

The Governor's Academy

CURRICULUM and COURSE DESCRIPTIONS for 2011-2012

ACADEMIC REQUIREMENTS FOR DIPLOMA

I. CREDITS

- A. Successful completion of 16 credits including required courses.
- B. Two-semester majors = 1.0 credit; minors = .25 credit & one-semester majors = 0.5 credit.
- C. Transfer credits require approval of the Academic Dean.
- D. Repeated courses do not earn a new diploma credit but do count in the credit load for the semester or year.

II. DISTRIBUTION REQUIREMENTS*

- A. English - courses 11-12, 21-22, 31-32, 33-34 or AS 31-32, and one in each semester from the 40's series or 51-52.
- B. Mathematics - courses 11-12, 21-22, and 31-32 or 35-36.
- C. Social Studies - U.S. History and a two-semester course prior to U.S. History.
- D. Foreign Languages - Courses in 11-12, 21-22 and a third year in any one language. ESL students are not required to complete the foreign language requirement with permission of the Academic Dean.
- E. Science – 3 years of science, two of which must be year-long courses, including at least one biological and one physical science; also SC10 Life Skills, if entering 9th or 10th grade.
- F. Fine Arts - Introduction to the Fine Arts in 9th grade; thereafter, one course in art, ceramics, music, photography, drama/theatre or computer art.

III. MINIMAL CREDIT LOAD PER YEAR*

- A. 9th grade - 5.5 credits.
- B. 10th grade – 5.25 credits.
- C. 11th grade – 5.0 credits.
- D. 12th grade – 5.0 credits.

IV. OTHER REQUIREMENTS AND CONSTRAINTS*

- A. The Humanities Program requirement, the Community Service requirement, and the Afternoon Program requirement are part of the requirements for diploma. Students are required to attend one on-campus, one off-campus humanities performance, and one museum trip each year that they attend the Academy. Students must complete a minimum of fifty hours of community service. Students may do community service as an afternoon program commitment or they may create a community service project and perform the service over vacations. In the latter case students must provide adequate documentation of their work. Students may also earn 80% of their community service credit by volunteering to help with the Special Olympics tournament, hosted by The Governor's Academy, in both their junior and senior years. Students are required to participate in some offering of the afternoon program for every season during which they attend the Academy.
- B. Programs for grades 10, 11 and 12 must include at least four major courses in each semester. The 9th-grade program is fixed at five major courses and one minor course.
- C. Seniors must pass all two-semester courses regardless of total credits accumulated prior to the 12th grade, and may not fail a course in the second semester.
- D. In two-semester courses, a failure in the first semester can be made up by second semester achievement judged sufficient by the teacher to pass the year.
- E. Students may not drop-without-penalty, change or add courses after the semester drop-add deadline.

- F. Two-semester courses may not be discontinued at midyear, and no two-semester course may be changed beyond the 1st semester drop-add deadline. Requests for exceptions to this policy must be made in writing to the department head and Academic Dean. In all cases, the Academy reserves the right to determine appropriate placement.
- G. Any student not meeting minimal academic achievement standards as outlined in the student rule book is subject to Academic Probation. Failure to meet the terms of Academic Probation or the terms of summer make-up work will render the student liable to dismissal from the Academy.

COURSE OFFERINGS and EXPLANATORY NOTES

The pages that follow contain designations and descriptions of all courses being offered in the Academy's curriculum for the coming school year. This listing includes changes in the curriculum as detailed in the school catalogue published last summer. It is possible that a course listed herein will not actually take place if enrollment is deemed insufficient, or will change semesters if enrollments so dictate. Courses are listed by department, together with notes on special situations within each department's program and on any non-credit offerings. A special section at the end details restrictions that apply to students considering participation in the Senior Spring Projects Program.

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ACADEMIC SUPPORT POLICY The school wishes to be clear with parents and students about the curriculum adjustments or curricular opportunities that are available to help students. No waivers of academic graduation requirements will be granted to students. The Governor’s Academy offers the following academic support to all its students:

Group and individual extra help sessions are made available during the school day and evening by the school’s classroom teachers. All students are encouraged to attend these sessions when concepts are unclear.

Additional time on examinations conducted in class may be offered by classroom teachers for students who have extended time documentation. A student must request additional time, and the student and teacher must negotiate an appropriate time period and venue.

Students with documented learning differences may request preferred seating at semester and final examinations. Those arrangements must be made one week in advance of exam; up to 50% additional time is allowed for those students with extended time testing documentation.

Students may request individual adult tutors at an additional expense to the family. Tutors are requested after students have availed themselves of extra help with appropriate classroom teachers.

If a student is unable to pass a year of English during a school year, the student will be expected to enroll for an additional year at The Governor’s Academy to make up the year of English.

Students with learning differences that necessitate a nonstandard administration of the PSAT, SAT-I and SAT-II: Subject Tests and/or Advanced Placement Examinations must submit written evaluations with clear and documented diagnosis from qualified educational specialists upon matriculation. The evaluations must have been conducted within three years of the request for extended time. The

Academic Office provides certification for extended time for Academy testing to those students who regularly avail themselves of extended time on examinations given within the school's curriculum after it has received written documentation by certified learning specialists. Certification by the Academy, however, does not guarantee extended time permission from the College Board. The Academic Dean will assist students and their parents in submitting necessary forms to the College Board to request extended time.

The school has two computer laboratories, each offering individual work stations, Microsoft Word word processing software, and printers for students to use in preparing writing assignments.

The Governor's Academy provides a supervised evening study hall program limited to those students who are placed on Academic Probation, those students with a GPA below a 1.7 and those students who elect placement in the supervised study hall. Any student may be recommended for an additional Saturday morning study hall by his or her teachers or advisor.

Courses completed in the summer will not count toward The Governor's Academy graduation requirements or a student's grade point average. The school may require a student to do academic work during the summer to master content or skills not completed during the school year.

The Governor's Academy does not employ any certified learning specialists skilled in the area of learning differences or diagnostic evaluations. Families in need of such testing must arrange diagnostic testing with qualified persons outside the school at their own expense. Any adjustments in academic programs recommended by such testing would be limited to the academic support services outlined in this policy.

The Governor's Academy reserves the right to make all final determinations regarding support services for its student body.

COURSE DESIGNATIONS consist of a course number and a descriptive title, such as MA21-22: Geometry. An odd number is generally offered only in the FALL semester, even numbers in the SPRING semester. A course with a single number, such as HS45: Russian History, is a complete course in one semester. A two-number course, such as SC21-22: Biology, is a year-long course requiring enrollment in both semesters. All courses listed in these pages are MAJOR courses (two semester = 1.0 credit; one semester = 0.5 credit) unless designated as MINOR courses (0.25 credit per semester).

SPECIAL SECTIONING

The Governor's curriculum does not utilize "ability grouping" or "tracking by ability" as traditionally understood, especially in its younger classes. There are ways in which differences of background or ability are addressed, and there are special sections in each field of study to present more challenging opportunities for the student with outstanding strengths and high motivation.

Accelerated sections exist in the foreign language program. Similar to honors sections elsewhere, these special sections indicate greater challenge and competition compared to regular sections. Accelerated designation must be earned by selection.

Honors sections in upper-level mathematics and science signify more demanding sections of these courses. The "honors" designation in mathematics and science must be earned by selection. Honors sections of introductory biology indicate a full year of chemistry has already been studied, thus the course assumes more than do the regular sections.

Advanced Placement Policy

The Advanced Placement Program of the College Board, designed to offer greater challenges through rigorous course work to able and ambitious students, encompasses the most demanding coursework that we offer. Such courses include an additional 90-180 class minutes/week. Students have additional work over vacation periods, including the summer. All students who take advanced placement courses must sit for the AP exam in May.

Each academic discipline offers at least one Advanced Placement course, for which there might be multiple sections. Students are selected for Advanced Placement courses based on past achievement, evidence of commitment to learning, tested ability, and departmental recommendations. While a student might desire to take an Advanced Placement course, the Academy reserves the right to select students for our Advanced Placement courses. The Academy also reserves the right to remove a student from an AP course at the semester break if the quality of that student's work and work ethic does not meet the challenging caliber of these intensive and extensive courses.

It is our goal to place students in classes at all levels for which they are appropriately prepared and at which they are sufficiently challenged.

COLLEGE ENTRANCE REQUIREMENTS

Because our students plan to attend college, entrance requirements for college must be kept in mind when selecting courses. In many instances, especially at the highly selective colleges to which many of our students aspire, these requirements may exceed the Academy's minimum requirements for graduation. A college's website is a good source of information in addition to the departmental notes throughout this guide.

In general, the more selective colleges and universities are looking for breadth and depth in the academic preparation of their applicants. Hence, it is important for the student with high aspirations to continue the study of mathematics and foreign language beyond the minimum, to take the extra history course, to be sure to include a lab science in the junior and senior years and, when possible, to qualify for inclusion in accelerated, honors, or AP sections.

The individual testing requirements for each college can be found in the Admission section of each college's website. Our most competitive colleges will require two or three different SAT Subject Tests or the ACT (American College Testing) as part of the admission requirements. Because many colleges require candidates to take the SAT Subject Tests in addition to the SAT Reasoning Test or the ACT by December of the senior year, courses should be chosen with this in mind. Our students normally take the SAT Subject Tests two times, in June of the junior year and in the fall of the senior year. Some sophomores enrolled in accelerated courses (i.e. Honors Algebra II) are advised by their teachers to take one or two SAT Subject Tests upon completion of the appropriate courses.

CHOOSING A PROGRAM OF STUDY

Decisions concerning the selection of courses - made in consultation with the student's advisor - must account for the factors mentioned above. Choices made at the end of the ninth and tenth grades have a very important impact in the two crucial years -junior and senior - in the college admission process.

ENGLISH DEPARTMENT

EN 11-12: Freshman English - Foundations (two semesters) Freshman English (two semesters): This course is designed to help students develop sound, individual writing styles and gain confidence in evaluating

literature, exposing students to themes involving adolescence, the journey, fidelity and individuality. All freshmen will read *Oedipus Rex*, *Monkeys*, and a selection of short stories in the first semester; *Romeo and Juliet*, *Brave New World*, and a selection of poetry in the second. Each student will also read two outside-reading novels, one per semester, chosen from a list compiled and designed by freshman English teachers.

Students will study vocabulary weekly, a practice which will continue through a student's four years at The Governor's Academy. They will also study grammar proscriptively (through their writing) and from a workbook designed by The Governor's Academy English Department faculty members. While much of the writing will be literature-based essays (working toward internalizing the five paragraph form), creative writing (narration, poetry, and personal essays) will also be covered.

EN 21-22: Sophomore English – *Finding One's Voice* (two semesters) The Sophomore English curriculum encompasses the exploration and development of personal voice through both the study of characters' voices in literature as well as a broad range of writing assignments. Readings will include *Macbeth*, *Their Eyes Were Watching God*, *The Kite Runner*, poetry, short fiction, and *The Great Gatsby*. In addition, throughout the year, students will complete a grammar and vocabulary program. Sophomores continue to hone their writing skills, moving beyond the five paragraph essay.

EN 31-32: Junior English – *The American Experiment* (two semesters) Using, in part, The College Board's on-line SAT preparation, the junior curriculum reviews the fundamental grammar and composition study of the sophomore year, but moves beyond it to a more sophisticated consideration of form and style. Junior students will read carefully, write honestly, and discuss courteously the question: How does a person grow up in America? We will consider the problems of achieving an effective and authentic identity in the stress of a culture which values Emersonian "self-reliance" but which also locates individuals as members of various group/cultures. Texts include but are not limited to *The Adventures of Huckleberry Finn*, *Death of a Salesman*, *On the Duty of Civil Disobedience*, and *Julius Caesar*. Three times during the year students will also take vocabulary competency examinations.

EN 33-34: AP Junior English - *Language & Composition* (Advanced Placement; two semesters) This extensive and intensive course in literature and writing will provide an academic challenge for highly motivated students of English. While students will study numerous texts from a variety of periods, much of the literature will focus on the non-fiction and fiction of American Literature. In addition students will write in a variety of forms -- persuasive, expository, and narrative. This course will require supplementary work over the summer and during vacations. Students must maintain a B+ or higher average for sophomore English and receive the recommendation of their teacher. Selection will be made by the English department. Students must sit for the AP Language and Composition exam in May.

AS 31-32: American Studies (two semesters; double credit) What do American literature and history have in common? Both offer a narrative of human lives. This course offers a unique opportunity to examine American social, political, cultural, and artistic movements through the perspectives of history and literature. Working within a chronological framework, we will examine American society from European contact through the present. We will focus our analysis on events, movements, groups, and individuals who have shaped and continue to influence American culture. A 10-page research paper is required. This course meets for a double period, and fulfills credits for junior English & United States History. (Prerequisite: 2 semesters of history)

EN 40: Senior English – *Paired Texts* To fulfill the English requirement each senior will take a common course in the fall semester and then select one SPRING-semester course from those listed as the 40's series on the pages that are produced separately in the month of May. Descriptions of the fall common course and samples of past electives are printed below. By reading "paired texts," students will explore the depth, breadth, and variety of human experience that literature provides its readers. The core text for this course will be William Shakespeare's *Hamlet* paired with other texts of the teacher's choosing. All seniors, except those enrolled in the AP Senior English course, will take this course.

The New Voices of 21st Century American Fiction

This course will examine some of the fast, fresh, and unforgiving voices of 21st Century American Fiction. We will begin by engaging modern and postmodern methods of literary criticism to help us analyze these new perspectives. This investigation will enable us to experience how these writers employ both tradition and avant-garde literary techniques to help them facilitate a dialogue with contemporary issues. Finally we will attempt to define the current landscape of 21st Century American Fiction in hopes of developing a deeper understanding of its lineage. Writers my include Jonathan Safran Foer, Nick McDonell, Chuck Palahniuk, Annie Proulx, and David Foster Wallace.

Children's Literature

In this class, we will examine children's literature from an academic standpoint, and we will attempt to draw some conclusions about how this literature reflects the culture of the time and place in which it was written. We will read several children's books during the semester—including *Alice's Adventures in Wonderland*, *Charlotte's Web*, and an anthology of nursery rhymes and fairy tales—and we will discuss what makes for good children's literature and how our standards have changed over the decades. We will supplement these readings with several scholarly essays on the topic. In addition, we will watch movies and listen to songs from different eras to see how these have changed to reflect society's changing sensibilities regarding children. The final project for the course will be to create an original piece of children's literature—a picture book or folk song—that can be shared and enjoyed by the young faculty children on campus (including my own).

EN 46: Creative Writing Seminar: *open to Juniors and Seniors only; (one semester or full year).* This course is taken in addition to a regular English class for juniors and for seniors during their first semester. Seniors may choose **Creative Writing**, with permission from the teacher and the English Department head, as their second semester elective.

We hear of a strange or funny or tragic event, and we can't stop thinking about it: we wonder what it was like to experience. How were the people involved changed by it, if at all? Why do some of us persevere while others do not? What makes us unique but also universal, sharing in our common humanity?

What makes us us? And where do we go from here? What happens next?

Creative Writing is an introductory course for anyone interested in learning how to write stories more honestly and deeply. It is open to those who have never written fiction before, or have been writing for years. The only pre-requisite is that you be sincere in your desire to grow as a writer. There will be some assigned reading, but the bulk of the semester's work will be your daily writing, where you just may, as the late short story writer, Grace Paley, said: "...write what you don't know you know."

EN 51-52: AP Senior English - Literature & Composition (Advanced Placement; two semesters) This course is designed as a first year college level English course. Students will study extensively and intensively a variety of works from both the American and English literary traditions and from various time periods from the sixteenth century to the twentieth century. By confronting challenging reading and writing assignments, students will learn to become skilled, mature, critical readers and to become practiced, logical, succinct

writers. Students must maintain a B+ average in Junior English in order to be eligible to take this course. It will meet for an additional class period each week and there will be additional reading during the summer and other vacations. Students must sit for the AP Literature and Composition exam in May.

ES13-14: Advanced ESL This course is an intensive English as a Second language course taught at the advanced level, with reading, writing, listening and speaking skills emphasized. In addition, the students are required to communicate with people outside the community two hours per week.

ES11-12: Intermediate ESL This course has exactly the same description except it is not taught at the advanced level - it is taught at the intermediate level.

MATHEMATICS DEPARTMENT

The core Mathematics program includes Algebra I, Geometry and Algebra II as required courses. The focus is on the symbolic language of algebra, geometric figures, sound arguments, and first exposures to functions, graphing, problem solving, and mathematical modeling. What lies beyond necessitates skill with computation, an intuition for sensible estimates, much practice with algebraic manipulations, and experience applying appropriate concepts and strategies, and appropriate use of technology in given situations.

MA 11-12: Algebra I (two semesters*) This is a logical development of a first course in algebra - the foundation - emphasizing basic concepts, understanding, and fundamental skills. The course content includes the real number system, algebraic symbolism and its application (translating from English to mathematical language), applied problem-solving, graphs, exponents, radicals, linear and quadratic relations, factoring, rational expressions, equations and inequalities.

* - A special section of MA 11 may (depending on enrollment) be offered in the spring semester for those requiring a fresh start in Algebra I. In addition, a special section of Honors Algebra I (MA 16) may also (depending on enrollment) be offered in the spring semester for those students who have demonstrated high achievement and effort in MA 11.

MA 21-22: Geometry (two semesters) In this course the students are introduced to Euclidean Geometry. The challenge of being able to solve problems using the components of deductive structure and employing traditional, coordinate, and transformational approaches makes the course both fun and rigorous. Additionally, the course strives to integrate algebra and geometry, as these disciplines are made richer by building on each other.

* - In addition, a special section of Honors Geometry (MA 26) may (depending on enrollment) be offered in the spring semester for those students who have demonstrated high achievement and effort in MA 21.

MA 29-30: Algebra II Parts 1 and 2 (two semesters) This is an intermediate course which redevelops the concepts of Algebra I and extends them to a more mature understanding of inequalities; polynomial functions; graphing techniques; rational, real, and complex number systems; and introductions to exponential and logarithmic functions. Algebra I and Geometry are thus blended together in the analytic geometry of Rene Descartes. Students will also apply these concepts and skills to the solution of real world applied problems. This course is appropriate for those students whose background indicates a need for a more in-depth review of algebra skills, and moves at a slower pace than MA 31-32. Students enrolled in this course will be required to take MA 39 Algebra II Part 3 with Trigonometry.

MA 31-32: Algebra II with Trigonometry (two semesters) This accelerated course offers a faster pace and deeper coverage of the topics considered in MA 29-30 and introduces trigonometric functions. Students are likely to continue to MA 45-46 and MA 55-56; some will move to MA 39-40 or MA 41-42. Students are ready for the Math Level I SAT II Test after this course.

MA 35-36: Honors Algebra II with Trigonometry (two semesters) This honors course offers deeper coverage of the topics considered in MA 31-32 and introduces sequences, series, and probability. Students are likely to continue to MA 47-48 and MA 57-58; some will move to MA 45-46 and MA 55-56. Students are ready for the Math Level I SAT II Test after this course.

MA 39: Algebra II Part 3 with Trigonometry (first semester) This course completes the Algebra II requirement for students who have taken MA 29-30. Algebra II topics are reinforced and basic trigonometry is introduced. Students are likely to continue on second semester to MA 40: Functions, Statistics, and Trigonometry. Students are ready for the Math Level I SAT II Test if taken in December or later.

MA 40: Functions, Statistics, and Trigonometry (second semester) This course completes a year of mathematics for those students who have taken MA 39. Topics include more advanced trigonometry, sequences and series, as well as statistical analysis. Students are likely to continue on to MA 41-42, but will not be eligible for MA 45-46.

MA 41-42: Statistics (two semesters) Through the study of elementary combinatorics, probability, and descriptive statistics students will learn to deal with the plethora of data that confronts us daily. What part does chance play in our lives? What inferences can be drawn from masses of statistics? How valid are they? What do we mean when we say an occurrence is unexpected? What can be predicted? One outcome should be the recognition of the misuse of statistics by those advertisers, politicians, and the like who bombard us with "evidence" for taking their positions. (11th and 12th graders only; can be taken concurrently with another mathematics course with department approval.)

The two Precalculus courses – MA 45-46 and MA 47-48 - continue the traditional sequence from arithmetic through algebra and analysis to the calculus, either in high school or college. Precalculus reviews and extends both algebraic skills with applications and the concept of a function and its applications. Students in these courses are ready for Math Level I SAT II Test if taken in December, and Math Level II SAT II Test at the June session.

MA 45-46: Precalculus (two semesters) (The traditional sequence may include an extension of material from the first three courses: algebraic structure and proof, the elementary functions, conic sections, sequences, the binomial theorem and mathematical induction, and elementary probability.) Some introduction to the ideas related to the calculus is also included. This first course beyond the academy's requirement is strongly encouraged as the goal of all students. It has fast become a necessary part of a fuller education, useful to those wishing to maximize their options for college majors and employment opportunities as well as those aspiring toward the sciences or mathematics.

MA 47-48: Honors Precalculus (two semesters) This honors course offers deeper coverage of the material than the MA 45-46 Precalculus course. The elementary functions are completely explored with the assistance of a graphing calculator. Other areas such as limits, mathematical induction, polar coordinates, and vectors will be included in the course. In the last quarter of the course, students will start AP Calculus. (AP Calculus is the usual sequel.)

MA 49-50: Concepts in Calculus (two semesters) A full-year mathematics course offered to students who have successfully completed pre-calculus. The first semester will involve pre-calculus topics not covered in the previous year or topics that would benefit a calculus student to review more in-depth before jumping in the calculus. These topics may include: conic sections, polar coordinates, matrices, rational functions, inverse functions, complex numbers, trigonometry, logarithms, vectors, sequences and series, probability, and limits. The second semester will include introductions to both differential and integral calculus and give students a flavor of and a foundation for a college-level Calculus I course. With the approval of the mathematics department, this course may be taken concurrently with an AP or regular statistics course.

MA 51-52: AP Statistics (Advanced Placement; two semesters) The goal of the course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusion from data. Students will be exposed to four main conceptual ideas: Exploring Data, Planning a Study, Anticipating Patterns, and Statistical Inference. (MA 45-46 is a prerequisite; Advanced Placement Exam administered in mid-May is required; can be taken concurrently with another mathematics course (including MA 47-48) with department approval.)

MA 55-56: AB-Calculus (Advanced Placement; two semesters) This introduction to The Calculus includes analytic geometry, introductory limit theory and continuity, differential and integral calculus of the elementary functions, geometric motivation and formalism, and applications to graphing and to economics, physical sciences, and life-sciences. (MA 47-48 is the usual prerequisite; Advanced Placement Exam administered in mid-May is required.)

MA 57-58: BC-Calculus (Advanced Placement; two semesters) In addition to the material covered in AB-Calculus not already covered in MA 48, topics include limit theory, continuity and convergence, power and Taylor series, elementary differential equations, methods of integration, approximation techniques, polars, vectors, and parametrics. (MA 47-48 or MA 55-56 is a prerequisite; Advanced Placement Exam administered in mid-May is required.)

MA 61-62: Advanced Topics in Mathematics (two semesters; MINOR course) This course is for students who have completed BC-Calculus as juniors. Study will include topics from discrete mathematics and non-linear dynamical systems, perhaps to include some topics from the calculus and problem solving. In this way the student's background will be broadened.

MA 63-64: Advanced Topics in Mathematics (two semesters; MAJOR course) This course is for students who have completed BC-Calculus as juniors. Study will include topics from linear algebra and matrices and from number theory, perhaps to include some topics from the calculus and problem solving. In this way the student will develop a broader background and will be better prepared to read mathematics in college. A project is likely to be involved.

CS 21 Introduction to Computer Programming (FALL; MAJOR course) This semester length course introduces students to programming, first on the graphing calculator and then using the Java language on the computer. The course will cover syntax and style, conditional statements, and loops. Students will learn how to write and test short programs, design simple algorithms, and use software development tools. The students will also be introduced to applet design. The course is open to any student.

CS 51-52 Advanced Placement Computer Science A (two semesters; MAJOR course) This yearlong course in algorithms, object-oriented programming, and data structures is guided by the course description of the College Board's A-level Advanced Placement exam in Computer Science. The course covers Java language syntax and style, classes and interfaces, lists and iterators. It will also cover the concepts of object-oriented programming, relating them to Java classes, fields, and methods. Prerequisite for the course is completion of CS 21/22 and with teacher recommendation. Students with prior programming experience can enter the course without taking CS 21/22 with teacher approval.

NOTES:

1. The department strongly encourages all students to enroll in mathematics courses every semester. Students who wish to keep open as many college major options as possible or who are aiming for engineering or business will need to study mathematics in all four years.

2. Placement in courses will be determined by the department's recommendation. Exceptions require written permission of the chairman and the current teacher.
3. Students who have completed precalculus (MA45-46 or 47-48) are advised to take the Math Level II SAT II Test. Those who are only half-way through precalculus or at the end of Algebra II or Statistics are advised to take the Math Level I SAT II Test. Those who have not completed Algebra II are not fully prepared for either test.
4. Very strong students of Algebra I who have more than an abiding interest in mathematics/science may take Geometry and Honors Algebra II concurrently in the tenth grade with the approval of the Advisor, the Department Chair, and the Academic Dean. It is not permitted to double up with Geometry and regular Algebra II trying to accelerate a full year in the mathematics program.
5. Students enrolled in any of the following upper-level courses may not discontinue these year long commitments at semester break in January: MA 41-42 MA 45-46, MA 47-48, MA 51-52, MA 55-56, MA 57-58, MA 61-62, and MA 63-64.
6. Students will be required to have a graphing calculator throughout the mathematics program. (They will be required to use an advanced scientific graphing calculator – the TI84+ is the model most often used by the classroom teacher.) Computer software packages in spread sheets, graphing programs, and statistics programs will also be woven into the program's curriculum.

HISTORY and SOCIAL STUDIES DEPARTMENT

HS 13-14: Citizenship

AMERICAN CITIZENSHIP

Half of the freshman-year history program, this one-semester course focuses on the US Constitution and the rights and responsibilities of American citizenship. A core textbook, novels, movies and current events will illuminate these themes. Students will engage in a semester-long writing project exploring a public issue of their choosing. (Normally in the 9th grade.)

GLOBAL CITIZENSHIP

The other half of the freshman-year history program, this one-semester course uses the Facing History and Ourselves curriculum as a lens to evaluate historical events such as the Holocaust, the reign of the Khmer Rouge in Cambodia, and the genocide in Rwanda. Students will explore the political and social developments that permit such tragedies as well as their own values as citizens of the world. Through this course, student will be exposed to geography and non-Western cultures. (Normally in the 9th grade.)

HS 25-26: World History (two semesters) This is a survey course covering pre-historic to modern times, in both western and non-western worlds. Topics include: the rise of civilization; political, social, and economic developments of the Middle Ages; the Renaissance and the era of discovery; the growth of democracy and nationalism; the Industrial Revolution; the two world wars; the postwar problems; and current events. The development and influence of various religions, philosophies, and political, social and economic systems are also examined in context.

HS 27-28: AP World History (Advanced Placement; two semesters) The Advanced Placement World History course presents a very detailed account of human history. The course's main purpose is to develop a greater understanding of the evolution of global social, political, and economic processes by studying the growth and

interaction of various human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The course emphasizes relevant factual knowledge deployed in conjunction with leading interpretive issues and types of historical evidence. The course builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage. The content of this course will prepare you for the A.P. national exam in May that determines eligibility for college credit. Students are **REQUIRED** to take the A.P. exam.

HS 31-32: United States History (two semesters) This chronological survey focuses upon significant governmental, social, and economic issues and developments in the nation's history. Students work from primary and secondary sources, write frequent position papers and analytical essays, and research and write a 10-to-15-page thesis. (Prerequisite: two semesters of history; 11th or 12th grades.)

HS 33-34: AP United States History (Advanced Placement; two semesters) This section will undertake a more intensive study of American history. The syllabus will emphasize work with documents and analytical work in political, economic, constitutional and social history of the United States. Students are required to take the AP exam in May and to write a major research paper. (Departmental approval is required; 11th or 12th grades.)

AS 31-32: American Studies (two semesters; double-credit) What do American literature and history have in common? Both offer a narrative of human lives. This offers a unique opportunity to examine American social, political, cultural, and artistic movements through the perspectives of history and literature. Working within a chronological framework, we will examine American society from European contact through the present. We will focus our analysis on events, movements, groups, and individuals who have shaped and continue to influence American culture. A 10-page research paper is required. This course meets for a double period, and fulfills credits for junior English & United States History. (Prerequisite: 2 semesters of history.) All remaining History Department courses have the prerequisite of U.S. History, and are generally limited to one section.

HS 37: Post-War America (FALL; half-credit) "From Yalta to Megatrends" - This course will cover the dramatic emergence of the United States following the Second World War, through the impending Cold War, Vietnam, and Watergate. We will also consider America in the '80's under President Reagan and conclude by speculating about the future. A focus of the course will be comparing the 50s to the 60s and discussing which decade best fulfills the ideals that America professes. (Normally in 12th grade.)

HS 41: Modern Chinese History (FALL; half-credit) This course examines upheavals and changes in Chinese society and government in the 19th and 20th centuries: Western intrusion and influences, civil disorder and rebellions, collapse of imperial rule and renewed civil war, Japanese occupation, and the creation of two Chinas post-1949: the communist People's Republic of China on the mainland, and the Republic of China also known as Taiwan. The extent to which the 3000-year-old Confucian culture has weathered social, economic, and political upheavals, and its influence on the Chinese polity and people today, is a central question. (Normally in 12th grade)

HS 44: African History (SPRING; half-credit) This course will focus on sub-Saharan Africa, examining traditional societies, the impact of colonialism, and recent social, political and economic developments in the post-colonial period. Although emphasizing the diversity within the continent, the course will also provide a basic framework by which to study the region. (Normally in 12th grade.)

HS 45: Russian History (FALL; half-credit) This course stresses political, social, and geographic factors in the development of modern Russia. Political thought and modernization are important themes throughout the course, which will emphasize history and literature from the turn of the previous century to the present. (Normally 11th or 12th grades.)

HS 48: Middle Eastern History (SPRING; half-credit) This course will emphasize the history of the Middle East, particularly the Arab-Israeli conflict, during the twentieth century, especially after World War II.

Political, social, religious and economic developments, as well as current issues, will be dealt with in readings and discussions. (Normally in 12th grade.)

HS 49/49S: Supreme Court, Constitution & Current Issues (FALL or SPRING; half-credit) This course will investigate the historical background to the framing of the United States Constitution and engage in an in-depth analysis of the document itself. The course will then examine the role of the Supreme Court in interpreting the Constitution and making public policy. Landmark cases like *Marbury v Madison*, *Plessey v Ferguson*, *Lochner v New York*, *Brown v Board of Education*, *Sullivan v New York* and *Roe v Wade* will be examined. (Normally in 12th grade.)

HS 51: Microeconomics (FALL; half-credit) Concepts in this course will include the behavior of consumers and producers and decisions facing individuals and firms. To illuminate these concepts, students will pursue a traditional introduction to concepts such as the laws of supply and demand, opportunity cost, the marginal principle, the principle of diminishing returns and the principle of voluntary exchange. Concurrently, students will consider the evolution of man's economic behavior and the theories that have risen to describe that behavior. Current events will provide opportunities for practical application of course material. Students will be encouraged to use the language and concepts of economics to explore their positions on issues such as the environment, efficiency, income distribution and wealth disparities. (Normally in 12th grade.)

HS 52: Macroeconomics (SPRING; half-credit) Concepts in this course will include growth and production, inflation, employment, financial markets, monetary and fiscal policy, aggregate supply and demand, the national and international economy. Concurrently, students will consider the welter of statistics used to describe and predict economic fluctuations. A stock market project and discussion of current events will provide opportunities for practical application of course material. As in the fall, students will be encouraged to use the language and concepts of economics to explore their positions on issues such as the environment, economic growth, income distribution and wealth disparities. (Normally in 12th grade.)

HS 54: Comparative Religion (SPRING; half-credit) This course will offer an examination of the world's major religions. Special attention will be paid to common religious themes as well as differences in both belief structures and ethical tenets. The origins and the social, political, cultural, and economic impact of religious activity will also be examined. Consideration of literature, movies, art and music will supplement the core textbook. Current events will provide opportunities for practical application of course material. (Normally in 12th grade)

HS 67-68: AP Psychology (Advanced Placement; two semesters) The Advanced Placement course in psychology presents the student with a rigorous examination of the scientific nature of the discipline and the research methodology that directs the study of human and animal behavior and mental processes. Students will also gain an understanding of the ethical considerations that guide psychologists and their practices. In addition to examining the science of psychology and the various theoretical approaches that are used, a major focus will be the subfields that exist within psychology. Some of these areas include the psychology of learning, cognition, developmental psychology, social psychology, personality theory, physiological psychology, psychopathology and diagnosis and treatment of specific disorders. The class will be taught as a college level course and thus expectations will be commensurate with those of students who possess advanced skills in writing and critical thinking. Students are required to take the AP exam in May. (Department approval required; normally in the 12th grade.)

HS 71: Global Studies (FALL; half-credit) (description will be here shortly!)

FOREIGN LANGUAGE DEPARTMENT

FRENCH

FR 11-12: French I (two semesters) This course introduces fundamental French communication skills, both oral and written. Basic grammar is presented along with an introduction to French civilization and readings. Most course work is conducted in French, and multi-media materials are utilized to enrich classroom instruction.

FR 21-22: French II (two semesters) This course reviews and extends the goals of First Year French. Most course work is conducted in French, and multi-media materials are utilized to enrich classroom instruction.

FR 31-32: French III (two semesters) In this course the mastery of basic communicative skills continues (including a basic review of grammar), while the student is also introduced to aspects of French culture. Most course work is conducted in French and multi-media materials are utilized to enrich classroom instruction.

FR 33-34: Accelerated French III (two semesters) This course is a more rigorous and intensive version of FR31-32 described above. It also focuses on highlights of French culture. It is designed for the more motivated and capable foreign language student. Course work is conducted in French. Strong course performance helps students to prepare for the (optional) June French SAT II Test and for advancement to Accelerated French IV.

FR 41-42: French IV (two semesters) Emphasis in this course is placed on an intensive review of grammar and vocabulary in order to further develop all communicative skills. Readings from various sources are also studied. Multi-media materials are utilized to enrich classroom instruction. Course work is conducted in French. Superior course performance helps students to prepare for the (optional) French SAT II test.

FR 43-44: Accelerated French IV (two semesters) This course is a more rigorous and intensive version of FR41-42 described above. It is designed for the more motivated and capable foreign language student. Course work is conducted in French. Strong course performance helps students to prepare for the (optional) French SAT II test and for advancement to Advanced Placement French V. Preparation for the Advanced Placement Language Examination is begun.

FR 51-52: French V (two semesters) The description for this course is the same as that for FR 41-42. The syllabus is alternated from year to year so that students at both levels can study in the same "class" without duplication. Multi-media materials are utilized to enrich classroom instruction. Course work is conducted in French. Strong course performance helps students to prepare for the (optional) French SAT II.

FR 53-54: AP French V (Advanced Placement; two semesters) This course is designed to prepare advanced language students for the demanding Advanced Placement Examination in French. An intensive review of grammar, vocabulary and literature is conducted. Advanced composition and conversation skills are also stressed. Once enrolled in this course, students are involved in a rigorous course of instruction and required to take the Advanced Placement Examination in addition to other course assessments.

FR 91-92: French Independent Study (two semesters; MINOR course) This individualized tutorial is available to motivated students with near native language proficiency, only with instructor recommendation and departmental approval. Requires planning with and written consent from the current Foreign Language Department instructor at the time of registration. (Note: This course is not open to native speakers.)

GERMAN

GR 11-12: German I (two semesters) Basic communication skills, both oral and written, are introduced in this course, with an emphasis on idiomatic conversation. Some elementary readings are introduced. Most course work is conducted in German, and multi-media materials are utilized to enrich classroom instruction.

GR 21-22: German II (two semesters) Basic mastery of grammar underpins this course, with more emphasis on writing and vocabulary acquisition. Students develop a broader, more confident active command of the language as well. Readings serve to introduce students to more idiomatic expressions. Most course work is conducted in German and multi-media materials are utilized to enrich classroom instruction.

GR 31-32: German III (two semesters) Concentrated work in communication skills as well as mastery of basic grammar highlight this course. The student is also introduced to German civilization, history, and literature. Course work is conducted in German and multi-media materials are utilized to enrich classroom instruction.

GR 33-34: Accelerated German III (two semesters) Accelerated German III is designed for highly motivated students who are ready to begin an intensive reading, writing and speaking program in a faster-paced and more challenging environment. Students would begin reading short stories by contemporary authors, progress to popular plays and finish with several short novels. A challenging writing program parallels the reading curriculum beginning with journaling, graduating to weekly themes and culminating in a longer paper connected with literature, history or culture. Rewriting at this level will challenge students to digest/use much of the grammar they have learned in previous years. Class work will be conducted in German and will invite students to make periodic presentations in the target language and to engage in daily conversations about topical themes, thereby strengthening and broadening their vocabulary.

GR 41-42: German IV (two semesters) This course includes an intensive review of grammar, regular writing assignments, discussion of current events, and a survey of German Literature. Strong course performance helps prepare the student for the (optional) German Language SAT II test. Course work is conducted in German and multi-media materials are utilized to enrich classroom instruction.

GR 43-44: Accelerated German IV (two semesters) Accelerated German IV is designed for highly motivated students who are ready to begin an intensive reading, writing and speaking program in a faster-paced and more challenging environment. Students begin reading short stories by contemporary authors, progress to popular plays and finish with several short novels. A challenging writing program parallels the reading curriculum beginning with journaling, graduating to weekly themes and culminating in a longer paper connected with literature, history or culture. Rewriting at this level challenges students to digest/use much of the grammar they have learned in previous years. Class work is conducted in German and would invite students to make periodic presentations in the target language and to engage in daily conversations about topical themes, thereby strengthening and broadening their vocabulary. Strong course performance helps prepare the student for the (optional) German Language SAT II test. (With departmental approval, students may opt to participate in the Advanced Placement Examination Program, which necessitates *rigorous independent study*. Those students will have the designation "AP" added to their transcripts and will be required to take the AP exam, in addition to the other course assessments.)

GR 51-52: German V (two semesters) The description for this course is the same as that for GR 41-42. The syllabus is alternated from year to year so that students at both levels can study in the same "class" without duplication. (With departmental approval, students may opt to participate in the Advanced Placement Examination Program, which necessitates *rigorous independent study*. Those students will have the designation "AP" added to their transcripts and will be required to take the AP exam, in addition to the other course assessments.)

GR 91-92: German Independent Study (two semesters; MINOR course) This individualized tutorial is available to motivated students with near native language proficiency, only with instructor recommendation and departmental approval. Requires planning with and written consent from the current Foreign Language Department instructor at the time of registration (Note: This course is not open to native speakers.)

LATIN

LT 11-12: Latin I (two semesters) This course uses the Ecce Romani I series to present basic grammar, forms, vocabulary, translation and reading comprehension. Elementary readings, following the life of the Cornelius family, serve as the basis for these components of learning the Latin language. The text also provides students with English readings that examine Roman culture and history, mythology, and the influence Roman civilization has on our own. Students take the Level I National Latin Exam.

LT 21-22: Latin II (two semesters) The study of basic and more complex grammar, forms, vocabulary, translation and reading comprehension continues in this course. The Ecce Romani II text presents students with the second half of the Cornelius family's story while also asking them to consider deeper cultural and historical topics. Students take the Level II National Latin Exam.

LT 31-32: Latin III (two semesters) This course uses the Ecce Romani III text to focus on Latin readings concerning exciting events and interesting personalities from the First Centuries B.C. and A.D. Emphasis is placed on reviewing previously met Latin grammar and forms, learning the final topics of Latin grammar, improving translation skills and the discussion of literary and cultural themes. An introduction to Latin verse is included in the second semester. Students take the Level III National Latin Exam. Strong course performance helps prepare students for the (optional) June Latin SAT II test.

LT 41-42: Latin IV (two semesters) The focus of this course is literary; the poetry of Catullus, Horace, Ovid or Vergil, the prose of Cicero, or the writings of other authors provide the course readings. Students study the elements of Latin literature and Roman culture in depth and react to the issues that arise. Emphasis is also placed on strengthening grammatical and translation skills. Students take the Level IV National Latin Exam, and strong performance helps prepare them for the (optional) SAT II test. (With departmental approval, students may opt to participate in the Advanced Placement Examination Program, which necessitates rigorous independent study. Those students will have the designation "AP" added to their transcripts and will be required to take the AP exam.)

LT 51-52: Latin V (two semesters) The description for this course is the same as that for LT 41-42. The syllabus is alternated from year to year so that students at both levels can study in the same "class" without duplication. Students take the Level V National Latin Exam. (With departmental approval, students may opt to participate in the Advanced Placement Examination Program, which necessitates rigorous independent study. Those students will have the designation "AP" added to their transcripts and will be required to take the AP exam.)

LT 91-92: Latin Independent Study (two semesters; MINOR course) This individualized tutorial is available to motivated students with excellent language proficiency, only with instructor recommendation and departmental approval. Requires planning with and written consent from the appropriate Foreign Language Department instructor at the time of registration.

SPANISH

SP 11-12: Spanish I (two semesters) This course introduces fundamental Spanish communication skills, both oral and written. Basic grammar is presented along with an introduction to Hispanic Civilization, culture, and readings. Most course work is conducted in Spanish and multi-media materials are utilized to enrich classroom instruction.

SP 11-12H: Spanish for Heritage Learners (two semesters) This course is designed for bilingual Hispanic speakers to begin their formal study of Spanish. The goal of this course is to acquaint students with Spanish in its written form and to expand students' overall knowledge of the language. The students learn the various differences between formal written Spanish and casual, every day and regional Spanish. They acquire an improved command of the various forms of formal spoken Spanish. In addition, the syllabus introduces selected short stories, which are representative of the most popular of Spanish literary genres. All course work is conducted in Spanish.

SP 15-16: Practical Applications in Spanish I (two semesters) This course is similar to SP11-12 but presents Spanish language mastery instruction primarily from a communicative approach. Most course work is conducted in Spanish and multi-media materials are utilized to enrich classroom instruction. Enrollment is limited to those students who are specifically recommended by the Language Department. Once admitted, students must complete their language requirement within this track.

Note: This is not an elective course.

SP 21-22: Spanish II (two semesters) This course reviews and extends the goals of first year Spanish. Most course work is conducted in Spanish and multi-media materials are utilized to enrich classroom instruction.

SP 21-22H: Spanish for Heritage Learners (two semesters) This course is designed for bilingual Hispanic speakers to continue their formal study of Spanish. The goal of this course is to continue acquainting students with Spanish in its written form and to expand students' overall knowledge of the language. The students learn the various differences between formal written Spanish and casual, every day and regional Spanish. They acquire an improved command of the various forms of formal spoken Spanish. In addition, the syllabus introduces selected short stories, which are representative of the most popular of Spanish literary genres. All course work is conducted in Spanish.

SP 25-26: Practical Applications in Spanish II (two semesters) This course is similar to SP21-22 but presents Spanish language mastery instruction primarily from a communicative approach. Course work is conducted in Spanish and multi-media materials are utilized to enrich classroom instruction. Enrollment is limited to those students who are specifically recommended by the Language Department. Once admitted, students must complete their language requirement within this track.

Note: This is not an elective course.

SP 31-32: Spanish III (two semesters) In this course the mastery of basic communicative skills continues (including a basic review of grammar), while the student is introduced to aspects of Hispanic culture. Most course work is conducted in Spanish and multi-media materials are utilized to enrich classroom instruction.

SP 31-32H: AP Language Spanish for Heritage Learners (Advanced Placement; two semesters) This course is designed to prepare advanced heritage students (bilingual Hispanic speakers) for the demanding Advanced Placement Examination in Spanish Language as well as for other assessments. Students develop their abilities in composition writing and intensively review grammar in order to prepare for the Exam. Students also read widely from Spanish literature to become familiar with its most important authors. All course work is conducted in Spanish.

SP 33-34: Accelerated Spanish III (two semesters) This course is a more rigorous and intensive version of SP31-32 described above. It also includes an introduction to Hispanic literature. It is designed for the more motivated and capable foreign language student. Course work is conducted in Spanish. Strong course performance helps students to prepare for the (optional) June Spanish SAT II test and for advancement to Accelerated Spanish IV.

SP 35-36: Practical Applications in Spanish III (two semesters) This course is similar to SP31-32 but presents Spanish language mastery instruction primarily from a communicative approach. Course work is conducted in Spanish and multi-media materials are utilized to enrich classroom instruction. Enrollment is limited to those students who are specifically recommended by the Language Department. Once admitted, students must complete their language requirement within this track.

Note: This is not an elective course.

SP 41-42: Spanish IV (two semesters) Emphasis in this course is placed on an intensive review of grammar and vocabulary in order to further develop all communicative skills. Readings from various sources are also studied. Multi-media materials are utilized to enrich classroom instruction. Course work is conducted in Spanish. Superior course performance helps students to prepare for the (optional) Spanish SAT II test.

SP 43-44: Accelerated Spanish IV (two semesters) This course is a more rigorous and intensive version of SP41-42 described above. It is designed for the more motivated and capable foreign language student. Course work is conducted in Spanish. Strong course performance helps students to prepare for the (optional) Spanish SAT II test and for advancement to Advanced Placement Spanish V.

SP 51-52: Spanish V (two semesters) The description for this course is the same as that for SP41-42. The syllabus is alternated from year to year so that students at both levels can study in the same "class" without duplication. Audio/video cassettes are utilized to enrich classroom instruction. Course work is conducted in Spanish. Strong course performance helps students to prepare for the (optional) Spanish SAT II test.

SP 41-42H: AP Literature Spanish for Heritage Learners (Advanced Placement; two semesters) This course is designed to prepare advanced heritage students (bilingual Hispanic speakers) for the demanding Advanced Placement Examination in Spanish Literature. Students develop their abilities in composition writing as well as read widely from Hispanic literature in order to prepare themselves fully for the Exam. All course work is conducted in Spanish.

SP 53-54: AP Spanish V (Advanced Placement; two semesters) This course is designed to prepare advanced language students for the demanding Advanced Placement Examination in Spanish. An intensive review of grammar, vocabulary and literature is conducted. Once enrolled in this course, students are involved in a rigorous course of instruction and required to take the Advanced Placement Examination in addition to other course assessments.

SP 91-92: Spanish Independent Study (two semesters: MINOR course) This individualized tutorial is available to motivated students with near native language proficiency, only with instructor recommendation and departmental approval. Requires planning with and written consent from the current Foreign Language Department instructor at the time of registration. (Note: This course is not open to native speakers.)

CHINESE

CH 11-12: Mandarin Chinese (two semesters) The goal of Chinese 11-12 is to build a solid foundation in elementary written and spoken Mandarin, as well as to introduce elements of Chinese culture. At this level, students focus on basic grammar and sentence structure. Pinyin, tones, and Chinese character writing are stressed.

CH 21-22: Mandarin Chinese II (two semesters) In this course students build on the four basic language skills of listening, speaking, reading, and writing. At this level, more sophisticated language usage and style are stressed.

CH 31-32: Mandarin Chinese III (two semesters) This course develops the skills presented in levels one and two. At this level, students will expand their repertoire of vocabulary and characters, increase their ability to read both edited and unedited texts, and further develop their oral and aural proficiency.

CH41-42: Mandarin Chinese IV (two semesters) Chinese IV builds on the cumulative language knowledge acquired over the prior three years of the study in the Chinese language. The course will continue to build on the grammar, sentence structure and vocabulary, and further develop listening, speaking, reading and writing skills. It will also delve deeper into the study of language and culture through greater use of media such as music/songs, movies/TV, and through practical use of classic Chinese idioms. It will cover more aspects of Chinese culture and history.

NOTES:

1. Native Speakers: Those native speakers who need co-validation for their government/school must take an advanced level examination. Upon successful completion, credit will be granted by the Department.
2. Students must take three consecutive levels (years) of the same foreign language to fulfill the The Governor's Academy graduation requirement. Those students considering selective colleges should plan to take at least four years of one foreign language. Such institutions are impressed by students who take the full sequence of one language.
3. Capable foreign language students are encouraged to begin an additional foreign language at The Governor's Academy while continuing advanced study of the first foreign language.
4. Foreign language students at The Governor's Academy have a number of enrichment opportunities which include trips abroad, language club outings, audio/video and cultural presentations, and extensive Internet access to foreign language periodicals, newspapers and Web pages.

SCIENCE DEPARTMENT

SC 11-12: Freshman Science (two semesters; required of all 9th graders.) Freshmen take either one of two one-year courses, Freshman Biology or Freshman Physics, both introductory courses in their subjects. Both courses will introduce the students to basic laboratory skills, report writing and the use of technology in the laboratory, background necessary to the further study of science. Both are experiential and include many hands-on activities.

- Students taking Freshman Biology will explore the fields, marshes and woods surrounding our campus and will experience a naturalist's approach to the study of biology, as well as topics including the basis of genetic inheritance, evolution and the diversity of life. (No prerequisite)
- Students taking Freshman Physics will learn basic concepts of physical science, in addition to traditional topics in physics. Appreciation of physics involves fluency in basic algebra; therefore, students will be recommended for Freshman Physics based on their math experience and aptitude. (Prerequisite: permission of the department.)

UPPER-CLASS SCIENCE COURSES:

SC 10: Life Skills (one quarter; one-quarter credit; required of all 10th graders) The focus of this course will be toward the acquisition of health knowledge and decision-making skills which will encourage students to

promote wellness, avoid injury, and prevent disease. In learning to appreciate one's role in the health and well-being of self, family, and community, students should acquire lifelong healthy habits and practices.

SC 21-22: Biology (two semesters) A hands-on approach to biology with emphasis on laboratory observation and experimentation, data gathering and fieldwork to give students an appreciation of the unity and diversity of life.

SC 23-24: Honors Biology (two semesters) A demanding introductory course for the student who is willing and able to engage in an intensive study of biology at an accelerated pace. The course emphasizes the relationships among living things at each level of organization. Laboratory work illustrates and emphasizes these relationships. (Prerequisite: Successful completion of one year of chemistry and permission of the department)

SC 27-28: AP Biology (Advanced Placement; two semesters) This course is designed to prepare students for the College Board Advanced Placement exam in biology. The course covers the material expected in a first-year college-level introductory biology course, and all students are required to take the AP Biology exam in May. This course meets for one additional laboratory period, compared to a standard Academy science course. (Prerequisite: Successful completion of one year of chemistry and permission of the department)

SC 31-32: Chemistry (two semesters; 10th, 11th, 12th grades) A general introduction to chemical theory and laboratory practices. Students in this course will gain an understanding of atomic structure and theory, chemical equations and reactions, stoichiometry, thermochemistry, solutions and gas laws. There is a laboratory period every week. In the lab, students will gain an understanding of proper lab practice, use of equipment and chemicals.

SC 33-34: Honors Chemistry (two semesters) A demanding introductory course for students with strong aptitudes and a strong interest in science. This course offers a more rigorous and comprehensive introduction to chemical theory and laboratory technique than is offered in regular sections of Chemistry. (Prerequisite: successful completion of Algebra I with honors-level achievement and permission of the department)

SC 35-36: Applied Chemistry (two semesters; 10th, 11th, 12th grades) In this laboratory course, students will learn basic chemical principles through investigation of chemistry's impact on society. Environmental issues currently confronting our society and the world will serve as a basis for introducing the chemistry needed to understand them. Students will explore how chemical concepts apply to their daily lives and the world around them. The course uses the American Chemical Society text, Chemistry in the Community.

SC 39-40: AP Chemistry (Advanced Placement; two semesters, 11th and 12th grades) This course is designed to prepare students for the College Board Advanced Placement exam in Chemistry. It is a second-year, two-semester laboratory course in chemistry which further develops and expands on the concepts presented in the first year of chemistry, covering the material expected in a first-year college-level introductory chemistry course. All students are required to take the AP Chemistry exam in May. Students should have mastery of the following topics before starting this course: measurement, units, significant figures stoichiometry, history of atomic theory and the periodic table, empirical gas laws, calorimetry and heat, VSEPR and molecular geometry, intramolecular and intermolecular bonding. (Prerequisite: recommendation from the first year chemistry teacher, approval of the course instructor, and completion of Algebra II with C or better.)

SC 41-42: Physics (two semesters) This course is designed for the student who probably won't major in science or engineering in college, but who wants to be exposed to the concepts of physics in order to be a truly educated and aware citizen of the twenty-first century. An extensive amount of laboratory work using microcomputer-based equipment is involved. The development of problem-solving skills using basic algebra and the rudiments of trigonometry is also a goal of the course. The focus of this class is on mechanics, dynamics and energy. Some astronomy, waves and electrostatics are also discussed. At the completion of the course, the student should be more able to make responsible decisions regarding science in an age of increasing technological complexity. (Prerequisite: Algebra II, completed or studied concurrently and permission of the department)

SC 43-44: Honors Physics (two semesters) A demanding introductory course for the student with strong aptitudes who is willing and able to engage in an intensive study of physics. The course covers traditional topics in mechanics, dynamics, simple harmonic motion and waves. While an experimental approach to developing concepts is emphasized, problem solving is also stressed. It is intended to be the first year of a two year AP course, but students are not expected to take the second year (although they can) or the AP exam. (Prerequisite: successful completion of Algebra II with honors-level achievement and permission of the department)

SC 45-46: Conceptual Physics (two semesters) Conceptual Physics is a laboratory course that builds understanding of concepts before computation. Physical phenomena are experienced in the laboratory then extensively analyzed and explained. Graphical and algebraic relationships are then introduced as guides to thinking. Finally, physics problems are solved as a way of verifying and extending students' understanding of concepts. The course deals with mechanics, kinematics, wave theory and other topics. The text for the course is Conceptual Physics by Hewitt. Extensive use is made of StarLogo TNG a graphical programming language that allows students to build physically sound simulations and games in a realistic 3D virtual world. (Prerequisite: Algebra II completed or studied concurrently)

SC 55-56: AP Physics (Advanced Placement; two semesters) This course is designed to prepare students for the College Board Advanced Placement exam in Physics B. The course covers the material expected in a first-year college-level introductory physics course, and all students are required to take the AP Physics exam in May. It is a second-year physics course that covers the concepts of the B-level College Board Advanced Placement exam. The first year is briefly reviewed during the first few weeks of the course with special emphasis on electricity, magnetism, quantum mechanics, thermodynamics, and optics. While not a laboratory course per se, experiments will often be included in the curriculum. (Prerequisite: successful completion of Honors Physics or Freshman Physics with honors level achievement and successful completion of Honors Pre-Cal with honors level achievement and/or permission of the department chair and AP Physics teacher.)

SC 57-58: Human Anatomy and Physiology (two semesters, 11th or 12th grades) This course covers the fundamentals of human anatomy and physiology. Units of study include cell chemistry and structure, tissues and organ systems including the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, digestive, respiratory, urinary, reproductive and sensory systems. Students should finish the course with a strong introductory understanding of the structure and function of the human body. (Prerequisite: one year each of biology and chemistry)

SC 59-60 Marine Studies (two semesters; 11th or 12th grades) This course covers the basic physical and biological principles of marine and estuarine ecosystems. Understanding the concepts of ecology, such as the relationships between organisms and the flow of energy and nutrients, viewed through the lens of evolution allows a structure for discussions of many of the pressing environmental issues that we face today. Emphasis is placed on field work with a 2-1/2 hour block each week set aside for field trips and independent projects in local habitats and for group and independent projects in the classroom. (Prerequisite: one year of biology and a year of physics or chemistry completed or studied concurrently.)

SC 63 Environmental Science (one semester; may be offered in Fall or Spring) This course provides students with a foundation of understanding the risks associated with growth in a developing world; environmental impact of population growth on natural resources; mineral and resource extraction; water resource uses; and renewable and non-renewable sources for power generation. Students will explore current environmental topics and gain the knowledge and skills to deal effectively with environmental problems such as global warming, acid rain, endangered species and invasive plants and animals. Students learn a variety of basic laboratory and field techniques including soil and water sampling. An emphasis is placed on students using critical thinking and analytical skills to make a positive impact on the environment. (Pre-requisite: one year each of biology and chemistry)

SC 64 Forensics (one semester; may be offered in Fall or Spring) This course is multidisciplinary (biology, chemistry, physics and crime science investigation). Topics that will be addressed may include but are not limited to: genetics, toxicology, entomology, ballistics, pathology, computer forensics, fire debris and trace

evidence. It will focus on forensic science concepts: DNA analysis, blood typing; fingerprinting; handwriting analysis, hair and fiber analysis, toxins, identification and analysis of crime scene evidence, and the law. Case studies and current events will be explored . (Pre-requisite: one year of biology and one year of chemistry or physics)

SC 91/92: Independent Study in Science (FALL or SPRING; .25 credit) Requires planning with and written consent of a Science Department instructor at the time of registration; i.e. prior to June 1.

NOTES:

1. All students, especially those contemplating studying science, engineering or medicine in college should include biology, chemistry, and physics in their programs; because of the varying requirements among colleges, it is best for a student to consult with his or her science teacher before registering for a SAT Subject Test.
2. Students who intend to apply to college programs in science, engineering or pre-med are strongly advised to take AP chemistry, AP biology, or AP physics if qualified.
3. In all cases, students should follow the recommendations of the Science Department. Any deviation from these recommendations must be approved by the chair of the science department.

NOTE: The remaining offerings, except for Introduction to the
Fine Arts and Performance, are NOT open to 9th-graders.

FINE ARTS DEPARTMENT

FA 11-12: Introduction to Fine Arts (IFA) (one semester; MINOR course)) All 9th graders are required to take IFA, which allows them to discover the wide array of arts offerings available on campus. Students rotate through a new discipline with a new teacher every 8 classes, exploring Music, Technical Theater, Video, Photography, Ceramics, Drama, and Studio Art.

VISUAL ARTS

VA 25: Architecture (FALL; half credit) Architecture is a full-semester course with each student displaying his or her final project to the community. The first quarter is spent learning the principles of perspective, spatial concepts and basic architectural design. During the second quarter each student will demonstrate his or her knowledge of architecture by designing a structure with a floor plan and elevation design, and by creating a 3-D model of a structure. A lab fee of \$30.00 is required.

VA 26F/26: Film (FALL or SPRING; half credit) This is a full-semester upper class course with each student displaying his or her final project to the community. The first quarter is spent studying films and learning the principles of film making techniques (i.e., camera operation, editing, directing and acting). During the second quarter each student will demonstrate his or her knowledge of film making by working on several separate film projects as part of a film crew. Each student will be required to direct at least one film.

VA 31/32: Ceramics Studio (FALL or SPRING; half-credit) This studio course offers instruction in basic pottery, including design and the study of various techniques from "Raku" to wheel throwing, glazing and kiln use. Ninety-minute classes meet twice each week. There is a student charge for materials of \$50. (Limited to one section per semester.)

VA 34: Intermediate Ceramics Studio (SPRING; half-credit) This studio course is for the more serious pottery student who wishes to continue to explore further with sculpture and handbuilding techniques and more advanced wheel work. The student will also learn about different temperature firings such as Saggar, Pit and Smoke firings in addition to learning how to fire the kilns.

VA38: Art History (SPRING; half-credit) In this course we will study the artists and their works from the Proto-Renaissance (1150) through the Post-Impression movement of the early 20th Century. Although we will certainly be learning how to properly critique a work based on the principles and elements of design, we will also be looking at how art influenced and was influenced by the philosophies, politics, theology and literature of the time. To do this we will not only be studying the images in the classroom through critiques and writing exercises, but also utilizing hands on exploration of different media, museum visits (usually on a Sunday) and readings on artists and their times. There is no prerequisite for this course.

VA 41/42: Photo 1 (FALL or SPRING; half-credit) This is a basic studio course in photographic techniques with emphasis on visual perception and expression. Students are provided with 35mm SLR cameras and are introduced to a number of shooting and printing techniques. During the first half of the semester, students print black and white images in the darkroom, but later they learn how to work with color images using Adobe Photoshop. Students have access to an assortment of lenses, filters, and films to complete their photo assignments. Assignments encourage students to create ambitious, personal work. Students print and bind their own photo books, exhibit a selection of their mounted prints in the Student Art Show, and often publish their photographs in school publications. Lab fee of \$75.00 covers all film and printing costs.

VA 43F/43S: Carpentry for the Theatre (FALL or SPRING; half-credit) This one semester course will focus on constructing scenery, staging and properties (aka-props). The course offers a hands-on curriculum implementing the safe use of power and hand tools, paints, and finishes. The goal of the course is to learn more detailed construction methods currently in use in the entertainment world while gaining valuable lifelong building skills. "Anything Goes" on stage so the projects will be equally varied and diverse in class. There are no prerequisites for this course. All levels of ability will be accepted.

VA 44F: Lighting and Sound (FALL; half-credit) A one-semester course dedicated to discovering the finer points of lighting and sound design and implementation, this course will be a hands-on application of current theatrical trends. The Performing Arts Center offers state-of-the-art equipment that each student will have the opportunity to learn, to manipulate, and to discover. There are no prerequisites for this course. All levels of ability will be accepted.

VA 50: Portfolio (SPRING; half-credit) This course will focus on the proper techniques for choosing, narrowing and exploring a portfolio concentration; but we will also be learning how to photograph work for slides, matting techniques and designing a show. Two large components will be used to choose and explore your concentration. One will be your actual studio work, but in addition you will also be participating in an Art History component of the program. There will be writing assignments for research papers and artist statements. Each individual will also be participating in a gallery show, either as an individual or with 2 or 3 other artists. *This Portfolio course will be a prerequisite for any of the AP Studio Portfolios (Drawing/Painting; 2-D Design; 3-D Design).* Lab fee \$40.00

VA 51/52: Introductory Studio Art (FALL or SPRING; half-credit) This course is designed for the student who wishes to explore art and is curious to learn something about the creative process. Specific assignments will be given in which the student will explore self-expression in various media. Emphasis will be placed on basic color theory, two-dimensional drawing, design and paper mache, and three-dimensional design. Projects will be assigned in the following media: pencil, block print, and acrylic painting. Student work will be shown in exhibits across campus. Classes meet for 90 minutes twice each week. A lab fee of \$40 is required.

VA 53/54: Intermediate Studio Art (FALL or SPRING; half-credit) This is an intermediate course for the more serious art student who wishes to further explore the media covered in the introductory course. Emphasis will be placed on drawing and painting, with attention given to the Advanced Placement requirements. Work required for exhibit. (Prerequisite: VA51 and the instructor's permission or, for the serious experienced student, a portfolio for audition.) A lab fee of \$40 covers the cost of supplies.

VA 57-58: AP Studio Art (Advanced Placement; two semesters) This course prepares the artist to present a finished portfolio in either Drawing/Painting, 2-D Design or 3-D Design. Each portfolio is broken up into three distinct components:

Concentration - the focusing in on one concept or subject matter.

Breadth - a demonstration of an artist's prolificacy

Quality - pieces that demonstrate an artist's mastery over the medium

The class will also design the end-of-the-year Student Art Show. Lab fee \$60.00. (Prerequisites: An introductory course, an intermediate course, and Portfolio)

VA62 Photo II (SPRING; half credit) This course builds upon on the photographic knowledge from Photo I, expanding students' understanding of the expressive and descriptive powers of photography. Students are encouraged to develop a visual style and personal aesthetic. Emphasis is placed on refining technical skills, but cross-media projects requiring experimentation and non-traditional printing methods are introduced throughout the semester. Both film and digital cameras are used during the semester. Students create a final portfolio of work to complete this course. Owning an SLR film or digital camera is strongly recommended for this course. Lab fee of \$75.00 covers all film and printing costs. *Prerequisite – Photo I, or with permission from instructor.*

VA 91/92: Independent Study in Visual Arts (FALL or SPRING; .25 credit) Individual study in a topic as arranged by the student in consultation with an instructor from the department. Students meet together once each week to discuss their work. (Prerequisite: VA51.) A lab fee of \$40 is required.

PERFORMING ARTS

PA 10: Public Presentation Skills (one quarter; .25 credit; required of all 10th graders). The course is designed to help students feel comfortable speaking in front of people. Students will practice different ways to engage an audience by controlling vocal dynamics. Students will also practice techniques for controlling their anxiety while speaking. Instructors will ask students to practice working in different presentation situations, e.g. a news cast, a wedding toast, a formal introduction, a humorous anecdote, instructions, directions, political persuasion, and sales presentation. If time allows, students will be asked to use props and PowerPoint.

PA 21: Electronic Music and Recording (FALL; half credit) This course will focus on learning the basics of electronic music and recording. Students will use programs including Garageband, Reason and Protools to write original music compositions and record student performances. Topics covered will include MIDI, sequencers, synthesizers, digital recording methods, songwriting, and electronic music history.

PA 23/24: Orchestra (two semesters; MINOR course) Students learn a variety of chamber and symphonic music, drawn from Baroque, Classical, Romantic, and contemporary styles. This course stresses musical

development through individual practice, rehearsals, and regular performance at Fall, Winter, and Spring concerts. Open to all students with intermediate fluency on an orchestral instrument.

PA 25/26: Jazz Band (two semesters; MINOR course) Students learn music from the Jazz repertoire and perform regularly in Fall, Winter, and Spring concerts, in addition to other small performances. This course stresses musical development through individual practice, rehearsals, and regular performance. Open to students with intermediate fluency on standard Jazz Band instruments; rhythm section (including guitar, bass, drums, and piano) is selected by audition in September.

PA 27/28: Chorus (two semesters; MINOR course) “The Academy Singers” is open to all students. This ensemble rehearses a wide variety of choral repertoire from classical to Broadway. The Academy Singers performs at all Fine Arts concerts and at other school events throughout the year. No prior musical training is necessary.

PA 47/48: Advanced Chorus (two semesters, MINOR course) “The First” is open to 10th, 11th, and 12th graders by audition only. This ensemble studies and performs American and European choral literature of the 16th through 20th century, including works written in foreign languages. Potential members should be serious singers, dedicated to perfecting their vocal skills. The First performs at all Fine Arts concerts and at special events at the request of the administration.

PA 34: American Music History (SPRING; half-credit) A survey of American popular music from the pre-colonial days to the Revolutionary War to Minstrel Shows to Ragtime, Jazz, and Rock ‘n Roll. Throughout the course students also explore the technological developments of recorded sound (phonograph to iPod), famous and notorious popular musicians and songs, and how music defines our personal and cultural identity.

PA 41 Music Theory (FALL; half-credit) Vocalists and instrumentalists with limited knowledge of music theory are invited to take this basic course. Topics covered include note-reading, scales, key signatures, accidentals, intervals, chords, melodic dictation, and exploration of songwriting.

PA 51-52 AP Music Theory (Advanced Placement; two semesters) This is an advanced music theory course designed to develop the tools necessary to understand and analyze musical works in a wide range of styles and forms. In addition to music theory (scales, key signatures, harmony, voice leading, rhythmic and melodic dictation etc.), students will learn compositional, analytical, and aural skills. While preparing for the AP exam, students will also compose original music for various instruments and ensembles, including the piano and string quartet. Students will be scheduled to take the AP Music Theory exam in May.

Prerequisite – Students must have taken PA 41 Music Theory, or with permission from the instructor.

PA 91/92: Independent Study in Performing Arts (FALL or SPRING; .25 credit) Individual study in a musical topic, such as Music Theory, conducting, composition, or recording, as arranged by the student in consultation with an instructor from the department.

Private Lessons: Students at The Governor’s Academy have the opportunity to study with talented teachers and performers from the area who offer lessons on various instruments and in voice during the Academic Day. Students and instructors find a common “free-time” block in which to have a 45-minute weekly lesson. Lessons are currently offered in piano, voice, guitar, bass, drums, flute, trumpet, trombone, tuba, clarinet, saxophone, violin, and viola. Lessons for other instruments are based on the availability of teachers and interest from students. For more information, contact Ms. Miller, Lesson Program Coordinator.

NOTE: Because the number of sections offered in each of the arts courses is limited and the number of seats in each studio is limited, the student must indicate both a first and a second choice in any one semester on the course registration form.

SPECIAL NOTE SENIOR SPRING PROJECTS

Some seniors intend to participate in the Senior Spring Projects Program and may wish to petition for release from some of their courses for the fourth quarter. Certain courses have restrictions or prohibitions governing this situation. Thus, SENIORS- and JUNIORS-TO-BE may wish to study the special information below detailing course constraints for consideration in planning their courses for the next two years. The information also is included with project planning guidelines normally published in November. Seniors-to-be seriously contemplating participation in the program are asked to so signify on the salmon-colored course registration sheet now.

SENIOR SPRING TERM PROJECTS

The following recommendations are proposed for the Spring Term Projects. We would like to emphasize that a Senior Spring Term Project is a privilege, not a right. This valuable experience helps students become more independent and mature.

All projects are subject to the approval of the SSTP Committee and must meet all of the following conditions:

1. Students must maintain at least a C- over-all grade point average (1.7) in their courses through the third quarter in order to take a Senior Spring Term Project. A student who wishes to do a project may petition through the Academic Dean's office if his/her grade point average is lower than a C-.
2. Students may drop up to three classes but are encouraged to limit the number of courses dropped. Any courses which require an AP exam may not be dropped. No distribution requirements may be dropped for a spring term project except for a fourth year of English. Also the following one-semester courses may not be dropped: CS22 and HS64.
3. If a student drops a course for the fourth quarter, he/she will not be required to take the final exam. However, the project requires a research paper, daily journal, weekly meetings and a final presentation to the committee. Failure to complete any of these requirements satisfactorily will result in no diploma.
4. Students must get the classroom teacher's approval in order to drop a class. The classroom teacher will determine if the student's performance merits leaving the class by judging a student's overall standing in the course.

*** END OF DOCUMENT***

Subject to change without notice.

