

**HIGHLAND SCHOOL**  
**UPPER SCHOOL COURSE OF STUDY**  
**2009-2010** (dated 2-12-10)

(Please note that courses offered are dependent upon student enrollment and staffing.)

**CLASSICAL LANGUAGE**

**GREEK**

**Greek I** (full year) (course number 417)

Greek introduces the grammatical concepts of the fifth century Attic Greek. It lays the basis for future language study, builds a sound basis of Greek grammar through the reinforcement of English grammar, and increases English vocabulary. The curriculum includes extensive exercises to develop students' language and translation skills, to teach them to comprehend and to write simple sentences in Greek, and to improve basic grammar skills. Prior language study, especially in Latin, is not necessary but certainly is helpful. Complementing the language study are selections from the text for translation, oral reports, selected field trips, and the National Greek Examination.

**Greek II** (full year) (course number 438)

Greek II is a continuation of the grammar study of the first year. Students complete the Book One course of the Greek I text and continue to Book Two. Complementing the language study are selections from the text for translation, oral reports, selected field trips, and the National Greek Examination.

**LATIN**

**Latin I** (full year) (course number 412)

Latin I introduces the concepts of an inflected language, lays the basis for future language study, builds a sound basis of English grammar through the teaching of Latin grammar, and increases English vocabulary. The curriculum includes exercises to develop students' language skills. Extensive Latin passages, covered in class, are designed to increase students' translation skills, and frequent vocabulary quizzes expand their vocabulary in both English and Latin. Complementing the language study are lectures on various aspects of Roman culture, emphasizing its contribution to western civilization, selected field trips, and the National Latin Exam.

**Latin II** (full year) (course number 413)

Latin II is a continuation of the grammar and cultural study of Latin I. Latin II students begin the year with a review of the material from Latin I and then continue their study of grammar throughout the remainder of the year. Culturally, students examine Roman Egypt, including

Antony and Cleopatra and the Battle of Actium. During the second semester students concentrate on Roman Britain, which is preparation for the study of Caesar. Complementing the language study are selected field trips, the National Latin exam, and other state competitions.

**Latin III** (full year) (course number 414)

Latin III students begin the year with a short grammar review and continue working in Unit III of the Cambridge Latin series, during which time they complete their formal study of grammar. Culturally, students study Roman religion, the calendar, and baths. During the second semester, students move on to a study of Julius Caesar, his army, and his *Commentarii de Bello Gallico*. Students compete in various competitions, including the National Latin Exam; additionally, juniors and seniors taking this course are encouraged to take the Latin section of the SAT II.

**Latin IV** (full year) (course number 415)

In Latin IV, students begin the year with a short grammar review. Students then resume the storyline in Britain upon returning to the Unit 3 text. Students also study the city of ancient Rome, including the Forum Romanum, Masada, and Roman engineering. In the Unit 4 text, students examine the works of various authors, including Martial, Pliny, Vergil, Phaedrus, Catullus, Cicero, and Ovid. They will learn how to scan dactylic hexameter and analyze elegiac and epic poetry. Students will participate in the National Latin Exam and various state competitions.

**Latin IV Honors** (full year) (course number 436)

During the first semester, Honors Latin IV students translate selections of Ovid's epic poem, the *Metamorphoses*, and his elegies the *Amores*. In addition to studying the poetic devices particular to Ovid, students conquer scanning dactylic hexameter meter and elegiac couplets. During the second semester, students translate Petronius' *Cena Trimalchionis*.

**Latin V** (full year) (course number 418)

This class gives students a wonderful opportunity to add an extra year of foreign language to their high school transcript and offers a variety of Roman Republican literature, including selections from Virgil's epic, the *Aeneid*, Livy's historical *Ab Urbe Condita*, and Apuleius' satirical *Metamorphosis*. Students compete in various state contests and the National Latin Examination.

## **CLASSICS ELECTIVES**

**Classical Mythology** (semester elective) (course number 419)

This class is an introduction to the primary characters and most important stories of Greek and Roman mythology. Following the text of H. A. Guerber, this course covers the Greek concept of creation and the main Greek and Roman gods, including Zeus, Hera, Athena, Poseidon, Apollo, Ares, and Aphrodite. Next, Greek Heroes such as Hercules, Perseus, Theseus, and Jason are discussed; the course finishes with the Trojan War. Contemporary films and documentaries complement classroom discussion and readings.

## **COMPUTER SCIENCE**

**Advanced Placement Computer Science AB** (full year) (course number 504)

This course prepares students for the Advanced Placement exam in Computer Science AB. It covers all of the required subsets of Java: Programming Basics, OOP, Data and Information Processing, Software Development, Graphical User Interfaces and Event-Driven Programming, and Web Basics. This is a college-level class that is run as though it were being offered to college students. There is a strong emphasis on developing the requisite analytical and problem-solving skills.

**Advanced Programming** (full year) (course number 518)

This course explores advanced topics in Computer Science and is designed for highly motivated Computer Science students. The course includes a semester each of advanced C++ and advanced Java programming with an emphasis on understanding complex data structures and the operations that can be performed in these environments. Stand-alone projects and programming related cases will be developed as part of the course structure.

**Game Development** (semester elective) (course number 508)

For the first time, gaming has driven the development of the latest microchips, taking over from Defense. The game industry is a multi trillion dollar business. This course is a single semester introduction to game development. Basic ideas like graphics, audio formats, storage, design and development are reviewed. Students create 2D and 3D games using concepts and creativity; they program using “point and click” tools. Logical programming and object oriented programming concepts are emphasized.

**Honors Programming** (full year) (course number 503)

This course explores suitably advanced topics in Computer Science (which may in part overlap the AP Computer Science A curriculum, but typically goes beyond that curriculum). This course is designed for highly motivated Computer Science students. VB.NET is the medium of instruction, with in-depth discussion of programming concepts and techniques. In addition, there are several out of text logical constructs, algorithms, and real-world applications.

**Programming I** (full year) (course number 521)

This course serves as an introduction to computer programming using Alice 2.0. Alice 2.0 is designed for students at the high school or college level. Alice introduces object-oriented programming in a modern programming environment. Students learn fundamental programming concepts such as developing software methods, programming with logical structures, and creating event-driven software while creating 3D animated worlds.

**Simulations** (semester elective) (course number 510)

Computation is used in a wide array of contexts to simulate the real world and thereby derive insight into real world problems. This course introduces students to various software packages that simulate some aspect of the world. Current software packages include: Capitalism II, which simulates the business world; Real Lives, which models the lives of people from different parts of the world; Zoo Tycoon, which challenges the students to design, build, and manage a zoo including animal behavior; and SimCity 3000, which offers a realistic 3-D environment with

businesses and other facilities to control. The text, Entrepreneurship, teaches business topics in a more traditional way, and is intended to support Capitalism II.

**Technology Concepts** (semester elective) (course number 524)

This course is a single semester introduction to the fundamental ideas of computers. It covers the components of a computer system, application software, input, output, and storage devices, as well as operating systems. Additionally, students gain a basic knowledge of the electronics of a computer system. All of this is accomplished using the textbook, interactive CDs, classroom discussions and demonstrations, and a hands-on circuitry kit.

**Technology for the 21<sup>st</sup> Century** (REQUIRED semester elective) (course number 523)

Today's students are digital learners. This class is designed to prepare students for 21st century learning. They will explore the role of technology in a global society as well as what it takes to be information, media, and computer literate locally and globally in the 21<sup>st</sup> century. Students will also examine how to use applications/tools unfamiliar to them, Web tools, online help, as well as gain an understanding of current computer terminology. This course is required for graduation unless students have taken Computer Concepts or Programming I prior to the 2009-10 school year

**2D Graphics** (semester elective) (course number 509)

Computer graphics are employed everywhere in our world today. Movies, games, the Internet, and scientific modeling are a few such arenas. This course first introduces Adobe Creative Suite 2, a unified, industry-strength design environment with the ability to produce the next level of integration in creative software. It is used to design, create, and edit graphics, publications, and web pages. The suite consists of Adobe Illustrator CS2, used for creating illustrations, Photoshop CS2, used for photo editing, InDesign CS2, a page layout program, GoLive CS2, a publishing program to publish and manage websites, and Acrobat 7.0, a tool used for reading PDF files. The course concludes with an introduction to digital movie and video creation on a PC using Microsoft Windows Movie Maker.

**3D Animation** (semester elective) (course number 525)

3-D Computer animation is employed everywhere in our world today. Movies, games, and the Internet are a few such arenas. This course introduces 3D animation. Students learn the basic properties of 3D computer objects. Subsequently, they proceed to character creation and animation. The software package for this course is Animation Master, an industry-strength animation tool.

**3D Architecture** (semester elective) (course number 526)

3-D computer architectural modeling is employed everywhere in our world today. Movies, games, the Internet, and scientific modeling are a few such arenas. This course introduces 3D architectural design and modeling. Students learn the basic properties of 3D computer objects. Subsequently, they proceed to CAD (computer-aided design). The software package for this course is Chief Architect, a powerful industrial software package used for architectural modeling.

## ENGLISH

### **English I** (intended for freshmen) (full year) (course number 001)

English I is a foundations course, presenting groundwork texts, themes, and skills that are essential to the student's high school and college careers. The major works are selected to expose students to archetypal ideas and characters on which Western literature and thought is largely based, and touch on fundamental questions of existence such as man's understanding of self in community and the nature of good and evil. Narrative, responsive, and analytical writing is explored, in addition to special emphasis on responsible methods of reporting research. Vocabulary and grammar are taught both in context of student work and according to structured texts. Literary texts include *Romeo and Juliet*, *The House on Mango Street*, *The Oedipus Cycle*, *Lord of the Flies*, and *In My Hands*.

### **English I Honors** (with permission) (full year) (course number 002)

English I Honors covers much of the same material as English I, but more is expected from students in this class and they are assessed by higher standards of growth. In addition to the works taught in English I, Honors students read *The Odyssey* (Fitzgerald translation) and *Macbeth*.

### **English II** (intended for sophomores) (full year) (course number 003)

In English II students will develop an appreciation of different genres of world literature as they hone their critical thinking, reading and writing skills. Typical units to be covered include short story, novel, drama, poetry, and nonfiction. Literary works covered include *Beowulf*, *Things Fall Apart*, *Metamorphosis*, *Julius Caesar*, and *Cryano de Bergerac*. Ability to understand and use literary terms unique to each genre will be emphasized. Students will improve their writing skill by following the writing process of prewriting, writing and revision. Students will use great literature as models of writing and they will write for different purposes including narration, persuasion, and exposition. Grammar, learned by students in lower and middle school, will now be used by students for self-editing to improve the clarity, unity and fluency of their writing. Through discussions, oral projects, and dramatic presentations, students will enhance their listening and speaking skills. Students will use technology for research and word processing.

### **English II Honors** (with permission) (full year) (course number 004)

English II Honors covers much of the same material as English II, but more is expected from students in this class and they are assessed by higher standards of growth. In addition to the works taught in English II, Honors students read *Cry*, *the Beloved Country* and *Angela's Ashes*.

**English III** (intended for juniors) (full year) (course number 011)

This course is an exploration of themes in American literature, from the optimism of its founding to the stark existentialism of the twentieth century to the frenetic overload of the post-modern era. Texts include selections from the Norton Anthology of American Literature as well as *The Crucible*, *Of Mice and Men*, *The Great Gatsby*, *The Narrative of the Life of Frederick Douglass*, *Their Eyes Were Watching God*, and *The Things They Carried*. We will supplement our study of this literature with examinations of art and music—such as the Hudson River School of painting and ragtime music—born of those same time periods. The literature will inspire our writing; we will write analytical, creative, and personal pieces. We will focus on sentence and paragraph structure, logical development, rhetorical strategies, and narrative techniques. For the dual purpose of improving written expression and preparing for the SATs, we will study vocabulary and practice the two verbal sections of the test.

**English III Honors** (with permission) (full year) (course number 010)

English III Honors covers much of the same material as English III, but more is expected from students in this class and they are assessed by higher standards of growth. In addition to the works taught in English III, Honors students read *The Scarlet Letter*, *Streetcar Named Desire*, and *Ethan Frome*.

**Advanced Placement English Language & Composition** (with permission) (full year)  
(Juniors, course number 006)

This intense course serves two distinct but complementary purposes. As AP language and composition, it requires students to use a college-level mastery of language to critically deconstruct non-fiction prose and compose analytical and artful responses that reveal a comprehensive world view. The writing emphasis is persuasive analytical, with additional attention given to responsible research practices. Vocabulary is studied in context and according to a structured text; grammar is reviewed as needed. All AP students must sit for the exam in May. Preparation for the exam begins in the first quarter and continues through April.

The texts studied for the above purposes are American, including the texts listed for English III Honors and supplemental readings in literary non-fiction. As American Literature, the course works chronologically to construct the development of our nation's thought and understanding of literature through all its major periods and styles. Students are exposed to a wide range of historical, social, and cultural perspectives on what it means to be an American and wide-ranging definitions of the American Dream.

**English IV** (intended for seniors) (full year) (course number 007)

English IV offers a sweeping survey of British literature including, but not limited to, *Hamlet*, *Pygmalion*, *Jane Eyre*, *A Modest Proposal*, and selections from Chaucer's *Canterbury Tales*. Students study its evolution and work towards its genuine appreciation and understanding. Students engage in high-level dialogue regarding the assigned readings and respond to the texts in both personal and analytical writings that proceed from draft form to a final product. Improving the technical use of the English language and advancing vocabulary skills are additional goals of this course. Readings include fiction, nonfiction, poetry, and drama.

**English IV Honors** (with permission) (full year) (course number 009)

English IV Honors covers much of the same material as English IV, but more is expected from students in this class and they are assessed by higher standards of growth. In addition to the works taught in English IV, Honors students read additional texts.

**Advanced Placement English Literature & Composition** (with permission) (full year) (Seniors, course number 008)

This intense course is structured to prepare dedicated students for the AP English Literature and Composition exam in the spring and to further train them as learners for their college experience. As part of this process, students read, study, and critically respond to a survey of British literature, including many of the classics from the Medieval Period to Contemporary times. Texts include *Sir Gawain and the Green Knight*, *Hamlet*, *Jane Eyre*, *Pride and Prejudice*, *To the Lighthouse*, *The Picture of Dorian Gray*, and *Pygmalion*, among others. This response “to” and “from” fiction, nonfiction, drama, and poetry is done both orally and in writing. High-level dialogues, including Socratic Seminars, aid students in exploring all components of the literary experience. Literature logs, response essays, and longer analytical papers help develop the students’ readiness both for the exam and for the many writing assignments that await them in college and beyond.

**ENGLISH ELECTIVES**

All English electives are open to sophomores, juniors, and seniors.

**Creative Writing** (semester elective) (course number 016)

This writing-intensive course offers students the opportunity to explore their narrative voices and receive personal, critical feedback from peers and the instructor. Studying a wide variety of texts, students develop the ability to articulate what makes writing powerful and to infuse their own prose and poetry with the techniques of the masters. Students develop a writing portfolio, and opportunities to submit writing to competitions and publications are presented. This elective combines writing workshop and class instruction models.

**Debate** (semester elective) (course number 022)

Debate is a course that will increase a student’s self-confidence as a public speaker. Students become better critical thinkers by examining both sides of an issue. A student’s listening and note taking skills, invaluable for college study, are greatly improved through debate. Research skills and application of that research to argumentation are also enhanced through debating and judging debates. Students learn how to structure and write Lincoln-Douglas debate, and they participate in a class tournament in a formal Lincoln-Douglas debate. Students are also introduced to policy debate theory and participate in informal classroom debates on a variety of topics. Improvement of both physical and vocal delivery in giving speeches is highlighted.

**Journalism** (full year) (course number 015)

In this course, students explore journalistic historic and contemporary aspects of writing for newspapers, periodicals, and more extensive non-fiction books. Students expand their creative ability by learning to hone their writing style using innovative, yet concise language. Students learn to express information accurately and truthfully, while considering the impact of their

words upon readers. Journalism students use textbook readings and workbook exercises to advance their writing skills, and they read and analyze longer pieces. Students contribute to the publication of the school newspaper by writing and editing one another's work, so they also learn about layout production and deadlines. In the spring students contribute to, edit, and produce the Highland School literary magazine, *Hiatus*.

**Literary Influences: The Bible as Foundational Text** (semester elective) (course number 027)

Do you know the story of the Prodigal Son? Why did Joseph have a coat of many colors? Would you recognize the phrase "the valley of the shadow of death"? Stories and language from the Bible are a central reference point for much of the great literature from Chaucer to the present. Major authors from Shakespeare to Faulkner had a thorough knowledge of the Bible and filled their writing with allusions to Biblical characters, stories, and phrases. Literature students who are not well-versed in this area of cultural literacy are limited in their ability to appreciate the themes and layers of symbolism in major texts. This course will survey all the stories that are often alluded to in literature, giving students a working knowledge of characters, plots, and names that always carry symbolic weight when transferred into other literature. If you've ever felt "left out" when reading a novel, play, or political speech because the footnote about Job or Bathsheba didn't make sense, this is the course for you.

**Media Literacy** (semester elective) (course number 076)

The impetus for offering this elective stems from the desire to expand the notion of "text" beyond the traditional printed word to other media, including photographs, film, television, advertising, and the internet, with the goal of preparing Highland students for life in a complex, media-rich, technologically dynamic environment. Using higher order critical and creative thinking skills, students will explore issues of media influence, examine advertising from a critical perspective, and reflect/analyze visual approaches to narrative, thereby enabling them to "read" media more effectively. In addition to photographs, advertisements, and websites, content possibilities may include, but are not limited to: Ken Kesey, *One Flew Over the Cuckoo's Nest* (book and film); A. Huxley, *Brave New World*; Jean Kilbourne, "Killing Us Softly: Advertising and the Image of Women;" "Consuming Kids: The Commercialization of Childhood."

**Myth and Legends** (semester elective) (course number 024)

This elective provides an overview of multi-cultural mythologies with the exception of Greek and Roman classical mythology. Ancient Egyptian, Celtic, Norse, Indian/Hindu, and other mythologies are studied. Topics to be covered include: Development and Purposes of Myth, Types of Myth, Deities and Lesser Spirits, and Mythological Heroes. Students focus their study of legends on the legend of Dracula.

**Shakespeare: Analysis and Performance** (semester elective) (course number 025)

This elective allows students intrigued by Shakespeare to wallow in his language and works from both literary and dramatic perspectives. Students gain exposure to the texts through readers' theater, analyze through discussion and writing the textual intricacies that have kept scholars fascinated for centuries, research the historical and political context of Shakespeare's stories, and bring his drama to life through rehearsed scenes, soliloquies, and spoofs. This high-

energy course strengthens skills in English as well as tapping into memorization and sword fighting abilities.

**Speech** (semester elective) (course number 021)

In speech or forensics students learn the art and skill involved in oral presentations. Students develop self-confidence through oral presentations and in-class competition. Students learn to develop and apply criteria to evaluate, appreciate and respond to oral presentations by others. They learn to work within time constraints and thematic possibilities of selected pieces of literature. Finally, they demonstrate the ability to analyze literature and communicate their understanding through their own vocal physical expression.

## **EXPERIENTIAL AND SERVICE LEARNING**

**Leadership Studies I** (elective offered to sophomores, juniors, and seniors) (elective meets three days per week for one semester during a study hall) (pass/fail) (course number 730)

This course is one of the required components of a Certificate of Leadership and serves as a baseline for leadership development. The content is taught in units: Models and Methods of Leadership; Great Leaders in History; Individual Leadership Styles; Ethical Considerations of Leadership; Communication; and Practicum. The Practicum is a leadership experience that can be evaluated by an advisor to give a student direct feedback on leadership style. A full description of the Certificate of Leadership program is available.

## **FINE ARTS**

### **PERFORMING ARTS**

**Advanced Placement Music Theory** (with permission) (full year) (course number 627)

In this course, students learn music terminology and notation skills, the concepts of rhythm and tempo, concepts of pitch and pitch relationships, melody and harmony, including advanced harmonic structure, basic and advanced ear training and basic and advanced sight-singing. They also examine different periods of music, becoming familiar with the different eras and the impact as musical complexity advanced. They are tested weekly, and they exercise their skills with practice AP Music Theory exams. Ear Training, Sight Singing and Piano Exercises are alternated on a daily basis. The course demands practice of skills outside of the classroom, and students are expected to be prepared and on-task at all times. This is a very intensive course covered in a very short time period.

**Beginning Guitar** (full year) (course number 621)

This class is for students who would like to learn how to play the guitar. Students are taught the parts of the instrument, tuning, proper playing position, as well as basic chord structure. Beginning notation and rhythm reading are practiced. This class teaches students how to play in

an ensemble as well as how to be a solo musician. The group performs in at least one public concert each semester.

**Beginning Guitar** (semester elective) (course number 619)

This class is for students who would like to learn how to play the guitar. Students are taught the parts of the instrument, tuning, proper playing position, as well as basic chord structure. Beginning notation and rhythm reading are practiced. This class teaches students how to play in an ensemble as well as how to be a solo musician. The group performs in at least one public concert during the semester.

**Chorus** (full year) (course number 602)

This active singing ensemble is for students who wish to learn and rehearse a wide variety of choral music including arrangements of folk, classical, jazz, show tunes, pop songs, and spirituals. The group performs in two concerts in the Highland Center for the Arts and also participates in a music festival in the spring, usually in D.C. Other occasions for performances include assemblies and high school graduation.

**Chorus** (semester elective) (course number 604)

This active singing ensemble is for students who wish to learn and rehearse a wide variety of choral music including arrangements of folk, classical, jazz, show tunes, pop songs, and spirituals. The group performs in a concert in the Highland Center for the Arts; second semester students also participate in a music festival in the spring, usually in D.C. Other occasions for performances include assemblies and high school graduation.

**Guitar Ensemble** (with permission) (full year) (course number 620)

This class is designed for students who have at least two years of experience playing the guitar. It gives them the opportunity to perform in an ensemble as well as offering solo opportunities. Students learn chords, notation, and other music theory concepts. Students perform in at least two public concerts during the school year. Audition for seating placement is required.

**Intermediate Guitar** (full year) (course number 637)

This class is designed for students with at least one year of guitar experience (or two semesters of Beginning Guitar) and some music theory knowledge who want to improve their skills and possibly move on to Guitar Ensemble. Students further the skills they learned in Beginning Guitar as well as learning the skills necessary to audition for the Guitar Ensemble.

**Introduction to Theater** (semester elective) (course number 638)

In this class students participate in at least two One-Act plays or selected scenes from longer plays in the Lise Hicklin Black Box Theater. They are involved in acting, lighting, sound, set and costume production. Assignments include line memorization and other work that can be done outside of class. Class time is used for production purposes and rehearsals. Students also assist in the fall and spring productions, learning to use the light and sound equipment in the main theater.

**Jazz Ensemble** (full year) (course number 635)

This ensemble is for students who wish to actively participate in a performing instrumental jazz group. The main emphasis is to play musical instruments by ear, incorporating music theory into the practical playing of jazz pieces, and to develop the ability to improvise in various scales, modes, harmonies, and keys. The ensemble performs publicly at two concerts in the Highland Center for the Arts; other performances are encouraged.

**Music Theory** (semester elective) (course number 652)

In this one semester course, students will learn fundamental music terminology and notation skills, the concepts of rhythm and tempo, concepts of pitch and pitch relationships, and melody and harmony. They will also be introduced to different periods of music, becoming familiar with the major eras. Also, sight-singing and ear training will be practiced. This course is a prerequisite for AP Music Theory.

**Songwriting** (semester elective) (course number 624)

The songwriting course is a musical elective in which participants learn the basics of songwriting. Time is spent analyzing existing songs and studying lyric-writing, basic music theory, and musical form. Lyric-writing includes the setting of existing texts, rhyming, and creating original lyrics. Musical concepts such as form, scales, keys, voice ranges, word rhythms, meters, and others, are discussed and applied directly to creative projects.

**String Ensemble** (two days per week for full year; only half credit is awarded) (course number 649)

This ensemble is for students who wish to actively participate in a performing string ensemble. The main emphasis is individual performance improvement. The ensemble performs publicly at two concerts in the Highland Center for the Arts; other performances are encouraged.

## **VISUAL ARTS**

**Advanced Filmmaking** (semester elective open to juniors and seniors) (course number 655)

This course will be a continuation of Intermediate Filmmaking with more emphasis on better story development and higher production values. Students will work as a team on a single documentary, sharing the work of planning, critiquing, filming, lighting and editing. This will result in the creation of a longer, more complex film as well as teaching the students to work collaboratively on a project by providing and receiving ideas, constructive criticism and feedback.

**Advanced Placement Drawing** (with permission) (full year) (course number 639)

AP Art in drawing is designed to take the student with a strong interest in art and develop that interest into a college level talent. Students learn a variety of drawing techniques using a wide range of media, and most importantly they learn how to think about art, bring content to art and talk about their ideas in critiques. They place their work in context by researching similar artists, so they learn to think about their own work by thinking about the work of others. In the first semester the students prepare a portfolio demonstrating a breadth of understanding of the elements of art and principles of design as applied to drawing. During the second semester they work on a concentration which will be a semester long series of projects all specifically related.

Photographic and computer-driven design is not permitted in AP Drawing. Students select five of their best works for presentation. At the end of the year during AP exam week, in lieu of an exam AP art students will be turning in a portfolio consisting of 24 separate works.

**Advanced Placement 2-D Design** (with permission) (full year) (course number 640)

This course is identical to the Advanced Placement Drawing course, with the only exception being that photographic and computer-driven design is permitted.

**Advanced Placement 3D Design** (with permission) (full year) (course number 641)

AP Art is designed to be the culmination of a student's high school art studies. Students are expected to work at a higher level of art than in previous classes. The course is comparable to an introductory college art course. Students study and use the elements of art and the principles of design as a basis for self expression. Work begins during the summer before taking the course; summer work and a paper are a requirement. Work in the course goes towards an AP portfolio, which will be submitted to the AP Board during AP exam week in May. The AP portfolio consists of at least 20 finished works to the College Board in lieu of a written exam as the course's culmination. The course is very demanding of both time and effort, but is very rewarding. It is for serious art students who have taken at least Advanced Sculpture and/or Ceramics III. Students may submit either a sculpture or ceramics portfolio, depending on their experience and interests.

**Advanced Sculpture** (full year) (course number 658)

This course is designed for students who have completed Introduction to 3D Art; other art classes are highly recommended. Students develop skills already learned, as well as work with new media and techniques. Design elements and principles are a primary focus of the course. Students are expected to exhibit greater understanding of media and methods, and to produce more thoughtful and creative works. Projects involve additive, subtractive, and constructive methods. Students also develop ideas for projects on their own, choosing their own media and themes.

**Art History I** (semester elective) (course number 656)

This class is recommended for those with an interest in art or history. Students who plan to major in the Visual Arts in college may especially want to take this class. It is a good introduction to art periods, styles, and artists. Students learn about the world and work of the artist. They learn how works of art are evaluated and why people create art. The aesthetic properties of each work are discussed, including the sensory, formal, technical, and expressive properties, as well as the cultural and historical relevance. Students taking this course study non-Western art and Western art from the Paleolithic period through the Renaissance in Northern Europe. There are at least two field trips to various museums in the area.

**Art History II** (semester elective) (course number 657)

This class is a continuation of the study of art history I, although students need not take these two classes consecutively. Students taking this course study non-Western art and Western art from the Renaissance in Northern Europe through the twenty-first Century.

**Art II** (with permission) (full year) (course number 623)

This class develops drawing, painting and printmaking skills and understanding of visual language through studio instruction. The students expand upon what they know about the fundamentals of drawing, learning how to translate what they see into the elements of art (line, shape, color, texture, value, and space) and using the principles of design (proportion, perspective, and composition) to create more meaningful art. They work on projects using drawing, painting and printmaking. They also try their hand at watercolors, pastels and acrylics on paper or on canvas, prints and collages.

**Beginning Filmmaking** (semester elective) (course number 653)

An introduction to filmmaking techniques and theory. Students will learn to analyze films through readings and viewings, and recognize and understand the underlying film techniques. This theoretical knowledge will be solidified and applied through shooting short scenes and sequences around the school. Students will learn the basics of proper camera skills, sound recording, and lighting as well as professional editing and post-production software such as Final Cut Pro, Soundtrack Pro and Garage Band.

**Ceramics I** (semester elective) (course number 631)

In this introductory course, students learn methods and techniques for working with clay to create art. They explore various hand building techniques, begin to work on the potter's wheel, and discover ways to bring the two methods together in a single work. Though they spend more time on the wheel, this course serves only as an introduction to wheel-throwing. Students leave the course with a basic knowledge of clay.

**Ceramics II** (semester elective) (course number 632)

Students expand on their knowledge of clay in this intermediate level course after successfully completing Ceramics I. More advanced wheel techniques are taught, as well as more methods for using handbuilding techniques with wheel-thrown pieces. The primary theme of the course is combining functionality with aesthetics and design. Students are expected to work more independently and show more creativity with their pieces than in Ceramics I.

**Ceramics III** (full year) (with permission) (course number 642)

Students further develop their skills with clay on and off the wheel. The course focuses on improving skills and techniques already acquired and learning more advanced skills. A good understanding and application of basic wheel skills are essential in undertaking the coursework. Students assume more studio responsibilities, including recycling and preparing clay, keeping the classroom clean, maintaining an inventory of supplies, and loading and unloading the kiln. Through the skill development and added responsibilities, students learn more about continuing with pottery on their own. Work is critiqued continuously over the course by both peers and the

instructor. The course concludes with a final project showing skill mastery. Juniors taking the course will prepare for an AP portfolio beginning in the spring semester.

**Intermediate Filmmaking** (semester elective open to juniors and seniors) (course number 654)

An introduction to the basics of making a short digital documentary, from concept development to finished piece. Beginning filmmakers will plan, shoot, and edit their own individual short documentaries. The class will cover the essential technical skills, the categories of emerging styles of non-fiction film, and how to experiment with a variety of documentary storytelling techniques. The course format consists of individual video assignments, screenings, and critique.

**Introduction to 2D Art** (semester elective) (course number 609)

Students in this class study the elements of art through a variety of materials and methods. Incorporating art history as projects are conceived, they look at the development of Modern Art as followed through the work of several influential artists. This class is about process more than production and should leave students with a foundation that will make their own work stronger as well as making them more educated viewers of other's work. Students work in a variety of media, although drawing forms the basis for this class.

**Introduction to 2D Design** (semester elective) (course number 610)

Students in this class study the elements of art and the principles of design through a variety of projects and drawings. This class is about process more than production and should leave students with a foundation in design that will make their own work stronger and enable them to analyze the works of others. Using a variety of media students work on design projects which deconstruct what makes an artwork successful. The projects in this class are generally more abstract than Introduction to Art.

**Introduction to 3D Art** (semester elective) (course number 622)

In this course, students learn methods for creating three-dimensional art work and sculpture using additive, subtractive, and constructional methods. Students explore common media associated with three-dimensional art -- their uses, procedures, and results. These include, but are not limited to, clay, plaster, foam, found objects, wood, wire, and papier mâché. Projects are based on seeing and using the third dimension and ideas that separate three-dimensional art from two-dimensional art.

**Photography** (semester elective open only to seniors) (course number 611)

In this course, students learn to use an SLR camera and its settings, develop black and white film, make black and white prints, and learn photographic techniques to improve the quality and creativity of their photographs. Students study composition, art elements in photography, portraiture, photojournalism, darkroom techniques, photography as narrative, presentation, and developing portfolios. This is done through taking photographs, making prints, group critiques, and studying work by other photographers. Various applications of photography and careers in the field are discussed.

**Theater Technology** (semester elective) (course number 616)

This course examines the practical application of set and lighting design. Students are involved in the building of sets for school productions, starting with drawings, model sets and the construction of actual set pieces. Students also learn the basics of lighting and sound design, so that they can take charge of the sets, lights and sound for all drama productions and Center events. The course is taught through lecture, video and class participation. Some after-school participation may be required.

**Yearbook** (full year) (course number 645)

In this course, students learn aspects of yearbook journalism and graphic design while completing Highland School's yearbook. Students complete the yearbook from start to finish, beginning with fundraising and planning in the summer and ending with a published book to be distributed at the end of the school year; summer work and assignments are a course requirement. This course is very demanding of both time and effort, with many out-of-class assignments. *This course does not apply to the one year requirement of a Fine Arts class for graduation.*

## FOREIGN LANGUAGE

### FRENCH

**French I** (full year) (course number 407)

French I begins the process of learning French as a second language in the Upper School. It is designed to give students the vocabulary and grammar of French and begin their adventure into the richness of the Francophone world. Using the *Bon Voyage 1* textbook, French I students learn how to converse in basic terms about needs, discuss events and services, and conduct both formal and informal conversations. During the third quarter, students take the National French Examination.

**French II** (full year) (course number 408)

Using the *Bon Voyage 2* textbook, students communicate in real-life situations using necessary vocabulary and structures. In various situations, such as the train station, the bank, the airport and the hotel, students are faced with cultural realities in the French-speaking world. The cinematic aspect of the course focuses on the award-winning movie "Sugar Cane Alley" set in Martinique. Students have regular access to computers and complete regular technology-based tasks. During the third quarter, students take the National French Examination.

**French III** (full year) (course number 409)

Using the *Imaginez* textbook, short films and website, students continue to build their linguistic and cultural foundations. Communicative competency is developed through thematically linked structures. Subjects studied include: living in the community, town life, the media, the value of ideas, changes in society, generation differences, science and technology, leisure time, work perspectives and natural resources. The classic French movie "Small Change" serves as the

cinematic key element in this course. During the third quarter, students take the National French Examination.

**French IV** (full year) (course number 410)

French IV continues to advance student proficiency in all language skills. The fourth year is the year in which students take part in a two week exchange with a lycée in France. Using the *Histoire du temps* textbook, connections are made with other disciplines. Students develop their manipulation of language and hone their higher level thinking skills through the judicious mix of cultural, literary and historical texts. During all units, grammar is reviewed and introduced. The recent award-winning movie “The Chorus” enables students to consider comparison of cultures and school through the eyes of the students in the film. During the third quarter, students take the National French Examination.

**Advanced Placement French Language** (with permission) (full year) (course number 411)

In this class students prepare to take the AP French Language exam at the end of the year. Students develop a thorough understanding of French and its complexity. Varied class activities based on authentic material allow students to improve on their knowledge for the challenge of the written and oral examinations. During the third quarter, students take the National French Examination.

**SPANISH**

**Spanish I** (full year) (course number 401)

Spanish I lays the groundwork for successful second language acquisition. Classroom activities and text exercises are designed to span all four language skills: listening, speaking, reading, and writing. Students in this course begin communicating in Spanish. The student learns basic and intermediate vocabulary terms at this level, as well as verb conjugations in the present and past tenses. The students write an autobiography with the vocabulary acquired, search the Internet for information using sites in Spanish, watch videos, and create original projects that reflect their knowledge of the Spanish language and culture. During the third quarter, students take the National Spanish Examination.

**Spanish II** (full year) (course number 402)

This course emphasizes practical communication and encourages students to express their own ideas. The grammar and vocabulary in this course are taught within the thematic context in each chapter of the textbook (i.e. different real-life situations). In addition, the students write and illustrate their own children’s story, watch videos, perform skits, and write their autobiography using the vocabulary learned in each chapter of the textbook. Another aspect taught is the study of Hispanic culture through reading assignments, research, and videos. During the third quarter, students take the National Spanish Examination.

**Spanish II Honors** (with permission) (full year) (course number 403)

This course emphasizes vocabulary and the more complex grammar structures that allow students to perform some daily practical tasks. These include: making phone calls, leaving a message on an answering machine, planning a trip using air and train transportation, going to a

doctor's office, asking for driving directions and shopping for food and apparel. Class activities include searching the Internet for information using websites in Spanish, doing oral presentations, and preparing a travel brochure in Spanish. During the third quarter, students take the National Spanish Examination.

**Spanish III** (full year) (course number 404)

Students complete and review the study of basic grammar from Spanish II and then quickly move on to new grammar material. This includes: the imperfect and preterite tenses, new forms of the subjunctive, the future and conditional tenses, expressions with “hacer,” etc. The development of sophisticated conversation is enhanced by continued practice with more advanced grammar, composition, and vocabulary. Students are expected to give oral presentations, in Spanish, throughout the course of the year on selected cultural topics. Additionally, students take the National Spanish Examinations once during the fall semester as practice for the examination that is administered during the spring semester.

**Spanish III Honors** (with permission) (full year) (course number 422)

Spanish III Honors covers much of the same material as Spanish III, but in greater depth and at an accelerated pace to meet increased standards of achievement and understanding. Honors students also read a variety of works on Hispanic and Spanish culture, history, and art, and investigate four different literary genres of Spanish literature: narrative, poetry, drama, and the essay. Students analyze each of these genres by reading excerpts by authors such as Emilia Pardo Bazán, Sor Juana Inés de la Cruz, Pablo Neruda, Miguel de Cervantes and many others. The text discusses “el panorama histórico y categorías fundamentales” before each section and touches upon the significance of art and aesthetics in literature. This course provides the foundation for entrance into Spanish IV or the Advanced Placement (AP) program in Spanish. Additionally, students take the National Spanish Examinations once during the fall semester as practice for the examination that is administered during the spring semester.

**Spanish IV** (full year) (course number 405)

This course is designed for fourth year Upper School Spanish students who wish to continue with the language at an advanced level. It is a course that requires some accelerated review of grammar and vocabulary from Spanish III, and it introduces students to more complicated structures and usages of the target language, such as the “pluscuamperfecto” and moods of the “subjuntivo,” that are set in various thematic contexts. Students are exposed to longer, more challenging reading assignments, magazine articles, Internet research, videos on different aspects of Spanish history, culture and language, short stories, and current events. They also read short literary selections from various periods so that they may be exposed to different styles and genres of classical and modern Spanish literature from several great writers. It is through an examination of Spanish literature that the students further appreciate the richness, variety, and complexity of the Spanish people, their history, and their intellect. Students improve their proficiency and satisfy their intellectual curiosity about Spanish language, literature and culture, in preparation for Advanced Placement Spanish Language. Students should be prepared to take AP exam practice tests throughout the school year. The language of the classroom is Spanish. During the third quarter, students take the National Spanish Examination.

**Advanced Placement Spanish Language** (with permission) (full year) (course number 406)

AP Spanish Language is intended for students who wish to develop proficiency and integrate their language skills using authentic materials and sources. This course focuses on speaking and writing in Spanish at an advanced level in preparation for the AP exam in May. The course content reflects a wide variety of academic and cultural topics, including arts, history, current events, literature, culture, and sports. The materials used include the use of authentic sources in the form of radio and TV recordings, films, newspapers, literary texts, and magazines. The language of the classroom is Spanish. During the third quarter, students take the National Spanish Examination.

**Advanced Placement Spanish Literature** (with permission) (full year) (course number 423)

AP Spanish Literature is designed for students who have already taken the Spanish AP Language examination and want to explore the language in its literary form at an advanced level. It is a course that requires an accelerated review of grammar and vocabulary from earlier courses in Spanish, and it introduces students to more complicated structures and usages from the target language that are set in various thematic contexts. Students are exposed to longer, more challenging reading assignments, magazine articles, Internet research, videos on different aspects of Spanish history, culture and language, short stories, and current events. The students also read short literary selections by many great writers from various periods so that they may be exposed to different styles and genres, ranging from medieval epic poetry to the Golden Age to the magical realism of modern Spanish literature. The students' literary experience includes an in-depth analysis of the AP College Board Reading List and culminates in the AP Spanish Literature exam in May. It is through this extensive examination of Spanish literature that the students further appreciate the richness, variety, and complexity of the Spanish people, their history, and their intellect. The language of the classroom is Spanish. During the third quarter, students take the National Spanish Examination.

## **FOREIGN LANGUAGE ELECTIVES**

**Advanced French Literature** (with permission) (semester elective) (course number 437)

This Advanced Literature course aims to have students become proficient in the fundamental language skills that enable students to read and understand prose and verse of moderate difficulty and mature content, as well as to formulate and express critical opinions in correct oral and written French. In addition, students will develop the ability to read and analyze critically and to discuss perceptively representative works of French Literature. All class activities and assignments are conducted exclusively in the French language. They include detailed reading and discussion of texts, paying close attention to character and theme, structure and style and to how these elements contribute to overall interpretation. Students will learn techniques of critical analysis; they will develop a vocabulary of literary terms and expressions to express their understanding of poetry, plays and novels. Regular class and home work will include the following: reading of assigned texts; preparing character outlines and analysis of themes, structure and style to prepare for class discussion, answering of questions, and essay writing and oral presentations on a subject related to the literature studied. Final Assessment will be conducted through a project written in French.

**World Culture Awareness in the Francophone World** (semester elective) (course number 430)

The World Culture Awareness course provides students with the tools to develop a global understanding of other cultures as preparation for the challenges of College and later life. Students' investigations will be based around a single essential question: 'What is my place in the world?' The course covers cultural diversity, linguistic diversity, families, and political systems. Through the use of articles, editorials and movies from the French-speaking worlds, students develop skills to help them consider, reflect, discuss, understand, examine, compare and build arguments. At the end of each unit, students complete a reflective project which requires them to read newspaper articles and documents, watch documentaries and movies, and meet individuals from other cultures. The curriculum incorporates elements from history, current events, literature, music and art, thus enabling students to gain a greater insight into world issues. This course does not apply to the three-year Foreign Language requirement for graduation, but it is strongly recommended for students who qualify for a language waiver or for those students who only study Spanish.

**World Culture Awareness in the Spanish-speaking World** (semester elective) (course number 431)

This course is similar to World Culture Awareness in the Francophone World, except that students in this class explore the cultures of Spanish-speaking worlds.

## **LEARNING SUPPORT**

**Reading/Writing Lab** (with permission) (semester elective) (pass/fail) (course number 731)

Taught by the Director of Learning Support, this course is designed for students who need additional reading and writing support in their regular English and history classes. The skills to be emphasized include note-taking, test-taking, reading with a purpose, using graphic organizers, identifying main ideas, and writing essays. To gain admittance, students may self-identify or be recommended by their humanities teachers. Students who self-identify may be asked to submit a graded writing sample and/or to schedule a brief interview with Dr. Porter.

## **MATHEMATICS**

**Algebra 1** (full year) (one high school credit) (course number 101)

This is the traditional college preparatory course that serves as a foundation for subsequent math courses. Arithmetic skills and reasoning skills are developed, including arithmetic with integers and rational numbers, and solving and graphing linear functions and inequalities. Students master operations with monomials and polynomials, and they use that knowledge to factor polynomials and solve quadratic equations. The students are introduced to radical equations and probability. Problem solving is integrated throughout the course as connections to other subject areas are made through practical applications. Models, manipulatives, and technology, including

the graphing calculator, are used when appropriate. Students are expected to use the language and symbols of mathematics.

**Algebra 1, Part 2** (full year) (course number 118)

This class is intended for the student who has satisfactorily completed Algebra 1, Part 1. It is an in-depth exploration of linear and non-linear equations, polynomials, and radical and rational functions. It serves as a foundation for subsequent math courses. Students are expected to use the language and symbols of mathematics. Models, manipulatives and technology, including the graphing calculator, are used when appropriate.

**Geometry** (full year) (course number 105)

This is a traditional study of Euclidian geometry. Students perform a study of geometric structures, their characteristics and relationships. The students describe and investigate relationships within a geometric system using definitions, axioms and theorems in that system. Formal proofs and practical applications are used. This course is designed for students who have acquired the skills of Algebra I and includes an introduction to trigonometry.

**Honors Geometry** (with permission) (full year) (course number 109)

This course is a comprehensive study of Euclidean geometry. Students perform an in-depth study of geometric structures, their characteristics and relationships. The students describe and investigate relationships within a geometric system using definitions, axioms and theorems in that system. Emphasis is placed on mathematical argumentation through formal proofs and practical applications. This course is designed for students who have mastered the skills of Algebra I and includes an introduction to trigonometry.

**Informal Geometry** (full year) (course number 111)

The goal of this course is to teach students to think more analytically so that they can apply these skills to problems involving space. Students explore angles and shapes, particularly triangles and quadrilaterals, and identify characteristics of each shape. Finally, they learn to attack challenging SAT-style problems involving perimeter, circumference, area and volume.

**Advanced Algebra** (with permission) (full year) (offered to students who have completed Geometry) (course number 112)

This traditional algebra course includes a comprehensive study of advanced algebra topics including absolute value, rational, logarithmic, exponential and trigonometric functions, and trigonometry. Modeling real world applications is a major component of this course. This course moves at a rapid pace to prepare students for the rigors of Pre-Calculus.

**Algebra II** (full year) (course number 102)

This course provides the mathematical base for higher levels of math. This course is intended to introduce students to different approaches to solving equations and inequalities, including systems of equations and inequalities, and to help students get a deeper understanding of linear relations and elementary functions. Throughout the course, the students explore quadratic and polynomial functions and develop skills in graphing those functions. Modeling real world applications is a major component of this course. Students in this class take Algebra III and Statistics the following year.

**Algebra III** (semester course) (course number 116)

This course is intended for students who have studied Algebra II through Quadratic Equations. This one semester course is devoted to advanced algebra, beginning with a review of quadratic equations and their applications. Students build on their knowledge of quadratic equations through study of polynomial and inverse functions. They then progress to exponential and logarithmic functions and use their knowledge of these functions to solve growth and decay problems. Students study triangle trigonometry and develop basic knowledge of the six basic trigonometric functions and their relationships. They also tackle sequences and series, arithmetic and geometric, finite and infinite, their properties and their applications to problem resolution. Throughout the course, students are encouraged to use the language and symbols of mathematics.

**Statistics** (semester course) (course number 114)

This course is intended for students who have completed Algebra II through Quadratic Equations. This one semester course covers introductory statistics and probability. Topics include experimental design, measures of central tendency, correlation and regression, and probability and chance variability. Varied sampling methods are discussed as well as different graphing techniques. Interpretation of data is stressed. Statistical applications to a wide variety of subjects, such as the social sciences, economics, and business, are stressed. Students perform a statistics project, including appropriate graphs and calculations for in-class presentation. The graphing calculator is used extensively throughout the course while a balanced approach of numerical and logical methods is emphasized. Throughout the course, students are encouraged to use the language and symbols of statistics.

**Pre-Calculus** (full year) (course number 110)

This course provides the mathematical background for a calculus class. It is a course intended for students who have a solid working knowledge of Algebra and have basic knowledge of Trigonometry. This rigorous course is intended to develop skills in graphing linear and non-linear function using different methods, get a deeper understanding of different kinds of functions and their applications, extend the understanding of trigonometry and master skills in solving equations and inequalities. The course focuses on skills and concepts and their applications in real life by using models, relating to other subjects, and conducting real life projects. This course enables students to approach a problem algebraically and graphically. Students develop their quantitative thinking, reasoning, algebraic and graphical skills.

**Honors Pre-Calculus** (with permission) (full year) (course number 103)

This course provides the mathematical background for the AP calculus class and is a prerequisite for AP Calculus. It is intended for students who have mastered Algebra and have a working knowledge of Trigonometry. Students explore all of the topics of Pre-Calculus, but at a faster pace and in more depth. Students in the Honors class also learn to solve problems analytically by exploring analytical trigonometry and analytic geometry.

**Differential Calculus** (full year) (course number 123)

This course is intended for students who have a solid working knowledge of algebra, geometry, trigonometry and elementary functions. The purpose of the course is to prepare the student for college calculus. The course covers differentiation of elementary functions as well as applications of calculus to problem solving. The graphing calculator is used extensively throughout the course while a balanced approach of graphical, numerical and algebraic methods is stressed. Problem solving is introduced early and integrated throughout as connections to other subject areas are made through practical applications. Models and technology are used when appropriate. Throughout the course, students are encouraged to use the language and symbols of calculus.

**Advanced Placement Statistics** (with permission) (full year) (offered to students who have satisfactorily completed Pre-Calculus or to those who are currently taking Honors Pre-Calculus) (course number 107)

This course is intended for students who have a thorough knowledge of algebra, geometry, trigonometry and elementary functions. The purpose of the course is to prepare the student for advanced placement into college statistics. The content of the course is driven by The College Board Advanced Placement Course Development Syllabus. The graphing calculator is used extensively throughout the course while a balanced approach of graphical, numerical and algebraic methods is stressed. Students are required to complete a summer reading and problem solution assignment prior to admission into the course. The assignment is due on the first day of class. Problem solving is introduced early and integrated throughout as connections to other subject areas are made through practical applications. Models and technology are used when appropriate. Throughout the course, students are encouraged to use the language and symbols of statistics.

**Advanced Placement Calculus AB** (with permission) (full year) (course number 104)

This course is intended for students who have a thorough knowledge of algebra, geometry, trigonometry and elementary functions. The purpose of the course is to prepare the student for advanced placement into college calculus. The content of the course is driven by The College Board Advanced Placement Course Development Syllabus. The graphing calculator is used extensively throughout the course while a balanced approach of graphical, numerical and algebraic methods is stressed. Students are required to complete a summer reading and problem solution assignment prior to admission into the course. The assignment is due on the first day of class. Problem solving is introduced early and integrated throughout as connections to other subject areas are made through practical applications. Models and technology are used when appropriate. Throughout the course, students are encouraged to use the language and symbols of mathematics.

**Advanced Placement Calculus BC** (with permission) (full year) (course number 126)  
BC Calculus is similar to AB Calculus except that it is more rigorous and covers three semesters of college calculus versus two.

## **PHYSICAL EDUCATION**

**Ninth Grade P.E.** (meets three days per week for a full year) (pass/fail) (course number 701)  
The Ninth grade Physical Education class offers students a variety of lifetime and recreational activities, team sports, and fitness instruction. Each unit is organized for the class to feel like they have entered in an intramural sports league. Students practice and learn rudimentary skills of the sport, engage in scrimmages and tournaments, and focus on fitness throughout each class. Ninth grade Physical Education fulfills the credit necessary for graduation. Classes meet three days a week and are taught in conglomeration with ninth grade Wellness.

**Introduction to Athletic Training** (semester elective offered to juniors and seniors) (course number 706)

This course allows the student to learn about the athletic training profession. The course focuses on the six domains of athletic training and incorporates a hands-on component. Throughout the course the students also learn basic anatomy, kinesiology, and first aid. The six domains of athletic training are: prevention; recognition, evaluation, and assessment; immediate care; treatment, reconditioning, and rehabilitation; organization and administration; and professional development and responsibility.

**Sports Marketing** (spring semester elective open only to seniors) (course number 702)

This class offers students a step-by-step journey through the world of marketing. Students learn the basic functions of marketing and how these functions are applied to sports and entertainment. In class, students discuss, research and evaluate marketing strategies that are used by successful sports franchises. In addition, students become acquainted with people who have made their career in sports, entertainment and marketing. Finally, the class looks at legal and ethical issues that exist in the sports and entertainment industry.

**Strength Training and Conditioning** (semester elective offered to sophomores, juniors, and seniors) (pass/fail) (course number 711)

Strength Training and Conditioning is an elective course for students committed to improving their athletic performance and fitness. Upon mastery of basic weight training principles, students design and implement their own workout programs.

## SCIENCE

### **Ecology** (summer class for semester credit) (course number 322)

The objectives of this field sciences course are to provide an opportunity to apply scientific methodology in field settings; to utilize a format that is not available during the regular school year; and to take advantage of the resources in our greater region. This course lasts 14 days and students spend nights either camping or in lodge type settings. Students are expected to contribute to the tasks of the group which will include food preparation, camp or lodge maintenance, and organizational tasks. This course is available to rising sophomores, juniors, and seniors.

### **Environmental Science** (full year) (course number 304)

Environmental Science is the study of how humans interact with the environment. Industrial advances, booming economies, and an improved quality of life's ecosystems challenge the sustenance of the world. This course focuses on identifying environmental problems, learning and practicing the scientific method, and understanding the different constituents of a healthy environment. Laboratory and field experimentation are essential components to encourage critical thinking and to help establish a scientific outlook. The role of humans in nature is discussed, and students formulate possible solutions to environmental problems.

### **Biology** (with permission) (full year) (course number 301)

Throughout the course of this introductory biology class students explore the various forms and functions of organisms and how they interact with their environment. The scientific method is employed to provide students the framework with which to question the biological world around them. Classroom lectures are supplemented with various laboratory exercises, field trips, and guest lecturers to create an experiential learning environment. The goal of this course is for students to be familiar with major biological concepts, scientific methods, and current issues in biological science so that they understand the importance of their input to the future of science, regardless of whether they go into a biology career field or not.

### **Chemistry** (full year) (offered to students who have completed Biology) (course number 303)

Chemistry is the study of matter and energy. This class includes labs, demonstrations, projects, and many activities designed to make chemistry interesting and understandable, while also expecting students to think both critically and analytically. The course includes the properties of matter, gas laws, nomenclature, periodicity, atomic structure and driving forces in chemical reactions. The class uses a variety of means both to engage students and help them develop an interest in chemistry.

### **Honors Chemistry** (with permission & completion of Biology) (full year) (course number 320)

Honors Chemistry is a quantitative, in-depth course recommended for students planning further study in a science-related field at the college level. This laboratory-oriented course is designed to prepare highly motivated students for AP Chemistry. Topics are explored through teacher demonstrations, laboratory exercises, and student problem-solving activities. Students are introduced to the shorthand of chemistry as they learn to use chemical formulas and equations. Chemical properties are related to atomic structure as students learn to use the periodic table of

the elements. Stoichiometry, qualitative analysis, thermodynamics, and nuclear chemistry are introduced.

**Physics** (full year) (offered to students who have completed Biology and Chemistry) (course number 305)

Physics is the most basic of science courses. As such, the purpose of this course is to provide a fundamental understanding of the relationships between energy and matter in order to provide students with a foundation for the study of additional science courses. Emphasis is placed on development of critical thinking and problem solving skills. As with any experimental science, laboratory work is an integral part of the learning process and is utilized where appropriate. The five major topics to be covered are mechanics, states of matter, waves, electricity and magnetism, and atomic and nuclear physics. Knowledge of algebra and trigonometry is required for this course as well as a graphical display calculator.

**Human Biology** (offered to students who have completed Biology & Chemistry) (semester course) (course number 308)

Human Biology provides an overview of anatomy and physiology. The class includes an introduction to the structure and function of the human body with an emphasis on health and disease. Students should leave this class with a firm grasp of how their bodies function. An understanding that humans are a part of the biosphere and that human activities can have environmental consequences is stressed throughout the course. Bioethical issues such as stem cell research, performance enhancing drugs, genetically modified foods and oil drilling in Alaska are a few of the topics students explore in class. Guest speakers, case studies, videos, labs, field trips, and current event topics serve to enrich the curriculum.

**Marine Biology** (offered to students who have completed Biology & Chemistry) (semester course) (course number 307)

Throughout this marine biology course students are introduced to the biology, ecology, and the physiology of marine organism. Topics include the chemistry of the marine environment; the diversity of organism inhabiting marine environments, the study of major marine environments, and the effects of human on the marine environment. Students also explore the specific physiological adaptations, body types, and behavioral strategies that marine organisms have evolved for survival.

**Advanced Placement Biology** (with permission) (full year) (offered to students who have taken Biology and Chemistry) (course number 302, student must also register for AP Bio Lab, course number 310)

The AP Biology course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. The labs done by AP students in this course are the equivalent of those done by college students. This course covers three general areas: molecules and cells; heredity and evolution; and organisms and populations. Course work prepares the student for the AP Biology exam; a double period is required during the second semester in order to cover the laboratory portion of the course.

**Advanced Placement Chemistry** (with permission) (full year) (offered to students who have taken Biology and Chemistry) (course number 309, student must also register for AP Chem Lab, course number 313)

AP Chemistry is a rigorous, college level class. Major topics include electrochemistry, equilibrium, reaction prediction, kinetics, chemical bonding, gases, phase changes, solutions, acid/base reactions, thermochemistry, and electron configuration. Students complete the recommended labs in the AP Chemistry curriculum and prepare for college level research. Course work prepares the student for the AP Chemistry exam; a double period is required during the second semester in order to cover the laboratory portion of the course.

**Advanced Placement Physics (B)** (with permission) (full year) (offered to students who have taken Biology, Chemistry, and Physics) (course number 306, student must also register for AP Physics Lab, course number 311)

The course includes topics in both classical and modern physics as outlined in the *AP Course Description for Physics (B) [and (C)]*. The topics are representative of those covered in similar college courses as determined by the College Board. Currently these topics can be classified by five major categories: Newtonian mechanics, fluid mechanics and thermal physics, electricity and magnetism, waves and optics, and atomic and nuclear physics. Laboratory work is integral to the course and students will use computers with appropriate software and hardware to collect and analyze data. Knowledge of algebra and trigonometry is required for this course as well as a graphical display calculator. Course work prepares the student for the AP Physics exam; a double period is required during the second semester in order to cover the laboratory portion of the course.

## SOCIAL SCIENCES

**World History I** (intended for freshmen) (course number 201)

World History I focuses on “Western” civilizations (or those centered around Europe) beginning with the European Renaissance and continuing on to the present day. Modern European history is the context used to help students develop critical skills key to success in the social sciences in high school, college, and beyond. Objective analysis, critical thinking, and analytical expression are key skills pursued in this freshman history course. Students also focus on practical skills such as critical reading, note-taking, information ordering, analytical writing technique, and strategic test-taking skills that will be critical to success in their academic careers.

**World History II** (intended for sophomores) (course number 211)

World History II focuses on the history and cultural development of communities beyond the scope of Western civilization, including Asia, Africa, India and South Asia, Polynesia, and the Middle East. Students are responsible for learning a base of specific facts but more emphasis is placed upon themes, concepts, and valuable skills such as critical reading and writing, primary source analysis, research techniques, and current event interpretation. Each of these skills is practiced in a variety of contexts and assignments, and students are exposed to a wide assortment of teaching methods. The class constantly utilizes a variety of primary and secondary sources,

including films, speeches, memoirs, documentaries, music and art.

**United States History** (intended for juniors) (course number 204)

The American History Course focuses primarily on student understanding of and appreciation for the contours and development of American History in the 20<sup>th</sup> & 21<sup>st</sup> Century. Students survey aspects of contemporary topics of American History. Emphasis is the evolution of socio-economic structure, the progression of minority movements, and the development of the American Democracy both real and ideal. The structure of this course is designed to hone the critical and analytical skills of students by making the connections across different time periods. Writing, oral articulation, and research are also emphasized.

**Advanced Placement United States History** (with permission) (course number 208)

The Advanced Placement program in United States History is designed to provide students with the analytical skills and factual knowledge to deal with problems and materials in United States History. The Curriculum begins with European Exploration and concludes with the Bush Era. The program prepares students for intermediate and advanced college courses by making the demands upon them equivalent to those made by full year introductory college courses; moreover, the AP curriculum stresses higher order thinking skills within a rigorous academic context. Students are required frequently to analyze, synthesize, and evaluate primary and secondary sources in addition to memorizing, comprehending, and applying facts. Students learn to assess historical materials for their relevance, their reliability, and their importance, and to weigh the evidence and interpretations presented in historical scholarship. In addition, AP US History prepares students to pass the AP examination in May 2006, for which valuable college credit can be earned. To achieve this goal, students should be prepared to spend significant amount of time outside of class on homework and research.

**Advanced Placement European History** (with permission) (full year) (course number 205)

This course prepares students for the Advanced Placement Exam in European History (1450-present). It emphasizes acquiring the required factual knowledge, developing the requisite analytical and writing skills, and practicing with the kinds of questions and formats used on the AP exam. Students interpret primary sources, trace cause and effect chains, explore similarities and differences across nationalities, time periods, and subject areas, and adjudicate for themselves, the major historical controversies presented in the history of this fascinating and turbulent period. The course emphasizes the integration of information across the fields of social developments, politics, religion, intellectual concepts, technology, and economics.

**Government** (semester course that is required for graduation) (intended for seniors) (course number 206)

This introductory course in Government is designed to examine the role that American government and politics plays in our lives, as well as to provide a better understanding of the functions and responsibilities of our governmental system. In order to learn more about the nature and context of American political institutions, students study various features of the executive, legislative, and judicial branches of government, as well as the role of political parties, interest groups, and the bureaucracy in our political system. Students gain an in-depth understanding of the Constitution and how it is applied. In addition, students examine the

purpose and evolution of the governmental and political system of the US and examine how it differs from systems used in other countries. Students have a chance to propose and debate their own ideas on what our government should look like and how it should be run.

## **SOCIAL SCIENCE ELECTIVES**

All Social Science electives are open to sophomores, juniors, and seniors.

### **Comparative Religion** (semester elective) (course number 212)

In this course students develop the background necessary for an appreciation of the basic beliefs and practices of the world's religions. Emphasis is placed on historical origins as well as on current beliefs. Students study Buddhism, Christianity, Confucianism, Hinduism, Islam, Judaism, Taoism, and other belief systems.

### **Cultures in Conflict: Assimilation, Adaptation, and Extermination** (semester elective) (course number 221)

This class is dedicated to exploring the historical relationship between peoples of the Developed, Developing and “Third” worlds, and the legacies left by clashes of “western” and “non-western” cultures. Throughout history, cultures have come into conflict. Some cultures by their nature act “aggressively” toward other cultures, replacing the other culture’s values with its own (even though such effects are not consciously directed). The aggressiveness of one culture can have a devastating impact on another culture, and the results of cultural conflicts are the assimilation of the weaker culture into the stronger, the adaptation of the weaker culture to the stronger, or the extermination of the weaker culture by the stronger. When finished with this course, students will have an understanding of the inevitability of cultural change over time, of the factors that make Western culture “aggressive” whether one wants it to be or not, and a feel for the position of those who belong to a culture under attack by a more aggressive culture.

### **Economics** (semester elective) (course number 218)

This course teaches students the basics of economic theory, the distinctions between public and private sector economic decision-making, markets, labor theory, factors affecting national and local economics, and personal finances. Students evaluate the impact of real world events on the supply and demand of various commodities and perform cost/benefit analyses of both personal financial decisions and national monetary and fiscal policies.

### **International Flashpoints** (semester elective) (course number 217)

International Flashpoints is a fast-paced and fascinating tour of various important conflicts around the world. Although this course does by its nature focus on important events in the news, students can also expect to cover such long-standing trouble spots as North Korea, Iraq, Palestine, Taiwan, Kashmir, and civil wars in Africa. Depending on student interest, we may also cover non-geographically specific issues, such as epidemics (AIDS or SARS), drug smuggling, ecological change, terrorism, religious conflicts, and the roles of America and the UN in the world. Students are expected to keep up with daily newspaper and magazine reading as well as assignments covering background information for each topic. Students have the opportunity to explore an area of individual interest through an in-depth project at the end of the course.

**Nuclear Power Politics** (semester elective) (course number 222)

This class examines the history and role of nuclear weapons in world affairs as well as the international/diplomatic implications of the development and acquisition of nuclear power by governments. The course examines in broad depth how “nuclear power politics” have shaped 20<sup>th</sup> and 21<sup>st</sup> Century diplomacy and society in both the nuclear and non-nuclear nations. The course traces the history of the development of nuclear weapons and power systems and the influence that countries or organizations have gained through the acquisition of these weapons and systems. Students also encounter cultural impacts of the nuclear age that have not only changed military or political reality, but how we live our lives.

**Peace and Conflict Studies** (semester elective) (course number 223)

This class is an inter-disciplinary inquiry into war as human condition and peace as human potential. This course enables students to explore conflict and resolution from a number of academic perspectives, honing and exercising a range of critical thinking skills and their knowledge of the social sciences. Students study the causes and realities of current and historic national and social conflicts, and they explore the ways these conflicts were brought to an end or have otherwise been avoided. Looking at the careers and teachings of 20<sup>th</sup> century peacemakers such as Martin Luther King, Jr., Ghandi, Nelson Mandela, and Jimmy Carter, students seek common themes and methodologies in the establishment of peace that can be generalized to other forms of current conflict both in the world and even around their own lives. By the end of the semester, students will put their knowledge into action by applying the concepts they’ve encountered to a current real-world situation, either interning at a local organization focused on a current conflict, or even forming an “interest group” on their own to bring awareness and potential solutions to the table.

**Revolutionaries** (semester elective) (course number 224)

This course focuses on the people and ideas throughout modern history that have stirred the hearts of millions and caused radical change (both productive and destructive) in societies around the world. The idea of Revolution sparks the interest of all students interested in politics, society, and ideas. This course challenges students to look beyond the heroes enshrined in the marble statues of the western “developed” world and to focus instead on revolutionaries of the “third world” or developing nations who exist in the shadows of the west, who nonetheless left their impact on ideas and the way of life all over the world. This course forays into several regions of the non-Western World and determines how these individuals came to power and how the impact of their ideas either benefited or deterred the growth of their regional influence.

## WELLNESS

**Freshman Wellness** (two days per week for a full year) (pass/fail) (course number 705)

Taught by the Director of Guidance, Freshman Wellness is an integrated curriculum designed to foster and promote healthy decision-making and action, to develop and nurture resilience, and to enhance personal and social responsibility.

**Senior Transition Seminar** (weekly throughout the year) (course number 732)

Throughout the senior year, students meet weekly with the guidance counselor and college counselors in small groups. Each seminar focuses on a timely and pertinent aspect of the college application process and the transition to college. Topics in the fall semester include narrowing the college list, staying organized, writing essays, and preparing a resume. In the spring, the seminars will address the transition to college with sessions addressing time management, changing relationships, health, college safety, selecting classes and etiquette.