

GARRISON FOREST SCHOOL

300 GARRISON FOREST ROAD • OWINGS MILLS, MARYLAND 21117



UPPER SCHOOL CURRICULUM GUIDE

2017-2018

GARRISON FOREST SCHOOL'S MISSION AND PHILOSOPHY

At Garrison Forest School, we prepare our students in and out of the classroom to thrive in a complex, changing world by:

- Challenging them to strive for academic excellence and to grow into informed, independent and creative thinkers;
- Cultivating an authentic and resilient sense of self, grounded in respect and integrity;
- Creating a diverse and inclusive community built on a spirit of caring;
- Inspiring young women to lead and to serve with passion, purpose and joy.

Our motto informs our mission: *Esse Quam Videri*—"To Be Rather Than To Seem."

STATEMENT OF RESPECT

The Garrison Forest School community is deeply committed to equity, honesty, kindness and respect as part of the educational experience. To this end, we:

- Celebrate diversity both within our community and our curriculum;
- Support the well-being of all people;
- Build the self-esteem of all people;
- Promote understanding among all people.

We recognize the dignity and worth of all individuals. To protect their rights, we confront bias, prejudice and discrimination. Garrison Forest does not condone any behavior which is inconsistent with these tenets. We believe that it is unacceptable for our spoken and written language and behavior to demean anyone's physical characteristics, as well as anyone's ethnic, gender, personal, racial, religious or sexual identities. We, as individuals, must take responsibility for our words and deeds and respect all people.

GARRISON FOREST'S SCOPE OF PROGRAMS

Garrison Forest School offers an exceptional elementary, middle and high school program for girls, beginning in Kindergarten. For grades 8-12, Garrison Forest also has a regional, national and international boarding program. The coed Preschool begins with a Parent-Toddler program and has classes for two-, three-, and four-year-old boys and girls. For more information about the Preschool, Lower School, Middle School, Upper School or boarding programs, please visit www.gfs.org or contact the Admission Office at (410) 559-3111.

THE CURRICULUM

Requirements for Graduation

Garrison Forest Upper School operates on a trimester system. One credit is given for a full-year course; semester courses earn one-half ($\frac{1}{2}$) credit.

General Requirements:

- A minimum of 21 credits is required for graduation.
- In general, students take at least 5 academic credits each semester. In grade 9, students generally carry 6 academic credits. In grade 10, students generally carry 5 $\frac{1}{2}$ to 6 academic credits. In grades 11 and 12, students carry 5 to 6 academic credits, unless the student is enrolled in three Advanced Placement courses.

Due to the demanding nature of our curriculum, students must be recommended for AP courses (see AP guidelines, pp. 7-10) and are limited to two AP courses in the junior year and three AP courses in the senior year. Exceptions are considered by formal request on an individual basis. In order to graduate, seniors must remain in and pass all courses in which they are enrolled at the end of the add/drop period of the semester in which the course begins.

Graduation Requirements:

English: 4 credits

Language: 3 credits in one language through Level III. For those students electing a second language, at least 2 credits must be completed.

Recommendation: Language students who complete 3 credits at the end of grade 10 are recommended to continue at least one language in grade 11.

History: 3 credits, one of which must be in World History II and one of which must be in United States History.

Recommendation: Students are encouraged to take 1 or more history electives in addition to their 3 core history courses.

Mathematics: 3 credits in grades 9, 10, and 11 including Algebra I, Geometry, and Algebra II.

Recommendation: Students are strongly urged to take a fourth credit.

Science: 3 credits of laboratory science. Credits must include one biological, one chemical, and one physical science, one of which must be in grades 11 or 12.

Recommendation: Students are encouraged to complete Biology, Chemistry, and Physics before signing up for an advanced elective.

The Arts: 2 credits including 1 credit of Art Foundations in grade 9. For student entering Garrison Forest School after grade 9, both Performing and Visual Arts must be represented in the Arts credits.

Physical Education: 6 points before the conclusion of junior year.

Digital Thinking: Non-credit; required in grade 9

Decision Making: Non-credit, required in grades 9 and 11.
SAT Prep/Career Explorations Unit: Non-credit, required in grade 10.
Transitions: Non-credit, required in grade 12.

COURSE SELECTION SAMPLES

These summaries are designed to help students visualize a few of the many program combinations. Students should work closely with their academic advisors when schedule planning in order to explore all options both to meet their graduation requirements and to include their extracurricular interests.

Grade 9 - Students in grade 9 generally carry 6 academic credits.

<u>Core Courses:</u>	English I	(1 credit)
	Mathematics	(1 credit)
	Language	(1 credit)
	Science	(1 credit)
	Art Foundations	(1 credit)
	<u>Choose one of the following two courses:</u>	
	Second Language	(1 credit)
	History	(1 credit)
	<u>Plus:</u>	
	Physical Education	
	Decision Making	(non-credit)
	Digital Thinking	(non-credit)

Grade 10 - Students in grade 10 generally carry 5 ½ to 6 academic credits.

<u>Core Courses:</u>	English II	(1 credit)
	Mathematics	(1 credit)
	Language	(1 credit)
	History	(1 credit)
	Science	(1 credit)
	<u>And:</u>	
	Electives	
	<u>Plus:</u>	
	Physical Education	
	SAT Prep/Career Exploration	(non-credit)

Grade 11 - Students in grade 11 carry 5 ½ to 6 academic credits. Students must complete at least one year of laboratory science in either grade 11 or 12.

<u>Core Courses:</u>	English III	(1 credit)
	Mathematics	(1 credit)
	History	(1 credit)
	Science	(1 credit)
	Language	(1 credit)
	<u>And:</u>	
	Electives	
	<u>Plus:</u>	
	Physical Education	
	Decision Making II	(non-credit)

Grade 12 – Students must carry a minimum of 5 full unit courses each semester. Students enrolled in 3 Advanced Placement courses may carry a minimum of 4 ½ credits. Students must complete one year of laboratory science in either grade 11 or 12.

<u>Core Courses:</u>	English IV	(1 credit)
	Mathematics	(1 credit)
	History	(1 credit)
	Language	(1 credit)
	Science	(1 credit)
	<u>And:</u>	
	Electives	
	<u>Plus:</u>	
	Physical Education	
	Transitions	(non-credit)

STE(A)M AT GARRISON FOREST: SCIENCE, TECHNOLOGY, ENGINEERING, (ART), AND MATHEMATICS

Garrison Forest School broke new ground in 2005, partnering with Johns Hopkins University to establish the WISE (Women in Science and Engineering) program, in response to a national call to craft opportunities to engage young women in pathways to STEM (science, technology, engineering, mathematics) fields. Ten years into the WISE program, over 30% of each class now is participating in the WISE program, GFS alumnae have pursued STEM majors in college in record numbers, and student and family interest in STEM has expanded.

As interest within GFS in STEM education for all grades has grown, research has demonstrated the pivotal need to engage young women in STEM from the elementary years forward. At the same time, the ongoing underrepresentation of women in STEM, along with critical shortages in the overall STEM-qualified workforce, remain challenges for the United States.

STE(A)M in 2017-2018

In addition to the core courses offered in the Mathematics, Science, and Arts Departments at Garrison Forest School, GFS students may take advantage of electives and program options which provide STEAM-relevant opportunities for hands-on learning, problem solving, creativity, and invention. These options are complemented by the offerings of the GFS Arts Department. Courses in the arts develop many of the ways of thinking, intellectual capacities, and skills demanded by STEM subjects. As part of their Art Foundations credit, for example, the Arts Foundations course required of all 9th grade students provides experiences that integrates art and technology. Students with STEAM interest are strongly encouraged to include arts electives among their course selections.

Throughout the curriculum, students will find Arts courses and other courses that include significant STEAM-related content. These courses are designated in the Curriculum Guide with this icon: 

Students with an interest in STEAM also are encouraged to explore the offerings of the [One Schoolhouse/Online School for Girls \(OSG\)](#). See pages 41-44.

The WISE Program is available for juniors and seniors who seek an intensive, experiential STEAM opportunity at Johns Hopkins University. Finally, students are encouraged to explore substantive co-curricular opportunities related to STEAM and the arts that complement their classroom experience.

Curricular STE(A)M options:

Electives in Computer Science, Mathematics, and Science:

- Engineering Design (Grades 10-12)
- Digital Game Design (Grades 10-12)
- Intro to Computer Programming (Grades 10-12)
- AP Computer Science Principles (Grades 10-12)
- AP Computer Science A* (Grades 10-12)
- Creating Tomorrow:
Designing for a Digital World* (Grades 10-12)
- Animal Science (Grades 11-12)
- AP Biology (Grades 11-12)
- AP Chemistry (Grades 11-12)
- AP Environmental Science (Grades 11-12)
- Anatomy and Physiology (Grade 12)
- AP Calculus AB and BC
- Advanced Calculus and Linear Algebra
- Multivariable Calculus, Differential Equations, AP Statistics*
- Women in Science and Engineering
(WISE) Program (Grades 11-12)
- *Half the Sky*:
International Perspectives on Women, Gender, and Health
- Biochemistry, Microbiology and Public Health Research (Honors) -
Small World Initiative (New 2017) (Grades 11-12)

Arts Department electives, especially:

- Art and Ideas (Grades 10-12)
- Color Theory (Grades 10-12)
- Jewelry (Grades 10-12)
- Photography I and II (Grades 10-12)
- Sculpture I and II (Grades 10-12)

Social Science electives:

- Developmental Psychology
- AP Psychology

*Selected courses through the Online School for Girls.

STE(A)M Co-Curricular Activities:

- GREEN Club, Ocean Club, and other environmental/sustainability activities
- Robotics Club
- Makerspaces
- Young Engineers and Scientists Seminars (YESS Program; early Fall)
- GFS's annual Maryland STEM Festival program (November, program differs each year)
- Annual Hour of Code program (December or early winter)
- Competitions, including the North American Computational Linguistics Olympiad (January)

- Biennial USA Science & Engineering Festival and the X-STEM Symposium (April)
- Mathematics and Science Department-sponsored special activities and competitions
- Service opportunities including participation in GFS tutoring programs, with focus on helping peers with STEM subjects
- In-school field trips and weekend Activity Program opportunities with a STEM focus

THE ADVANCED PLACEMENT PROGRAM

What is the Advanced Placement Program?

The Advanced Placement Program enables students to pursue college-level studies while still in high school through enrollment in AP courses. The program is administered by the College Board, which determines the curricular goals and course content for all AP courses. The College Board approves schools that wish to offer AP courses and conducts regular “audits” at schools to assure that AP courses meet requirements. AP courses are rigorous, fast-paced, and require students to master content and skills thoroughly and independently. Based on their performance on rigorous AP Exams offered in May by the College Board, students may earn college credit, advanced placement in college, or both. Each college has its own policy about AP courses and scores. More than 3,600 colleges and universities annually receive AP Exam scores and over 90% of 4-year colleges in the U.S. provide credit and/or advanced placement for qualifying scores. AP exams are graded on a scale of 1 through 5, with a 3 being the minimum grade generally required to support advanced placement in college.

Who should take AP courses?

Since AP courses are college-level courses offered in high school, they are appropriate for students ready to tackle college-level work and who meet certain criteria. At Garrison Forest School, specific academic eligibility requirements have been established for each AP course offered by the School in order to ensure that students in AP courses have the academic preparation necessary for success. In addition, other considerations are weighed by the School in determining placement in AP courses.

Students who meet the academic requirements for placement in an AP course should also:

- be passionate about the subject matter and highly motivated to meet the demands of the course;
- possess excellent academic and study skills, the capacity to work independently, and an exceptional work ethic;
- be highly capable abstract, critical, and independent thinkers;
- be able to balance the demands of AP coursework with other academic and non-academic commitments and goals.

The competitiveness of the college application process, a desire to keep up with classmates, and other factors sometimes contribute to a student’s interest in enrollment in an AP course. While such considerations are not necessarily misplaced, they are not in and of themselves sufficient for placement in an AP course. Students are ill-served by placement in demanding courses that do not match their interests or their strengths. The breadth and depth of the Garrison Forest School curriculum is such that many course options, including ones that strongly support college admission, are available to students apart from AP offerings.

The rigor of AP courses may result in a student achieving a lower grade than what she would earn in a non-AP course. In addition, the intensive time-demands of AP courses often stretch even the most gifted and disciplined students, resulting in trade-offs on other fronts, including grades in other courses and time

available for other commitments and interests. Students and parents need to weigh these factors carefully in assessing best options and be prepared to be guided by the School's recommendations regarding the appropriateness of AP coursework.

Because of the demands of AP coursework, students are counseled to consider these courses carefully and to balance their other course selections accordingly. Our most rigorous curriculum includes 2 APs in the junior year and 3 APs in the senior year. This level of rigor is communicated to colleges as our most challenging. Exceptions to these limits are considered on an individual basis.

The AP Enrollment Process at Garrison Forest School

- Students should, at the time of their arrival in the Upper School, begin to work with their advisors to develop their year-by-year course plan leading to graduation. Students are encouraged to discuss their interest in AP coursework with their advisors. Students and parents are cautioned, however, that indicating a desire for an AP course on a student's four-year-plan course outline does not guarantee that the student will be recommended for the AP course(s).
- As they move through their sophomore year, students interested in specific subject areas in which AP courses are offered should begin to talk more specifically with their advisors and teachers in those subject areas about their interest. Often, subject teachers can provide students with valuable feedback regarding the student's academic strength in the subject, which students can use in discussion with their advisors about potential AP coursework options.
- Placement in an AP course is granted through departmental recommendation. Departments meet prior to course registration to determine appropriate placements for students for the next academic year. In most instances, students recommended for AP courses are identified at this time. In some instances, the Department may elect to monitor a student's progress in the third trimester before making an AP placement recommendation.
- Departments consider a range of factors in determining AP placement, including academic performance to date in the subject and in other relevant disciplines, feedback from teachers, the student's intellectual and personal preparedness for college-level work, the student's commitment and interest in AP-level study, and the student's ability to manage the workload.
- Students who have been recommended for AP placement will be informed by their advisor during the course selection process. Students who have not been recommended, but who have an interest, should speak with the department chair to determine whether the department will consider placement.
- Enrollment in an AP course for the next academic year is contingent upon the student sustaining her academic effort and performance over the full academic year prior to AP enrollment. A department may revoke the AP course placement recommendation of a student who does not maintain overall academic performance, grades and effort consistent with AP course placement.

Expectations regarding AP Course Study

By submitting the completed and signed course selection forms, students admitted to an AP course, along with their parents, indicate their understanding of the AP course expectations before enrollment in the course is finalized. Students and parents must be prepared for:

- Required summer work for the AP course;
- Required assignments and study over breaks;
- Required and recommended special activities, such as weekend field trips, related to the AP course;
- Required high level of independent learning and self-management;
- A course experience that mimics college-level study in content, rigor, pacing, and assessment.

Students are encouraged to work closely with their advisors and teachers to assess whether placement in an AP course is appropriate for them.

AP Course Costs

Parents will be billed for the College Board's exam fee for each exam for which their daughter is registered.

Garrison Forest School AP Guidelines

Department/AP Course	Year of Eligibility	Course Prerequisites	Required Grades for <i>consideration</i>
Art: <i>AP Art History</i>	Senior or Junior year		B+ or higher in English III and US History/AP U.S. History for seniors; B+ or higher in English II and World History II for juniors.
English: <i>AP English Literature</i>	Senior year	English III	B+ or higher in English III.
English: <i>AP Language and Composition Exam</i>	Junior year		Strong B+ average in concurrent English III course.
History: <i>AP U.S. History</i>	Junior year	World History II	B+ or higher in World History II
History: <i>AP Psychology</i>	Senior Year	US History or AP U.S. History	B+ or higher in U.S. History or AP U.S. History
World Languages: <i>AP Chinese Language and Culture</i>	Junior or Senior year	Chinese IV (H)	B or higher in Chinese IV (H)
World Languages: <i>AP French Language and Culture</i>	Junior or Senior year	French IV (H)	B or higher in French IV (H)
World Languages: <i>AP Latin</i>	Junior or Senior year	Latin III (H) or Latin IV (H)	B+ or higher in Latin III (H) or Latin IV (H). Success in the transition to reading Latin literature at the Latin III or Latin IV level.
World Languages: <i>AP Spanish Language and Culture</i>	Junior or Senior year	Spanish IV (H)	B or higher in Spanish IV (H)

Science: <i>AP Biology</i>	Senior or Junior year	<ul style="list-style-type: none"> ● Biology ● Chemistry ● May take Physics concurrently 	<ul style="list-style-type: none"> ● Grade average of B or higher in Biology; ● Grade average of B or higher in Chemistry or B- or higher in Honors Chemistry ● Higher than a 650 SAT II Biology or Chemistry score if not at GFS for Biology or Chemistry or a placement test.
Science: <i>AP Chemistry</i>	Senior or Junior year	<ul style="list-style-type: none"> ● Honors Precalculus concurrently or as a junior ● Calculus or higher as a senior ● Chemistry 	<ul style="list-style-type: none"> ● B+ or higher in Precalculus; ● A- or higher in Honors Chemistry; ● Test grade average of B+ or higher in Honors Chemistry; ● Test grade average of B+ or higher in Physics, if already taken; ● Higher than a 650 SAT II Chemistry score if not in Honors Chemistry or at GFS for Chemistry.
Science: <i>AP Environmental Science</i>	Senior year and Junior year by departmental recommendation	<ul style="list-style-type: none"> ● Biology ● Chemistry ● Algebra II 	<ul style="list-style-type: none"> ● B or higher in all previous science classes; ● B or higher average in English III; ● Test grade average of B or higher in Algebra II.
Science/Technology: AP Computer Science A	Senior, Junior, or Sophomore year by departmental recommendation.	Algebra II Honors concurrently Intro. to Computer Programming, Digital Game Design, previous programming experience with instructor permission, or the OSG summer course "Preparing for AP Computer Science."	B+ or higher in Precalculus; Test grade average of B+ or higher in Honors Chemistry; Test grade average of B+ or higher in Physics, if already taken; B+ or higher in Algebra II; Previous programming experience;
Science/Technology: AP Computer Science Principles	Senior, Junior, or Sophomore year by departmental recommendation.	Geometry	B or higher grade in Geometry.

ARTS

Requirements and Recommendations:

- Each student is required to complete 2 credits in the arts.
- Two of the following disciplines must be represented in the Arts credits:
Music, Theatre, Visual Arts/Art History.

Visual Arts

The Visual Arts faculty is committed to promoting literacy, communication, and imagination in all students, based on their belief that the arts are fundamental to the human experience and to the contemporary world. Our comprehensive art program provides opportunities to foster creative problem-solving, to develop aesthetic judgments, comprehend historical perspectives, explore personal identities, express innovative ideas, and facilitate cognitive, perceptual, and manipulative skills according to individuals' interests and abilities. Not all courses will be offered every year; courses with the largest pre-registration enrollments will be given preference. Please see the Visual Arts chart for sequencing of courses.

***AP Art History** Grade 12 (Grade 11 with permission) 1 credit; year course

Offered through One Schoolhouse/Online School for Girls 2017-2018

See p. 41-44 for full course description

*Cross listed in History

W Art Foundations: Design Lab Grade 9 ½ credit; semesters 1 and 2
(Required of all ninth graders)

This course is part of a yearlong course that includes Design Lab and Performing Arts. The Design Lab segment of the course puts the student in the role of a designer faced with a variety of creative industry design problems and provides the student with experiences in 2D, 3D, and digital art making. Through experimentation, problem-solving and sequential approaches, students create compositions and constructions with varied materials and techniques. Applying principles of design, the creative projects aim to heighten visual literacy, enhance spatial reasoning, stimulate endless creative possibilities, and generate relevancy to everyday life.

Studio fee: \$25.00

W Art and Ideas Grades 10, 11, 12 ½ credit; semester 2

Create concepts and mix media that cross over disciplines, defy classification, and invite personal interpretations! Investigating ideas about the function and aesthetic roles of art forms, in Art and Ideas, students will exercise innovative thinking, experimentation, and fabricating with a variety of materials and techniques. Mediums included in the course are clay, bookmaking, printmaking, and fibers.

Studio Fee.

W Color Theory Grades 10, 11, 12 ½ credit; semester 1

Where do colors come from? What effects do colors have in the world? This course supports STEM objectives and is for students who are interested in the integration of science and art. Color Theory projects include a variety of media such as painting, drawing, screen printing, and digital imaging.

Through research, experimentation, and reflection, students will learn the science of color integration and the art of color pairing.

Studio fee: \$50.00

W Photo I: Wet Lab Grades 10, 11, 12 ½ credit; semesters 1 and 2
This course will help you see the world rather than just look at it. Discover the magic of traditional, photographic image making. Mix your own chemistry and witness images appear out of thin air. This course supports STEM objectives and introduces the art of black and white photography via the 35mm camera, picture making, and darkroom skills. Our work will include pinhole photography, photograms, double exposures, dodging and burning, motion studies and compositional principles. With emphasis on composition, photography enhances an artist's facility with drawing, filmmaking, digital imaging, and painting. Studio fee: \$125.00

W Photo II: Wet Lab and Digital Darkroom Grades 10, 11, 12 ½ credit; semester 2
(Prerequisite: Photo I)
Take your selfies to the next level! Develop your personal, artistic vision. This class is taught both in the Wet Lab as well as in the Digital Darkroom. Students may choose to use traditional processes, digital processes, or a combination of the two to create exciting photographic bodies of work. Our work in the Wet Lab and Digital Darkroom will include studies of Perspective, Long Exposures, Light and Shadow, Portraiture, and Visual Narrative. Structured as an intensive workshop, students will refine the skills learned in Photo I, further develop their imaging skills, and explore advanced process, techniques and themes. Studio Fee: \$125.00

W Digital Portfolio Grades 11, 12 ½ credit; semesters 1 and 2
(Prerequisite: Photo I, Photo II, and permission of instructor)
This course builds on the skills and processes learned in the prerequisite courses and offers opportunities for concentrating on a particular subject or style. Aimed at assembling a college portfolio, this course requires considerable dedication, discipline, and imagination. Alternative process in both traditional and digital photography will be encouraged to expand the student's repertoire. This class may be taken up to three times; it is required for students submitting a portfolio for AP to take the course three times. Studio fee.

Drawing Grades 10, 11, 12 ½ credit; semesters 1 and 2
"Everyone learns to write. We are taught to write by copying marks, and even when we copy marks, we all make them individually, we all have different kinds of handwriting. Within a year or two of being taught to write, things happen to our handwriting and personal ways of making marks develop very quickly. That's the way, really, you learn to draw. And in learning to draw (unlike learning to write) you learn to LOOK. It's not the beauty of the marks we like in writing, it's the beauty of the ideas. But in drawing, it's a bit of both." - David Hockney

Drawing is fundamental to other art studies. This course grows the student's understanding of the technical and conceptual components to drawing. With a focus on observational drawing, students will investigate still life, portraiture, human figures, and architecture subjects.
Studio Fee: \$30.00-\$50.00

Drawing and Painting Portfolio Grades 11, 12 ½ credit; semesters 1 and 2
(Prerequisite: Drawing, one of the following courses: Color Theory or Painting, and permission of instructor)
The course is for students who want to pursue a particular concept, subject or technique. Portfolio expects students to stretch themselves to expand their skills, to explore the expressive qualities of drawing, painting, printmaking or mixed media and to implement a few of their own projects. Aimed at

contributing to a college portfolio, the creative work requires initiative, dedication, discipline, and imagination. This class may be taken up to three times; it is required for students submitting a portfolio for AP to take the course three times. Studio fee: \$20.00-\$100.00

Jewelry Grades 10, 11, 12 ½ credit; semester 2
Develop basic jewelry making skills, including cutting, forging, filing, soldering, and polishing copper, silver or new gold. Students will be encouraged to expand upon design fundamentals and explore jewelry making as an expressive, inventive art form. Studio fee: \$75.00

Painting Grades 10, 11, 12 ½ credit; semesters 1 and 2
(Prerequisite: Drawing)
Investigate light, form, and color through the medium of paint. Using both traditional and innovative techniques, students will interpret still life arrangements, human figures, structures, and abstraction. In addition to painting in the studio, students will keep a visual journal, participate in critiques, and view paintings in a local museum. Students will gain a working understanding of color theory as is necessary in painting, and would benefit from taking the Color Theory course as well for increased depth of knowledge. Studio Fee: \$100.00

Sculpture I Grades 10, 11, 12 ½ credit; semesters 1 and 2
Create beyond the confines of the two dimensional world and allow your art to function in 3 dimensions. Design, experiment and craft three-dimensional objects with a range of materials such as clay, metal, wood, wire and found objects. This introductory course supports STEM objectives, enhances students' understanding and manipulation of space, emphasizes problem-solving, structural and spatial reasoning, and provides training in the fundamental processes and conceptual development of sculpture. Studio fee.

Sculpture II Grades 10, 11, 12 ½ credit; semester 2
(Prerequisite: Sculpture I)
Create a body of work that is visually compelling through an effective relationship between expressive content, composition, materiality, and structure. Refine the skills learned in Sculpture 1, further your conceptual and technical skills, explore advanced topics and participate in group critiques. Figurative sculpture as well as architectural model making will be explored and an emphasis on individual exploration of both media and concept will be encouraged. This course supports STEM objectives and is a continuation of Sculpture 1. Studio fee

3D Portfolio Grades 11, 12 ½ credit; semesters 1 and 2
(Prerequisite: Sculpture I and II and permission of instructor)
Delve deeper into the capabilities and expressiveness of sculpture, jewelry or other three-dimensional materials to assemble a body of work with innovative concepts and forms. Aimed at assembling a college portfolio, this class requires considerable motivation, discipline, and imagination. This class may be taken up to three times; it is required for students submitting a portfolio for AP to take the course three times. Studio fee: \$100.00

MUSIC

Music addresses the whole person in unique ways, eliciting responses and presenting challenges that are at once intellectual, emotional, physical and creative. The Upper School Music program gives students the knowledge and skills necessary to express themselves musically in meaningful ways and to formulate valid aesthetic opinions about music. The required and elective courses develop music literacy and cultivate an understanding of music as an art form, which is an integral and valuable component of life in all cultures.

Co-curricular opportunities within the Upper School Music program include the Ragged Robins*, a student-led a cappella singing group open to 11th and 12th graders by audition only and the annual Musical Theatre Production.

Garrison Forest School also offers a co-curricular [Applied Music program](#), through which students can receive private lessons in voice, piano, violin, flute, cello and guitar.

** Current and aspiring members of the Ragged Robins must have a minimum of at least one (1) year of Chamber Choir experience and/or permission of the Upper School Music Teacher.*

Art Foundations: Music Fundamentals Grade 9 *(Required of all ninth graders)*

½ credit; semesters 1 and 2

This course is part of a yearlong course that includes Design Lab and Performing Arts. The Music segment of the course focuses on developing musicianship, singing, and ensemble skills. A variety of carefully chosen repertoire provides the context for the study of music notation, ear training, and the healthy development of the singing voice, an introduction to instrumental music, music history and appreciation. Students broaden their understanding of the elements, theory, and vocabulary of music, and develop the ability to read and perform increasingly complex melodies, harmonies, and rhythms. Within the Performing Arts semester, students will experience both the Music Foundations and Theatre Foundations courses.

Chamber Choir Grades 10, 11, 12 *(Audition required)*

1 credit; year course

The Chamber Choir is a select vocal ensemble which performs extensively throughout the year both on and off campus. All members of the ensemble are expected to have some facility with sight-singing. Chamber Choir studies a challenging and varied repertoire which includes classic and contemporary music as well as folk, ethnic, jazz and popular selections. Students form a unified ensemble, advance in their vocal technique, and expand their musicianship and sight singing skills. Interested students also have opportunities to perform as soloists and in small ensembles. Attending all rehearsals and performances is a requirement for this course.

Music Theory Grades 10, 11, 12

1 credit; year course

The Music Theory course is designed for the student who is interested in learning basic music theory skills and applications. Topics that are covered in this course include, but are not limited to, scales and intervals, note names, keys and time signatures, chords and progressions, and writing for choral or instrumental settings. Ear training and listening skills will be developed for writing rhythms and pitches. No extensive musical background is required, but a strong interest in music is encouraged. This course can be tailored to musicians of all levels.

Band & Vocals (I, II, & III) Grades 10, 11, 12

½ credit; semester 2

(No Prerequisite – instrumental experience preferred)

Band & Vocals explores the popular styles and sounds of the 21st century instrumental ensemble (incorporating lead and ensemble vocals). Learning to play as an ensemble performing with drums, keyboard instruments, electric and acoustic guitars (bass included), as well as brass and woodwind instruments will be the focus of this course. The repertoire will be selected from a wide range of styles encompassing Rock, R&B, Hip-hop, Jazz, Blues, Gospel, Rap, Pop, etc. Students will be required to perform in at least one school concert per semester. Simultaneously, students may perform with the choral ensembles as the musical accompanist for performances both on-campus and off-campus. Attending all Band & Vocals performances is a course requirement.

DANCE

The Upper School Dance program is a technique-based, challenging after-school program in which students focus on the development of strong dance skills, build self-confidence, and explore artistic self-expression. Three levels of dance are offered: Beginner, Intermediate, and Advanced. These three levels offer students the opportunity to learn dance discipline and performance skills through the study of jazz, ballet, and lyrical/contemporary dance styles. Each class is structured to include warm-up exercises, center combinations, and locomotor movement patterns that require significant physical exertion and concentration. Opportunities for performance include informal showings throughout the year and a full concert production in the spring. All students taking dance in the spring trimester are required to perform in the spring concert and attend all tech rehearsals the week of the performance. In addition, students are encouraged to attend professional performances as scheduled by the instructor. Some out-of-class rehearsals will be required of Intermediate and Advanced students in preparation for performances.

Beginner Dance Grades 9-12

semesters 1 and 2

(No audition necessary)

Beginner Dance is offered Tuesdays and Thursdays from 3:30-4:30pm. The primary goals of Beginner Dance are to foster the understanding of dance as an aesthetic, kinetic art form and to introduce elements of jazz, ballet, and contemporary dance styles in a studio setting. Students will learn to prepare the body for dance through a warm-up incorporating strengthening and stretching exercises. They will learn basic ballet leg work and positions, turns and leaps, modern dance and jazz curvature and contraction of the torso, and short dance combinations. Students in the second semester will learn and perform a complete dance from start to finish. Students with no prior dance experience do not need to attend the placement class held prior to the start of the semester.

Intermediate Dance Grades 9-12

semesters 1 and 2

(Placement audition or permission of instructor)

Intermediate Dance meets Tuesdays and Thursdays from 4:30-5:45 pm and is offered to students who have some prior dance experience or who have made significant progress in the Beginner course. Year-long participation is strongly encouraged, but not required. Students placed at the Intermediate level build on the foundation of basic dance elements, continue to study ballet technique, explore dance combinations that are increasingly complex and expand into complete dances, and focus on dance as a performing art. This course strongly emphasizes performance and will include performances throughout the year as well as a full-length two-evening production in the spring. Intermediate Dance students are required to attend some out-of-class rehearsals on a very occasional basis in preparation for performance.

Advanced Dance Grades 9-12

year-long course

(Placement audition or permission of instructor)

Advanced Dance meets Mondays and Wednesdays from 3:30-5:00pm and Fridays as needed. It is offered to students who have strong technique and experience and/or those who have made significant progress in Intermediate Dance. Advanced Dance functions as both a technical class and a company rehearsal for in-depth choreography to be performed later in the year. This course is designed to develop discipline and performance skills through serious and concentrated study of dance technique in jazz, ballet, and lyrical/contemporary dance styles. This course strongly emphasizes performance and will include performances throughout the year as well as a full-length two-evening production in the spring. Students are required to attend out-of-class rehearsals occasionally in preparation for performances or as needed when working with guest choreographers. Because of the rigorous nature of this company-level class, year-long participation, beginning in the fall, is required. Exceptions will only be considered if a student is currently taking dance outside of school, has extensive prior dance experience, and has received permission from the instructor.

THEATRE

The Upper School Theatre program offers skills-based training in the theatre arts. From an introduction to theatre history, to acting and directing, to script work and playwriting, these courses promote active learning environments, giving students a kinesthetic and empathetic understanding, as well as an intellectual understanding, of the topics covered. Students will have opportunities to perform their work for an audience, allowing them to showcase their skills. Emphasis is on developing self-awareness of the body and voice, developing one's own aesthetic by studying various genres and styles of theatre, working with others as an ensemble, and building a strong sense of self-confidence. The skills of collaboration, creativity, self-directed learning, curiosity, and critical thinking are highlighted within each theatre course. Whenever possible, theatre courses are reflective of and offer connections to the academic curriculum and today's world.

Co-curricular opportunities within the Upper School Theatre program include the annual Play, the annual Musical Theatre Production, the One-Act Festival and involvement in technical theatre as a Stage Crew member for one or more of these productions.

Art Foundations: Theatre Fundamentals Grade 9

½ credit; semesters 1 and 2

(Required of all ninth graders)

This course is part of a yearlong course that includes Design Lab and Performing Arts. The Theatre segment of the course begins with a focus on public speaking. Students will develop an understanding of the elements that allow for effective public speaking, and will write and give individual speeches during this course. Students will also be introduced to all elements of theatrical productions. This exploration will be focused around a play which students will read aloud in class. In putting together their own final presentation, students will explore script annotation, character analysis, understanding language and themes, performance styles, techniques of theatrical review, and the design elements of set, costumes, lighting, and sound. Students will also have the opportunity to attend a professional production at a local Baltimore theatre company. Within the Performing Arts semester, students will experience both the Music Foundations and Theatre Foundations courses.

Acting & Directing (I) Grades 10, 11, 12

½ credit; semester 2

This course is an introductory exploration of the role of the actor and the director. Students will be introduced to the basics of acting, which include but are not limited to: script analysis, making clear

choices, identifying objectives and tactics, stage presence, vocal projection and learning how to work successfully as an ensemble. Students will also be introduced to the role of the director, using William Ball's *A Sense of Direction* as a guide for the class. For the final project of the course, students will elect to either direct or act in a one-act play, to be presented to the Garrison Forest community.

Acting & Directing (II & III) Grades 10, 11, 12 ½ credit; semester 2
(Prerequisite: *Acting & Directing I or II*)

Students who aspire to further explore and improve their acting or directing skills may elect to continue with this course. The acting methods of Stanislavsky, Meisner, Uta Hagen and Stella Adler will be a focus in this course. The directing styles of George Abbott, Hal Prince, Tina Landau and Susan Stroman will also be studied. As opportunities arise, students may have the experience of working with professional guest artists during this course. For the final project, students will direct or act in a one-act play, to be presented to the Garrison Forest community, and create an Actor's Notebook or a Director's Notebook tracking the development of their character(s) and/or concept(s).

Playwriting Grades 10, 11, 12 ½ credit; semester 1

In this class, students will read and study several plays, and begin writing (and possibly staging) scenes and monologues of their own creation. They will learn to analyze what is essential to a powerful monologue and how writing for two characters presents very different challenges. Students will study and compare the writing styles of various playwrights as they are discovering their own writer's voice. Students will be strongly encouraged to submit a final piece of their writing for publication. As opportunities arise, students may also learn from guest speakers/artists during this course.

Intro to Musical Theatre Grades 10, 11, 12 ½ credit; semester 2
(No audition required)

Intro to Musical Theatre invites students to study musical styles, acting and vocal techniques as they relate to musical theatre performance. In this course, students will learn how to interpret musical numbers as actors and how to use movement and popular musical theatre choreography, allowing them to become well-rounded performers. The course will also cover the history of this art form, including the basic elements of musical theatre, important playwrights, choreographers, composers and directors. Various performance opportunities will be available throughout the semester.

Theatrical Production Grades 10, 11, 12 ½ credit; semester 1

This semester course provides students with an in-depth exploration of the theatre production process. From initial readings and play analysis through design and production, all elements of production are explored. Class discussions, selected readings, videos and visual presentations will help students develop and demonstrate theories and concepts through practical applications. Students will take on roles as actors, directors, dramaturges, designers and stage managers as they work on two major productions during the course: Upper School Musical and Spring One-Acts. This course is ideal for the student who is interested in the backstage process of theatre.

COMPUTER/TECHNOLOGY

It is the goal of Garrison Forest School that each graduate leave the school confident and ready to use her technology skills. Students will have opportunities to use technology in a way that combines creativity and advanced applications.

***W Engineering Design** Grades 10, 11, 12 1 credit; year course
The objective of this course is to introduce basic concepts of engineering. This will be a hands-on course where students will work individually and in collaborative teams to creatively solve relevant design challenges using the engineering design process. Students will be exposed to different engineering disciplines and ethics while emphasis will be upon modeling, problem-solving, and communication skills.
*Cross listed in Science

***W Digital Game Design** Grades 10, 11, 12 ½ credit; semesters 1 and 2
Advanced Game Design Grades 10, 11, 12 1 credit; year course
This courses allows students to create their own digital games without needing any previous programming experience. Students will learn about game design and development, re-imagine well known games, and bring their own ideas to the digital screen. Alongside exploring gameplay, students will be engaged in iterative design, problem-solving, and learning the principles of computer science. This is a class for anyone who has ever been curious about digital games, computer science, or using design and creativity in new ways. This course can be taken first semester, second semester, or for the entire year as Advanced Game Design.
*Cross listed in Science

***W AP Computer Science Principles** Grades 10, 11, 12 1 credit, year course
(Prerequisite: Geometry)
This course will develop computational thinking vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course is unique in its focus on fostering student creativity. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while using computer software and other technology to explore questions that interest them. They will also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society, and the world. The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course which will prepare students for the AP exam and for further study in computer science.
*Cross-listed in Science

Digital Thinking: Apps to Ethics Grade 9 non-credit; year course
(Required of all ninth graders)
This required 9th grade course is designed to introduce and reinforce GFS technology expectations, policies and procedures and solidify students' understanding of computer science principles and practices so that they can make informed choices and use appropriate digital tools and techniques. In this course, student will explore the breadth of computing and its influence in almost every aspect of modern life as well as the social and ethical implications of using computing technology both personally and professionally.

DECISION MAKING

The goal of the Decision Making curriculum is to teach decision making skills and to provide current information on health-related topics. Classes are lecture and discussion-based and are designed to meet the needs of the students as their moral, intellectual, and social capabilities develop during their tenure in the Upper School.

Decision Making I Grade 9

non-credit; year course

(Required of all ninth graders)

This course encourages each student to examine her own value system as we discuss health topics, social and emotional issues, and ultimately, responsible decision making in every-day life. The class functions as a "group" in which students explore their values as they discuss varying topics. Each girl is encouraged to express her opinion respectfully while recognizing the differences that exist in family, ethnic, racial and cultural experiences within the class. We use films, websites, a textbook, and handouts to structure our topics and discussions.

Career Explorations/Test Prep Grade 10

non-credit; ½ year

(Required of all 10th graders)

During the second half of the year, the sophomore class engages in SAT/ACT test prep and Career Explorations. The Test Prep mini-course and our Career Explorations curriculum consist of six sessions taught during X-Block. The test prep course is delivered by Capital Educators, a private test prep company based in Rockville, MD. Career Explorations is team taught by the college counselors and other administrative leaders in the Upper School. Personality inventories, resume writing and basic interviewing skills are covered in Career Explorations.

Decision Making II Grade 11

non-credit; year course

(Required of all 11th graders)

This course is designed to provide students with information and workshop experiences involving leadership, group identity, personal values, and college search strategies that will help them in making decisions about their immediate and future goals. The college search and application process is taught in this class.

Transitions Grade 12

non-credit; year course

(Required of all 12th graders)

This course helps to facilitate the transition from high school to life beyond. The first half of the year focuses on the college admission and application process while the later part of the year teaches students about personal, social, and financial skills that will guide them in the future.

ENGLISH

The English program is designed to foster appreciation for literature as a reflection of human experience and to encourage students to become insightful readers and expressive writers. Over four years, students develop their critical thinking, editing, and close reading skills; read deeply in a variety of genres; and find their own voices by writing, revising, and presenting essays and creative writing.

Requirements: All students must earn four credits of English, completing the sequence English I-IV.

Literature and Composition for Non-Native Speakers of English

1 credit; year course

(Required English course for first-year international students)

This one or two-year course introduces international students to the study of literary genres, including short stories, personal essays, nonfiction, novels, drama and poetry to be drawn from world literature. The goals of the course are to enhance English fluency in reading, writing, listening and speaking through content-based instruction as well as focused grammar and vocabulary study, and to develop academic literacy skills so that international students will be better prepared to participate fully in English II, III and

IV classes. Students will participate frequently in structured academic conversations in student pairs or small groups, role play and debate in order to develop both aural and oral fluency. Students will build an academic vocabulary in this course, and will develop a foundational knowledge of literary terms and concepts. There will be a significant focus on language, and students will be taught to use word parts, context clues and cognates to aid comprehension. Students will complete many written and oral assignments, including presentations, class journal entries, short written responses, and longer expository essays. Texts will include such works as Shakespeare's *Romeo and Juliet*, Dickens' *A Christmas Carol*, Romantic poetry, American short stories and selections from world literature.

English I: Writing Intensive Grade 9

1 credit; year course

This required course includes both analytical and creative writing skills, with an emphasis on academic writing, grammar, and vocabulary development. Students will read in a variety of genres including stories, personal essays, nonfiction, novels, poetry, and drama. These works will be read and studied both together as a class and through independent enrichment reading assignments. Students will generate thematic connections across genres, cultures, and contexts, and through close reading, class discussions, and extensive writing, students will develop their ability to appreciate and analyze literature. Texts include *The Bean Trees* by Barbara Kingsolver, Shakespeare's *Romeo and Juliet*, *Life in a Jar* by Jack Mayer, *Warriors Don't Cry* by Melba Patillo Beals, *Fahrenheit 451* by Ray Bradbury, *The Absolutely True Diary of a Part-time Indian* by Sherman Alexie

English II: British Literature and the Human Experience Grade 10

1 credit; year course

In this course, students are encouraged to grapple with many essential questions related to the human experience. Readings and course work include a diverse array of poetry, satire, drama, and prose that studies the role of British literature, the historical influence of British rule and the thematic tethers that both present. Students become more proficient in close readings, language analysis, vocabulary development and usage, and expository writing. As they become more sophisticated readers and writers, students gain fluency in the conventions of both written and spoken English. The wide range of writing assignments encourages students to continue to develop their own voice in their writing style. Major units are broken down thematically to represent many angles of the human experience and are titled: "Heroes", "Journeys and Sacred Pursuits", "Life Decisions and Morals Struggles", "Expression" and "Hardship and Transformation". Representative works may include *Beowulf*, *The Canterbury Tales*, *Macbeth*, *Frankenstein*, *Things Fall Apart*, and *Balzac and the Little Chinese Seamstress*, as well as a rich sampling of poems and essays that complement each unit.

English III: The Literature of American Identity Grade 11

1 credit; year course

English III is arranged thematically to allow exploration of American identity and experience, rather than to follow a timeline of American history. At the beginning of the year students examine the theme of longing, or desire for self-betterment. Summer reading selections immediately allow analysis of concepts of identity, inclusion, ethnicity, gender, and class. The depiction of social class and the American Dream is explored through F. Scott Fitzgerald's *The Great Gatsby*, complemented by poetry of the Harlem Renaissance. Transcendental themes such as individuality, nonconformity and nature are explored through the texts of Emerson and Thoreau. The question of "What does it mean to be an American?" is asked in our American Voices short story unit, readings from a wide range of authors from Nathaniel Hawthorne to Charlotte Perkins Gilman, from Sherman Alexie to Alice Walker. Switching

genres, students follow Blanche DuBois's search for self and acceptance in *A Streetcar Named Desire* and also read Toni Morrison's stunning novel, *The Bluest Eye*, which explores concepts of race and how it intersects with beauty, self-worth, and love.

Throughout the year, students also read and analyze nonfiction texts (speeches, letters, satire, editorials, etc.), considering elements of tone, style, and aspects of Aristotelian rhetoric as they discover the author's purposes and intended message. This non-fiction instruction is specifically intended to provide readiness for the AP English Language and Composition exam taken during May of the junior year. Although English III at Garrison Forest does not carry the AP designation, students will be recommended for the exam by the English Department. Another focus of English III is the continual development of writing skills. Students will write various literary analyses and build upon their abilities to dissect a text, craft a compelling argument, focus their ideas and use evidence from the text to support their thesis. Students also work continually on creative and personal narrative writing skills and this culminates in an independent assignment called the Passion Project and the composition of a college essay.

English IV: The World as Text Grade 12

1 credit, year course

Senior English encourages students to apply and synthesize all of the critical reading and writing skills taught in the Upper School. Students read canonical and contemporary works from classical Greek tragedy and contemporary American drama to novels and memoirs of personal discovery and transformation. A selection of thematically relevant poems, short stories and nonfiction accompanies each longer work. The final quarter of the course is dedicated to nonfiction texts and journalism. Students choose a nonfiction book to read independently and a subject to interview and profile, which allows them to explore non-academic writing and real-world experiences.

AP English (by recommendation) Grade 12

1 credit; year course

The focus of Advanced Placement English is World Literature and Drama with an emphasis on 19th and 20th century Western European fiction and critical theory. This college-level course demands extensive reading and writing as well as significant participation from students during seminar-style class discussions. In preparation for the AP Literature exam in May, students will learn how to analyze a text at the sentence-level and discuss the ways in which an author's use of language generates and intersects with theme.

We will study several classical works of drama both as written texts and as films in order to explore the ways in which visual media creates and complicates literary meaning. Over the course of the year, we will compare the structural and thematic patterns which appear in works of drama written in different cultural contexts and over time. Using the summer reading texts, we will begin the course with the theme, "Women and Money" as represented in the works of Flaubert, Ibsen, Austen, and Woolf. In conjunction with these texts, students will learn the foundations of literary criticism and develop fluency in the tenets of feminist and Marxist theory. We will then examine Aristotle's definitions of *tragedy* and *the tragic hero* as articulated in *The Poetics* as a framework for reading the works of Sophocles and Euripides. From Greek tragedy, we will move into an extensive study of *Hamlet*, focusing on close readings of Shakespeare's language as well as the application of archetypal, feminist, and psychoanalytic theories. Arthur Miller's canonical essay, "Tragedy and the Common Man," will be our point of departure for reading Edith Wharton's *Ethan Frome*, followed by the works of Dostoevsky, Kafka, and Gogol. We will

explore American modernism by way of William Faulkner's *Light in August*, read against and alongside Nella Larsen's *Passing*. In dialogue with Faulkner, we will read excerpts from W.E.B. DuBois' *The Souls of Black Folk* and watch films such as *Pinky*, *Imitation of Life*, and *Devil in a Blue Dress*. Through nonfiction works by critics such as Edward Said and Jamaica Kincaid, students will be introduced to the political and aesthetic elements of postcolonial literature.

Critical writing is a significant element of the course. Students will write rigorously and often, crafting essays similar in structure to those which appear on the AP Literature and Composition exam. In addition to analytical essays based on both written and film texts, students will develop and deliver several individual and group presentations.

English as a Second Language (ESL)

ESL support is provided to all for whom English is a second language. Except in special circumstances, authorized by the Head of the Upper School, all students for whom English is a second language and who are new to the Upper School (including students who were in Garrison Forest Middle School) will be scheduled for the literature and composition course for non-native speakers of English. Students will be given a placement test at the beginning of the school year. If a student attains superior results on her placement exam, and it is determined that she is not required to take the course, she will be permitted to drop the course from her schedule and add the appropriate English class. ESL students need permission from the Head of the Upper School to enroll in French, Spanish, Latin, or Chinese in the Upper School.

HISTORY & SOCIAL SCIENCES

The primary goals of the History & Social Sciences Department are to help students develop the abilities to think critically, independently, ethically, and philosophically. Students should recognize that they inherit the past and that they are global citizens who share a responsibility for the present and the future.

Through a solid core of interdisciplinary and multicultural courses offered in history, students acquire the global perspective they need to appreciate diversity and to accept that there are multiple potential answers to world questions and problems. The History & Social Sciences faculty strives to challenge students through a variety of learning techniques to: analyze controversial issues and evaluate alternative solutions; practice and strengthen the skills, which will help them acquire and use knowledge; articulate an understanding of historical developments; and appreciate the dignity of individuals, cultures, and nations.

Requirements and Recommendations:

- The distribution requirement is 3 credits of History & Social Sciences.
- Students are required to complete World History II and United States History.
- Latin "Love" and "Hate" may be taken for ½ history credit each

World History I Grade 9

1 credit, year course

World History I seeks to explore the histories and cultures of major societies around world from 500 – 1500 CE. Through the exploration of facets of human civilization—cultural values and traditions, political and economic structures, ideologies and religious beliefs, scientific and artistic developments—students foster their own sense of historical imagination and empathy. Students cultivate global citizenship skills and historical habits of mind by developing their ability to assess evidence, interpret multiple

perspectives, and analyze change and continuity over time. Significant emphasis is placed on the development of organizational, note-taking, critical reading, writing, and research skills.

World History II Grade 10

1 credit, year course

World History II is a continuing exploration of the issues and events which have created world history from 1500 CE to our contemporary age. With particular attention to the theme of "revolution," students analyze the causes and effects of ongoing social, economic, political, religious, intellectual, and technological changes. They examine multiple perspectives, endeavoring to understand the interrelationships and diversity of our world. Analytical reading and writing skills are emphasized, as are the techniques of independent research.

U.S. History Grade 11

1 credit, year course

The U.S. History curriculum explores the richness of the American experience. While developing their skills as historians, the students build on their analytical reading and writing skills to explore questions such as: What is an American? What factors make up the American identity? How does the definition of "America/n" change over time?

Using a range of primary and secondary sources such as non-fiction and fiction works, audio and visual samples, artifacts and more, we critically examine the various periods and movements in America's history and the many ways in which those times have been interpreted. Students are challenged to develop their ideas in written and oral expression, expository and creative writing, civil discourse and open debate.

The course is a thematic and chronological study from the colonial period to the present. Various perspectives are considered in our discussions of the evolution of the United States of America. Concepts such as the importance of civil liberties, individualism, capitalism, frontier spirit, imperialism, conflict and compromise, sectionalism and nativism are examined as students explore the variety of facets of American development. How and why events happened, and the importance of their effects, are driving elements of this course.

AP United States History –AP Grade 11 with permission

1 credit, year course

The AP United States History curriculum explores the richness of the American experience. While developing their skills as historians, the students build on their analytical reading and writing skills to explore questions such as: What is an American? What factors make up the American identity? How does the definition of "America/n" change over time?

Using a range of primary and secondary sources such as non-fiction and fiction works, audio and visual samples, artifacts and more, we critically examine the various periods and movements in America's history and the many ways in which those times have been interpreted. Students are challenged to develop their ideas in written and oral expression, expository and creative writing, civil discourse and open debate.

Advanced Placement is offered to those students who have both the necessary verbal skills and interest in pursuing U.S. culture, history and literature. By undertaking the greater work load required for the AP exam, students who elect AP must expect to do more reading, and reading of a more complex nature, as well as more analytical writing, than that required in the other U.S. History sections. Because of the pressure of time and the amount of material to be covered before the AP exam, students should also be aware of the necessity of working independently; class discussion in this course is not designed to explain what students have read, but to build upon it.

AP Psychology Grade 12

1 credit, year course

(Departmental permission in consultation with the Science Department)

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. Areas covered include: history of psychology, research methods, biological bases of behavior, sensation and perception, cognitive psychology, physical, social and emotional development, abnormal behavior and therapies, social psychology, and gender differences. This is a rigorous and demanding course requiring students to have a strong work ethic, to read at a rigorous pace, and to complete a variety of assessments, including independent research and analysis. Students are expected to demonstrate strong writing and analytical skills, and independent work habits. The AP Psychology course prepares students to sit for the AP Psychology exam in May.

Contemporary World Issues Grades 10, 11, 12 elective

½ credit, semester 2

What are the roots of the crisis in Syria? What roles do sanctions play in solving conflicts? What are the consequences of global pollution? Why do some humanitarian crises receive more international attention than others? These are among the questions that we explore in this course. There are ongoing issues that we examine. At the same time, we draw content from the daily national and international headlines. Through the use of simulations, daily readings, personal accounts, individual and group presentations, and blogs, we analyze a wide range of social, economic, and political issues in our world today.

Developmental Psychology Grades 11, 12 elective

½ credit, semester 2

This course introduces the theories and current research that form the foundation of the study of human development from conception through adolescence. We study perception, learning theories, cognition, memory, language, and social and moral development. Additional topics will include psychological disorders, heredity and environment, temperament, attachment, developmental milestones and expectations, childrearing practices, gender, and cultural perspectives. This course requires students to participate in observations with children in the GFS Preschool and Lower School.

Economics: Making cents of personal and global financial literacy

Grades 10, 11, 12 elective

½ credit, semesters 1 and 2

Using real-life data and case study activities, students explore the issues involving their own financial literacy and the factors which influence the global economy. In the process, we examine basic microeconomic and macroeconomic concepts, such as: how to budget one's money, how to be a wise consumer, making wise investment decisions, the importance of saving for retirement, supply and demand, taxes, the federal budget, and international trade.

Ethics Grades 10, 11, 12 elective

½ credit, semester 2

(not offered in 2017-18)

This course will introduce ethical theories and implications of these theories in practice. Students consider various philosophical interpretations of ethics and develop their own definition for the question, "What is ethical?" In addition, we explore answers to the question of "What is right?" By examining various case studies in medical, business, media and gender topics, students analyze various ethical dilemmas and apply ethical theories. A major component of this course is a daily journal for reflection. In addition, position papers on ethical issues and case study analyses allow students opportunities to explore their ideas culminating with a written exploration of their own "moral compasses."

W Half the Sky: International Perspectives on Women, Gender, and Health

Grades 11, 12 elective (grade 10 with permission)

½ credit; semester 1

This first-ever-at-GFS Public Health course is designed to unite the humanities and science to provide students with the knowledge, understanding, and skills needed to identify and understand emerging global issues related to girls' and women's' health. Women's health issues including reproductive health, child marriage and motherhood, and disparities impacting the health and well-being of women and girls will be examined through the lenses of culture, government, education, and economics. Particular attention will be paid to issues that affect adolescent women internationally and in the United States. This course is recommended for students with an interest in a Public Health WISE placement and/or in the Jenkins Fellows program. *Cross listed in Science

Modern Latin America Grades 10, 11, 12 elective

½ credit, semester 2

Latin America is a diverse and expansive region, which represents many ethnicities, interests and cultures. This course examines Latin America since its Age of Independence in the 1800s. Both parallels and differences among the various nations of Latin America will be explored. Students learn about the leaders, artists, economies, politics, and popular cultures of Latin American through primary and secondary sources, case studies, literature and video. Current issues regarding Latin American relations with the United States and immigration policies are also important topics of discussion.

***Latin Literature: Prose and Poetry (Fall)**

½ credit; semester 1

(Prerequisite: Latin III-Honors or Latin IV; this course is offered as a pre- or post-AP option. With permission.)

Romance, Regret and Revenge: Tales of Love on the Rocks: A literature course for students who have mastered the study of advanced Latin grammar. Selections will include poems of Catullus, excerpts from Cicero's *Pro Caelio*, scenes from Ovid's *Metamorphoses* and Vergil's *Aeneid* (a preview of the poetry in the AP course). Through the careful reading of the Latin texts, students will develop and hone facility in translation, literary and historical interpretation, and critical analysis.

*Cross listed in World Languages

***Latin Literature: Prose and Poetry (Spring)**

½ credit; semester 2

(Prerequisite: Latin III-Honors or Latin IV; this course is offered as a pre- or post-AP option. With permission.)

Enemies of Rome: A literature course for students who have mastered the study of advanced Latin grammar. Readings will focus on hostile reactions to Roman power and cultural influence as it dominated a growing empire. Selections will include excerpts from Caesar's *De Bello Gallico* (a preview of the prose in the AP course), Cicero's *In Catilinam*, Sallust's *Bellum Catilinae*, Livy's *Ab Urbe Condita*, Tacitus's *Annales*, and poems of Catullus and Horace. Students will develop and hone facility in translation, literary and historical interpretation, and critical analysis.

*Cross listed in World Languages

Modern Africa Grades 10, 11, 12 elective

½ credit, semester 1

This course studies the history of Africa and its interactions with the western world from the mid-19th century through the present. Paying special attention to African current events, students explore salient historical questions that are relevant to understanding the continent today. We explore a range of issues from a variety of countries, including but not limited to colonial Congo, postcolonial South Africa, and

modern Rwanda, Uganda, South Sudan, Libya, Mali, and Nigeria. These issues include global relationships, governance, education, ethnic and religious relations, and violent extremism. We work to dispel stereotypes and explore commonalities and differences. The study of African history is not just in understanding its turbulent history, but also in appreciating its rich musical and artistic cultures. Students are expected to have a genuine curiosity about modern Africa resulting in active participation. Students end the course with an independent research project on a contemporary issue in a country of their choice.

Modern Middle East Grades 10, 11, 12 elective ½ credit; semester 2

This course is designed to increase awareness and understanding of the varied and diverse histories of Middle Eastern and North African states. The course will begin with a review of broad themes encompassing most states in the region, such as colonial and postcolonial history, geography, nationalism, Islam, political economy, and regime types. The course will then be devoted to a closer investigation of several states, and finally the course will address specific pressing issues in the Middle East today, including the Arab-Israeli conflict, the Iran nuclear issue, the Arab Spring, and the depiction of the Middle East in the media. Throughout the course students will read and analyze current events selected from the New York Times Middle East coverage online, as well as a host of other sources.

Peace Studies Grades 10, 11, 12 elective ½ credit; semester 1

It isn't enough to talk about peace. One must believe in it. And it isn't enough to believe in it. One must work at it. ~ Eleanor Roosevelt

(not offered 2017-18)

In this discussion-based course we examine peace, conflict, and justice. As we explore various sources of violence we consider how to manage and resolve conflicts in order to move towards a more just world. We engage in careful and thoughtful discussions of major problems facing humankind, both in our own community and globally. Throughout this journey we weigh what our roles and responsibilities are as global citizens. Among the assessments is a Peace Action Project. Each student examines an area of particular interest for which she will design, implement, and evaluate an action plan.

Recent American History: From JFK to Today

Grade 12 elective ½ credit, semester 1

(Prerequisite: U.S. History/American Studies or AP U.S. History)

This course examines major events from the presidency of John F Kennedy to the presidency of Donald J. Trump. The speeches, films, newsreels, literature, primary documents, political campaigns and popular culture of this time are analyzed in written and spoken form. The assignments for this course include expository essays, case studies, group projects and class debates. The twentieth century was known as the American Century. Will the same be said of the twenty-first century?

Stopping Genocide Grades 10, 11, 12 elective ½ credit, semester 2

(not offered in 2017-18)

This course takes us on a journey into the heart of one of the most troubling aspects of the human condition: ethnic conflict and the “cleansing” that sometimes accompanies it. We begin with an examination of the most recognized genocide in recent history, the Holocaust. We also learn about other modern examples of “ethnic cleansing,” focusing on why these events occur, what drives people to participate in them, and how ethnic conflict can be avoided in future generations. We explore these questions, and more, utilizing a variety of modalities: students should expect a heavy emphasis on primary document readings, individual research and reporting, documentaries, and discussion.

Major World Religions

Grades 10, 11, 12 elective

½ credit, semester 2

This course explores the history, beliefs, practices, and contemporary influence of Judaism, Christianity, Islam, Hinduism, and Buddhism. Through a broad variety of primary and secondary sources—including sacred texts, interviews, news articles, personal narratives, podcasts, film, artwork, and field trips—we ponder how people have grappled with the essential questions of "Who am I? What is my purpose in this life? What is the meaning of suffering and death? What are my obligations? What is right and ethical?" We learn about the rituals that shape the lives of followers and examine the roles religions play in current political and social controversies, both across the globe and here in the United States. In addition to discussion and journal writing, students have the opportunity to research a specific religious movement or issue according to their interests.

WORLD LANGUAGES: CHINESE, FRENCH, LATIN, AND SPANISH

The Upper School language sequence develops mastery in both the modern languages and Latin. The primary goal is to develop a solid command of grammar, vocabulary, reading skills, written and oral expression, as well as the exposure to and appreciation of foreign cultures and literature. The ultimate goals are flexibility of thought through the development of self-expression in another language and an understanding of different grammatical patterns.

In the modern languages, auditory comprehension, speaking ability, and conversational spontaneity are additional objectives. In Latin, there is a special emphasis on the development of analytical skills.

Requirements and Recommendations:

Chinese, French, Latin, and Spanish courses are available in sequence through Levels I, II, III, IV, V, and AP. However, the ultimate viability of any Level I class (in French, Latin, Spanish or Chinese) will depend upon enrollment. Students are placed at the appropriate level depending on previous experience. Level I courses in the Upper School are taught at an accelerated pace. Students placed into a Level I course in the Upper School may be pure beginners able to handle an accelerated Upper School pace, or they may be students who have had prior exposure to the language but can benefit from the review and thereby be better prepared with a stronger foundation to subsequently move on to Level II.

- Students entering grade 9 with a modern language and Latin are encouraged to continue both languages through grade 9.
- Students are required to complete Level III in one foreign language, and it is recommended that students carry at least one foreign language through grade 11.
- A student is discouraged from electing two modern languages (Chinese, French and Spanish) concurrently until she has completed Level II in one of them. Students should obtain permission from the department chair to carry two modern languages simultaneously.
- Students must complete through Level II of a language in order to receive credit for Level I.

Chinese

Chinese II and II Honors

1 credit; year course

Chinese II and II Honors are intended for students who have successfully completed the introductory level. The class enables students to further develop the communicative skills of listening, speaking, reading, and writing Mandarin Chinese at an intermediate-low level. The course focuses on basic language skills and emphasizes the development of oral proficiency. It also expands upon vocabulary and grammatical structures. Students will explore Chinese culture from traditional China to the 21st century through research projects, videos, and short stories. Honors students are introduced to more challenging material and assessments.

Chinese III and III Honors (Prerequisite: Chinese II or II Honors)

1 credit; year course

Chinese III and III Honors is designed to consolidate the skills (listening, speaking, reading, and writing) that students have acquired in Chinese II or IIH, as well as to introduce more complex grammatical structures and broader vocabulary. Students develop the ability to apply their language skills toward interpretive, presentational, and interpersonal practice. Various visual and audio aids allow students to explore Chinese culture from traditional China to the 21st century. Honors students are introduced to more challenging material and assessments.

Chinese IV, IV Honors and V (Prereq: Chinese III, III Honors or IV)

1 credit; year course

course

This course is designed for students who wish to continue to study Chinese beyond the required Level III course and to reach an intermediate-high level. Students continue to focus on reading, writing, listening, and speaking skills while acquiring new vocabulary and reviewing all basic and advanced grammar. There is an emphasis on oral communication and writing skills. Students are involved in oral discussion of all material studied. They also write papers about the themes studied in class. They read a variety of materials about the culture and history of China. The curriculum alternates every other year so that students are not repeating the same material if they are in this course for two years. Honors students are introduced to more challenging material and assessments.

AP Chinese Language and Culture (Prerequisite: Chinese IV Honors)

1 credit; year course

This advanced course is designed for students who have taken Honors Chinese courses throughout the Upper School and who are on track to take the AP Language and Culture exam at the end of their senior year. Students will explore the five AP topics (Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, and Families and Communities) through informational and literary sources spanning the Chinese-speaking world. Students will also receive a complete grammatical review while acquiring additional advanced-level vocabulary.

French

French I (Offered Online)

1 credit; year course

This course introduces the fundamental elements of the French language within a cultural context. Students acquire basic listening, speaking, reading, and writing skills while exploring the daily life of various French-speaking communities around the world. By the end of the year, they can use basic vocabulary and grammar to talk, read, and write about their family, food, school, daily routine, and major French customs.

French II (Prerequisite: French I)

1 credit; year course

This course reviews and builds on the grammar, vocabulary, and cultural competency taught in French I to enhance conversational, listening, reading, and writing skills. Audio and video programs will be used to bring francophone cultures into the classroom and make the study of French a complete cultural and linguistic experience.

French II Honors (Prerequisite: French I. With Permission)

1 credit; year course

French II Honors is designed to consolidate the language skills (listening, speaking, reading, and writing) that students have acquired in French I, as well as to introduce more complex grammatical structures and broader vocabulary. Students develop the ability to apply their language skills toward interpretive, presentational, and interpersonal communication. They continue to explore the cultures of the French-speaking world through videos, short documentaries, and informational texts.

French III (Prerequisite: French II)

1 credit; year course

This intermediate course reviews and builds on the grammar, vocabulary, and cultural competency taught in French II to enhance conversational, listening, reading, and writing skills. Students explore the societies and cultures of the French-speaking world through a variety of authentic texts, interviews, commercials, documentaries, and short films. They make presentations, stage skits, converse with their classmates, and write short essays. By the end of the year, they can express themselves with simple but accurate grammar about present, past, and future events. Students will have acquired enough vocabulary and cultural competency to compare their own community with the communities of the French-speaking world.

French III Honors (Prerequisite: French II Honors)

1 credit; year courses

This intermediate course is designed for students who are on track to take the AP exam at the end of their senior year. Students will expand upon their speaking, listening, reading, writing, and cultural skills through an accelerated study of vocabulary and grammar, numerous informational and short literary texts, as well as short movies, interviews, commercials, and news broadcasts. They will strengthen their oral fluency by making presentations and engaging in spontaneous conversations. They will also write essays on various aspects of the cultural and social life of the French-speaking world. The class is taught mostly in French.

French IV/V (Prerequisite: French III or French IV)

1 credit; year course

This upper intermediate course is designed for students who wish to continue to study French beyond the required Level III course and is taught exclusively in French. Students will continue to focus on reading, writing, listening, and speaking while acquiring new vocabulary and reviewing all basic and advanced grammar. They will also continue to explore the various cultures of the French-speaking world with an emphasis on current events and social issues. Students will read and analyze informational and literary texts, be involved in oral discussions, write compositions, and make presentations. They will also expand their knowledge of the French-speaking world by watching documentaries, short movies, and news broadcasts. The curriculum will alternate every other year so that students are not repeating the same material if they are in this course for two years.

French IV Honors/ V Honors/ AP French Language and Culture (Prerequisite: French III Honors or French IV Honors. With Permission) 1 credit; year course

This advanced course is designed for students who have taken Honors French courses throughout the Upper School and who are on track to take the AP Language Exam at the end of their senior year. The French IV Honors students (typically juniors) will have two years to prepare for the Advance Placement Exam while the French V AP students (typically seniors) will take the AP Language and Culture Exam at the end of the course year. Students in both classes will work towards further developing their oral and listening skills as well as reading comprehension and written expression. They will explore the five AP topics (Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, and Families and Communities) through informational and literary sources spanning the French-speaking world. Students will also receive a complete grammatical review while acquiring additional advanced-level vocabulary.

Latin

Through a framework of Roman civilization and classical mythology, the Latin program builds the skills that will enable students to read original Latin literature. *Cambridge Latin Course*, a reading-based approach, is the foundation of the curriculum, and by Level III students begin to read selected works of Ovid, Catullus, Pliny, Martial, and Vergil. In all courses, the development of English vocabulary through Latin roots is stressed.

LATIN electives (beyond the basic requirements of levels I, II/III, and III/IIII)

Latin IV/Latin IV-Honors/Latin V 1 credit; year course
(*With permission*)

These advanced courses are for those who wish to continue in Latin and are designed according to the needs and abilities of the students. Reading selections may include the love poetry of Catullus and Horace, portions of Vergil's *Aeneid* and Ovid's *Metamorphoses*, as well as excerpts from Cicero's orations. A thorough review of advanced grammar is an integral part of these courses. For qualified juniors, Latin IV-Honors provides preparation for Latin AP.

Latin AP 1 credit; year course
(*Prerequisite: Latin III-Honors or Latin IV-Honors. With permission*)

Qualified students pursue the study of both Vergil's *Aeneid* and Caesar's *De Bello Gallico* preparing for the College Board Advanced Placement exam. This course provides an opportunity to enjoy in Latin the adventure, drama and romance of Vergil's great epic as well as to explore the crisp prose and strategic leadership of Julius Caesar. Through this experience students develop college-level facility in translation, literary interpretation, and critical analysis.

***Latin Literature: Prose and Poetry (Fall)** ½ credit; semester 1
(*Prerequisite: Latin III-Honors or Latin IV; this course is offered as a pre- or post-AP option. With permission.*)

Romance, Regret and Revenge: Tales of Love on the Rocks: A literature course for students who have mastered the study of advanced Latin grammar. Selections will include poems of Catullus, excerpts from Cicero's *Pro Caelio*, scenes from Ovid's *Metamorphoses* and Vergil's *Aeneid* (a preview of the poetry in the AP course). Through the careful reading of the Latin texts, students will develop and hone facility in

translation, literary and historical interpretation, and critical analysis.

*Cross listed in History

***Latin Literature: Prose and Poetry (Spring)**

½ credit; semester 2

(Prerequisite: Latin III-Honors or Latin IV; this course is offered as a pre- or post-AP option. With permission.)

Enemies of Rome: A literature course for students who have mastered the study of advanced Latin grammar. Readings will focus on hostile reactions to Roman power and cultural influence as it dominated a growing empire. Selections will include excerpts from Caesar's *De Bello Gallico* (a preview of the prose in the AP course), Cicero's *In Catilinam*, Sallust's *Bellum Catilinae*, Livy's *Ab Urbe Condita*, Tacitus's *Annales*, and poems of Catullus and Horace. Students will develop and hone facility in translation, literary and historical interpretation, and critical analysis.

*Cross listed in History

Independent Study in Ancient Greek

1 credit; year course

(Prerequisite: advanced level Latin. Requires application and permission.)

A course in the basics of ancient Greek for qualified advanced level Latin students.

Spanish

Spanish I

1 credit; year courses

This course introduces the fundamental elements of the Spanish language within a cultural context. Students acquire basic listening, speaking, reading, and writing skills while exploring the daily life of various Spanish-speaking communities around the world. By the end of the year, they can use basic vocabulary and grammar to talk, read, and write about their family, food, school, daily routine, and major Hispanic customs.

Spanish II (Prerequisite: Spanish I)

1 credit; year course

This course reviews and builds on the grammar, vocabulary, and cultural competency taught in Spanish I to enhance conversational, listening, reading, and writing skills. Audio and video programs will be used to bring Hispanic culture into the classroom and will help make the study of Spanish a complete cultural and linguistic experience.

Spanish II Honors (Prerequisite: Spanish I. With Permission)

1 credit; year course

Spanish II Honors is designed to consolidate the language skills (listening, speaking, reading, and writing) that students have acquired in Spanish I, as well as to introduce more complex grammatical structures and broader vocabulary. Students develop the ability to apply their language skills toward interpretive, presentational, and interpersonal communication. Audio and video programs will be used to bring Hispanic culture into the classroom and will help make the study of Spanish a complete cultural and linguistic experience.

Spanish III (Prerequisite: Spanish II)

1 credit; year course

This intermediate course is designed to consolidate the skills (listening, speaking, reading, and writing) that students acquired in Spanish II, as well as to introduce more complex grammatical structures and broader vocabulary. Students will build their cultural competency by exploring the societies and cultures

of the Spanish-speaking world through a variety of texts and visual aids. They will also develop the ability to apply their language skills through interpretive, presentational, and interpersonal practice.

Spanish III Honors (Prerequisite: Spanish II Honors)

1 credit; year course

This intermediate course is designed for students who are on track to take the AP exam at the end of their senior year. Students will expand their speaking, listening, reading, and writing skills through an accelerated study of vocabulary and grammar, numerous informational and short literary texts, and various audiovisual materials, all allowing for an increased cultural awareness. They will strengthen their oral fluency by engaging in spontaneous conversations on a daily basis and will write short compositions.

Spanish IV (Prerequisite: Spanish III)

1 credit; year course

This upper intermediate course is designed for students who wish to continue studying Spanish beyond the required Level III course. Students will continue to focus on reading, writing, listening, and speaking skills while acquiring new vocabulary, reviewing grammar covered in previous years, and learning more advanced grammatical structures. The primary goal of this course is to strengthen the students' reading skills and oral and written communication. Students will read a variety of authentic materials and watch short films related to the history, culture, and current events of the Spanish-speaking world.

Spanish IV Honors (Prerequisite: Spanish III Honors)

1 credit; year course

The Spanish IV Honors course is intended for students who wish to develop proficiency and integrate their language skills using authentic materials. Its primary goal is to strengthen the students' language skills and to develop their cultural competency. Students demonstrate their level of Spanish proficiency across three communicative modes: interpersonal, interpretive, and presentational. The course is designed for students who want to continue with the AP Language and Culture Course the following year.

Spanish V (Prerequisite: Spanish IV)

1 credit; year course

Spanish V is a course designed for students who have successfully completed the Level IV course and who are passionate about continuing the study of Spanish. Students will put into practical use all the skills acquired in their previous years of learning Spanish while working to achieve a higher level of fluency through reading, writing, listening, and speaking. Students will continue to focus on vocabulary acquisition, learn the more advanced grammatical structures of the Spanish language, and strengthen their reading, oral, and writing skills. Students will also take a more in-depth look at the history, culture, and current events of the Spanish-speaking world through movies, short films, newspaper articles, short stories, and novels.

AP Spanish Language and Culture

1 credit; year course

(Prerequisite: Spanish IV Honors. With Permission)

The AP Spanish Language and Culture course is intended for students who already have extensive knowledge of the language and culture of Spanish-speaking communities and have attained a reasonable proficiency in listening comprehension, speaking, reading and writing. Students develop a strong command of the Spanish language by integrating the three modes of communication: interpersonal, interpretive, and presentational. The course focuses on the integration of authentic resources with the goal of providing a rich, diverse learning experience. Resources include online print, audio and audiovisual materials, literature, essays, and articles from magazines and newspapers. The course is divided into thematic units and guided by essential questions.

Independent Advanced Spanish Culture and Literature (prerequisite: AP Spanish Language and Culture; by permission) 1 credit; year course

This advanced course is designed for students who have successfully completed the AP Spanish Language and Culture course. Students will read and analyze Spanish and Latin American literature. Students will also explore current events in the Spanish-speaking world by reading articles from newspapers and magazines, by listening to the news and music, and watching videos and movies. As a result of these activities, students are expected to give oral reports in class and lead debates. This class is reserved for students who have demonstrated their commitment to advanced Spanish studies, their ability to work independently, as well as their academic accountability.

MATHEMATICS

The Mathematics Department believes that students need to have mathematical competency and confidence to be able to participate fully in modern society. We wish to develop in all students the analytical and technical skills that will prepare them for a college education, to develop their understanding of the underlying concepts of mathematics, to foster independent thinking, to increase enjoyment of the subject, and to help every student attain the self-confidence that comes from genuine achievement.

Requirements and Recommendations:

- The study of mathematics is required at least through junior year.
- Each student is required to complete at least 3 credits of mathematics in grades 9 through 12 and is strongly encouraged to take mathematics each year.
- Every student must complete at least Algebra I and II and a year of Geometry.

Algebra I 1 credit; year course

A thorough study of basic algebra, focusing both on symbolic manipulation and applied problem-solving. Topics include the four arithmetic operations with real numbers and variables; equations and inequalities; graphs and functions; polynomials and factoring; irrational numbers and radicals; and quadratic functions.

Geometry 1 credit; year course

(Prerequisite: Algebra I)

A rigorous study of Euclidean geometry including points, lines, planes, angles, parallel and perpendicular lines, triangles, quadrilaterals, polygons, congruence and similarity, inequalities in triangles, right triangles, circles, constructions, area and volume, and coordinate geometry. The nature of deductive proof and the structure of a mathematical system are emphasized throughout the course.

Geometry/Trigonometry Honors 1 credit; year course

(Prerequisite: Algebra I and permission)

A deeper treatment of all the geometry topics listed above, including more extensive study of trigonometry and coordinate geometry.

Algebra II 1 credit; year course
(Prerequisite: Geometry)

This advanced algebra course includes the topics of real numbers, equations and inequalities, systems of equations, polynomials, rational expressions, graphs and functions, factoring, radicals, complex numbers, quadratic and polynomial equations, analytic geometry, and exponents.

Algebra II/Trigonometry Honors 1 credit; year course
(Prerequisite: Geometry/Trigonometry Honors and permission)

For qualified students, this course covers all the above Algebra II topics in greater depth and also variation, logarithms, sequences and series and trigonometry.

Precalculus 1 credit; year course
(Prerequisite: Algebra II and permission)

This course covers more advanced algebra topics and trigonometry. Major topics are linear, quadratic, polynomial, rational, exponential and logarithmic functions and their graphs, inequalities, general properties of functions, analytic geometry, properties and graphs of the trigonometric functions, the inverse trigonometric functions, trigonometric equations and applications, triangle trigonometry, trigonometric formulas and identities and sequences and series.

Honors Precalculus 1 credit; year course
(Prerequisite: Algebra II/Trigonometry and permission)

The focus of this course is the concept and applications of functions. Trigonometry is covered in depth: trigonometric equations and their application; triangle trigonometry; and trigonometric addition formulas. Other Precalculus topics are polar coordinates and complex numbers and vectors and determinants. The following calculus topics are studied: limits and their properties; differentiation rules; the applications of differentiation.

Statistics 1 credit; year course
(Prerequisite: Algebra II)

This introductory course will emphasize conceptual understanding and applications of statistics; computations, plotting, and regressions will be done on the TI-83/84 graphics calculator. Topics will include organization and analysis of data, averages and variation, regression and correlation, probability, normal curves, distributions, estimation and inference. This course may be taken either as an elective or as a student's sole math class.

Calculus 1 credit; year course
(Prerequisite: Precalculus)

An introduction to differential and integral calculus within the larger context of the function. Major topics are functions, limits, derivatives, applications of differentiation, and integrals and their applications. Students will strengthen their understanding of Precalculus mathematics and be prepared for college calculus.

 **AP Calculus AB** 1 credit; year course
(Prerequisite: Honors Precalculus or Precalculus and permission)

A college-level calculus course covering the basic theory and applications of the derivative and integral.

AP Calculus BC

1 credit; year course

(Prerequisite: Honors Precalculus and permission)

This more advanced college-level calculus course includes, in addition to the topics of the AB course, advanced techniques of integration, infinite series, and calculus with parametric, polar, and vector-valued functions.

***Advanced Calculus and Linear Algebra**

1 credit; year course

(Prerequisite: AP Calculus BC and permission)

This course will cover some topics that are not part of the AP Calculus BC curriculum, such as hyperbolic functions, centers of mass and centroids, among others. We will also explore topics that are studied in Multivariable Calculus, Differential Equations and Linear Algebra. Some of the Multivariable topics include vectors and vector valued functions, differentiation in several variables, optimization in several variables, multiple integration, and line and surface integrals. In addition, Differential Equations topics will include solving first order and simple higher order equations with applications to various scientific fields, laws of planetary motion, fundamental theorems of vector analysis, solving linear differential equations and their applications, and Laplace transform methods. Finally, some of the Linear Algebra concepts covered will be vector spaces, linear transformations, matrices, systems of linear equations and determinants. A student who is qualified for this course should be prepared for independent study.

*May be offered in-school or online depending on enrollment.

AP Statistics

1 credit; year-course

(Prerequisite - Successful completion of Algebra II (or equivalent) and permission from the Mathematics Department).

This course is a non-calculus-based, college-level course in statistics. Students planning collegiate studies in the physical sciences, social sciences, or business fields should consider taking this course. AP Statistics focuses on four conceptual themes: exploring data, planning a study, anticipating patterns, and inference. This course is designed to provide students with opportunities to design, administer, tabulate and analyze results from surveys and experiments. This course will also help students develop their analytical reading and writing capabilities. Students who take this course will be expected to take the Advanced Placements Statistics examination.

PHYSICAL EDUCATION AND ATHLETICS

Physical Education Requirement and Options

The Physical Education Department provides an opportunity for physical activity for each student and requires participation in all classes specific to each area of study. Students are encouraged to develop positive habits and attitudes toward fitness and healthful living through these classes. The Athletic Program attempts to provide students with many opportunities to compete in a sport at a level appropriate to the student's skill and experience while keeping safety in mind. Through participation on a team the student is encouraged to develop favorable attitudes of competition, sportsmanship, responsibility, loyalty, and a sense of contribution to group effort. Every effort will be made to provide multiple levels of team opportunities (V, JV); however, participation and numbers and/or league sponsorship may preclude some teams from being sponsored by Garrison Forest School.

NOTE: For all interscholastic sports, there is a \$50.00 transportation charge.

UPPER SCHOOL PHYSICAL EDUCATION REQUIREMENTS

All physical education activities have a value of one (1) point:

- Interscholastic sports
- Physical education classes
- Dance
- On-campus riding instruction (3 lessons per week)
- Polo
- Game-day manager plus one (1) PE class
- Approved independent physical education

Each student entering Garrison Forest Upper School as a freshman must complete six (6) points of participation before the conclusion of her junior year.

Students new to Garrison Forest Upper School as sophomores must complete four (4) points of participation before the conclusion of their junior year.

Students new to Garrison Forest Upper School as juniors must complete two (2) points of participation before the conclusion of their junior year.

If a WISE student has not already completed her graduation requirement, she is expected to participate in physical education class on days when she does not have off-campus WISE responsibilities.

Fall options:

- Tennis Team
- Field Hockey
- Cross Country
- Volleyball*
- Soccer Team
- Dance
- Riding Team (fee)
- Riding Lessons (fee)
- Polo (fee)
- PE Class
- PE class and game day manager
- Independent PE (with PE Chair approval)

Winter Options:

- Basketball Team
- Indoor Soccer Team (fee)
- Indoor Track Team
- Dance
- Riding Team (fee)
- Riding Lessons (fee)

- Polo (fee)
- PE Class
- PE class and game day manager
- Squash Team (fee)
- Independent PE (with PE Chair approval)

Spring Options:

- Badminton Team
- Lacrosse Team
- Softball Team
- Dance
- Golf Team (fee)
- Golf Lessons (fee)
- Polo (fee)
- Riding Team (fee)
- Riding Lessons (fee)
- PE class and game day manager
- Independent PE (with PE Chair approval)

- ❖ Students may only participate in one activity per trimester for credit;
- ❖ Once a team roster is posted, students are committed to that activity.

A student may miss a maximum of three PE classes. Any additional missed classes must be made up in a physical activity approved by the PE Department Chair. Students who do not meet the Physical Education requirement will fail the class for the trimester and must make up the work satisfactorily in order to receive credit for the class. The student will meet with the Chair of the Physical Education Department to determine when and how the work will be made up.

SCIENCE

The goal of the science department is to have each student become scientifically literate. To that end, all courses are laboratory-oriented and stress the ability of the student to experience opportunities to develop critical thinking skills using the logical, scientific mode of reasoning which will prepare them for future, lifelong learning. It is our hope that each student will emerge with enthusiasm and appreciation for science and its dynamic, changing nature, and with awareness of global concerns and current issues.

Requirements and Recommendations:

- The Science Department recommends the appropriate course for a student.
- All students are required to complete 3 credits of lab-based science courses in the Upper School.
- Students must take Biology, Chemistry and Physics.

Biology Grades 9, 10

1 credit; year course

A study of basic biological principles with an emphasis on the place of humans in the biosphere, the relation of human physiology to medical conditions, and the ethical and social implications of biological

decisions. The topics covered include basic chemistry, respiration, photosynthesis, cell structure and function, human anatomy and physiology, genetics, evolution and ecology. Laboratory is an integral part of the course, and provides students the opportunity for hands-on experiences in the field of biology. Beyond mastery of subject matter, the most important goal is to encourage an appreciation for life, a sense of wonder, and an understanding of the complexity and efficiency of living things.

Chemistry Grades 10, 11

1 credit; year course

(Prerequisite: Biology)

Chemistry is an introduction to the chemical and physical properties of matter. Topics including atomic structure, properties of elements and compounds, reactions, the periodic table, chemical thermodynamics, and solution chemistry. Emphasis is placed on development of good qualitative and quantitative skills with less of a focus on the mathematical approach.

Honors Chemistry Grades 10, 11

1 credit; year course

(Prerequisite: Biology. Completion of Geometry recommended)

Chemistry is an introduction to the chemical and physical properties of matter. Topics include atomic structure, properties of elements and compounds, reactions, the periodic table, chemical thermodynamics, solution chemistry, reaction rates, and chemical equilibria. Emphasis is placed on development of good qualitative and quantitative skills. This course is recommended for students interested in entering a competitive college, a science or science-related career, and for those students who plan to take AP Biology or AP Chemistry

Physics Grades 11, 12

1 credit; year course

(Prerequisite: Chemistry and Algebra II or Algebra II concurrently)

This introductory course in physics assumes a background in Algebra and Geometry. Trigonometry is presented and used throughout the course. Topics covered include Newtonian mechanics (kinematics and dynamics), energy, waves, optics, electricity, magnetism, and nuclear particle physics. Laboratory work for introducing and applying concepts is an integral part of the course. Building and computer projects offer opportunities to apply analytical and problem solving skills that are emphasized.

Honors Physics Grades 11, 12

1 credit; year course

(Prerequisite: Honors Precalculus concurrently or teacher recommendation)

Students will gain an understanding of core physics principles and then apply them to problem-solving exercises and experimental investigations. Extensive use of trigonometry and algebra will be used to analyze two-dimensional motion. Topics of study from classical and modern physics include Newtonian mechanics, fluid mechanics and thermal physics, electricity and magnetism, waves and optics, and atomic and nuclear physics. Laboratory work is an integral component of this course. Technology including scientific calculators, probeware, graphing and data analysis software, and physics apparatus is used throughout this course.

Honors Physics with Calculus Grades 11, 12

1 credit; year course

(Prerequisite: AP Calculus AB or AP Calculus BC concurrently. B+ or higher average in previous science and math courses)

In this demanding course, students will gain an understanding of core physics principles and then apply them to problem-solving exercises and experimental investigations using advanced mathematical methods, including calculus. Topics of study from classical and modern physics include Newtonian mechanics, fluid mechanics and thermal physics, electricity and magnetism, waves and optics, and atomic and nuclear physics. Laboratory work is an integral component of this course. Technology including

scientific calculators, probeware, graphing and data analysis software, and physics apparatus is used throughout this course.

W Anatomy and Physiology Grade 12 1 credit; year course

(Prerequisite: Successful completion of Biology and Chemistry)

Anatomy and Physiology provides students with a comprehensive study of the structure and function of the human body. Through lab exercises, demonstrations, guest speakers, lectures and dissections, students will be able to investigate the systems of the body, learn how the human body works, and gain insight into possible careers in the biomedical field. Topics covered include the circulatory, digestive, nervous, muscular, skeletal, endocrine, immune and integumentary systems, as well as diseases and disorders pertinent to each system.

W Animal Science Grades 11, 12 1 credit; year course

(Prerequisite: Chemistry)

Animal science will allow students to discover the behavioral and physiological characteristics of the animals. Students will explore the purpose behind the many curious actions of animals, as well as explore the amazing diversity of life on our planet. The class will employ lecture, lab work and campus field work to better understand the nature of the world around us. Lecture sessions will center on the evolutionary foundations of behavior and morphology, how form relates to function, as well as the fundamentals of ecology and taxonomy. Assessments have a particular focus on application of class material to form hypotheses and design experimental procedures, with the goal of “doing science” rather than just learning about science. Lab and field work will accentuate understanding of class topics and promote a sense of natural wonder.

W AP Biology Grades 11, 12 1 credit; year course

(Prerequisite: Biology and Chemistry. With permission)

The course studies the fundamental biological principles. Major topics include cell structure and function, molecular genetics, heredity, cellular energetics, evolutionary biology, diversity of organisms, structure and function of plants and animals, and ecology. Laboratory is an integral part of the course including at least 8 inquiry based labs and preparation for college-level laboratory work. Current events on biological developments supplement the text. The equivalent of a two semester college-level Biology course, AP Biology is designed to prepare students for the AP exam and for further study in science.

W AP Chemistry Grades 11, 12 1 credit; year course

(Prerequisite: Biology, Chemistry and Algebra II. With permission)

This course will allow students to attain a depth of understanding of fundamentals and competence in dealing with chemical problems. It integrates the three aspects of a college level course: development of theoretical concepts, construction of problem-solving techniques, and participation in a laboratory program. The course will contribute to the development of the students’ abilities to think clearly and to express their ideas, mathematically and in writing, with clarity and logic. The equivalent of a two semester college-level Biology course, AP Chemistry is designed to prepare students for the AP exam and for further study in science.

W AP Environmental Science Grade 12 (Grade 11 with special permission) 1 credit; year course

(Prerequisite: Biology, Chemistry, Algebra II)

The AP Environmental Science course provides students with the scientific principles, concepts and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these

problems, and to examine alternative solutions for resolving and/or preventing them. The course will involve ongoing lab inquiry and fieldwork analysis, allowing for a systematic and scientific study of the environment and our role in it. Environmental Science is interdisciplinary; it will embrace a wide variety of topics from different areas of study. The equivalent of an introductory college level Environmental Science course, AP Environmental Science is designed to prepare the student for the AP exam.

W Engineering Design Grades 10, 11, 12 1 credit; year course

The objective of this course is to introduce basic concepts of engineering. This will be a hands-on course where students will work individually and in collaborative teams to creatively solve relevant design challenges using the engineering design process. Students will be exposed to different engineering disciplines and ethics while emphasis will be upon modeling, problem-solving, and communication skills. *Cross listed in Computer/Technology

W Digital Game Design Grades 10, 11, 12 ½ credit; semesters 1 and 2
Advanced Game Design Grades 10, 11, 12 1 credit; year course

These courses allows students to create their own digital games without needing any previous programming experience. Students will learn about game design and development, re-imagine well known games, and bring their own ideas to the digital screen. Alongside exploring gameplay, students will be engaged in iterative design, problem-solving, and learning the principles of computer science. This is a class for anyone who has ever been curious about digital games, computer science, or using design and creativity in new ways. This course can be taken first semester, second semester, or for the entire year as Advanced Game Design.

W AP Computer Science Principles Grades 10, 11, 12 1 credit, year course

(Prerequisite: Geometry)

This course will develop computational thinking vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course is unique in its focus on fostering student creativity. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while using computer software and other technology to explore questions that interest them. They will also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society, and the world. The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course which will prepare students for the AP exam and for further study in computer science.

W Biochemistry, Microbiology and Public Health Research (Honors) - Small World Initiative

Grades 11, 12 1 credit; year course

(prerequisite: B average or higher in Biology and Chemistry and departmental recommendation)

The Small World Initiative (SWI) is an independent research class that encourages students to pursue careers in science while using novel crowdsourcing initiatives to address a worldwide public health threat – the diminishing supply of effective antibiotics. Over two thirds of all antibiotics originate from soil bacteria and fungi. Students will be using university-level research techniques over the course of the year to discover and produce new antibiotics. The project entails: isolation and classification of new antibiotic producing bacteria species, extraction and analysis of novel antibiotic compounds and student designed experimentation. Students will enhance their lab experiences by learning about the microbiological world, mechanisms of antibiotic action and the development of antibiotic resistance in the context of basic

biochemical processes. Classroom activities include: lab, lecture, student led discussion, lab-meeting style presentation of findings, journal critiques and poster sessions.

***W* *Half the Sky: International Perspectives on Women, Gender, and Health**

Grades 11, 12 (grade 10 with permission)

½ credit; semester 1

This first-ever-at-GFS Public Health course is designed to unite the humanities and science to provide students with the knowledge, understanding, and skills needed to identify and understand emerging global issues related to girls' and women's' health. Women's health issues including reproductive health, child marriage and motherhood, and disparities impacting the health and well-being of women and girls will be examined through the lenses of culture, government, education, and economics. Particular attention will be paid to issues that affect adolescent women internationally and in the United States. This course is recommended for students with an interest in a Public Health WISE placement and/or in the Jenkins Fellows program. *Cross listed in History

***W* Women in Science and Engineering Program (WISE)**

½ credit; semesters 1 or 2

Grades 11, 12

(Prerequisites: Chemistry and Algebra II, unless placement warrants an exception; admission requires participation in selection process and recommendation by WISE faculty based upon motivation, maturity, academic strength, and capacity to succeed in program)

WISE is an experiential learning opportunity in which students are assigned to a faculty mentor at Johns Hopkins University and participate in hands-on research in their mentor's lab or research site at Johns Hopkins. WISE emphasizes three key learning areas: WISE students (1) learn about the scientific method applied in real-world science; (2) learn about both a specific area of inquiry and a broad array of disciplines in a major research university; and (3) learn how to be a contributing member of a research team. WISE students fulfill academic assignments, maintain an electronic portfolio, prepare and deliver a final presentation on their work at GFS and at JHU, and participate in an annual poster session at GFS.

Placements are available with faculty in JHU's Whiting School of Engineering, Krieger School of Arts and Sciences, Bloomberg School of Public Health, and School of Medicine. Customized placements in other arenas, including Jhpiego and the Institute for Policy Studies, may be available. Participation is typically for 1st or 2nd semester, although students may continue beyond this time period based on her interest and her mentor's availability. WISE orientation and research seminars prepare and support WISE students for their first month in the program, prior to beginning research, and once a cycle after work at JHU begins. There is an additional tuition fee for participation. Complete information on the program is available [here](#) and from the Director of the James Center/Dean of Special Programs, who can assist students with specific scheduling issues, including 3-season athletes and a few others who may need a special summer WISE placement.

ONLINE COURSES

Online providers, such as One Schoolhouse/Online School for Girls (of which Garrison Forest School is an affiliate member), are an increasingly prevalent form of education. GFS views use of online courses as an important enhancement to the learning experience of its students in certain situation. Circumstances in which online coursework may be pursued in addition to, or instead of, a classroom course, include:

- To address scheduling needs created by enrollment in a special program, such as WISE;
- To address placement needs, such as in foreign language courses;
- To address sequence needs, when a student has moved beyond the highest level course available at GFS;
- To address a compelling and demonstrated interest in taking a course not offered by GFS, as in approved independent study.

In the Upper School, students may request enrollment in an online course or be recommended for one by their advisor. Department chairs will suggest consideration of an online option for a student to the Head of Upper School and the Dean of Special programs. The request is reviewed by the Academic Dean and the Head of Upper School, who may consult with the department chair and others to assess whether to approve it. Considerations include:

- The educational needs of the student;
- The availability of classroom course options;
- The availability of appropriate learning support for the student;
- The student's readiness for an independent learning experience;
- The course's comparability in content and rigor to GFS courses.



In partnership with [One Schoolhouse/Online School for Girls](#), Garrison Forest School offers the approved courses listed below. All OSG course enrollments must be approved by the Academic Dean and Department Chair.

AP Art History Grades 11, 12 elective (by recommendation of the English and History Departments) 1 credit, year course

Prerequisite: Successful completion of one year of high school history

Students enrolled in the AP® Art History course examine and critically analyze major forms of artistic expression from a variety of cultures spanning 32,000 years of art. Beginning with global prehistory and ending with global contemporary art, students consider influential forces like patronage, politics, class, belief, gender, and ethnicity in their analysis of art forms. Students become active participants in the global art world, engaging with its forms and content, as they experience, research, discuss, read, and write about art, artists, art making, and responses to and interpretations of art. By investigating a specific image set of 250 works of art characterized by diverse artistic traditions from prehistory to the present, the course fosters an in-depth, holistic understanding of the history of art from a global perspective. Students may select the AP® or non-AP® track in this course. AP® students are expected to delve deeper into the topics, take AP®-style assessments, and prepare for the AP® exam in the spring.

AP Computer Science A Grades 10, 11, 12 elective

1 credit, year course

Prerequisite: Successful completion of an OSG computer programming course or permission from the OSG administration.

The AP Computer Science course will introduce the key concepts and techniques of object-oriented programming in Java. The analytic, critical-thinking, and problem-solving skills developed in this course will transfer to programming in other languages on a variety of platforms. This course is designed with the idea that programming should be fun, engaging, and intuitive. Students will work creatively and collaboratively with their classmates and develop a solid foundation from which to launch into a wide range of computer science areas. In today's world, having an understanding of programming concepts as well as the ability to approach problems with a "programmer's eye" have become essential skills for students and professionals. Students taking this course will be well prepared for the AP® Computer Science A Exam in May. *May be offered in-school or online depending on enrollment.

Creating Tomorrow -- Designing for a Digital World 1 credit year course
Grades 10, 11, 12 elective

Prerequisite: Successful completion of an OSG computer programming course or permission from the OSG administration

The importance of communication in the digital world can't be underestimated. In this course, students will enhance their communications and technology skills by using the design process to create software products relevant to the digital age in which we live. Combining software engineering and entrepreneurship, students will create digital products using a variety of software tools and computer languages, and learn how to brand and market these products and services such as games, web sites, videos, mobile applications, etc. The design and development of their products will require study in market research, conceptual design, prototype development, product implementation and testing, as well as branding and social media marketing strategies for the final product launch. Students will have a choice in selecting topics or issues of interest and be able to pursue their interests in depth. By the end of the course, students will have developed a portfolio of their work and a digital product that they may continue to develop and market forward.

AP Macroeconomics Grades 11, 12 elective 1 credit, year course

Prerequisite: Successful completion of Algebra II

AP Macroeconomics will introduce students to major economic issues such as basic market analysis, the causes of the cycle of economic growth and recession, the problems of inflation and unemployment, the causes and consequences of federal budget deficits, and the causes and effects of international trade imbalances and currency fluctuations. The impact of fiscal and monetary policies are analyzed as are the debates surrounding the proper implementation of each. This course will involve extensive reading, problem-solving exercises, online discussions, quizzes and tests, and research and writing about contemporary macroeconomic issues. Strong reading, algebra, and analytical skills are necessary for success, as is strong motivation. AP Macroeconomics will prepare students to become informed and thoughtful and will thoroughly prepare students to take the Advanced Placement exam in the spring. AP® Macroeconomics is recommended for juniors and seniors.

AP Microeconomics Grades 11, 12 elective 1 credit, year course

Prerequisite: Successful completion of Algebra II

AP Microeconomics is a course that examines how individuals (such as consumers and producers) make decisions and how these decisions affect our everyday lives. Topics discussed include the forces of supply and demand, costs of production, consumer choice, and behavioral economics, amongst others. Throughout the course, students will examine various models that are used to conceptualize how our economy operates and will explore the role that government plays in a given economy. As an online, college-level course, significant emphasis is placed on independent work and individual accountability. Students will complete collaborative projects, group discussions, problem sets, quizzes, and tests. The

curriculum is developed to prepare students for the AP Microeconomics examination in May. Strong mathematical reasoning skills and an interest in finance, business, or government will aid students in this course. AP Microeconomics is recommended for juniors and seniors.

AP US Government and Politics and AP® Comparative Government and Politics

Grade 12 elective

1 credit, year course

Prerequisite: Successful completion of one year of high school history

AP Government and Politics is a yearlong course that provides students with an in-depth understanding of the American government as well as various political systems around the world. The fall semester covers AP US Government and Politics. Students will learn how the American government was founded, how the electoral process works, who votes and why, and how the various branches function. Special attention will be given to how the different agencies within the government interact, and how these agencies and their policies affect the daily lives of Americans. The spring semester covers AP Comparative Government and Politics, which takes an in-depth look at six different states: Iran, Nigeria, China, Russia, Mexico, and Great Britain. In addition to learning how to conduct proper comparative studies, students will analyze how these different states function, both as independent states and as part of the global community. Upon completion of this course, students will have a thorough understanding of some of the major political systems across the world, which will make it easier to comprehend how our world evolves and functions. Students will be prepared for both AP exams.

AP Music Theory

1 credit, year course

Prerequisite: Ability to read at least one clef of music and proficiency in an instrument or voice

AP Music Theory introduces advanced concepts of music theory to students. The aim of this course is to improve students' performance, aural, analytical, and composition skills. AP® Music Theory is an intensive, fast-paced course that touches on aspects of melody, harmony, texture, form, musical analysis, and composition. This course also includes an aural section of sight-singing, melodic and harmonic dictation, and listening examples. Each student composes and perform original compositions, both as an individual and in a group setting. All students enrolled in this course take the Advanced Placement exam in the spring. Yet AP® Music Theory is not just about the exam; students experience growth in their performance skills and all around musicianship. This is a crucial course for anyone looking to pursue music professionally or for anyone who wants to pursue their passion in music.

Intro. To Computer Programming: Summer Prep Course for AP Computer Science

Prerequisite: None

Offered: Online School for Girls, Summer (June 13 – August 5, 2016)

The goal of this course is to create an environment where students develop the skills to express their creativity in various programming languages. The course will start by introducing students to basic programming constructs and techniques using a simple but powerful drag-and-drop programming language in an animated environment. Students will then learn to create simple apps, explore a Java-like language that incorporates an electronic sketchbook with graphics and animation, and finally move on to object-oriented programming with 3D graphics. Throughout the course, students will conduct research and collaboratively investigate current issues surrounding computer science, specifically focusing on recent events involving computer science and the issues surrounding women in technology. By the end of the course, students will understand how relevant and important computer programming is in the world around them. This course prepares students for all advanced One Schoolhouse computer science courses.

Students participating in summer courses should plan to devote 25-30 hours per week for eight weeks to their course. Students will receive grades and comments in these classes, which are the equivalent of

year-long, high-school level courses. Because of the pacing and intensity of summer courses, there is little flexibility; students must be available and have internet access for all eight weeks of the course. For more information about summer courses and policies please see the School's website and the OSG Summer Handbook.

STUDENT SUPPORT

Academic Resources Course (ARC)

non-credit; semesters 1 and 2

This course, which meets once per cycle, offers academic support to students who are new to the Upper School and have been identified as needing support. Basic "survival skills" will be taught, including organization, time management, reading comprehension, note-taking, test-taking strategies, and exam preparation. This interdisciplinary approach to the school curriculum will reinforce what is happening in the classroom, whether it is writing the expository essay for English, reading primary sources for a history class, or memorizing vocabulary and grammar in a foreign language.

ACADEMIC CREDIT FOR COURSES AND SPECIAL PROGRAMS OUTSIDE OF GFS

Permission from the Head of Upper School and the relevant department chair is needed in order for a student to receive credit for a course or program other than those offered during the regular school day and year (summer school, for example). Credit is granted only on an individual basis, and requests for such credit must be made in advance of enrollment in such a course. In general, the following guidelines apply:

- Credit will not be given for more than one such course per year or for more than one course in a discipline during a student's Upper School career.
- The Head of Upper School, in collaboration with the relevant department chair, will determine whether such a course can be used to fulfill departmental requirements for graduation or whether it can only be used to fulfill overall course load requirements.

