norms, scatterplots, correlations, regression, probability, and sampling distributions. *(Pre-requisite: minimum grade of "C" in Algebra II)*

## 6TH-HOUR ELECTIVES

**AP STATISTICS** (*Mrs. Oh*) AP Statistics is a college-level course which teaches probability; relative frequency; measure of central tendency, variation, and correlation; binomial and normal distributions; testing of hypotheses and estimation; and linear regression in preparation for the AP Statistics exam.

**AP WORLD HISTORY** (*Mr. Rasmussen*) AP World History has a chronological time frame from of 8000 B.C. to the present. This course requires that students engage with the dynamics of continuity and change across the historical periods that are included in the course. Students are taught to analyze the processes and causes involved in these continuities and changes. Students focus on these five themes: interaction between humans and the environment; development and interaction of cultures; state-building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures. *(Pre-requisites: sophomore, junior, or senior standing)*

**BAND** (*Mr. Sturm*) Students who enroll in Senior High Band will work in an exciting musical performance group. This group will meet with their friends to improve their skills in reading and performing music. Fall activities will include playing in the High School Pep Band as well as performing at Homecoming. Interested students should possess an ability to read music. Band members need to supply their own instruments unless other arrangements have been made. Those who do not have a background in music but are interested in learning how to play an instrument should see Mr. Sturm about private lessons. *(Pre-requisite: an ability to read music and previous instruction on a band instrument)*

**CHEMISTRY** (*Mrs. Burton*) General chemistry is a lab science which incorporates mathematical principles. It is designed to meet the needs of students who hope to broaden their scientific foundation or who simply need to fulfill a graduation requirement in the area of physical science. Topics covered include a basic understanding of matter and its interactions, gas laws, stoichiometry, chemical compounds and chemical formulas, the periodic table, acids and bases, equilibrium, and organic chemistry. In addition to the lecture portion of the class, lab work will be done periodically. *(Pre-requisites: junior or senior standing [sophomores must obtain approval from the instructor and the academic advisor], a minimum grade of "C" in Algebra II OR be concurrently enrolled in Algebra II)*

**JOURNALISM** (*Mrs. Herrera*) Journalism introduces reporting and writing for the media. The course focuses on information gathering, interviewing, and writing for print media. Journalism emphasizes news reporting, including the basics of feature writing, journalism law, and ethics.

**LAW, ORDER & PUBLIC POLICY** (*Mr. Elder*) Law, Order, and Public Policy is a comprehensive course that studies the history, operations, and processes of the American justice system and its agencies; how the justice system influences human behavior; and how it is influenced by social, economic, and environmental factors. This course draws from theory and research in a broad range of social disciplines, such as criminology, political science, psychology, and sociology. A comparison of the American justice system and multi-national systems will be taught. International agencies and cross-cultural comparisons of crime will also be covered. *(Pre-requisites: junior or senior standing)*

**STRENGTH TRAINING** (*Mr. John Rasmussen*) Strength conditioning using free weights and machines. *(Pre-requisite: member of the Faith Baptist football team)* **NOTE: This class DOES NOT count for PE credit.**

**STUDIO ART** (*Mrs. Grewal*) This full-year class is geared toward design, art appreciation, and art history, as well as a realm of art techniques. Students will be tested over different concepts, and work outside the classroom is required. *(Pre-requisite: none required but Drawing and Design is recommended)*

**STUDY HALL WITH ENGLISH TUTORING** (*Miss Rollema*) A room which will remain quiet the entire period during which students can work on their homework, study for upcoming tests, or visit the library. Students are also allowed to ask the teacher for additional help with their English assignments.

**STUDY HALL** A time during which students can work on their homework, study for upcoming tests, or visit the library.

**Study Hall and Teacher's Assistant positions  
are also available during every class hour.**