GERMANTOWN ACADEMY

UPPER SCHOOL
COURSE DESCRIPTION BOOKLET

2018-2019

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UPPER SCHOOL CURRICULUM OVERVIEW

Germantown Academy offers a rigorous, college-preparatory curriculum geared toward allowing each student to pursue his or her own path to individual excellence. Our Upper School curriculum consists of a wide array of challenging liberal arts classes that engage students in each discipline while also affording them opportunities to pursue their strengths and interests intensively. All of our sequential academic programs offer students both regular college preparatory and honors or Advanced Placement preparation classes. In our math and science courses we offer three levels of study for each core course, allowing students to progress at their own pace - be it highly advanced, standard college preparatory, or between the two.

GA students will typically take between 5 and 7 courses per year, gaining knowledge and skills in their core academic classes (English, History, Math, Science, Modern Language or Classics, and Arts) while supplementing these with participation in Physical Education, Wellness, Freshman Seminar, Junior College Seminar, and a rich array of electives. As students grow over the course of their years in the Upper School and begin to flourish academically, many will add a second course in one discipline or will pursue a formal Independent Study course or project. All GA students surpass the minimum distribution criteria expected by competitive colleges and universities.

Students are guided through the curriculum by a broad support network consisting of Advisors, House Heads, Department Heads, Counselors, College Counselors and the Upper School Head. We help all students select the courses that best match their interests and talents while making sure they are well poised to present their best selves in the college admission process.

Academic Graduation Requirements:

Arts (Performing and/or Visual)	1 credit (must be completed by end of 10th grade)
English	4.25 credits
Health/Wellness	.5 credits
History	3 credits
Math	3 credits (including at least Algebra 1, Algebra 2, and Geometry)
Modern or Classical Language	3 credits (through Level III in any language)
Physical Education	1.5 credits (9th, 10th, and 11th grades)
Science	3 credits (including at least Physics, Chemistry, and Biology)

Other Graduation Requirements:

- Minimum 20 total credits
- Annual Summer Reading
- Senior Project
- Students must pass all courses in senior year
- Seniors must carry at least five credits each semester (typically 5 major courses meeting 6/7 days per rotation)
- Fulfillment of the annual activity and community service requirements

Notes:

- Please refer to the specific sections below for departmental policies and to the Upper School Handbook for details about other academic policies, deadlines, and requirements.
- Graduation requirements may be waived only with the approval of the Head of School, the Head of Upper School, the House Head, and the Department Head.
- If a course is failed and the Academy does not require or permit the student to repeat the course, the student may pass the course at an approved summer school or pass the course by pre-approved independent work or approved tutoring. In the latter case, the Academy may require a re-examination in the subject. In order to present a complete record to colleges, both the original failing grade and the summer grade will be entered on the student's permanent record and on the GA transcript sent to colleges.

UPPER SCHOOL COURSE DISTRIBUTION

9TH GRADE

Ninth graders generally take 6.5 courses:

- English 9
- World History I
- Math
- Physics
- Modern or Classical Language
- Arts
- PE (3x/rotation for whole year)
- Freshman Seminar (2x/rotation for the first semester)

10TH GRADE

Tenth graders generally take 6 courses, but some take up to 7:

- English 10
- History
- Math
- Chemistry
- Modern or Classical Language
- Wellness/PE (1 semester of each; Wellness 4x/rotation and PE 3x/rotation)
- (Arts)

11TH GRADE

Eleventh graders take a minimum of 5.5 credits, but some take up to 7 courses:

- English (two semesters) & Personal Essay Writing (May)
- History
- Math
- Biology
- PE (3x/rotation for whole year)
- Junior College Seminar (1x/rotation for the second semester)
- (Modern or Classical Language)
- (Arts)

12TH GRADE

Twelfth graders generally take 5 courses, but some take up to 7:

- English (two semesters)
- (History)
- (Math)
- (Science)
- (Modern or Classical Language)
- (Arts)

Notes:

1. Typically students pursue a minimum of five major academic courses each year throughout Upper School. Colleges define the major academic disciplines as English, Mathematics, History/Social Science, Science, and Modern Language. Occasionally, seniors may pursue courses in only four of these areas if they desire to pursue two courses in one discipline.
2. Juniors need to be especially thoughtful about scheduling their senior year courses; seniors who drop a class after transcripts have been submitted must notify colleges of this change in schedule. If a student has already been admitted, the student must write to the college to gain permission for the schedule change and must share this written communication with the college counselor.

Junior College Seminar

All juniors are automatically enrolled in Junior College Seminar. It is a semester-long course in the spring that is ungraded. Students are required to take this course if they are in the 11th grade at GA.

Course Number: 0047

Class Meetings: 1/7

In Junior College Seminar students learn how to develop a college list, research colleges, and complete an effective college application. This Seminar, combined with the English department's Personal Essay Writing course, will equip juniors with a first draft of the Common Application, an application used by over 500 colleges and universities throughout the United States.

Senior Project

All seniors must complete a Senior Project in order to graduate.

Seniors complete their Senior Projects during the last weeks of the second semester as an alternative to classes. The Projects are an off-campus educational program co-sponsored by Germantown Academy and an individual in the business or professional world who is involved in the field of the student's choice and who oversees the program. Students must submit their proposals by mid-February. Any senior taking an AP course must commit when signing up in the spring of junior year to stay at home during senior project until his/her last AP is completed. Taking the AP exam at GA is required in order to get academic credit. At the conclusion of the project students hand in a journal and deliver a speech to their House about the experience.

Pass/Fail Option for Seniors

Seniors may be permitted to take one of their non-honors, non-required courses on a pass/fail basis in order to explore a new and/or challenging area without worrying about the grade per se. Seniors wanting to use this option should give their House Head a written petition stating their reasons and summarizing relevant conversations they have had with the teacher of the course, their advisor, and their college counselor. The deadline for pass/fail petitions is the end of the second week of a term course and the end of the fifth week of a year course. Pass/fail petitions must be approved by the Head of the Upper School and the House Head.

Minimesters

Sophomores, juniors and seniors may register for Minimester courses. Minimesters are co-curricular classes in an array of subjects (i.e. Robotics, Archival Studies, Journalism, etc.) in which there are no assessments and no formal grades beyond pass/fail. They are a semester in length and meet two or three times per rotations. Registration for Minimesters occurs in May, after the regular course selection process has been completed.

Independent Study Program (ISP)

It goes without saying that students are free and encouraged to pursue independently any topic of interest without academic credit. Students seeking academic credit that will show on their transcripts must prepare in detail the following:

1. a description of the goal of the study;
2. the means by which they intend to reach that goal; those means must include at least two full-period meetings per rotation with their study leader as well as six hours independent work per rotation on their study;
3. the means by which they, their study leader, and we will assess the quality of their progress quarterly. These means have to be clear and detailed.

ISP courses earn .5 credits per year, are not eligible for honors/AP credit, and do not count as 'major courses' when honors/high honors are determined. ISP courses do count in your grade point average.

All the normal school regulations will apply to such studies: they remain on the transcript whether they are completed successfully or not unless they are dropped during approved drop/add periods. The study leader will grade and comment on the study; late work will suffer the normal penalties, etc.

All ISP proposals must be particular to each student involved, typewritten, double-spaced, and signed by the student, the student's parents, the student's advisor, the student's college counselor, the study leader, the House Head, and the department head of the area of study involved.

ISP proposals may be submitted to the Upper School Head at any time for its approval or disapproval, as the case may be, though after the first few weeks of the term it may be difficult to invest enough time to meet the criteria for credit for that term. The Upper School Head will consult with House and Department Heads before approving or disapproving the proposal.

Students should consider whether transcript record is the best way to reflect their work before applying.

Upper School
Academy Scholars Program

The Academy Scholars program is not a program in the sense of a course of learning defined by the school; it is an opportunity for students with a passion for scholarship, creative writing, visual art, performing art, or research (in the sciences, social sciences, or humanities) to pursue that passion by means of developing and working on a significant, independent project. Students become Academy Scholars candidates generally during their freshman or sophomore years by gaining the approval of the Director(s) of the program. Besides having demonstrated pronounced intellectual and creative vitality, those permitted to join will also have exhibited the ability to do exceptional work in the relevant discipline with a high degree of independence and perseverance. Examples of past Academy Scholars projects include:

• Writing a full-length novel, a memoir or a collection of stories.
• Pursuing advanced scientific or engineering research in collaboration with local laboratories.
• Composing, performing and recording original works of music.
• Producing an advanced portfolio of visual art.
• Inventing a new form of technology for practical use.

Academy Scholars candidates may take their work as far as they wish. Some will complete the projects they first envisioned; others will set aside their work altogether as the demands of junior and senior year escalate. The criteria for completion of specific levels of the program are summarized below. In addition to fulfilling other requirements, students have to find a faculty sponsor from the school department most closely affiliated with their project. That sponsor will serve as a consultant and advisor, but not as a project leader or director. Academy Scholars projects are student-initiated, planned, and conducted. For those who desire to earn transcript credit for their work as Academy Scholars, the option of submitting their projects for review by the Academy Scholars Director(s) is available. The following courses will appear retroactively on the transcript as credit courses graded "P" for "pass" if the Director decides that the work completed merits doing so.

Academy Scholars Stage I

Course Number: 0080
Credit: 1/2

This credit is awarded to Academy Scholars candidates who have done the following: taken the initiative to develop a formal project proposal, completed extensive background work, and have a significant start on the project. Students should be prepared to demonstrate an investment of time commensurate with what would be normal for a semester's worth of classes and homework in an honors course (averaging 1.5 hours per week over the course of the school year). Students who receive Stage I credit are eligible to pursue Stage II credit.

Academy Scholars Stage II

Course Number: 0081
Credit: 1/2

This credit is awarded to students who, having received Level I credit, have subsequently elected to take their project sufficiently far such that it shows not only an investment of time commensurate with what would be normal for a semester's worth of classes and homework in an honors course (averaging 1.5 hours per week over the course of the school year), but also such that it shows work that is marked by originality, completeness, thoroughness, breadth, depth, attention to detail, and intellectual and/or creative energy.

Academy Scholars Stage III (H)

Course Number: 0082
Credit: 1/2

A few students whose Stage II projects are deemed exemplary by the Academy Scholars Director(s) will be invited to pursue transcript and/or graduation honors. If they decide to pursue these honors by submitting their work to an even higher level of scrutiny, they need to be forewarned that success is by no means guaranteed by having already completed the first two stages of Academy Scholars or by having been encouraged to try for such honors. Candidates for Level III must take their project out into the world in some way (work with mentors and professionals outside the school, publication of a text, production of a musical recording or a live publicly advertised performance, etc.) to prepare for the formal GA public presentation of their work no later than April of their senior year. Students again must demonstrate an investment of time commensurate with what would be normal for a semester's worth of classes and homework in an honors course (averaging 1.5 hours per week over the course of the school year). An Evaluating Committee of the Academy Scholars Director(s), including the student's project adviser and another faculty member of the student's choice, is set up especially to review the project. Projects deemed by the Evaluating Committee as outstanding will be given honors status designation on the transcript in the "Prizes and Honors" section as "Academy Scholar with Honors" and will be designated an Academy Scholar at graduation.

Upper School Classics
Sequence of Courses

This is the typical sequence of courses for a student enrolled in the specified course in 9th grade. Movement between levels is possible.

9th	10th	11th	12th
Latin 1 **Typically for students from outside or those from GA's MS who wish to begin a new language**	**Latin 2**	**Latin 3**	**Latin 4**
Latin 2 **For students from GA's MS or those from the outside who test well**	**Latin 3**	**Latin 4**	**Latin 5**
Latin 2H **For students from GA's MS or from the outside who test exceptionally well**	**Latin 3H**	**Latin 4H**	**Latin 5H**

Notes:

1. Completion of a single language through Level 3 is required for graduation.

2. Students who wish to move from Regular into the Honors track must:

   a) have a minimum of an A- average in their current course
   b) have permission of the Department Chair
   c) complete prescribed summer work and pass (with a B+ or above) a placement test in late July

3. **In order to continue in the Honors Program,** a student must have a minimum average of B.

4. **In order to continue to the next level in the regular sequence (e.g., Latin 2 to Latin 3)**, a student must have a minimum average of C-.

5. Note that Latin 3/4, Latin 4/5 and/or Latin 4H/5H may be combined in certain years depending on enrollment and staffing.

Upper School Classics
Departmental Overview

The study of the Latin language provides students with an insight into the structure of an inflected language and encourages them to make instructive comparisons with their own language. Students also discover that many English words are derived from Latin, thus further bolstering their command of their own language. In addition, students develop a sound basis for the study of Romance languages, and a clear understanding of how these languages are related through their origins in Latin. And, while the study of Latin may have intrinsic value as a vehicle to hone one's analytical and critical thinking skills, the study of Classics—through history, art, literature, philosophy, and religion—combines with the study of language into a uniquely powerful force as one understands the importance that ancient Roman and Greek cultures have had in shaping the heritage of Western civilization. As such, classical studies are not presented as an abstract linguistic system, nor merely as an exercise for developing mental discipline, but as a medium of great culture and literature.

The student who completes the full sequence of Latin at GA will have had wide exposure to the language, history, and culture of the ancient Romans and Greeks, and will be well prepared to pursue classical studies at the university level.

Upper School Classics
Course Placement Policy

- Students who are new to Germantown Academy but who have taken Latin in another school and wish to take Latin in the Upper School must take a placement test.

- Students coming to the Upper School from GA's Middle School Latin program will be placed by their eighth grade Latin teacher.

- Students who are interested in and qualified for work beyond the regular scope and sequence of Classics Department offerings, e.g., Latin 6 Honors, must meet before the full department to discuss and create an appropriate academic plan.

Upper School Classics
Course Offerings

Latin 1

Course Number: 0203

Credit: 1

Students with little or no past experience in Latin are introduced to the language, history, and culture of the ancient Roman world via Units 1 and 2 of the Cambridge Latin Course. Set in Pompeii in the first century A.D., Unit 1 is based on the family and household of Lucius Caecilius Iucundus, whose house and business records survive. Unit 2, set in Roman Britain and Roman Egypt, addresses topics ranging from Roman colonization to Roman science, medicine and technology. Throughout the course, emphasis is placed both on reading Latin and on using the knowledge of Latin roots to build English vocabulary. Students completing Latin 1 will acquire a sound foundation of grammar and syntax, in both Latin in English, and an increased awareness of the Roman contribution to western civilization.

Note: This course is not open to Seniors.

Latin 2

Course Number: 0204

Credit: 1

The primary purpose of Latin 2 is to complete the grammatical sequence after Latin 1 (or Latin C in the middle school), and to strengthen the reading skills and cultural/historical understanding of the ancient world via Unit 3 of the Cambridge Latin Course, which completes the narrative set in Roman Britain and culminates in Rome, the capital of the Empire, in the years A.D. 81-83. The study of Latin vocabulary and its influence on English words and meaning continues to be a regular commitment in Latin 2. Research papers and projects may be required throughout the year. Films or documentaries, where applicable, are used to illustrate the historical, cultural, and social themes of the readings and class discussions.

Latin 2 (H)

Course Number: 0205

Credit: 1

Placement: A final grade of A- or higher in Latin 1 for Upper School students. For students new to GA, and for those entering the Upper School from GA's Middle School, departmental permission is required.

Latin 2 (H) is similar to the Latin 2 course but will cover material faster with a greater number of readings of more sophistication and complexity.

Latin 3/4

Course Number: 0206 (Latin 3); 0211 (Latin 4)

Credit: 1

This course will delve into ancient Roman authors in the original Latin and, where appropriate, in translation, to deepen the student's understanding of Roman culture and literature. The development of reading skills in the language will be emphasized at first through extended textbook readings and further work in vocabulary and grammar. Students will transition from reading textbook-created Latin to modified and/or annotated Latin authors when appropriate. An intense year-long review and consolidation of the fundamentals of grammar will prepare the students for the rigors of advanced Latin.

Latin 3 (H)

Course Number: 0207

Credit: 1

Placement: A final grade of B or higher Latin 2 (H) or departmental permission with summer work required

Latin 3 (H) is similar to the Latin 3/4 course but will cover material faster with a greater number of readings of more sophistication and complexity.

Latin 4 (H)/5(H)

Course Number: 0208 (Latin 4H); 0209 (Latin 5H)

Credit: 1

Placement: A final grade of B or higher Latin 3 (H)/4(H) or departmental permission with summer work required

This course is meant to expose students to the sustained and analytical reading of Vergil's *Aeneid* in its original form. The primary emphasis in doing so will be to create a greater depth of understanding of the Latin language along with a richer appreciation for the genius and nuance of Latin literature, particularly its legacy in Western thought and institutions. Complementary goals include instilling a deeper understanding and recognition of the Latin lexicon, especially as it applies to the acquisition of English vocabulary, and the ability to connect ancient perspectives meaningfully to the modern world in politics, history, art, and social mores.

Upper School English
Sequence of Courses

This is the typical sequence of courses for a student enrolled in the specified course in 9th grade.

9th	10th	11th	12th
English 9	**English 10 (different teachers each semester)**	**First Semester Upper Level Course; Second Semester Upper Level Course; Personal Essay Writing (5 weeks)**	**First Semester Upper Level Course; Second Semester Upper Level Course**
English 9	**English 10 (different teachers each semester)**	***First Semester AP English Course Second Semester AP English Course; Personal Essay Writing (5 weeks)**	***First Semester AP English Course; Second Semester AP English Course**
English 9	**English 10 (different teachers each semester)**	**First Semester Upper Level Course; Second Semester Upper Level Course; Personal Essay Writing (5 weeks)**	***First Semester AP English Course; Second Semester AP English Course**

* Students must qualify for AP English Courses. See qualification criteria in the Course Placement Policy for details.

Notes:

1. In order to graduate, students must complete four credits (four full years) of English and Personal Essay Writing.

2. Students enrolled in AP courses take the AP English Language exam after 11th grade and the AP English Literature exam after 12th grade. If enrolled in an AP English course, a student is required to take the AP exam in May.

3. Students may elect to take the AP English Language or Literature exams even if they have not taken the AP courses. The English Department offers VLE-based review materials that can help them prepare for these exams.

4. Students who are admitted and choose to take AP English are required to take AP English for both semesters; they may not opt out of AP for the second semester.

Upper School English
Departmental Overview

The Upper School English Department uses the critical examination of literary texts as a way to help students learn to read the world around them. We cultivate critical and creative thought and confidence and clarity in written and verbal expression, preparing students with skills that will serve them throughout their lives. Our foundation courses, English 9 and English 10, explore tropes that recur throughout literature and across genres and time periods, helping students identify and grapple with the core questions that we, as humans, have sought to understand for centuries. We draw on literature from a variety of time periods and cultures, helping students identify both common elements across texts and culturally and historically specific contexts. We ask students to write in a variety of genres, from literary analysis, to personal narrative, to poetry. The upper level courses for juniors and seniors offer students the chance to explore a particular theme, genre, or time period for a full semester, and the variety of course offerings and topics anticipates the kinds of courses students are likely to encounter in college. We expect all students to grapple intellectually, to participate actively, and to hone their skills as writers, speakers, and thinkers throughout their Upper School English careers.

Upper School English
Course Placement Policy

- All ninth graders take English 9
- All tenth graders take English 10 (one teacher for first semester and a different teacher for second semester)
- Eleventh graders take two semester upper level courses and Personal Essay Writing, a five week mini-course in May
- Eleventh graders who qualify may take two AP Literature semester courses (plus the five-week Personal Essay Writing)
- Twelfth graders take two semester upper level courses
- Twelfth graders who qualify may take two AP Literature semester courses
- Requirements for AP Literature courses—open to both eleventh and twelfth graders:
  1. Minimum B+ or better for two most recent English grades
  2. Demonstrated willingness to participate in class discussions
  3. Successful completion of qualifying essay based on previous AP Literature exam questions. AP English teachers blind grade the essays; the English Department makes collective decisions about a student's candidacy based on the above criteria.

Notes:

1. Eleventh and twelfth graders may not enroll in more than one course taught by a particular teacher in a given year unless there is no other option available in the schedule.

2. All juniors and seniors must be enrolled in a first and second semester course before students can petition to add a second upper level course for either semester.

3. AP English requires a full-year commitment. Students may not take one semester of AP and one semester of regular English. Students who are not admitted to AP English at the end of tenth grade may re-apply during the spring of eleventh grade, so long as they continue to meet the criteria.

Upper School English
Course Offerings

English 9

Course Number: 0303

Credit: 1

English 9 is a yearlong course in which students develop a foundational understanding of some of the building blocks that storytellers combine, and endlessly recombine, to create compelling, meaningful narratives. The course tracks, in particular, four tropes that recur throughout world literature, and throughout literary history: heroes and the hero's journey, female characters' efforts to gain power within patriarchal societies, trickster figures, and parent-child relationships. In addition to literary study, English 9 also emphasizes the study of writing. Throughout the year, students develop their vocabularies and their mastery of grammatical conventions and write persuasive, analytical, reflective, and creative pieces.

English 10

Course Number: 0304/0305

Credit: 1

English 10 focuses on the critical reading and writing skills students will need to master as they go forward in their study of literature. We explore various genres of literature, helping familiarize students with the terminology and conventions of fiction, poetry, and drama. In our reading of literature, we build on the tropes in English 9, focusing, this year, on coming of age stories and power struggles. The course is designed to help students make connections between the readings by tracing three key motifs through the year: coming of age, individual vs. society, and power struggles. Students continue to develop their skills in analytical writing, using similar but more advanced versions of the essay assignments introduced in English 9. They also have the opportunity to explore and more fully understand the choices writers make in crafting good literature through the process of writing their own short story and poem. Students also work on grammar and vocabulary throughout the year. In order to expose students to a variety of teaching styles and prepare them to transition to the upper level courses, students change teachers between first and second semester.

Personal Essay Writing

Course Number: 0340

Credit: .25

The goal of this course is to teach juniors an important skill: how to write a personal essay. This skill will prove especially useful as juniors prepare to write essays for college applications. In the process of teaching students how to write a good personal essay, teachers particularly emphasize description, reflection, tone, and voice. The course consists of preliminary exercises and short graded assignments designed to teach and assess students' command of each of these skills. Over the course of the five-week class, students also produce and refine a personal essay, which serves as the culminating assessment for the course.

Note that enrollment in all junior-senior courses is capped at 15 students. Minimum enrollment is 12. While students may express a preference for certain courses, placement generally depends on the scheduling of their other classes as well as ensuring a good distribution among all upper level courses. Students wishing to switch courses after schedules have been issued should speak with the Department Head to explain their reasons for wanting to switch; permission to change courses once they have been assigned is contingent upon a valid reason for the switch and acceptable distribution of students across all upper level courses.

Upper School English
Junior Senior Courses
FIRST SEMESTER

Fairy Tales

Course Number: 0277

Credit: 1/2

Instructor: Ms. Burnett

Semester(s): First

Once upon a time, your parents may have read these tales to you as bedtime stories. Now, you will have a chance to revisit the treasured tales of your childhood, turning a critical eye on the lessons they teach and the socio-cultural contexts that generated them. Working our way through Disney's fairy tale oeuvre, we will study traditional and modern versions of "Snow White," "Cinderella," "Sleeping Beauty," and "Beauty and the Beast" along with the original literary versions of "The Little Mermaid" and "Aladdin." With each of these tale types, we will also consider the Disney film adaption. Be forewarned: most students say this class forever changes the way they think of Disney films! Towards the end of the course, we will consider modern adaptations of tales, including the libretto of the Broadway musical *Into the Woods,* and create our own modern retellings. By the end of this class, you may feel differently about what it means to live "happily ever after."

Families in Literature

Course Number: 1382

Credit: 1/2

Instructor: Mr. St. Jean

Semester(s): First

In this course, we'll read stories about imaginary people as loving, selfish, generous, disloyal, and complex as our own mothers, fathers, sisters, and brothers. We'll consider how family relationships shape characters' identities, and how and why fictional families band together or fall apart. In particular, we'll consider what happens within families at moments of crisis or transition, when power dynamics shift and people and relationships evolve. The reading list will include August Wilson's *Fences* and Celeste Ng's 2014 novel *Everything I Never Told You*, as well as poems and short stories by Michael Ondaatje, Jhumpa Lahiri, Amy Tan, Tom Perrotta, and Junot Díaz. Course requirements will include two major analytical essays and a final creative project.

Literary Beasts, or "The Question of the Animal"

Course Number: 1288

Credit: 1/2

Instructor: Mr. Ferrier

Semester(s): First

Since the earliest Paleolithic cave paintings and the fables of Aesop, animals have occupied a central place in the human imagination. In this course, we will contemplate the figure of the animal in myth, literature, and film, keeping in mind the cultural and historical background of various tales, as well as some central questions like: What are the borders between human and animal, if there are any? Can we morally distinguish between the rights of humans and the rights of animals? How do animals serve as metaphors for understanding the values, anxieties, and fears of the cultures in which they emerge? Among other narrative functions, we will investigate what the cultural politics of animality have to tell us about what it means to be human. Starting with excerpts from various myths, fairy tales, and folk tales and Charles Darwin's seminal treatise *The Origin of Species* (1850), we will place into conversation a series of texts that may include: J.M. Coetzee's *The Lives of Animals*, Franz Kafka's *The Metamorphosis*, Edward Albee's *The Goat, or Who is Sylvia?*, Peter Shaffer's *Equus*, Eugene Ionesco's *Rhinoceros*, Barbara Gowdy's *The White Bone*, Karen Joy Fowler's *We Are All Completely Besides Ourselves*, and Brian K. Vaughan's *Pride of Baghdad*, as well as Werner Herzog's film *Grizzly Man*.

Literature of *Walden's* World

Course Number: 1289

Credit: 1/2

Instructor: Mr. Hyland

Semester(s): First

In this interdisciplinary English class, we will read classic and contemporary works of environmental literature in order to make sense of the social significance of "wilderness" in America. We will read a range of genres—from fiction and poetry to essays and travelogues—and also view films, look at art, and explore GA's campus. Taking a long historical view of this topic, we will begin with Native American myths before considering the Puritans in New England; we will then work our way through the nineteenth century by reading selections from writers such as Thoreau, Whitman, Dickinson, and Emerson. In addition to reading and discussing important works of environmental literature, we will also study issues concerning social justice and the environment by engaging texts and films that foreground questions of racism, equality, and freedom in regard to America's landscapes. Texts will include *Solar Storms* by Linda Hogan, *Mississippi Solo* by Eddy Harris, and *Half an Inch of Water* by Percival Everett, in addition to readings provided by the teacher.

Monstrous Femininity: From Lilith to Lady GAGA

Course Number: 1290

Credit: 1/2

Instructor: Ms. Peters

Semester(s): First

In this course, we will examine a variety of female monsters: classical mythological monsters, werewolves, witches, and vampires. In addition, we will consider how and why women who live outside of societal boundaries are deemed "monstrous." According to film theorist, Barbara Creed, "All human societies have a conception of the monstrous-feminine [exploring] what it is about women that is shocking, terrifying, [and] horrifying." Furthermore, Creed argues that the depiction of women as monstrous frequently centers on their status as mothers and emerges from their reproductive abilities and sexuality. Using Creed's analysis as a jumping off point, we will analyze feminine monstrosity in literature, film, poetry, and popular culture. Texts may include Arthur Miller's *The Crucible*, Maryse Conde, *I, Tituba, Black Witch of Salem*, Angela Carter's *The Bloody Chamber*, Sheridan La Fanu's *Carmilla*, *Ginger Snaps*, and *The Babadook.*

Telling True Stories: Narrative Nonfiction and Literary Journalism

Course Number: 1378

Credit: 1/2

Instructor: Ms. Lintgen

Semester(s): First

The evolution of football strategy, the origins of cancer research, the pressures of navigating life in college and life at home: Any of these topics could be the subject of a lengthy, dry dissertation by a writer seeking to simply inform the public. But in the hands of Michael Lewis (*The Blindside*), Rebecca Skloot (*The Immortal Life of Henrietta Lacks*), and Jeff Hobbs (*The Short and Tragic life of Robert Peace)* these issues become the foundation of gripping narratives. Grounded by rigorous investigation and a journalist's eye for a good story, these authors (and others we will read this semester) seek to educate, entertain and, often, persuade their readers. In this course, students will read book-length narrative nonfiction works in addition to examples of long-form journalism, and we will consider how a central narrative can provide a compelling focus in a nonfiction work. Students will write analytical essays, lead class discussions, and research and write a narrative nonfiction piece of their own as a culminating project.

What You Want to Be: Work and Identity in Literature

Course Number: 1389

Credit: 1/2

Instructor: Ms. Vutz

Semester(s): First

What do you want to be when you grow up? Adults spend the majority of their waking hours at work; a person's job is often the primary label used to assign identity, status, and the rules for social interaction. If work is so pervasive in the way people define themselves and others, then how do we define work itself? What is the difference between the questions: "what do you do?" and "who are you?" What agency do people have when they choose what kind of work to do, and why do some people seem to have more freedom to choose a career path than others? Literature helps us

better understand our assumptions about work and the social implications of the way we choose to work. Students will write analytical essays, lead class discussion, and write a final paper presenting their understanding of the role of work in defining personal morality and identity. Texts may include: Shakespeare's *The Merchant of Venice*, Charles Dickens' *A Christmas Carol*, George Orwell's *Animal Farm*, and Michael Thomas' *Man Gone Down*, as well as short readings from Studs Terkel's *Working* and the films *Office Space, The Pursuit of Happyness,* and other short stories and poems.

Upper School English
Junior Senior Courses
SECOND SEMESTER

City Stories

Course Number: 1291

Credit: 1/2

Instructor: Mr. Ferrier

Semester(s): Second

The image of the modern "city"--its bustling crowds, bright lights, sights and smells--is a central landscape in American fiction, and it has served as an important lens to examine American cultural diversity, economic innovation, and social change. This course explores the ways in which cities have formed and shaped American literature, and the role that authors and filmmakers have played in transforming what these "concrete jungles" mean to us. We will look at the literature of three American cities at pivotal moments in their histories: New York at the turn of the 20th century; Chicago in the late 19th and early 20th centuries; and Los Angeles in the mid- to late 20th century, with special attention to cross-cutting themes of community and alienation, class and power, race and ethnicity, and gender and sexuality. Texts may include: E.L. Doctorow's *Ragtime*, excerpts from F. Scott Fitzgerald's *The Great Gatsby*, and excerpts from Anzia Yerzierska's *The Bread Givers* (New York); excerpts from Upton Sinclair's *The Jungle* and Carl Sandburg's *Chicago Poems* (Chicago); Raymond Chandler's *The Big Sleep* and Anna Deavere Smith's *Twilight: Los Angeles, 1992* (Los Angeles). As a final creative project, you will write a play, short story, collection of poetry, or screenplay that explores issues pertaining to our time and place--21st century Philadelphia.

Dystopia in Literature

Course Number: 1383

Credit: 1/2

Instructor: Ms. Lintgen

Semester(s): Second

What is so compelling about a future that is so decidedly unhappy? What can a terrifying vision of the future tell us about our present? Are these works a reflection of our current state of discontent or do they serve as cautionary tales? Exploring these questions, we will look at a variety of scary, sad and troubling dystopian futures in both literature and film. Readings will likely include *1984* by George Orwell, *Children of Men* by P.D. James and *Oryx and Crake* by Margaret Atwood. The course will culminate with an independent project in which students will have an opportunity to explore other works that address themes of dystopia.

Fiction Writing

Course Number: 0392

Credit: 1/2

Instructor: Ms. Graffam

Semester(s): Second

What makes good fiction good? In this course we will try to develop an understanding of this question, both through reading and analyzing other people's writing, as well as through writing and revising our own. Students should bring to this class a love of writing, a willingness to accept constructive criticism, and a lively imagination. The course will focus on the fundamentals of fiction writing, including plotting, characterization, setting, theme, etc., and on how to recognize and discuss their use, effective or otherwise, in a short story. We will also work on how to develop these skills in writing original fiction. We will read a variety of published and unpublished works, and we will spend a significant portion of the course reading and critiquing the students' own stories. Students will be expected to produce a portfolio of three original short stories over the semester and will take an exam at the end of the course. As much of the course will be run as a writing workshop, preparation and participation will also count heavily in grading.

Graphic Novels

Course Number: 1352

Credit: 1/2

Instructor: Dr. Friedman

Semester(s): Second

Art Spiegelman (creator of the Pulitzer prize-winning graphic novel *Maus*) has said that "comics have a pipeline to something very basic about the way people think." In this course, we will explore the format of that "pipeline" by reading a variety of graphic novels – narratives told through a blend of words and pictures. Though this combination of words and pictures may make graphic novels appear different from other novels, we will examine how they can and should be read as a literary form. We will analyze formal structure as it relates to content and will trace the development of larger themes, such as the coming-of-age story and the conflicts between the individual and society. More broadly, we will think about how comics can provide new ways of seeing, reading, and interpreting experience, and we will consider how graphic novels can be used to address significant historical and contemporary social issues. Readings may include Scott McCloud's *Understanding Comics*, Vera Brosgol's *Anya's Ghost*, Alan Moore's *Watchmen*, Marjane Satrapi's *Persepolis*, and Gene Yang's *American Born Chinese*.

Reading and Writing Poetry

Course Number: 1292

Credit: 1/2

Instructor: Mr. Hyland

Semester(s): Second

In this course, we will address questions central to the study of poetry, such as: What is a poem? How is it made? How do we talk about a poem? In our search for answers, you will be introduced to a wide range of poets and poetics. We will read poetry from ancient Greece to the English Renaissance and Romantic periods to the modern poetry of the twentieth century and up through our present moment. By engaging both classic and contemporary poetry, we will learn about the fundamental vocabulary and techniques of the craft of writing poetry such as issues of form, metrics, rhythm, imagery, diction, lyricism, voice, and metaphor. We will also listen to recordings of poets reading their work and think about the relationship between music and poetry. In addition to studying and listening to diverse poets and styles, we will devote significant time to writing poetry in a workshop setting. The emphasis will be as much on reading as on writing: our time will be equally divided between studies of various poetic forms and writing workshops where you will try your hand at each form. Students will not be required to purchase texts for this course; readings will be provided by the teacher.

Victorian Lit

Course Number: 1293

Credit: 1/2

Instructor: Ms. Peters

Semester(s): Second

The Victorian era in Great Britain (1837-1901) was a time marked by urbanization, globalization, and economic prosperity, and the label "Victorian" often connotes a society ruled by propriety and order. What makes the literature of the Victorian era so interesting, however, is not what appears on the surface, but what lies beneath. In this course, we will explore the rising conflicts of the time: how, beneath the growth of the city, lay the explosion of the slums; how, beneath the glory of the empire, rested the subjugation of the colonized; ho, beneath the primness and propriety, lay the uncanny underbelly. In reading this literature, we will pay particular attention to how the tensions around class, gender, and sexuality appear in coded ways. Texts may include excerpts from Dickens' *Bleak House* and Bronte's *Jane Eyre*, as well as Stevenson's *The Strange Case of Dr. Jekyll and Mr. Hyde*, Wilde's *The Picture of Dorian Gray*, Eliot's *The Lifted Veil*, and a selection of poetry.

Within and Without: Values in World Mythology

Course Number: 1294

Credit: 1/2

Instructor: Ms. Vutz

Semester(s): Second

Now more than ever, the welfare of human cultures depends on the attitudes and actions of other cultures. Myths are a useful way to grapple with our individual identities and our connection to a diverse array of others. All cultures have narrative traditions rooted in mythology, and common threads emerge in reading mythology from across the globe. World myths address questions of survival, control, satisfaction of desire, reconciliation with the inevitability of death, and the responsibility of family and community traditions and values. Underneath the characteristic differences and unique cultural perspectives across time and geography, the shared themes in these narratives tie people together in revealing ways. The readings for this course will span continents to explore a body of stories from each region, put together a literary interpretation of who those peoples are, and ultimately interpret who we are as we read the world of mythology. Texts may include: Neil Gaiman's *Norse Mythology,* Virginia Hamilton's *In The Beginning,* Donna Rosenberg's anthology *World Mythology,* and *Gilgamesh.*

Upper School English
Advanced Placement Courses
FIRST SEMESTER

AP English Literature: Crazy Love

Course Number: 1295

Credit: 1/2

Instructor: Ms. Lintgen

Semester(s): First

In the movie *Moonstruck*, a love sick Roni Cammareri declares, "Love don't make things nice - it ruins everything. It breaks your heart. It makes things a mess." Over the course of the semester, we will explore the central question: Why is it that in some of the best literature, love does not lead to happiness, but rather becomes a destructive force? Exploring poetry, drama, short stories, novels, music and film, we will look at how love "ruins everything." Major texts will include Shakespeare's *Othello*, *Brokeback Mountain* by Annie Proulx, *Wuthering Heights* by Emily Bronte, and *This is How You Lose Her* by Juno Diaz.

*Summer work is required for this course.

AP English Literature: Madmen and Geniuses

Course Number: 1357

Credit: 1/2

Instructor: Ms. Graffam

Semester(s): First

In order to determine whether or not someone is insane, we must first have a working definition of "sanity." But who gets to determine that definition? Doctors? Individuals? Society? What happens if someone merely exists beyond the limits of the definition? If they are exceptional rather than insane? Is it possible that people can be categorized as "mad" simply because they are socially or politically inconvenient? In this course we will look at books that portray individuals who test the boundaries of "normal," or who find it impossible to think or to live within the rules of so-called "normal" society. How are these determinations made? What happens to those people who find themselves regarded as psychologically abnormal? These are some of the questions we will try to answer. Likely texts will include: *Dr. Faustus*, by Christopher Marlowe, *Regeneration*, by Pat Barker, *Equus*, by Peter Shaffer, *Galileo*, by Bertolt Brecht, *Franny and Zooey,* by J.D. Salinger, and selections from *Invisible Man*, by Ralph Ellison. Students will be required to write in-class essays, two analytical essays and one creative piece during the semester. They will also lead class and complete a final presentation at the end of the course.

*Summer work is required for this course.

AP English Literature: Writing Ourselves into the World

Course Number: 1350

Credit: 1/2

Instructor: Dr. Friedman

Semester(s): First

How do we define ourselves? How do others define us? The languages we speak, the cultures and communities from which we come, and the histories and homes we claim as our own all help to shape us and help us know who we are. In this course, we will think about the relationship of the self to language, to culture, and to history. We will talk about stories and storytelling, about how stories shape who we are, and about how transforming these stories into writing reshapes that sense of self. We will begin the course with Toni Morrison's *Song of Solomon*, which students will read over the summer. Other readings may include Sherman Alexie's *Flight*, Frederick Douglass' *Narrative of the Life of Frederick Douglass*, Walt Whitman's *Song of Myself*, and Anton Shammas' *Arabesques*.

*Summer work is required for this course.

Upper School English
Advanced Placement Courses
SECOND SEMESTER

AP Literature: Beyond the Binary

Course Number: 1296

Credit: 1/2

Instructor: Ms. Burnett

Semester(s): Second

From Catilyn Jenner's public transition to Jaden Smith modeling women's wear for Louis Vuitton, the news has been filled in recent years with stories that complicate our traditional assumption that "men are men" and "women are women," that those two categories are biologically fixed, separate, and immutable. In this class we will explore and complicate the relationship between biological sex and gender identity; we will also examine the extent to which social expectations shape how we think about and perform gender identity. We will look at literature and film that question what it means to be "male" or "female" and examine potential spaces in between. Readings will include Shakespeare's *As You Like It*, Puig's *Kiss of the Spiderwoman*, Hwang's *M. Butterfly*, and the poetry of Saeed Jones, as well a variety of shorter texts, theory, and events and artifacts from popular culture.

AP Literature: First-Person Narratives

Course Number: 1297

Credit: 1/2

Instructor: Mr. St. Jean

Semester(s): Second

J.D. Salinger's Holden Caulfield, a young man familiar to GA students, draws readers into his story with his engagingly casual tone, with a narrative voice that promises unmediated access to his thoughts and feelings. The careful reader soon realizes, however, that Holden's words can obscure as much as they reveal: the consummate hater of "phonies" deceives others and, more dangerously, deludes himself. In this course, students will get to know narrators as vivid and complex as Mr. Caulfield and examine how several cunning, empathetic fiction writers manipulate first-person narrative perspective to bring their stories to life. The reading list will include Henry James's eerie, psychologically complex ghost story *The Turn of the Screw* and Kazuo Ishiguro's *Never Let Me Go*, a suspenseful and moving work of speculative fiction. Students will also read short stories and poems, including works by Charlotte Perkins Gilman, Langston Hughes, and Sherman Alexie.

AP English Literature: Imaginary Worlds

Course Number: 1386

Credit: 1/2

Instructor: Dr. Torrey

Semester(s): Second

What is the best of all possible worlds? What is the worst? How could the world go horribly wrong? These are the questions that we will explore in this course. We will read texts that describe ideal worlds, that envision post-apocalyptic landscapes and situations, and that interrogate and critique the world around them. Along the way, we will go back in time to lament the loss of pasts that may (or may not) have been better; we will leap forward in time to speculate on what the future might hold, and we will examine how authors articulate anxieties and fantasies about the historical moments that they inhabit. The path to doing so will run through the imaginary worlds that these authors create. Readings will likely include the following: Thomas More, *Utopia*; Plato, *Republic* (excerpts); George Orwell, *1984*; P.D. James, *The Children of Men*; Cormac McCarthy, *The Road*.

Upper School History
Sequence of Courses

9th	10th	11th	12th
World History I (Origins of the Modern World)	**World History II (Modern Global Interactions)** **AP World**	**Modern America** **AP U.S.** **Electives***	**Electives*** **AP European**

Notes:

- **History is not required in 12th grade.**
- **Art History and Civil Liberties Electives are open to Juniors, and may be taken as either half- or full-year courses.**
- **Enrollment in History senior electives is limited to 16 students.**
- **Senior electives are semester-long courses, except for AP European History.**
- **Three Honors Electives will be offered each semester, and they require minimum grades in current history courses and teacher recommendations.**

Upper School History
Departmental Overview

The course of study in Upper School History starts off with two years of modern world history, followed by a year of American history, and culminates in senior electives on such focused and varied topics as African American History, Art History, Civil Liberties, Civil War, Economics, Philosophies of Justice, Military History, Medieval History, Nazi Germany, The World Since 9/11, and Women in American History. Advanced Placement courses are offered in World, U.S., and European history. Three years of history are required, but most students opt to take history in all four years.

The History Department seeks to have our students use the intellectual exercise of studying history to develop the academic skills needed to engage the world outside of the classroom with confidence and compassion and effect positive historical change locally, nationally, and globally. In our classes, students develop the skills necessary for advanced intellectual inquiry. Students read and examine closely a wide variety of textual, audiovisual, primary, and secondary sources; they uncover information in those sources, recognize and assess point of view, and take organized notes; students conduct research together and on their own; they construct focused arguments and write analytical essays; students develop critical and independent thought and the confidence to express themselves; and they discuss history articulately with their peers around Harkness tables. We believe that studying the past can help students better understand the present, and studying cultures from other times and places can help students better understand themselves. To make the study of history relevant and meaningful, students visit local historical sites and museums to conduct research firsthand. And authors, professors, and people who lived through the events being studied come to our classrooms to share their scholarship and their stories. Ultimately, the History Department encourages our students to apply their learning in their decisions and interactions with others in order to make this world a better place through cooperation, compassion, and understanding.

Upper School History
Course Placement Policy

All Advanced Placement and Honors courses in the History Department (10th grade—AP World History; 11th grade—AP U.S. History; 12th grade—AP European History, and honors electives) have prerequisites, but they vary depending on the course.

10th grade—AP World History:
In order for freshmen to be considered for admission into this course, the following requirements must be met:

- minimum grade of B+ in 9th grade history course
- interview with 9th grade history teacher
- 9th grade history teacher's recommendation
- excellent performance on the competitive qualifying exam

All of these factors are weighed together to determine appropriate placement for 10th grade history.

11th grade—AP U.S. History:
A sophomore in AP World History may expect to be asked to continue in AP U.S. History if he/she has performed acceptably; if that is not the case, he/she should expect to be asked to give the spot to someone else.

In order for sophomores in World History II to be considered for admission into this course, the following requirements must be met:

- minimum grade of B+ in 10th grade history course
- interview with 10th grade history teacher
- 10th grade history teacher's recommendation
- excellent performance on the competitive qualifying exam

All of these factors are weighed together to determine appropriate placement for 11th grade history.

Some Electives are open to Juniors, depending on space and House Head approval.

12th grade—AP European History:
In order for juniors to be considered for admission into this course, the following requirements must be met:

- either a minimum grade of B in AP U.S. History or a minimum grade of B+ in Modern America
- interview with 11th grade history teacher
- 11th grade history teacher's recommendation
- interview with History Department Head

All of these factors are weighed together to decide who is allowed in the limited spaces of the course.

12th grade—Honors Electives (course will be specified on the sign-up sheet)
In order for juniors to be considered for admission into these courses, the following requirements must be met:

- minimum grade of B in AP U.S. History or Modern America
- 11th grade history teacher's recommendation

These factors are weighed together to decide who is allowed to be placed into a lottery, which will then be used to fill the limited spaces of the course.

Upper School History
Course Offerings

World History I

Course Number: 0438

Credit: 1

The history program in the Upper School begins with a modern World History course that examines the rise of the Modern Western World between 1450 and 1900. The course begins with the Age of Exploration and ends with the Age of Imperialism, asking students to grapple with essential questions about how the modern world they now inhabit came into being. A significant amount of time will be devoted to developing the reading, writing, and thinking skills needed for all subsequent history courses. To that end, students will read primary and secondary sources, take notes on those sources, discuss their ideas about those sources in class, construct historical arguments, and write analytical essays as well as research papers.

World History II

Course Number: 0439

Credit: 1

Students in their sophomore year continue taking the history department's modern World History curriculum. This course examines how global interactions have changed during the twentieth century, and highlights the importance of analyzing varied global perspectives on events and issues. As we study these larger patterns, we will focus our attention on four regions of the world that dominate our global news today: East Asia, Europe, Africa, and the Middle East. In particular, we will examine how these regions developed differently in the twentieth century, confronted distinct challenges, and interacted in unique ways with the rest of the world. Research assignments will give students the opportunity to follow their own interests by researching current events as well as historical phenomena. By the conclusion of this course, students will use their new knowledge and skills to critically analyze, through writing and discussion, news coverage of current events, in addition to primary and secondary historical sources.

AP World History

Course Number: 0408

Credit: 1

Placement: Admission to this course is by permission only. The criteria for selection include at least a B+ average in 9th grade World History I, an interview with the current 9th grade history teacher, a recommendation from that teacher, and an essay test administered in the spring of freshman year.

Requirement: Students must take the AP World History exam in May.

Major themes of the AP World History curriculum include interaction among societies (trade, war, and diplomacy), continuity and change across time periods, the impact of technology and demography, social and gender structures, cultural and intellectual developments, and the evolution of states and political identities. Particular emphasis is devoted to the study of Africa, Asia, and Latin America. Students will work frequently with primary sources, complete a major research paper, and read a college-level text.
**** Note that summer work/reading is required for this course.***

Modern America

Course Number: 0450

Credit: 1

This course is a history department requirement taken by students in their junior year. It focuses on the emergence and development of Modern America, from the late nineteenth century to the recent past. Course materials and assignments will emphasize critical reading, analysis of primary sources, note-taking, and research skills. Students will practice constructing historical arguments through discussing the material and writing essays.

AP US History

Course Number: 0407

Credit: 1

Placement: Admission to this course is by permission only. The criteria for selection include at least a B+ average in 10th grade World History II, an interview with the current 10th grade history teacher, a recommendation from that teacher, and an essay test administered in the spring of sophomore year. Sophomores in AP World History, if they have performed acceptably, may expect to be asked to continue in AP U.S. History without taking the qualifying test; if that is not the case, they should expect to be asked to give the spot to someone else.

Requirement: Students in this course are required to take the AP US History examination in May.

This course is for students in their junior year who have demonstrated the necessary skills and interest in studying history at the college level. It is a general survey course, covering the history of the U.S. from the colonial era to the conclusion of the Reagan era. Considerable time and attention will be devoted to a wide variety of special readings as students are expected to command an advanced degree of detail in the demonstration of their understanding.
**** Note that summer work/reading is required for this course.***

Upper School History
Senior Year Electives: AP & Honors Courses

Note: Enrollment in History senior electives is limited to 16 students.

AP European History

Course Number: 0405

Credit: 1 (this is a year-long course)

Instructor: Mr. Moyer

Placement: Admission to this course is by permission only. The criteria for selection include at least a B+ average in 11th grade Modern America (or a B in AP US History), an interview with the AP Euro course instructor, the 11th grade teacher's recommendation, and an essay test administered in the spring of junior year.

Requirement: Students in this course are required to take the AP European History exam in May.

This course is designed for the senior who has a keen interest in the study of history. Building upon an ability to read and analyze both primary and secondary sources at the college level, students in this course will examine the rise of Modern Europe from the time of the Renaissance to the collapse of the Soviet Union. Students will learn the history of nine nations over the course of a four hundred year period as they closely examine how culture, economics, and politics intertwined to produce what came to be known as "western civilization."
**** Note that summer work/reading is required for this course.***

Economics (H)

Course Number: 0492 (First); 0486 (Second)

Credit: 1/2

Instructor: Mr. Ginter

Semester(s): First or Second

Placement: A grade of B or better in 11th grade Modern America or AP US History and the recommendation of the 11th grade teacher. Once these requirements are met, admission may be determined by lottery.

Taking a relatively non-quantitative, partly historical, and politically neutered approach, this brief introduction to the sort-of science of economics will endeavor to teach students the basic elements of economic thought, expose them to the workings of national and international commerce, reveal current hot-topics in economics, cover key interesting episodes in the development of capitalism in America and beyond, and formally present an overview of some key components of both micro and macro-economics. The overall objective of this elective is to show students how fascinating studying the climate of economics should be while giving them some tools to interpret their own economic experience more effectively. In a nutshell, money does make the world go 'round, and this elective will help you grasp how and why that's true. Students enrolled in this course will complete reading and writing assignments similar to those of a typical college-level seminar course.

Women in American History (H)

Course Number: 0488

Credit: 1/2

Instructor: Ms. Krouse

Semester(s): First

Placement: A grade of B or better in 11th grade Modern America or AP US History and the recommendation of the 11th grade teacher. Once these requirements are met, admission may be determined by lottery.

Traditional U.S. History courses often spend little time addressing the role of women in the development of this country. This honors elective, in contrast, explores the contributions of both the extraordinary and ordinary women of America. Using a variety of textual sources, films, and special projects, we will examine concepts from "Republican Motherhood" to the "feminine mystique" in order to understand better the issues facing both men and women in today's complicated world. Students should expect extensive reading assignments from some of the leading scholars in the field of women's history, daily discussions that will require engagement and participation of all students, and to write a number of papers throughout the semester. Students enrolled in this course will complete reading and writing assignments similar to those of a typical college-level seminar course.

Modern Art History (H)

Course Number: 0498

Credit: 1/2

Instructor: Dr. Rabuck

Semester(s): Second

Placement: Admission to this course is by permission only. The criteria for selection include an interview with the course instructor, and at least a B average in the student's current history class.

Note: **This elective is open to Seniors and Juniors**.

This course will examine art and architecture in the Western tradition from the Italian Renaissance through the present day. Emphasis will be placed on the role of the artist in society and on the tension between tradition and innovation. Is it the artist's job to challenge the status quo or to express society's values? Does the artist paint for the masses, an elite patron, or for themselves? Artists who "break the mold," from Èdouard Manet to Frank Lloyd Wright to Judy Chicago, will receive special attention. This course can be taken as a one-semester elective, or as a full-year course when paired with Pre-Modern Art History

Philosophies of Justice (H)

Course Number: 0499

Credit: 1/2

Instructor: Dr. Kimmel

Semester(s): Second

Placement: A grade of B or better in 11th grade Modern America or AP US History and the recommendation of the 11th grade teacher. Once these requirements are met, admission may be determined by lottery.

Students will explore the meaning of justice, considering how ideas about justice guide personal and political decision-making. To do so, students will learn how different philosophical traditions--from ancient Greeks to Enlightenment thinkers to modern political philosophers--have defined justice. Students will examine hard moral questions from personal and public life as a way to encourage deep reflection and engagement with our contemporary world. Central questions include: What is a good society? What foundations allow us to build a good society? What principles should guide individual interactions and what laws should govern our society? The course assumes that we will not arrive a single right answer for any of these questions, but that all of us will demonstrate understanding and respect for a variety of philosophical arguments and will learn how to think through and communicate our own views on such profound questions. Course readings will include Michael Sandel, Justice: What's the Right Thing to Do? as well as readings from various philosophical traditions and articles about contemporary issues.

Pre-Modern Art History (H)

Course Number: 0497

Credit: 1/2

Instructor: Dr. Rabuck

Semester(s): First

Placement: Admission to this course is by permission only. The criteria for selection include an interview with the course instructor, and at least a B average in the student's current history class.

Note: **This elective is open to Seniors and Juniors**.

This course will explore art, architecture, and archaeology to examine how important cultural ideas are expressed through visual sources. Students will explore how religion, authority and social systems shape the art and architecture of a civilization. The course will begin in the civilizations of the ancient Mediterranean and progress through the European Middle Ages. Students will also explore non-Western traditions and compare how different cultures have expressed similar ideas through the visual arts. This course can be taken as a one-semester elective, or as a full-year course when paired with Modern Art History.

Upper School History
Senior Year Electives: Semester Courses

Note: Enrollment in History senior electives is limited to 16 students.

America's Civil War

Course Number: 0451

Credit: 1/2

Instructor: Ms. Krouse

Semester(s): Second

In the introduction to Ken Burns' epic PBS series "The Civil War", historian Shelby Foote says "Any understanding of this nation has to be based on an understanding of the Civil War." Although you spent some time studying the era of the conflict between the North and South last year in U.S. History or Modern America, you probably didn't have the time to go into the causes of the conflict, the war itself, and its results in any sort of depth. This course will attempt to fill in the gaps and expand on things you may have rushed through last year. We will closely examine the military aspects of the war, as well as the major social, economic, and political events of the era. This era is rich with primary source material, drawing from personal letters, memoirs, diaries, speeches, and newspaper articles. We will spend time attempting to answer the historical question of "why are we still so drawn to this tale of suffering, catastrophe, valor and death?"

History of Baseball and Baseball Literature

Course Number: 1403

Credit: 1/2

Instructor: Mr. Ginter and Ms. Graffam

Semester(s): First Semester

This course will explore the history of baseball, intricacies of the game itself, baseball literature, as well as its significance in American history. From neighborhood game to organized sport to national pastime and finally to multibillion dollar business, baseball has been one of our nation's most popular and enduring institutions. Through a variety of sources, students will watch, hear and read many entertaining accounts of games played and home runs hit as we examine what the history of baseball tells us about industrialization, war and patriotism, conflicts between labor and capital, racial prejudice, and ourselves.

Civil Liberties and the United States Constitution

Course Number: 0410 (Fall); 0421 (Spring)

Credit: 1/2

Instructor: Mr. Fenerty

Semester(s): First or Second Semester (Students may sign-up for one or both semesters)

Note: **This elective is open to Seniors and Juniors**.

This elective course explores the individual civil liberties granted to each citizen of the United States as guaranteed by the United States Constitution. This is a discussion-based class requiring each student to research and study several landmark cases of the United States Supreme Court. Much of this research work is done by using on-line sites.

The Crusades

Course Number: 0481

Credit: 1/2

Instructor: Dr. Rabuck

Semester(s): First

Is conflict inevitable between Jews, Christians, and Muslims? Events in the twenty-first century suggest that it is. However, examination of historical sources reveals a time when members of each religion acknowledged their common ancestry, and, despite rivalries, co-existed peacefully. This course begins with a study of Judaism in the Roman Empire, then looks at the origins of Christianity and Islam. Then, students will learn about the rise of intolerance which resulted in Crusades, jihad, and pogroms.

From Africa to America

Course Number: 0494

Credit: 1/2

Instructor: Mr. Freedland

Semester(s): First

African American history is an integral part of the broader story of the United States of America, and in this course, students will seek to better understand its beginnings with the emergence of the Atlantic slave trade and continuing through and beyond the Civil Rights Movement. Students will explore the impact of this history on current American political, social, and economic realities by engaging with film and primary sources, and they will also take on the history themselves through a "Reacting to the Past" simulation.

Military History

Course Number: 0464

Credit: 1/2

Instructor: Dr. Rabuck

Semester(s): Second

This course will explore representations of war throughout history. Students will read primary source accounts from soldiers and compare them with fictionalized or film representations of the conflicts. Simulation exercises will help provide a different perspective on the conflicts. This year, students will explore the American War for Independence, the Anglo-Zulu War, and the Vietnam War as case studies.

The Nazi World

Course Number: 0496

Credit: 1/2

Instructor: Mr. Freedland

Semester(s): Second

During the 1930s and 40s, the Nazis sought to reshape their world and that of many others in their own vision. Students in this elective will use film, primary documents and other readings to explore the Third Reich, beginning with its rise from the rubble of World War I to its legacy lingering long after the Nazi party's collapse in 1945. Students will examine a range of topics, including the Nazis' radical racial and social ideologies to their revolutionary urban planning.

The World Since 9/11

Course Number: 1400

Credit: 1/2

Instructor: Dr. Kimmel

Semester(s): First

Students will explore how the terror attacks of 9/11 have transformed America and the world. Topics will include the impact of 9/11 on American politics, government, and foreign policy; changing ideas about privacy and civil liberties; the experience of Muslim Americans; and artistic responses to the changes since 9/11. In addition the course will consider the global impact of the 9/11 attacks, examining the wars in Afghanistan and Iraq, new instability in the Middle East, and the evolution of global terror since 9/11. Students will learn from museum exhibits (9/11 Museum), films, excerpts from books, and articles published in newspapers, magazines, and academic journals. Students will participate in regular discussions of the course material and, through independent research, will become experts in one or more strands of change since 9/11, sharing their research with the class using a variety of media. Student will end the semester with a deeper understanding of current events and the ability to reflect on and evaluate the way America and the world responded to 9/11.

Upper School Mathematics
Sequence of Courses

This is the typical sequence of courses for a student enrolled in the specified course in 9th grade. A process is in place for students to move between levels.

9th	10th	11th	12th	Elective
Algebra 1*				
Algebra B	**Geometry**	**Algebra 2**	**Algebra 3/Trig**	**Statistics****
Geometry	**Algebra 2**	**Algebra3/Trig**	**Statistics****	
Geometry	**Algebra 2 Accelerated**	**Precalculus**	**Calculus**	**Statistics (H)*** AP Statistics********
Geometry (H)	**Algebra 2 (H)**	**Precalculus (H)/ Differential Calculus**	**AP Calculus AB** ↗	**AP Statistics********
			↘ **AP Calculus AB/BC*****	**AP Statistics********

* This course is for students new to GA or students who would benefit from a full year of Algebra. They will be placed in the appropriate level of Geometry for 10th grade. Capable mathematics students may take both the appropriate level of Geometry and Algebra 2 during their sophomore year.

Students enrolled in an accelerated or honors level mathematics course may **not sign up for this course without departmental permission.

*** This course is open to seniors with a B or better in their current math course (Precalculus or a higher-level course). Students who do not meet the B grade requirement may be admitted with departmental permission.

****Students with a B+ or higher average in their current mathematics course and a strong work ethic may take AP Statistics concurrently as an elective course after successfully completing Algebra 2 Accelerated (or a higher-level course). Students who do not meet the B+ requirement may be admitted only with departmental permission.

***** AP Calculus AB/BC is for the mathematically gifted student who can proceed through the material at a very fast pace.

Notes:

1. Mathematics is required each year except grade 12 and will be required in grade 12 for students who have not passed Algebra 2.

2. Note that some colleges, notably Pennsylvania State University, require trigonometry for admission. Students who are not taking Precalculus should take Algebra 3/Trigonometry if they plan to apply to Penn State or other colleges requiring trigonometry for admission.

3. The Upper School mathematics program prepares students to take the SAT Mathematics Subject Test, either Level 1 (following Algebra 2) or Level 2 (following Precalculus or any other advanced course). Students enrolled in AP Calculus AB are required to take the Advanced Placement AB exam, while those enrolled in AP Calculus AB/BC are required to take the AP Calculus BC exam. Students enrolled in AP Statistics are required to take the AP Statistics exam.

Upper School Mathematics
Departmental Overview

The Upper School Mathematics curriculum supports the school's mission statement of preparing students to be independent thinkers who are simultaneously collaborative in action. We emphasize process, critical thinking, and using mathematics as a way of making sense of the world around you. The mathematics department believes in presenting each student with a mathematics program which meets as many of his/her needs as possible, both as an individual and as a member of the class. In an ideal situation each student would have a successful and positive mathematics experience, while simultaneously enjoying a challenging and thought-provoking mathematics curriculum.

At each level we offer two or three different sections of math in order to meet the learning styles, pace, and abilities of our students (i.e. Geometry and Geometry (H), or Algebra 2, Algebra 2 Accelerated, and Algebra 2 (H)). We offer the full range of math AP exams, including AP Statistics, AP Calculus AB and AP Calculus BC. Statistics, Statistics (H) and Calculus classes are available for seniors as well.

Our team of math teachers works closely together to ensure both the sequencing and consistency of our curriculum.

Students seeking additional mathematical challenges outside of the classroom may take part in the Pennsylvania Mathematics League Competitions (a series of 5 contests during the academic year), and the American Mathematics Competition, a series of national contests designed to identify, recognize and reward excellence in mathematics.

The Upper School math department is a charter member of Mu Alpha Theta, the National Mathematics Honor Society. The following criteria must be met in order for a student to be considered for membership in Mu Alpha Theta:

a. Candidates eligible for election to this chapter must be members of the senior class.
b. To be eligible for selection to membership in this chapter, the candidate must have been in attendance for a period of two years (prior to their senior year) at Germantown Academy Upper School.
c. Candidates eligible for selection to the chapter shall have a minimum overall cumulative GPA of 3.5 (out of 4.0). Candidates must also maintain an A- or above across all honors level mathematics courses throughout their academic career (with at least two honors courses before or during the junior year). Students enrolled in a non-honors mathematics course in their freshman year must have earned a minimum A- average; those enrolled in an honors mathematics course must have earned a minimum B+ average. A student must also enroll in an honors level or AP mathematics course in both their junior and senior years unless they have exhausted the Academy's honors/AP courses.
d. Students may not have earned any honor strikes within 12 months of induction.
e. Upon meeting the grade level, attendance, honor code, and GPA standard requirements, candidates shall then be considered.

Upper School Mathematics
Course Placement Policy

- **Middle School Students Entering 9th Grade**
  - Mathematics placement is handled by the middle school mathematics department. All concerns regarding placement should be addressed with the student's current mathematics teacher or the Middle School Math Department Head.

- **Students New to Germantown Academy Upper School**
  - The scope and sequence of mathematics courses differ from school to school. Students entering GA in the fall take a placement exam the previous April. Students who are not enrolled in Algebra 1 or a higher level mathematics course sit for the Pre-Algebra exam. Students who are currently enrolled in Algebra 1 or a higher level mathematics course sit for the Algebra 1 exam.
  - Students who wish to obtain placement for a course beyond Algebra 1 (Geometry, Algebra 2, etc.), must sit for an exam for that course.

- **Current GA Upper School Students**
  - The Upper and Middle School mathematics departments have placed students in their respective mathematics course based upon the student's work in his/her previous mathematics courses. Although we believe that students are placed in the level that is appropriate for them, we do recognize the fact that each student is a "work in progress" and for that reason offer a process for students to challenge their placement level for the subsequent academic year.
    - Students must have a **final** average of A or better for the class.
    - Students must earn a final exam grade of A or better.
    - Students must take a challenge exam for his/her current math course (at the higher level at the announced time). For example, a student currently in Algebra 2 Accelerated would take an Algebra 2 Honors challenge exam.
    - **Students currently in Geometry:** Students who, at the time of the challenge exam, have a grade of A or better may take an Algebra-based challenge exam, given during the second semester. Students who perform at an acceptable level on the challenge exam, must earn a minimum final grade of A for the course. They must also earn an A or above on the final exam for Geometry. Students on tract to earning a final grade of A or better in Geometry should sign up for the higher-level course on their course selection for in April. *If they do not perform satisfactorily on the final exam OR if they do not earn the minimum required grade of A in their course, they will automatically remain in the same level for next year.*
    - **Students currently in any other standard or accelerated course <u>other than</u> Geometry:** Students who meet the challenge requirements must take a challenge exam. They may, depending on the course, **have to study several topics independently during the summer to prepare for the higher-level course. These students will be tested on the summer testing date at the end of July** (see Ms. Kennedy for testing date information). **They may NOT sign up for the higher-level course until they pass the summer exam.**

Upper School Mathematics
Course Offerings

Algebra 1

Course Number: 0609

Credit: 1

Prerequisite(s): Pre-Algebra

A one-year course in Algebra 1, this course emphasizes the fundamental ideas and processes of introductory Algebra. The axiomatic basis of Algebra is blended with the development of skills and the ability to apply those algebraic skills to problem solving situations. Topics include, but are not limited to: the properties, graphs, transformations and applications of linear and quadratic functions, and operations with both polynomials and rational functions.

Algebra B

Course Number: 0645

Credit: 1

Prerequisite(s): MS Algebra A (B)

This course is the second part of a two-year sequence in Algebra 1, emphasizing the fundamental ideas and processes of introductory Algebra. The axiomatic basis of Algebra is blended with the development of skills and the ability to apply those algebraic skills to problem solving situations. Topics include, but are not limited to: operations with polynomial, rational, and radical expressions, systems of linear equations, and the properties, graphs, and applications of quadratic functions.

Geometry

Course Number: 0610

Credit: 1

Prerequisite(s): MS Algebra B (B) or Algebra 1

This course includes a thorough study of the main topics of plane geometry, with connections between algebra and geometry, emphasizing how they develop and how they coordinate with one another. The curriculum is problem-based rather than chapter oriented. Problem-solving techniques and new concepts and theorems will become apparent as students work through the problems and discuss them as an entire class. Learning in an exclusively problem-based environment will likely be a very different kind of mathematical experience for most students. This approach to learning geometry can help students make stronger connections with and between concepts as they become more comfortable taking risks while solving problems and being challenged in new and interesting ways.

Algebra 2

Course Number: 0613

Credit: 1

Prerequisite(s): MS Algebra B (B) or Algebra 1 and Geometry

This course includes all of the topics studied in Algebra 2 Accelerated, except that the pace is somewhat slower, and breadth and depth of study are not as great.

Algebra 2 Accelerated

Course Number: 0614

Credit: 1

Prerequisite(s): MS Algebra B or Algebra 1 and Geometry Accelerated

This course emphasizes the structure of algebra, basic algebraic procedures, and the concept of functions, all necessary to the study of advanced topics in mathematics. Topics include, but are not limited to: the properties, graphs, transformations and applications of linear and quadratic functions and their applications, systems of equations and inequalities, linear programming, linear regression, counting principles and probability, exponents, logarithms, and conic sections.

Algebra 3/Trigonometry

Course Number: 0640

Credit: 1

Prerequisite(s): Algebra 2

This course includes most of the topics studied in Precalculus, except that the pace is somewhat slower and the depth and breadth of study are not as great. An emphasis on applications of the functions studied is made throughout the course through special problems and projects.

Precalculus

Course Number: 0630

Credit: 1

Prerequisite(s): Algebra 2 Accelerated

After a brief review of properties and characteristics of functions, students will spend the first semester completing a study of trigonometry. During the second semester, the topics include: the properties, graphs, transformations and applications of polynomial, rational, exponential, and logarithmic functions; inequalities and sequences and series.

Calculus

Course Number: 0636

Credit: 1

Prerequisite(s): Precalculus

Following a study of the concept of a limit, this course develops the general techniques of calculus. The basic concepts of differential and integral calculus are studied in some detail. While this course includes most of the topics of AP Calculus AB, the pace is somewhat slower and the depth and breadth of study are not as great.

Statistics

Course Number: 0644

Credit: 1

Prerequisite(s): Algebra 3/Trigonometry. Only students enrolled in standard-level mathematics courses or Algebra 3/Trigonometry may sign up for this course. All others require department approval.

This is a non-calculus based introductory statistics course. The course will introduce the student to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. It is a hands-on course in which students will be actively involved in the collection and analysis of data.

Chess

Course Number: 0684

Credit: ½

Class Meetings: 3/7

This full-year course will provide a thorough introduction to the rules, strategies, and techniques involved in playing chess at the beginner level. After an introduction to the fundamentals of piece-movement, chess notation, and checkmate, the course will explore basic tactical patterns and the proper thought process for making a move. Additionally, the course will investigate the principles of sound development in the opening stage, the basics of planning through the middle-game, and basic endgame technique, including several fundamental checkmate patterns. The course will combine directed instruction, individual exploration, and regular play; games will be played both over the board and online. In order to further their understanding and to develop their performance, students will have the opportunity to play in rated tournaments throughout the course of the year. In addition to the required text, students enrolled in the course will need to purchase a one-year membership in the United States Chess Federation (approximate cost of $26.00).

Chess 2

Course Number: 0681

Credit: 1/2

Prerequisite: Chess 0684

Class Meetings: 3/7

This full-year course will provide a continuation of the topics addressed in Chess. Moving beyond the basics of beginner play to an investigation of more advanced tactics and techniques, instruction will encourage the student to develop the skills necessary for success at the intermediate level. In particular, the course will highlight a variety of more involved openings, the continued development of tactics employed in the middle-game, and a more sophisticated exploration of end-game techniques. As in Chess, this course will combine directed instruction, individual exploration, and regular play; games will be played both over the board and online. In order to facilitate the student's progress as a player, participants in the course will be required to play in at least one rated tournament throughout the course of the school year. In addition to the required text, students enrolled in the course will need to purchase a one-year membership in the United States Chess Federation (approximate cost of $26.00).

Upper School Mathematics
AP/Honors Course Offerings

Geometry (H)

Course Number: 0612

Credit: 1

Prerequisite(s): MS Honors Algebra B or successful placement test, grades, and recommendations

This course includes a thorough study of the main topics of plane and solid geometry. A higher degree of rigor is expected in this course than in the Geometry Accelerated section, and the course will proceed at a faster pace and in greater depth. This course will also be problem-based (see Geometry ACC).

Algebra 2 (H)

Course Number: 0615

Credit: 1

Prerequisite(s): Geometry (H) and MS Algebra B Honors

This course emphasizes the structure of algebra, basic algebraic procedures, and the concept of functions, all necessary for the study of advanced topics in mathematics. The topics covered are the same as those of the Algebra 2 Accelerated course, with additional topics including rational functions and sequences and series. The pace is faster than that of the Algebra 2 Accelerated and Algebra 2 sections, and the study is done in greater depth and with greater breadth.

Precalculus (H)/Differential Calculus

Course Number: 0646

Credit: 1

Prerequisite(s): Algebra 2 (H)

The first semester will include an in-depth study of trigonometry and possibly polar or parametric graphs and equations. After a full study of the concept of a limit, the concepts of differentiation along with their techniques, applications, and supportive theory will be studied in detail. Students should be able to interpret problems graphically, numerically, algebraically, and verbally. This course will prepare students for either AP Calculus AB or AP Calculus AB/BC.

Statistics (H)

Course Number: 0654

Credit: 1

Prerequisite(s): Pre-Calculus or a higher level course

Course Requirement(s): Open to seniors with a B or higher in their current math course (Pre-Calculus or a higher level course). Students who do not meet the B grade requirement may be admitted with departmental permission.

This course will be project-based with a community-learning component. Statistical research and analysis will be emphasized from the onset by utilizing computer-intensive methods that allow students to see the logic and scope of statistical inference from the very beginning of the course. Students will also complete a capstone project in which they will work with a non-profit to help solve a problem by formulating a research question and collecting and analyzing data to answer the question.

AP Calculus AB

Course Number: 0626

Credit: 1

Prerequisite(s): Precalculus (H)/Differential Calculus

After a review of the concept of a limit and the basics of differentiation, applications of differentiation will be explored in detail. This will be followed by a detailed study of integration, including applications, techniques and supportive theory. Students will be asked to interpret problems graphically, numerically, algebraically and verbally

AP Calculus AB/BC

Course Number: 0648

Credit: 1

Prerequisite(s): Precalculus (H)/Differential Calculus (minimum grade of A- and recommendation of teacher) or AP Calculus AB

AP Calculus AB/BC continues to build upon the limiting concept and the basics of differentiation first addressed in Pre-Calculus Honors/Differential Calculus. Beginning with a detailed study of integration, including applications, techniques and supportive theory, the course continues with an expanded study of differential equations, sequences and infinite series, and the calculus of vector, parametric and polar functions. Students will be expected to interpret problems graphically, numerically, algebraically, and verbally.

AP Statistics

Course Number: 0625

Credit: 1

Prerequisite(s): B+ in current math course (Algebra 2 Accelerated or a higher level course). Students who do not meet the B+ requirement may be admitted with departmental permission. Enrollment in this course is limited. Preference will be given first according to grade level (12th, 11th), then course (honors, accelerated), then grade in course. *Summer work/reading required.

This is a non-calculus based introductory statistics course. The course will introduce the student to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. It is a hands-on course in which students will be actively involved in the collection and analysis of data. Students will utilize statistical software for simulations, visualization of concepts and data exploration both in class and for homework assignments. The course covers the four broad conceptual themes of AP Statistics as outlined by the College Board:

I. Exploring Data: Describing patterns and departures from patterns
II. Sampling and Experimentation: Planning and Conducting a Study
III. Anticipating Patterns: Exploring random phenomena using experimentation and simulation
IV. Statistical Inference: Estimating population parameters

Upper School Modern Language
Sequence of Courses

This is the typical sequence of courses for a student enrolled in the specified course in 9th grade. Movement between levels is possible.

9th	10th	11th	12th
Spanish 1 Typically for students from outside or 9th or 10th graders who wish to begin a new language	Spanish 2, Spanish 2 Accelerated or Spanish 2 H	Spanish 3 or Spanish 3 Accelerated	Spanish 4 Accelerated
Spanish 2 For new students or students who took Spanish 1 in GA's Upper School (based on department recommendation)	Spanish 3 (based on department recommendation)	Spanish 4 (based on teacher recommendation)	
Spanish 2 Accelerated For students from GA's MS/US and new students	Spanish 3 Accelerated	Spanish 4 (based on teacher recommendation) or Spanish 4 Accelerated	Spanish 5 Accelerated
Spanish 2H For students from GA's MS or new students who test very well	Spanish 3 H	Spanish 4H	Spanish 5 Accelerated or AP Spanish Literature and Culture
French 1 Typically for new students or students who wish to begin a new language	French 2 Accelerated or French 2H	French 3 Accelerated or French 3H	French 4/5 Accelerated or French 4H
French 2 Accelerated For students from GA's MS/US and new students	French 3 Accelerated	French 4/5 Accelerated	French 4/5 Accelerated
French 2H For students from GA's MS or new students who test very well	French 3H	French 4H	French AP Language and Culture
Chinese 1	Chinese 2 Accelerated or Chinese 2H	Chinese 3 Accelerated or Chinese 3H	Chinese 4 Accelerated or Chinese 4H
Chinese 2 Accelerated	Chinese 3 Accelerated or Chinese 3 H	Chinese 4 Accelerated or Chinese 4H	Chinese 5 Accelerated
Chines 2H	Chinese 3H	Chinese 4H	Chinese 5H
		Advanced Beginning German**	Advanced Beginning German**

* There will be no second or intermediate level offered.

Notes on Sequence of Courses:

1. **Students must earn a minimum grade of C in regular and accelerated classes and a minimum grade of B in honors classes in order to proceed to the next level.**
2. Completion of a single language through Level 3 is required for graduation.

Upper School Modern Language
Departmental Overview

GA provides the opportunity for students to learn the skills necessary to become global citizens and productive leaders in the world community. In a world of diminishing distances and increasing contact with people from other cultures and languages, proficiency in a modern language is important in the development of leadership skills and appreciation for cultural differences. Through the study of another language, students not only enjoy the experience of being able to communicate with others, but also gain insights into cultural similarities and differences. We want our students to understand and share ideas in a language other than their own, because world languages are a bridge to understanding, and opportunity. Our program encourages the use of contemporary, authentic multimedia sources for instruction and real-life interaction with speakers of the target language.

Our students are currently able to study Chinese (Mandarin), French, and Spanish throughout their Middle and Upper School years at Germantown Academy. In addition, one level of German is offered in the Upper School. Our students engage in an enriching and challenging curriculum that allows time to establish a firm foundation in the target language, complemented by cultural units, film studies, gastronomical feasts, music, interdisciplinary units, holiday celebrations, and in-depth literary and authentic readings. We encourage our students to develop relationships with speakers of the target language. The Modern Language Department provides additional opportunities to immerse students in the language with exchange programs and intensive summer study programs. Students also participate in language-related activities, which include writing and publishing *The Voyager* (the modern language magazine), local and national language competitions and the Chinese, French and Spanish national honorary societies. Our modern language program has been honored with the Golden Globe Pennsylvania Exemplary Program Award.

Upper School Modern Language SAT Subject Test Guidelines

The following guidelines may be used:

1. Students in accelerated courses finishing their level three requirement and not planning to continue their studies should consult their teacher before considering an SAT Subject Test. Unless they are very strong students, it is not recommended that they take the test.
2. Students in Chinese 3H, French 3H or Spanish 3H should consult with their teacher about the advisability of taking an SAT Subject Test in June.
3. Level 4 H classes in Chinese, French and Spanish will include preparation for the SAT Subject Tests as an integral part of the course. These students are encouraged to take the test in June or November. See the note below about listening comprehension.
4. Juniors in advanced level courses who are planning to apply for early decision should consider their options in terms of SAT Subject Tests carefully.
5. In November the Chinese, French and Spanish SAT Subject Tests with Listening Comprehension are offered. This is the only opportunity students have to take this particular test. Juniors and seniors should consider this option seriously, since for some students, having one third of their score based on listening skills is a distinct advantage.

Upper School Modern Language
Course Placement Policy

In order to progress to the next level, students must earn a minimum final grade of C in regular and accelerated classes and B in honors classes.

Germantown Academy's Modern Language Enrollment Policy

1. GA asks students to express a preference for the language they would like to study;
2. Whenever possible, GA gives students their first choice of language selection;
3. GA is committed to teaching Spanish and Chinese in the Lower School and Spanish, Chinese, and French in the Middle and Upper Schools;
4. To fulfill this commitment, we sometimes need to manage enrollment by limiting sections and numbers of students in a given language in order to create a more even distribution of students and to create consistent, highly qualified and experienced staffing;
5. If students do not receive their first choice language, they will have an opportunity to switch before they enter 6th grade, 9th grade or 10th grade.

Honors Sections: In both French and Spanish, honors sections are offered from MS Level B through Level 5, providing there is sufficient enrollment. Honors sections are currently offered in Chinese levels 3 and 4. In the spring of each year, the department reviews a student's progress and makes recommendations for the following year. Students who have demonstrated outstanding ability in all areas of Modern Language study are placed in honors sections by department recommendation. The demands of these courses are more rigorous, with greater stress on in-depth language study, accuracy in speaking and writing, the reading of novels, plays and poetry, and literary interpretation. It is expected that students who enroll in the honors program will continue through the AP level. Students must be enrolled in advanced-level honors courses to be eligible for nomination to the Chinese (全中文美荣誉学会), French (Société Honoraire de Français) and Spanish (Sociedad Honoraria Hispánica) Honor Societies.

- **Department permission is required for all honors level courses**. Department recommendations are based on the following criteria:
  1) achievement in prior courses
  2) effort
  3) enthusiasm for the subject
  4) willingness and ability to go beyond the minimum requirement

- **In order to continue in the honors program, a student must have a minimum average of B.**

- **Students requesting to move from the accelerated to the honors program must:**
  1) have the recommendation of their current teacher and Department Chair;
  2) have a minimum of an A- average in their current course;
  3) submit a document signed by them and their parents acknowledging that summer work with a tutor is recommended.
  4) successfully complete a placement exam in the summer in order to be placed in the honors program.

- **Students who take Advanced Placement French or Spanish must take the AP language or literature examination as prescribed by the curriculum in May.**

Chinese 1

Course Number: 0578

Credit: 1

Chinese 1 is an introduction to the basics of Chinese vocabulary, grammar and culture, with special emphasis on communicative competence via the four skills: listening, speaking, reading and writing. Freshmen and sophomores will be given placement preference.

Chinese 2 Accelerated

Course Number: 0584

Credit: 1

Prerequisite(s): A minimum grade of C in Chinese 1 Accelerated or department recommendation.

Chinese 2 Accelerated is a continuation course that stresses aural/oral comprehension, correct pronunciation, the development of critical reading skills, and the ability to communicate in simple, idiomatic Chinese.

Chinese 2 (H)

Course Number: 0535

Credit: 1

Prerequisite(s): Placement by the Middle School Modern Language department, or departmental recommendation.

The basics of Chinese 2 are covered in this course. However, the honors course moves at a faster pace and is enriched with additional readings and supplemental materials. Various projects and presentations are woven into the curriculum as well.

Chinese 3 Accelerated

Course Number: 0585

Credit: 1

Prerequisite(s): A minimum grade of C in Chinese 2 Accelerated or department recommendation.

Chinese 3 Accelerated is a sequential course with the goal of further developing the four basic skills of language acquisition - listening, speaking, reading and writing. The course is enriched with cultural activities, projects and additional reading material.

Chinese 3 Honors

Course Number: 0540

Credit: 1

Prerequisite(s): Student must have earned a B+ or higher in Chinese 2 Accelerated and be recommended by his/her teacher.

Chinese 3 Honors is a new rigorous course whose goal is to further develop the four basic skills of language acquisition - listening, speaking, reading and writing. The course is enriched with cultural activities, projects and additional reading materials.

Chinese 4 Accelerated

Course Number: 0586

Credit: 1

Prerequisite(s): A minimum grade of C in Chinese 3 Accelerated or department recommendation.

Chinese 4 Accelerated is designed to enhance the language skills of interested, highly motivated students who have met the language requirement and wish to continue their study of Chinese at the advanced level in preparation to study Chinese at the college level.

Chinese 4 (H)

Course Number: 0536

Credit: 1

Prerequisite(s): A minimum of grade B in Chinese 3 Honors

The Chinese 4 H course is designed to enhance the language skills of talented, motivated students who have met the language requirement and wish to continue their study of Chinese at the advanced level. This course refines grammatical skills, augments vocabulary and introduces critical analysis of literature and film. Emphasis is placed on oral and written expression.

Chinese 5 Accelerated

Course Number: 0548

Credit: 1

Prerequisite(s): A minimum grade of C in Chinese 4 Accelerated.

Chinese 5 Accelerated is designed for students who have completed the Chinese 4 Accelerated course, and have fulfilled the language requirement, and would like to further develop their proficiency in interpretive, interpersonal, presentational skills, and use these skills in handling everyday situations in Chinese. The course will review, reinforce and expand on the grammar concepts and the four language skills, speaking, listening, reading and writing that were introduced in the previous course.

Chinese 5 (H)

Course Number: 0549

Credit: 1

Prerequisite(s): A minimum grade of B in Chinese 4 (H).

This course is a continuation of Chinese 4 Honors, and is for students who have already fulfilled the language requirement, and are motivated to work towards fluency in oral comprehension and in reading and character-writing skills of Mandarin Chinese. It prepares students for further study at the advanced level, and places more emphasis on reading and writing Chinese characters, expanding vocabulary, practicing more sophisticated conversation and short speeches, and understanding Chinese culture.

French 1

Course Number: 0503

Credit: 1

French 1 is an introduction to the basics of French vocabulary, grammar and Francophone culture, with special emphasis on communicative competence via the four skills: listening, speaking, reading and writing.

French 2 Accelerated

Course Number: 0504

Credit: 1

Prerequisite(s): Placement by the Middle School Modern Language department, a minimum grade of C in French 1 Accelerated or department recommendation.

French 2 Accelerated is a continuation course that stresses aural/oral comprehension, correct pronunciation, the development of critical reading skills and the ability to communicate in simple, idiomatic French.

French 2 (H)

Course Number: 0505

Credit: 1

Prerequisite(s): Placement by the Middle School Modern Language department, or departmental recommendation.

The basics of French 2 are covered in this course. However, the honors course moves at a faster pace and is enriched with additional readings and supplemental materials. Various projects and presentations are woven into the curriculum as well. Students will participate in the National French Contest in the spring.

French 3 Accelerated

Course Number: 0506

Credit: 1

Prerequisite(s): A minimum grade of C in French 2 Accelerated.

French 3 Accelerated is a sequential course whose goal is to further develop the four basic skills of language acquisition - listening, speaking, reading and writing. The course is enriched with cultural activities, projects and additional reading material.

French 3 (H)

Course Number: 0507

Credit: 1

Prerequisite(s): A minimum grade of B in French 2 (H) and departmental recommendation.

French 3 Honors continues the rigorous study of grammar and francophone culture along with the introduction of literary works, cultural projects and films/videos. Students will participate in the National French Contest in the spring.

French 4 Accelerated

Course Number: 0508

Credit: 1

Prerequisite(s): A minimum grade of C in French 3 Accelerated.

French 4 Accelerated is designed to enhance the language skills of interested, motivated students who have met the language requirement and wish to continue their study of French at the advanced level.

French 4 (H)

Course Number: 0509

Credit: 1

Prerequisite(s): A minimum grade of B in French 3 (H) and departmental recommendation.

The French 4 (H) course is designed to enhance the language skills of talented, motivated students who have met the language requirement and wish to continue their study of French at the advanced level. This course refines grammatical skills, augments vocabulary and introduces critical analysis of literature and film. Emphasis is placed on oral and written expression. SAT Subject Test preparation is an integral part of the curriculum. Students will participate in the National French Contest in the spring.

French 5 Accelerated

Course Number: 0513

Credit: 1

Prerequisite(s): A minimum grade of C in French 4 Accelerated.

French 5 Accelerated offers a thorough review of all major grammatical concepts. Culture is explored through literary readings, contemporary films and the study of current events. Composition work and daily discussions provide ample practice for oral and written communication.

AP French Language and Culture

Course Number: 0510

Credit: 1

Prerequisite(s): Completion of French 4 Honors

Requirement: Students must take the AP French Language and Culture exam in May.

Note: **This course will be offered pending enrollment.**

This course prepares students for the Advanced Placement French Language and Culture examination in May. It emphasizes communication by applying the interpersonal, interpretive, and presentational modes of communication in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. All activities are structured around six themes; Beauty and Aesthetics, Contemporary Life, Families and Communities, Global Challenges, Personal and Public Identities, and Science and Technology. This course engages students in an exploration of culture in both contemporary and historical contexts as well as developing students' awareness and appreciation of cultural products; practices; and perspectives. The AP French Language and Culture course strives to promote both fluency and accuracy in language use.

Spanish 1

Course Number: 0553

Credit: 1

Spanish 1 is an introduction to the basics of Spanish grammar, geography, and culture, with special emphasis on communicative competence via the four skills: listening, speaking, reading and writing.

Spanish 2

Course Number: 0554

Credit: 1

Prerequisite(s): A minimum grade of C in Spanish 1 Accelerated and departmental recommendation.

This course is similar in content to the Spanish 2 Accelerated curriculum. However, the pace is slower and the breadth and depth of study are not as great. The emphasis is on the acquisition of useful vocabulary and practical grammatical structures in order to facilitate functional communication.

Spanish 2 Accelerated

Course Number: 0590

Credit: 1

Prerequisite(s): Placement by the Middle School Modern Language department, a minimum grade of C in Spanish 1 Accelerated and departmental recommendation.

Spanish 2 Accelerated is a continuation course that stresses aural/oral comprehension, correct pronunciation, the development of critical reading skills and the ability to communicate in simple, idiomatic Spanish.

Spanish 2 (H)

Course Number: 0555

Credit: 1

Prerequisite(s): Placement by the Middle School Modern Language department, or departmental recommendation.

The basics of Spanish 2 are covered in this course. However, the honors course moves at a faster pace and is enriched with additional readings and supplemental materials. Various projects and presentations are woven into the curriculum as well. Students will participate in the National Spanish Contest in the spring.

Spanish 3

Course Number: 0556

Credit: 1

Prerequisite(s): A minimum grade of C in Spanish 2 and departmental recommendation.

Note: **This is a terminal course. Students may not continue on to Spanish 4 Accelerated.**

This course is similar in content to the Spanish 3 Accelerated curriculum. However, the pace is slower and the breadth and depth of study are not as great. The emphasis is on the acquisition of useful vocabulary and practical grammatical structures in order to facilitate functional communication. Successful completion of this course fulfills our language requirement.

Spanish 3 Accelerated

Course Number: 0591

Credit: 1

Prerequisite(s): A minimum grade of C in Spanish 2 Accelerated.

Spanish 3 Accelerated is a sequential course with the goal of further developing the four basic skills of language acquisition: listening, speaking, reading and writing. The course is enriched with cultural activities, projects and additional reading material.

Spanish 3 (H)

Course Number: 0557

Credit: 1

Prerequisite(s): A minimum grade of B in Spanish 2 (H) and/or departmental recommendation.

Spanish 3 Honors continues the rigorous study of grammar and the culture of Spanish-speaking countries along with the introduction of literary works, cultural projects and films/videos. Students will participate in the National Spanish Contest in the spring.

Spanish 4

Course Number: 0533

Credit: 1

Prerequisite(s): Spanish 3 Acc or Regular

This course will provide the opportunity for students who have completed Spanish 3 or Spanish 3 Accelerated and who have been recommended by their teacher to continue their study of Spanish. The course, which minimally emphasizes grammar, but mostly emphasizes oral communication, will be divided into two semesters. The first semester will focus on contemporary Hispanic cinema and related literature from the 1980's until present day. This will offer students the opportunity to explore how cinema can be a source of learning more about Hispanic history, politics, culture, and society. The second semester will continue with the study of selected readings, films, games, current events, presentations, and other cultural activities. Participation in Spanish will be required.

Spanish 4 Accelerated

Course Number: 0558

Credit: 1

Prerequisite(s): A minimum grade of C in Spanish 3 Accelerated.

Spanish 4 Accelerated is designed to enhance the language skills of interested, motivated students who have met the language requirement and wish to continue their study of Spanish at the advanced level.

Spanish 4 (H)

Course Number: 0559

Credit: 1

Prerequisite(s): A minimum grade of B in Spanish 3 (H) and departmental recommendation.

The Spanish 4 (H) course is designed to enhance the language skills of talented, motivated students who have met the language requirement and wish to continue their study of Spanish at an advanced level. This course refines grammatical skills, augments vocabulary and introduces critical analysis of authentic literature. Emphasis is placed on oral and written expression. In addition, students will prepare for the SAT Subject Test. Students will participate in the National Spanish Contest in the spring.

Spanish 5 Accelerated

Course Number: 0563

Credit: 1

Prerequisite(s): A minimum grade of C in Spanish 4 Accelerated.

Spanish 5 Accelerated offers a thorough review of all major grammatical concepts. Culture is explored through literary readings, contemporary films and the study of current events. Composition work and daily discussions provide ample practice for oral and written communication.

AP Spanish Literature and Culture

Course Number: 0566

Credit: 1

Prerequisite: A minimum grade of B in Spanish 4 (H), summer work, and departmental approval.

Requirement: Students must take AP Literature and Culture Exam in May.

Note: This course will be offered pending enrollment.

This course prepares the students for the Advanced Placement Spanish Literature and Culture Examination. It is equivalent to a college level survey course of Peninsular Spanish, Latin American and U.S. Hispanic literature. It challenges the student to analyze works written by Spanish speaking authors while taking an historical and cultural approach to various genres of literature dating from the twelfth century to modern day. This course aims to provide students with ongoing and varied opportunities to further develop their proficiencies across the full range of language skills (interpersonal, interpretive and presentational) and the five goal areas (communication, cultures, connections, comparisons and communities). Emphasis is placed on the reading and analysis of novels, plays, short stories and poems representing significant literary movements such as The Golden Age, Realism, Romanticism and Modernism, while seeking to encourage reflection on diverse voices and cultures within the Spanish-speaking world. Students learn to read with critical, historical and literary sensitivity.

**** Note that summer work/reading is required for this course.***

Advanced Beginning German

Course Number: 0577

Credit: 1

Notes: **This is a one-year course. There will be no second or intermediate level offered. This course does not fulfill the language requirement. Students who have already completed the language requirement or who want to add a second language to their schedule may enroll. The course will be offered pending enrollment. Must be a junior or senior to enroll.**

Advanced Beginning German is an accelerated beginning course for students who have proven successful in the study of another foreign language. The course is designed to give students a solid background in the four skills: speaking, listening, reading and writing, as well as a cultural awareness about areas of the world where German is spoken.

Upper School Performing Arts
Sequence of Courses

This is the typical sequence of courses for a student enrolled in the specified artistic area in 9th grade. Movement between levels is possible at any point.

MUSIC	THEATRE	TECHNICAL THEATRE
Singing Patriots (9) **Singing Patriots Select**(9)**	**Foundations of Acting***(9)**	**Foundations of Technical Theatre***(9)**
	Improvisation*(9)	**Advanced Technical Theatre Production***
Academy String Orchestra (9) **Honors Strings**(9)**	**Music Theatre Ensemble***	**Theatrical Design**
Academy Symphonic Band (9) **Honors Band**(9)**	**Advanced Acting***	
	Audition and Performance(12)**	
Guitar I*(9)** **Advanced Guitar***(9)**		
Advanced Music Theory (H)**		

* Course available for honors or non-honors credit.

** Course available only for honors credit.

*** Course available only for non-honors credit.

(9) Course available to 9th grade (as well as 10th, 11th, and 12th); unless otherwise indicated, all other courses are open to 10th, 11th, and 12th grades.

(12) Course available only to 12th grade.

Notes:

1. The Honors sequence begins in 9th grade for Music and 10th grade for Theatre. Admission requirements by discipline are listed in the *Course Placement Policy*.

2. One Arts Credit (performing or visual) must be completed by the end of 10th grade and is required for graduation.

Upper School Performing Arts
Departmental Overview

Germantown Academy offers students a wide range of opportunities in the Performing Arts. Students interested in choral music participate in the Singing Patriots, while students with a pronounced interest and talent in voice may audition to join Honors-level choir, Singing Patriots Select. String instrument performance is offered through membership in the Academy String Orchestra as well as the advanced-level Honors Strings. The Academy Symphonic Band, including Honors Band, offers students an opportunity to play from the modern wind ensemble and band repertoire. This group occasionally combines with the String Orchestra for larger community events. The GA Jazz Ensemble, consisting of interested students from all performing ensembles, is an extracurricular group that meets before school, allowing full expansion of musical offerings while providing an authentic jazz experience to as many students as possible. GA music ensembles perform regularly on campus in addition to frequent performances in local Philadelphia venues. The choral program undertakes performance tours regularly, including tours to east coast cities and Europe. Additional extracurricular opportunities include the GA/PC Day Pump Up the Jam Band, A Cappella Club, and spring Pop Music-Themed Assembly.

The theatre component of GA Performing Arts includes annual courses in acting, improvisation, musical theatre, theatre production, and technical theatre. All courses in sophomore through senior years may be taken at the regular or honors-level. GA's Audition and Performance courses provide students with a serious interest in pursuing theatre at the college-level, a chance to prepare thoroughly for this rigorous process. Naturally, students taking theatre classes perform or participate in one or more of our Belfry Club productions, which includes musicals, comedies, and dramas offered as extracurricular activities. The Belfry Club was cited as the best high school theatre program in the Philadelphia area by *Philadelphia Magazine.* Over the past nine years, Belfry has participated in the Greater Philadelphia Cappies, earning 72 nominations and 21 awards for excellence in high school theatre, including a record three for best overall musical (Thoroughly Modern Millie 2009, Bat Boy 2014, Little Shop of Horrors 2015).

Upper School Performing Arts
Course Placement Policy

The performing arts department welcomes students with varying ranges of ability levels in its courses.

Students may apply to be part of the Honors program in Performing Arts. Below are the criteria for admission by discipline where honors designation is possible:

MUSIC (*Singing Patriots Select; Advanced Music Theory; Honors Band-brass, woodwinds, percussion, Honors Strings, & Piano*):

1. Grades in subject (A- or better)
2. Commitment to regular practice outside of school hours
3. Growth mindset for subject
4. Successful audition: includes singing/playing, scales, repertoire excerpt –see respective ensemble director for audition packet or email department chair, Mr. Masters: Charles.Masters@germantownacademy.org
5. Regular private lessons
6. Commitment to program for entire Upper School career
7. Goals-based approach towards musicianship and technique, with an emphasis on leadership
8. Participate in all scheduled performances.

THEATRE (*Improvisation; Music Theatre; Advanced Acting; Audition and Performance; Theatre Production*):

1. Grades in subject (A- or better)
2. Consistent Effort
3. Enthusiasm for subject
4. Successful audition: see K. Richardson for monologue requirements: K.Richardson@germantownacademy.org
5. Commitment to program for three years
6. Honors Performance Project.

TECHNICAL THEATRE (*Advanced Technical Theatre Production*):

1. Grades in subject (A- or better)
2. Consistent Effort
3. Growth mindset for subject
4. Commitment to program and study during both semesters for three years
5. Participation in at least one term of stage crew per year (fall, winter, or spring)
6. Referral of Technical Theatre Director: set up meeting- Paul Moffitt@germantownacademy.org

Students who do not maintain a high level of achievement and commitment to their programs in the Performing Arts will first be placed on probation and then removed from the honors program should there be insufficient improvement. This includes all aspects of membership, including performance, work ethic, and rehearsal/audition/performance attendance.

Upper School Performing Arts
Music Course Offerings

Singing Patriots

Course Number: 0736

Credit: 1/2

Class Sessions: 3/7

Requirements: **Participation in all Singing Patriots activities, including trips/off-campus performances: Performance scholarships are available for all trips**

Specific concert attire must be purchased for performance tour years (approx. $100)

European Tour 2019: The Singing Patriots will embark on a performance tour to Eastern Europe and Krakow, Poland. We will also collaborate with our sister school, the First High School of Krakow, for several combined concerts in the stunning medieval city of Krakow and surrounding area. The performance tour will be from **Saturday, March 15, 2019 to Sunday, March 24, 2019. Participation in the tour is mandatory for all Singing Patriots members.** The estimated cost per student is approximately $3,900 and includes everything except lunch. Scholarships are available. Also, each student must obtain a current US Passport.

Note: Singing Patriots meets three times per rotation during the same block, but different days from other musical performance ensembles. This creates an opportunity for students to participate in more than one music performance ensemble, specifically Academy String Orchestra or Academy Symphonic Band.

Singing Patriots is open to all students with an interest in singing a variety of choral music ranging from the Renaissance to Contemporary. This course focuses on building musicianship, vocal technique, music reading skills, and ensemble singing skills. Students will learn how to think critically about their performances while working synergistically with peers to build an aesthetically sensitive and unified sound. Students will be guided in the philosophy of Energy, Placement, and Beauty, infusing exuberance into all vocal production. Energy is a must for consummate participation.

Singing Patriots Select (H)

Course Number: 0737

Credit: 1

Class Sessions: 6/7

Requirements: **Participation in all Singing Patriots and Select activities, including off campus performances and trips**
Students returning to the program after their first year are not required to re-audition.
Private voice lessons

Placement: Audition and other criteria listed above
Auditions are open to students entering the 9th grade
Interested students will schedule a placement audition with Mr. Masters during the previous academic year

This is an intimate auditioned honor choir for students who are also members of the Singing Patriots. Singing Patriots Select functions as an independent vocal ensemble with extreme professionalism and flexibility in style and interpretation. Additionally, Singing Patriots Select provides leadership to the larger Singing Patriots Ensemble. Select performs in concerts, assemblies, on tours, and special events throughout the school year. Repertoire includes vocal a cappella, jazz, improvisation/scat, pop, classical, vocal percussion, and other modern compositions.

Honors Strings (H)

Course Number: 1756

Credit: 1

Class Sessions: 5/7

Prerequisite: All interested Instrumental-String students will schedule an audition placement with Mr. Horner

Requirements: Students must be members of the Academy String Orchestra.
Students must take weekly private lessons.
Students in Honors Strings must participate in a significant out of school experience. This may include participation in a local youth orchestra, the participation in the Montgomery County Honors String Orchestra, or auditioning for PMEA District 11 Orchestra.

Student work in Honors Strings will focus in part on chamber-specific repertoire such as quartets and trios. Students will gain experience in making artistic decisions and in collaborating with their fellow musicians to develop authentic, artistic, and convincing musical performances. Special emphasis is placed on preparing for and presenting performance opportunities on campus, as well as at a variety of venues off-campus, including service performances. Studentsenrolled in Honors Strings and String Orchestra will receive one full Honors credit.

String Orchestra

Course Number: 0716

Credit: 1/2

Class Sessions: 3/7

Placement: All interested Instrumental-String students will schedule a placement meeting with Mr. Horner

Note: String Orchestra meets three times per rotation during the same block, but different days from Singing Patriots. This creates an opportunity for students to participate in Singing Patriots in addition to being members of String Orchestra.

This course develops musical skills such as intonation, rhythmic accuracy, articulation, and expressive playing through the rehearsal and performance of music from the standard string orchestra repertoire. Special emphasis is placed on developing students' abilities to work cooperatively with each other and with instructors toward common artistic goals. The String Orchestra performs in concerts, assemblies, and special events both at GA and beyond the school community. Private lessons and daily practice outside of rehearsals are strongly recommended.

Honors Band (H)

Course Number: 1732 (H)/1733 (non-honors: see below *)

Credit: 1

Class Sessions: 5/7

Prerequisite: Students must audition for initial admittance. Students returning to the program after their first year are not required to re-audition.

Requirements: Students must be members of Academy Symphonic Band.
Students must take weekly private lessons.
Students earning honors credit for Band must audition for PMEA District 11 Band.
* A limited number of highly-qualified pianists may be admitted to the class for non-Honors credit. Interested piano students will schedule a placement audition with Mr. Masters.

Student work in Honors Band will focus on 1) reading modern and traditional band repertoire, 2) enhancing instrumental technique through a goals-based approach to instrument-specific repertoire and 3) increasing personal confidence via the auditioning process. Students will gain experience in making artistic decisions and in collaborating with their fellow musicians to develop authentic, artistic, and convincing musical performances. Students will also work on developing the skills and mindset necessary for performing successfully in auditions, including the PMEA District Band and Orchestra audition on the second Saturday of December.

Students enrolled in Honors Band and Symphonic Band will receive one full Honors credit.

Symphonic Band

Course Number: 0710

Credit: 1/2

Class Sessions: 3/7

Placement: All interested Instrumental-Band students will schedule a placement meeting with Mr. Correnti.

Note: Academy Symphonic Band meets three times per rotation during the same block, but different days from Singing Patriots. This creates an opportunity for students to participate in Singing Patriots in addition to being members of Academy Symphonic Band.

This course develops musical skills such as exemplary tone, intonation, rhythmic accuracy, articulation, and expressive playing through rehearsal and performance of music from the standard concert band repertoire. Special emphasis is placed on developing students' abilities to work cooperatively with each other and with instructors toward common artistic goals. The Symphonic Band performs in concerts, assemblies, and special events both at GA and beyond the school community. Private lessons and daily practices outside of rehearsals are strongly recommended.

Beginning Guitar

Course Number: 1761

Credit: 1/2

Class Sessions: 3/7

Enrollment: Limited to 12 students

Requirements: Students must have their own guitar at home for practicing.

This course is designed to build a foundation of guitar playing skills for students with little or no guitar experience. Students will gain experience in skills such as melodic playing, open position chords, and finger picking. Students will study music from a variety of traditions. Consistent practice, effort, collaboration, energy and willingness to experience various styles of guitar required.

Advanced Guitar

Course Number: 1762

Credit: 1/2

Class Sessions: 3/7

Enrollment: Limited to 12 students

Requirements: Students must have their own guitar at home for practicing.

This course is designed for students who have achieved a level of proficiency on the guitar that includes the ability to play common open position chords and melodic material in first and second positions. Students will build on these skills to advance their technique by learning power chords, barre chords, and melodic material in higher positions. Special emphasis is placed on developing a mastery of the guitar that will allow students to unlock their creative potential. Students will study music from a variety of traditions. Students may enroll in Advanced Guitar for more than one year.

Advanced Music Theory (H)

Course Number: 1736

Credit: 1

Class Sessions: 6/7

Advanced Music Theory is a yearlong course that develops core structural understanding, pursuing advanced levels of music theory and composition. Materials to be covered will include, but may not be limited to: scales, modes, intervals, keys, tonality, melodic construction, harmonic construction, style periods, score analyses, advanced chord spelling, advanced part writing, advanced melodic and harmonic structure, and advanced aural training. The course is designed in a sequential, cyclic order to emphasize the processes that make a musical work coherent, meaningful, and expressive through intensive analysis, repeated hearings, and concentrated work on ear skills and musical memory. The class format will include composition, aural dictation, and sight singing.

Note: Music Theory is best experienced in the context of active music performance and practice. Therefore, participation in vocal and/or instrumental music ensembles throughout Upper School years is strongly recommended for students to gain a concrete correlation to music theory ideals. Music Theory is highly recommended to those students who are interested in understanding the essence of music principles and foundation, as well as students who are interested in song-writing, composition, and overall music appreciation. Additionally, Music Theory is strongly recommended for students who anticipate pursuing music at the collegiate level.

Upper School Performing Arts
Theatre Offerings

Fundamentals of Acting

Course Number: 0791

Credit: 1/2

Class Meetings: 3/7

Enrollment: Limited to 12 students per section

The purpose of this course is to develop the foundational skills of the actor's craft. This includes connecting with fellow actors on stage, developing imaginative power and reading a script for drama. In class exercises will hone students' communicative skills, empathy, imagination, and their ability to bring their own unique selves to the stage. The second semester culminates in the presentation of short scenes.

Advanced Acting (H)

Course Number: 1758

Credit: 1

Class Meetings: 6/7

Prerequisite: **Fundamentals of Acting**

Placement: For enrollment criteria in honors courses, see above

Requirement (H): Advanced Acting Honors students are also expected to develop a performance piece for the Belfry Academic Theatre Showcase (B.A.T.S.) in the Spring. Students are encouraged to use this opportunity to explore additional theatrical interests, either by themselves of with other students.

Enrollment: Limited to 12 students

This class continues the Meisner progression begun in Fundamentals of Acting. Work includes advanced acting exercises, journaling, and scene study. Students will explore character work, emotional preparation, and personalizing an acting text. The cumulative effect of in class exercises and new dramatic literature assigned each semester mean that this class can be taken multiple times for maximum artistic growth. Students will have multiple presentations throughout the year.

Audition and Performance (H)

Course Number: 0781

Credit: 1/2

Class Meetings: 6/7

Semester(s): First

Prerequisites: Advanced Acting and permission of instructor

Enrollment: Limited to seniors

Note: Students considering application to college theatre programs should meet with the instructor and their parents in the spring of their junior year.
and their parents in the spring of their junior year.

Designed for the student who intends to pursue a B.F.A in Acting or Music Theatre, this course is helps students prepare an audition for application to college theatrical programs. As appropriate to the student's individual situation, work may include: constructing a resume, selecting and preparing an audition package, and developing audition skills.

Improvisation

Course Number: 0776 (Improvisation (H): 0777)

Credit: 1/2

Class Meetings: 3/7 (for the whole year)

Prerequisite: none

Requirement (H): Improvisation Honors students are also expected to develop a performance piece for the Belfry Academic Theatre Showcase (B.A.T.S.) in the Spring. Students are encouraged to use this opportunity to explore additional theatrical interests, either by themselves of with other students.

Enrollment: Limited to 12 students.

Improvisation is acting without a script. It is both its own art form and a useful tool for more traditional theatre work. This class forms an improv troupe to develop basic improv and ensemble skills, as well as learning improv rules, games and forms. This troupe meets typically has at least four performances over the course of the school year.

Music Theatre

Course Number: 0792 (Music Theatre (H): 1716)

Credit: 1/2

Class Meetings: 3/7

Prerequisite: **Fundamentals of Acting** or permission of the instructor

Requirement (H): Advanced Acting Honors students are also expected to develop a performance piece for the Belfry Academic Theatre Showcase (B.A.T.S.) in the Spring. Students are encouraged to use this opportunity to explore additional theatrical interests, either by themselves of with other students.

Enrollment: Limited to 6 students per section

Music Theatre is an American creation and remains our most popular theatrical form. As such, it commands much of our country's theatrical resources in terms of time, talent, and money. Using a master class format, this course provides practical work in the art of acting through song. Students are encouraged to take private voice lessons and are responsible for finding their own material. Class work will culminate in a cabaret performance. Additional performance opportunities are generally available throughout the year.

Upper School Performing Arts
Technical Theatre Course Offerings

Foundations of Technical Theatre

Course Number: 0795

Credit: 1

Class Meetings: 6/7

Enrollment: Limited to 6 students.

This course is a hands-on study of Carpentry, Lighting, Sound, Painting, and Sound for the theatre. The course is split up between projects were we learn new skills and practical application as we work on the current productions in the Arts Center. A love of working with your hands is a necessity for this course.

Advanced Technical Theatre Production (H)

Course Number: 1759

Credit: 1

Class Meetings: 6/7

Placement: For enrollment criteria in honors level, see above criteria.

Prerequisite: Foundations of Technical Theatre

Enrollment: Limited to 10 students.

Students will continue their work with technical theatre by being given leadership roles for the current productions. Advanced concepts and projects will also be covered in class. There will be a steady progression of responsibilities as the students become more knowledgeable. Students enrolling in this class must have shown initiative, the ability to self-start, collaboration skills, empathy, and a thirst for knowledge in Foundations of Technical Theatre.

Theatrical Design

Course Number: 1763

Credit: 1/2

Class Meetings: 3/7

Prerequisite: Foundations of Technical Theatre, Two Years of Advanced Technical Theatre

Enrollment: Limited to 3 students.

This class is taken in conjunction with Advanced Technical Theatre. In this yearlong class advanced students will focus on how to design in a specific area of interest. Students will already have taken one year of Foundations and two years of Advanced Technical theatre. The students will learn how to draft using Auto-cad, how to design a show, how to implement that design, and how to lead other students. The areas of focus available to the students will be Lighting, Set, or Sound Design. There is also the option of taking this class with an emphasis in Technical Direction. The students will design all the shows in the Arts Center and Honickman for their given area. This is meant to be a class for Seniors. Approval for taking this class must be gotten from Paul Moffitt before enrolling.

Upper School Physical Education
Sequence of Courses

	9th	10th	11th
Semester 1	**PE**	**PE** **or** **Lessons in Wellness**	**PE**
Semester 2	**PE**	**PE** **or** **Lessons in Wellness**	**PE**

Upper School Physical Education
Course Offerings

Physical Education

Course Number: 0820 (9th grade Fall); 0821 (9th grade Spring)
0822 (10th grade Fall); 0823 (10th grade Spring)
0806 (11th grade Fall); 0807 (11th grade Spring)

Credit: 1/2

Class Meetings: 3/7

Requirement: PE is required for 5 semesters in grades 9-11.
For all students new to Germantown Academy a water safety test will be given in the fall.

Students are encouraged to explore movement, develop coordination, and refine motor skills throughout the program in a safe and caring environment that encourages self-awareness, creative responses, cooperation and support. Students gain an understanding of themselves and their culture through exposure to a variety of environments including: *individual, dual and team activities, sports skill instruction, lab experiences, recreational activities, and individual and cooperative decision making challenges*. Students are encouraged to pursue their personal physical fitness goals by leading an active lifestyle, and by using the concepts and skills learned while actively participating in the physical education program.

Sample Units in the Upper School:

9th & 10th grades: Disc Golf – Field Hockey – Pickle Ball – Personal Fitness –Team Handball – Basketball – Lacrosse - Triathlon – Yoga – Self Defense – Softball – Speedball – Speedminton – Rugby – Floor Hockey – Track and Field

11th grade: Tennis - Aerobic Activities - In-Line Skating - Badminton - Volleyball - Archery- Golf

Lessons in Wellness

Course Number: 0816 (1st semester)/805 (2nd semester)

Credit: 1/2

Class Meetings: 4/7

Requirement: Lessons in Wellness is required for 1 semester in 10th grade.

In this Health course, students are informed about and discuss these topics: addictives, physical fitness, nutrition, stress, psycho-sexual development, human reproduction, dating and relationships, drugs as medicine, drugs of abuse, alcohol use and abuse, and tobacco. Emphasis is placed on applying information to daily life.

Lifesaving

Course Number: 0812

Credit: 1/4

Class Meetings: 3/7

Note: Enrollment is limited to 10 students.

This course is designed to prepare students to become a Red Cross certified lifeguard. In addition, students passing this course will be certified in First Aid, CPR and AED. Students taking this course in 9th, 10th and 11th grade will have the option of using it as their Physical Education class during the 4th quarter of the year. Students in 12th grade may take this as an elective class.

Upper School Psychology
Departmental Overview & Course Offerings

The Upper School Psychology Department offers both experiential and academic courses including Freshman Seminar taught by the US Counseling team, New Community Project, and AP Psychology.

Freshman Seminar

All Freshmen are automatically enrolled in Freshman Seminar. It is a semester-long ungraded course that students are required to take if they are in the 9th grade at GA.

Course Number: 0008

Class Meetings: 2/7

Freshman Seminar serves as the entree into the Upper School's health and wellness curriculum with this discussion-based, non-graded tutorial to address the developmental needs of 9th graders. It is designed to facilitate the transition from Middle to Upper School with a focus on the cognitive, social, and emotional needs of freshmen. Topics covered in Freshman Seminar include GA rules and procedures (i.e. the GA honor code), decision making, exam preparation and study skills, stress management strategies, prejudice and stereotyping, sexuality, resiliency skill building, emotional intelligence, ethical development, and mental health.

New Community Project

Course Number: 0979

Credit: 1/2

Class Meetings: 3/7 for the whole year

Note: Open only to juniors and seniors

Stories do more than stimulate and entertain; they provide the framework for how we understand ourselves and the spaces we inhabit. This has especially been true as we have formally and informally constructed our narratives all across the internet through the vehicle of social media. One can deduce a great deal about someone by viewing their Twitter feed and/or Facebook timeline. How can we use these varied narratives to investigate what it means to be human? How can we then use these discoveries to deconstruct and impact our spaces here at GA and within our neighborhoods? The New Community Project is a project-based, team-taught course that employs the concepts of design thinking (empathic problem solving), and the disciplines of History, English, and Arts to explore questions related to community in Philadelphia and the surrounding suburbs. At the end of the course, students will use their knowledge of narrative structure and empathetic problem solving to plan, construct, and present a solution to one of Philadelphia's most pressing challenges. In this way, we hope to build "new communities" through collaboration and conversation.

Positive Psychology

Course Number: 0992

Credit: ½ (2nd semester)

Class Meetings: 6/7

Prerequisite(s): n/a

This course will teach the basics of positive psychology by using research-based concepts and skills. In order to increase their own well-being and that of others, students will be introduced to the scientific theories of leaders in the field. Students will assess their own, current levels of well-being, engage in discussion about human flourishing, and learn resilience skills and performance strategies that are currently being used in the Army, by professional sports teams, in the medical field, by parents, professors, and those in many other disciplines. This class is intended for students who have an interest in psychology, and who are curious about how our actions, emotions, and thoughts interact with each other, enabling or preventing one from flourishing. The goal is to provide students access to knowledge and skills that they can use in order to maintain or increase their own resilience and well-being in both the short and the long term.

AP Psychology

Course Number: 0989

Credit: 1

Class Meetings: 6/7

Prerequisite(s): A minimum grade of B+ in current science and history courses due to the amount of reading and the demanding pace and expectations of this full-year course. Students who do not meet the B+ requirement may be admitted with departmental permission. Enrollment is limited. **Preference will be given first according to course levels (honors, accelerated), then grades in courses**.

Notes: Open only to seniors.
*Students in this course are required to take the AP Psychology exam in May.

This course offers students an introduction to the expanding field of psychology. Students explore the history of the field and the various approaches which have evolved over time, including the biological bases of behavior, personality theory, developmental psychology, the study of motivation and emotion, sensation and perception, social psychology, and psychopathology and treatment. Research methods and the techniques of testing and evaluating individual differences are also discussed. Summer reading and a written assignment are required as preparation for the first unit at the start of school.

**** Note that summer work/reading is required for this course.***

Upper School Science
Sequence of Courses

Physics	**Chemistry**	**Biology**	**Anatomy & Physiology** **Astronomy** **Computer Science** **Environmental Science** **Forensic Science** **Marine Biology** **Vex Robotics**
Physics 1	**Chemistry 1**	**Biology 1**	**Anatomy & Physiology** **Astronomy** **Computer Science** **Environmental Science** **Forensic Science** **Marine Biology** **Vex Robotics** **Engineering (H)*** **Organic Chemistry (H)*** **AP Biology **** **AP Chemistry **** **AP Computer Science** **AP Environmental **** **AP Physics 1**
Physics (H)	**Chemistry (H)**	**Biology (H)**	**Anatomy & Physiology** **Astronomy** **Computer Science** **Environmental Science** **Forensic Science** **Marine Biology** **Vex Robotics** **Engineering (H)*** **Organic Chemistry (H)*** **AP Biology **** **AP Chemistry **** **AP Computer Science** **AP Environmental **** **AP Physics 1** **AP Physics C**

This is the typical sequence of courses for a student enrolled in the specified course in the 9th grade. Movement between levels is possible.

A student is placed in the appropriate level yearly based on performance in the current course and recommendation of the teacher.

* Department approval is required if coming from Chemistry 1 and Biology 1.
** Qualifying test is required.

<u>Please note that Independent Science Research is available to interested students in every grade</u> (see course description below).

Upper School Science
Departmental Overview

Germantown Academy's Science Department features an engaging curriculum that exposes students to fundamental scientific principles as well as problem-solving techniques both in the classroom and experientially in the laboratory. The program offers an outstanding and sequential curricular framework set in a modern lab facility, which fosters a student's ability to think critically and apply scientific methods to topical challenges. Students practice advanced lab techniques and engage in both traditional lab investigations as well as design-thinking projects.

In addition, GA's campus includes extensive outdoor facilities that allow students to make real-life observations and collect data from nature so as to apply classroom theory. The Wissahickon Creek, GA's Preserve, the expansive woods and a natural courtyard are seamless extensions of our science classrooms. In particular, the "outdoor classrooms" focus on environmental science and ecology, plant and animal science, and a healthy appreciation for the natural sciences overall. These lab facilities, both indoor and out, provide students with a more hands-on, problem-based, and real-world approach that we hope will produce meaning in their lives.

GA incorporates this lab program into a carefully organized curriculum through the selection of myriad courses. GA follows a physics-first approach, building on the logical development of concepts that make sense of the physical world around us. Moving sequentially to chemistry and then biology, this rounds out a student's understanding of their world, focusing on the molecular nature of matter and the natural world, respectively.

To support students through this sequence, the program offers three placement levels for each of the major scientific disciplines. This allows instructors to cater to individual learning styles through differentiation, that is, to "meet students where they are." To complement this solid three-science requirement, GA offers a diverse set of interdisciplinary electives to mostly seniors. These include Forensics, Environmental Science & Natural History, Organic Chemistry, Anatomy and Physiology, and Marine Biology, to name a few. This curriculum is not static. Additionally, students can opt to participate in Independent Science Research. After these students compete in the Montgomery County Science Research Competition and Pennsylvania Junior Academy of Sciences local science fair, their work is displayed for the community during GA's Science Fair Open House.

Upper School Science
Course Placement Policy

9th grade Physics

- Coming into Upper School from GA Middle School – US Science Department will decide placement in consultation with the MS Science Department and the MS Math Department (due to the mathematical nature and abstract thinking of Physics).
- Coming into Upper School from outside the GA community – US Science Department will decide placement using the results of the Math Placement Exam. If placed into Algebra 1, the student would go into Physics. If placed into Geometry, the student would go into either Physics or Physics 1. Accelerated Geometry students take Physics 1. Placement into Honors depends on math placement, previous grades, recommendations, and interest.
- We realize that placement is not a perfect system; students mature at different rates and at different times. The Department Head will consider placement appeals but will adhere to original placement decision unless conversations with previous teachers and closer examination of placement testing indicate that a change may be warranted.

10th grade Chemistry

- Unless contraindicated by effort and teacher recommendation, students from Physics will move into Chemistry and students from Physics 1 will move into Chemistry 1.
- Students interested in moving from Physics to Chemistry 1 must obtain the approval of their Physics teacher and the science department head.
- Students interested in moving into an honors-level science must have at least an A average for the first semester of their current science course in order to be considered. Students who meet this requirement must then get the approval of their current science teacher and the science department head. Any student approved to move into the honors level must meet the following requirements at the end of their current science course:
    - Minimum final grade: A
    - Minimum exam score: B

  Students who do not satisfy this requirement will be registered for Chemistry 1.
- Students enrolled in an honors-level science course who have demonstrated the effort and scientific curiosity expected of an honors-level student may elect to continue at the honors-level when registering for their next science course by meeting the following requirements:
    - Minimum final grade: B-
    - Minimum exam score: C-

  Students who do not satisfy this requirement will be registered for Chemistry 1*.

11th grade Biology

- Unless contraindicated by effort and teacher recommendation, students from Chemistry will move into Biology and students from Chemistry 1 will move into Biology 1
- See second bullet in 10th grade process for transitions to Biology 1 from Chemistry.
- See third and fourth bullets in 10th grade process for honors-level biology.

11th and 12th grade Electives

- Entry into AP Chemistry will be predicated on an entry exam given in March.
- Entry into AP Physics 1 requires a minimum of a B+ in the current math course (Precalculus or above) and a B or better in Physics 1, as well as Chemistry 1 or Chemistry H. Students who do not meet the B+ (math) and B (science) requirement may only be admitted with departmental approval.
- Entry into AP Physics C is self-regulated but substantiated by teacher recommendation.
- Entry into honors-level electives will be determined by evaluation of science transcripts and the recommendation of science faculty.
- Non-AP/Honors courses are open to all and regulated by class size. Placement in highly popular electives will be determined by lottery.

12th grade Electives

- Entry into AP Biology, AP Chemistry, and AP Environmental Science will be predicated on an entry exam given in March.
- Entry into AP Computer Science Principles requires a minimum of a B+ in the current math and science courses and a minimum of a B+ in the introductory Computer Science course. Students who have not completed the introductory course may submit a letter of interest detailing prior experience with computer languages to be considered for admission.
- Non-AP/Honors courses are open to all and regulated by class size. Placement in highly popular electives will be determined by lottery.

** In rare cases, the department head may grant an exception to this policy if it is recommended by the student's current science teacher and supported by the student's overall academic record.*

Physics

Course Number: 0957

Credit: 1

Class Meetings: 6/7 + one lab (five single periods and one double period per seven-day rotation)

This course introduces students to the fundamental concepts and laws that govern the world in which they live. Each physics concept is thoroughly explained and developed in class (through demonstrations and discussions) and through practice. Laboratory work promotes skills in taking and analyzing data, while reinforcing the current concepts. All of the math needed for the course is developed in the class and is used as a guide for thinking. Mathematics is not used quite as extensively in problem solving as it is in the Physics 1 course.

Topics such as mechanics, waves (sound and light), and electricity are covered. By focusing on measureable quantities and how they relate to each other, the students will come to appreciate the simplicity and power of the modern description of the physical world.

Physics 1

Course Number: 0958

Credit: 1

Class Meetings: 6/7 + one lab (five single periods and one double period per seven-day rotation)

This course introduces students to the fundamental principles that describe all actions in our universe and to the kind of thinking that physicists use to develop and refine those descriptions. The topics covered in this first year physics course include mechanics, waves, and electricity. Frequent classroom demonstrations and laboratory experiments are designed to help students recognize how the "laws" of physics relate to real world processes. Discussions and a wide variety of concept development activities give students the opportunity to slowly develop a conceptual understanding of the way the world works. Basic algebraic and geometric principles and skills are introduced and developed as needed to illuminate and clarify physics principles.

Physics (H)

Course Number: 0951

Credit: 1

Class Meetings: 6/7 + three labs (three single and three double periods per seven-day rotation)

Placement: Recommendation by the Middle School Science and Math departments. If new to GA, the math placement test will determine eligibility.

The process of discovering and describing how the universe works is called physics. Topics covered in this introductory course include motion, forces, gravitation, mechanical energy, thermodynamics, waves, light, electromagnetism, direct current circuitry and atomic physics. Group discussion and problem solving lead the students to a working understanding of how mathematics can be used to describe the way the world works. Computers are used routinely for the collection and modeling of data trends characterizing systems studied in hands-on activities. Algebra 1 is used extensively throughout the course, and geometric and trigonometric principles are introduced and reinforced

as needed. Both GA email and the VLE are used regularly for communication between teacher and students, and WebAssign is used for homework assignments and for grade keeping, so that the students have continuous access to their progress in the course. This course prepares students for the SAT Subject Test in Physics, though additional independent preparation is expected for those electing to take that test.

Chemistry

Course Number: 0930

Credit: 1

Class Meetings: 6/7 + one lab (five single periods and one double period per seven-day rotation)

Prerequisite: Physics

The Chemistry course uses the text *Chemistry: Discovering the Chemistry You Need to Know*. This program teaches chemistry 'in the context of real life' with the concepts being grouped together in need-to-know sequencing to enhance problem solving and mimic how scientists learn and apply knowledge outside of a classroom. Contextual learning is a brain-based teaching technique. The non-traditional organization of the course content integrates lab and lecture materials around chapter themes such as: Things that Glow, Airbags, Antacids, Chemistry in Industry, Batteries, and Forensic Chemistry. Each unit provides students with opportunities for direct and indirect student-regulated learning, with inquiry-based labs being a cornerstone of the program. Assessments such as regular quizzes and post-reading guided questions are used to shift the focus of learning away from what the student does not understand toward students finding out what is important and meaningful to allow for authentic assessments. Traditional assessments are also a part of the program, with several research projects incorporated into the program over the course of the year.

Chemistry 1

Course Number: 0917

Credit: 1

Class Meetings: 6/7 + two labs (four single and two double periods per seven-day rotation)

Prerequisite: Physics

Placement: Recommendation of Physics teacher required.

This course covers the fundamental concepts of chemistry: matter and its changes. Topics include dimensional analysis, atomic theory, nomenclature, reaction types, stoichiometry, gas laws, molecular structure and geometry, thermodynamics, phases of matter, and acids and bases. The class emphasizes problem solving and the development of models that explain chemical behavior. Investigations include differentiating physical and chemical changes, the determination of empirical formulas, exploring mole relationships in chemical reactions, building of simple molecular models, calculating the molar volume of a gas, and performing an acid-base titration. The use of basic laboratory techniques and technology are stressed throughout the curriculum.

Chemistry (H)

Course Number: 0932

Credit: 1

Class Meetings: 6/7 + two labs (four single and two double periods per seven-day rotation)

Prerequisite: Physics (H) or Physics 1

Placement: Teacher recommendation and grade requirement. See Course Placement Policy.

This course, more rigorous than Chemistry 1, emphasizes the theoretical and conceptual aspects of chemistry based on atomic-molecular theory and related principles of physics. Topics include atomic structure through basic quantum mechanics, molecular bonding and shapes, stoichiometry and the gas laws, energy and entropy relationships in reactions, and equilibrium in acid-bases and oxidation-reduction reactions. The laboratory program is essential and closely integrated with the curriculum. Laboratory work will include the use of computer interfacing, synthesis and analysis of compounds, molecular modeling, and computer integration into report writing. An independent project is required of all students taking this course. It should be completed during free periods or after school. This course prepares students for the SAT subject exam though additional after-school review sessions and independent preparation are expected for those electing to take that test.

Biology

Course Number: 0919

Credit: 1

Class Meetings: 6/7 + one lab (five single periods and one double period per seven-day rotation)

Prerequisites: Physics and Chemistry

This course in biology features a wide range of topics that have been selected with concern for biological issues that have value and interest for students. The course is designed to resonate with students in a practical and authentic way such that students leave with a good sense of how the natural world works. Topics include environmental science, cells and cancer, disease, nutrition, digestion and other human systems, plants, animals and biodiversity, genetics and DNA, behavior and change. The course includes internet research projects and cooperative activities such that students can relate what they are learning to 21st century science issues. There will be several project-based learning experiences.

Biology 1

Course Number: 0918

Credit: 1

Class Meetings: 6/7 + two labs (four single and two double periods per seven-day rotation)

Prerequisites: Physics and Chemistry

Placement: Teacher recommendation required

This college-preparatory survey course covers both fundamental and current topics in biology. The course begins with a review of the scientific method and chemistry as they apply to the study of biology, and an exploration of topics in ecology. The course proceeds through an in-depth study of the cell, gene expression, genetics, biotechnology and evolution in order to ground students in the science of DNA and its practical applications. The final portion of the

course offers students the opportunity to take their newfound knowledge and apply it to animal and plant anatomy and physiology. Students will look at how different organs and organ systems work together to help plants and animals (including humans) thrive. Laboratory sessions are designed to acquaint students with lab techniques, exercise the lab report-writing process, and discover, illustrate and support the principles discussed in class. This course encourages students to think critically about biological concepts.

Biology (H)

Course Number: 0922

Credit: 1

Class Meetings: 6/7 + two labs (four single and two double periods per seven-day rotation)

Prerequisites: Chemistry (H) or Chemistry 1

Placement: Teacher recommendation and grade requirement. See Course Placement Policy.

This course is an introduction to the theoretical framework of modern biology. Topics of cell structure and function, Mendelian and molecular genetics, DNA technology, evolution, botany and human anatomy and physiology will form the basis of the course. The lab program is an important component of the course. Laboratory experiments and fieldwork are designed to acquaint students with fundamental biological principles and to build skills in the methods and techniques used to clarify those principles. An independent project is required from students in the course. It should be completed during free periods or after school. Students are required to pay for supplies ordered to complete their projects. Students who complete this course can elect to take the Biology SAT Subject Test (Molecular version).

Upper School Science
Senior & Junior Year Electives

Note that enrollment in several electives may be limited to the number of students we are able to seat safely in a lab.

AP Chemistry

Course Number: 0934

Credit: 1

Class Meetings: 6/7 + three labs (three single and three double periods per seven-day rotation)

Prerequisites: Chemistry (H) or Chemistry 1 and departmental approval

Placement: Placement test, teacher recommendation, grades in science courses

AP Chemistry is a college level course designed for those students who want to take a second year of chemistry and take the Advanced Placement Exam in May. The course expands on the material of Chemistry (H), and introduces new concepts such as molecular orbitals, rate law expressions and determinations, and entropy in equilibrium reactions. Mathematical and theoretical concepts are stressed in the lecture material while the laboratory work pursues concepts in depth and introduces topics of qualitative and quantitative analysis.

Note on AP Physics:
AP Physics 1 and AP Physics C: *AP Physics C requires an interest in and knowledge of calculus; in fact, AP Physics C can illuminate the utility and elegance of calculus in ways that calculus alone cannot. For this reason, AP Physics C is an ideal course for those who wish to gain swift entrance into the physical sciences or upper-level engineering courses in a university setting. By contrast, AP Physics 1 is an algebra- and trigonometry-based course that helps students develop the problem-solving skills needed for a wide variety of disciplines, not just the sciences. Because the AP Physics 1 syllabus is covered to a substantial extent in Physics (H), it is advisable that students who have successfully completed Physics (H) and who are considering enrolling in AP Physics 1 consult with members of the Science Department.*

AP Physics 1

Course Number: 0947

Credit: 1

Class Meetings: 6/7 + two labs (four single and two double periods per seven day rotation)

Prerequisite: **Minimum Requirements: B+** in current math course (Precalculus or above)**, B** in any first year physics course, **B** in Chemistry 1 or Chemistry (H). Students who do not meet these requirements may only be admitted with written permission from Science Dept. Head, House Head, and course instructor.

AP Physics 1 is an algebra and trigonometry based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry based learning, students will develop scientific critical thinking and reasoning skills. This course places an emphasis on hands-on laboratory work, and the ability to design, implement, test, and improve upon traditional physics lab activities in a collaborative setting.

The course work and expectations are meant to match those of an introductory college-level algebra and trigonometry-based physics course, and to cover the required syllabus and prepare students to take the AP Physics 1 Exam (non-

calculus) in May. This course will cover many of the same topics covered in the GA ninth grade physics program, but will introduce each concept again, at its fundamental level, before adding substantial depth and challenge to those topics.

**** Note that summer work/reading is required for this course.***

AP Physics C

Course Number: 0953

Credit: 1

Class Meetings: 6/7 + 3 labs (three single and three double periods per seven-day rotation)

Prerequisites: Successful completion of Physics (H) and at least concurrent enrollment in Calculus AB/BC, though one year of **prior study** of calculus is preferred. Students whose background is in Physics 1 require department approval.

This course is intended to expand the student's understanding of the basic concepts learned in introductory physics and to introduce the student to advanced topics such as rotational dynamics, angular momentum, oscillations and the fundamentals of electromagnetism. The analytical sophistication and course expectations are those of a college course for students majoring in physics, chemistry, engineering, or mathematics. Solving problems of increasing sophistication and mathematical complexity helps students refine their conceptual understanding and mathematical fluency. This refinement is accomplished within the context of a modern approach to the discipline, including relativistic discussions of momentum and energy. Laboratory activities are designed to deepen the student's understanding of the material and to practice the mathematical modeling of a physical system. The classes are centered on problem solving, group work, and laboratory activities. Both GA email and the VLE are used regularly for communication between teacher and students, and WebAssign is used for homework assignments and for grade keeping, so that the students have continuous access to their progress in the course. Students enrolled in this one-year course are required to take the Advanced Placement Physics C-level examination covering mechanics; the examination covering electricity and magnetism is optional.

Astronomy

Course Number: 0905

Credit: 1

Class Meetings: 6/7

Prerequisites: Algebra 2 and Physics

This course is intended to introduce students to the wonders of the universe, and to help them understand the fundamentals of the current scientific thinking explaining the past, present, and future of the universe. Possible course topics include: ancient astronomy, the geometry of the heavens, planets and the solar system, stars and stellar evolution, galaxies, and the structure and origin of the universe.

Engineering (H)

Course Number: 0944

Credit: 1

Class Meetings: 6/7 + one lab (five single periods and one double period per seven-day rotation)

Prerequisites: Chemistry 1 or Chemistry 1 (H)

Placement: Students must be active, engaged members of the science lab program. The criteria for selection include a **B+** in current math course, **B** in physics, **B+** in chemistry, recommendation of current science teacher and a brief interview with the course instructor. Students who do not meet particular grade requirements may only be admitted with permission from Science Dept. Head, House Head, and course instructor.

Max. Enrollment: 16

This project-based course will introduce the students to the many different types and applications of engineering by focusing on the engineering design process. Long-term projects and extended lab activities will be the basis of this course, with the majority of the class time devoted to collaborative work and investigations put together by groups. Students will compete (as part of a group) in several in-house engineering competitions and at least one out-of school competition. The topics covered are flexible, but will incorporate major themes such as mechanical engineering, structural/civil engineering, electrical engineering, aerospace engineering, and robotics. Discussions will be interspersed frequently within the major projects, to provide the necessary understanding of the design process and the basic science underlying each project. Most of the course grade will be based on group work, which requires thoroughly documented engineering notebooks and presentations to the class on a completed project. Several individual assessments each interim (essays, quizzes, and tests) make up the remainder of the student's cumulative grade.

Introduction to Computer Science

Course Number: 0912

Credit: 1

Class Meetings: 6/7

Max. Enrollment: 15

Introduction to Computer Science develops in students an understanding of problem-solving, algorithms, and perspectives that help students utilize computers to address real world problems in contemporary life. The course underscores basic coding principles, design strategies and methodologies, data organization, analysis of solutions and ethical implications of computing today.

Organic Chemistry (H)

Course Number: 0945

Credit: 1

Class Meetings: 6/7 + one lab (five single periods and one double period per seven-day rotation)

Prerequisites: Chemistry 1 or Chemistry 1 (H)

Placement: **Minimum Requirements: A** in Chemistry 1/**B** in Chemistry (H). Preferred co-curricular with Biology (H) if a junior.

Max. Enrollment: 14

This course will introduce students to the properties and reactions of organic compounds. The first semester will begin with a brief review of general chemistry concepts that are critical to organic chemistry: Electron Configurations,

Atomic theory, Lewis Structures, Bonding, Orbital hybridization, and Polarity. The class will then move into material that includes how to draw organic structures (Kekule, skeletal structures, and structural formulas), functional groups of organic compounds, and organic IUPAC nomenclature. Nomenclature will span from simple alkanes to alkenes, alkynes, cyclic hydrocarbons and aromatic substances. Additionally, each unit of nomenclature will include an examination of the properties of these compounds. Once we learn how to name specific kinds of molecules, we will learn about stereochemistry, isomerism, and chemical properties of compounds during the second semester. Then we will begin to focus on the mechanisms and common reactions of organic compounds. Laboratory experiments will be conducted to introduce and reinforce concepts from class. More importantly, the focus of the labs will be on techniques of common labs in college courses. As a result, students will be familiar with the laboratory equipment and techniques before they take this class in college. Some of these experiments will extend beyond the standard lab period. Lab groups must be flexible with using time during free periods and before and after school to prepare and carry out laboratory investigations.

Robotics

Course Number: 0906

Credit: 1/2

Class Meetings: **6/7** (fall semester)

Prerequisites: Physics

This course is designed to introduce students to the process of designing, building, and programing a robot using the essentials of the coding language RobotC and the VEX robotics system. This course will be project based, with the understanding that in addition to individual tests and quizzes, students will also be assessed on the completion of group based projects.
Students will learn about new concepts through lecture, virtual coding simulations, and challenges that their robot must complete.
This course is intended for students with no prior experience in robotics, but students must have a desire to learn to program, a drive to build, and the ability to work as an effective member of a team.

(Participation in the external VEX EDR challenge is not a requirement of this course.)

Upper School Science
Senior Year Electives

Note that enrollment in several electives may be limited to the number of students we are able to seat safely in a lab.

AP Biology

Course Number: 0924

Credit: 1

Class Meetings: 6/7 + two labs (four single and two double periods per seven-day rotation)

Prerequisites: Biology and Chemistry

Placement: Placement test, teacher recommendation, grades in science courses

AP Biology is intended for students who have a strong interest in the sciences and builds upon previous introductory courses in physics, chemistry and biology. Students must be committed to completing the daily reading and written assignments and to working independently and cooperatively in and outside of class. Students will develop advanced inquiry and reasoning skills, such as designing experiments for collecting and analyzing data and connecting concepts in and across foundational concepts. Emphasis is placed on the 'Four Big Ideas': the process of evolution drives the unity and diversity of life; biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis; living systems store, receive, transmit and respond to information essential to life processes; and lastly biological systems interact and these systems and their interactions possess complex processes.

Laboratory activities are completed which emphasize the underlying concepts within each of the Four Big Ideas including: Aquatic Primary Productivity, Animal Behavior, Bioinformatics, Vertebrate and Invertebrate Dissections, Bacterial Transformation, Enzyme Linked Immunosorbant Assay, and Osmoregulation in Marine Worms.

A summer reading and written assignment (collected on the first day) are required as preparation for the initial work in the fall. Students must take the AP Exam.

**** Note that summer work/reading is required for this course.***

AP Computer Science Principles

Course Number: 0907

Credit: 1

Class Meetings: 6/7

Prerequisites: B+ or higher in 11th grade math and science courses. B+ or higher in Introduction to Computer Science or submission of letter of interest to Mr. Anderson detailing prior experience with computer languages. Preference given to students in higher-level math and science courses.

AP Computer Science Principles introduces students to the fundamentals of computing, including problem solving, working with data, understanding the internet, cybersecurity, and programming with a goal of broadening their understanding of computer science for use in a diversity of majors and careers. In addition to regular coursework, students will complete two major projects.

Students who succeed in the AP Computer Science Principles (B) course and exam are well prepared to continue their study of CS and its integration into a wide array of computing and STEM related fields.

AP Environmental Science

Course Number: 0929

Credit: 1

Class Meetings: 6/7 + two labs (four single and two double periods per seven-day rotation)

Prerequisites: Biology and Chemistry

Placement: Placement test, teacher recommendation, grades in science courses

Advanced Placement Environmental Science is designed to be the equivalent of an introductory college course in environmental science. It is an interdisciplinary study of how natural and human systems work. In the class, students will use basic scientific principles from biology, chemistry, earth sciences, and physics, as well as from economics, sociology, politics, and ethics, to analyze ecosystems and to explore some of the most challenging problems facing humanity. Students will also evaluate the relative risks associated with these problems, and examine alternative solutions for resolving and/or preventing them. It is expected that students will keep up with the daily reading all year and that students will monitor local and national media for news related to environmental issues. Units of study in the course include ecosystems and how they function; renewable resources; human population; energy, and pollution and its prevention. Field trips will be taken off campus, and GA's outdoor environment is used for lab activities. Students must take the AP exam. Finally, summer reading will be assigned to prepare students for the ecology unit at the start of the year.

**** Note that summer work/reading is required for this course.***

Anatomy and Physiology

Course Number: 0959

Credit: 1

Class Meetings: 6/7 + one lab (five single periods and one double period per seven-day rotation)

Prerequisites: One physics, one chemistry, and one biology course (any level)

This course is designed to focus on specific facts and abstract concepts related to Anatomy and Physiology, specifically the structure and function of the human body. This course will combine textbook readings that build around key concepts, interactive on-line activities, and experimentation with laboratory experiments. The course content will include scientific inquiry, organization of the body, support and movement, integration and control, regulation and maintenance, and development. Students will utilize knowledge from previous chemistry and biology class content, and will be immersed in human body case studies, putting their knowledge of A&P to the test with different medical scenarios. Different careers in the medical field will also be discussed, providing students with a better understanding about a career in medicine.

Environmental Science and Natural History

Course Number: 0927

Credit: 1

Class Meetings: 6/7 + one lab (five single periods and one double period per seven-day rotation)

Prerequisites: One physics, one chemistry, and one biology course (any level)

This course will focus on important environmental issues that impact all of us. Some of these issues are human population growth and agricultural demands, water, soil and air pollution, climate change, invasive species impact, biodiversity decline and concern over energy. Each topic will be explored, addressing the problems and the possible solutions. In short, the course will compare the impact humans have had on the balanced ecological world and changes we should make to continue this homeostasis. Understanding human impact on nature requires a sense of the plants and animals with which we share the world and hence an understanding of our natural history is an important part of the course.

The course will use the project/problem-based approach as much as possible. Students will also craft artifacts and perform lab work that will help to elucidate many of the issues being taught. Simply put, this is a hands-on approach guided by discussion and will make use of the outdoor areas available on GA's campus.

Forensic Science

Course Number: 0963

Credit: 1

Class Meetings: 6/7 + one lab (five single periods and one double period per seven-day rotation)

Prerequisites: One physics, one chemistry, and one biology course (any level)

This course is a lab-oriented, problem solving, inquiry-based class designed to teach techniques used by forensic scientists to solve crimes. It is appropriate for non-science as well as science-oriented students. Students will be introduced to topics such as collection and sorting of crime scene evidence; blood identification; blood stain geometry; DNA fingerprinting; obtaining fingerprints; tire, tool and dental imprints; hair, fiber and paint analysis; glass fractures and direction of force; firing pin analysis; soil analysis; trajectory determination using ballistic angles; and use of insects to determine time of death and toxicology. Students will be expected to solve staged classroom crimes using these techniques. Psychology of criminal activity and legal implications of crime scene investigation will also be discussed. Students are expected to work independently on both individual as well as group projects. Students will need access to the Internet at home for use of VLE. The course will include an autopsy, guest speakers, and the reading of case studies.

Marine Biology

Course Number: 0960

Credit: 1

Class Meetings: 6/7 + one lab (five single periods and one double period per seven-day rotation)

Prerequisites: One physics, one chemistry, and one biology course (any level)

This program applies several scientific disciplines to the study of the world's oceans. Included in the course are water chemistry, the geology of coastlines and ocean floors, the classification and physiology of marine organisms, as well as

the study of the diversity of marine ecosystems. All of the course topics utilize concepts from chemistry, biology, and physics. An active laboratory and field program complements the course. In the fall, a field trip is taken to study barrier-island and marsh ecology of the New Jersey shore, and in the spring a field trip is taken to visit an established public aquarium. The lab program is an important component of the course and may include monitoring a saltwater aquarium, sea urchin embryology, mollusk dissections, construction and observation of a Winogradsky column, plankton identification and vertebrate morphology.

Upper School Science
Science Research and/or Project

Independent Science Research and/or Project

Course Number: 0980

Credit: 1/2

Class Meetings: 2/7

In this course, students in grades 9-12 elect to spend time designing and carrying out a scientific investigation in an area of interest. Students will spend the fall semester researching background information, creating a hypothesis, designing an experiment, and collecting data. Students will spend the spring semester collecting and analyzing data, writing a scientific manuscript, and preparing a PowerPoint with presentation, and a poster board with presentation. Students will compete in the regional Pennsylvania Junior Academy of Science (PJAS) Competition and the Montgomery County Science Research Competition, which could place them at the state PJAS Competition and the Delaware Valley Science Fair, respectively. Also, seniors can enter the Siemens Competition and/or the Intel Science Talent Search.

Students electing this offering are expected to demonstrate curiosity, personal initiative, and independence, and should discuss a research idea with the instructor prior to entry into the course. Research can be carried out at school during class time and after school, and at home or in an outside laboratory after school, over the weekend, or possibly during the summer. Students wishing to work in an outside laboratory are expected to take the initiative in the spring or early summer to find a professional scientist to mentor them. Grading evaluation will be accomplished through a contract based on deadlines and presentations. Therefore, the ability to meet deadlines is of utmost importance. Those who are unable to meet the deadlines may have to drop the course and re-enroll the following year. Students are responsible for fees to register for the science fairs and costs for supplies and materials.

Students will be admitted to the course based on their degree of interest, scope of project, and scheduling availability.

Upper School Visual Arts
Sequence of Courses

This is the typical sequence of courses for a student enrolled in the specified course in 9th grade. Movement between levels is possible at any point.

9th	10th	11th	12th
2D FOUNDATIONS	**Contemporary Practices 2D**	**Drawing and Painting H** **Contemporary Practices**	**Drawing and Painting H** **Contemporary Practices**
3D FOUNDATIONS	**Contemporary Practices 3D**	**Sculpture H** **Contemporary Practices**	**Sculpture H** **Contemporary Practices**
PHOTO FOUNDATIONS	**Contemporary Practices Photo**	**Photo H** **Contemporary Practices**	**Photo H** **Contemporary Practices**
DIGITAL MEDIA FOUNDATIONS	**Contemporary Practices Digital Media**	**Digital Media H** **Contemporary Practices**	**Digital Media H** **Contemporary Practices**
	DIGITAL SONGWRITING & AUDIO PRODUCTION	**Digital Songwriting & Audio Production** **Digital Songwriting & Audio Production 2** **Contemporary Practices**	**Digital Songwriting & Audio Production** **Digital Songwriting & Audio Production 2** **Contemporary Practices**

Notes:

1. After the "Foundations year" students may continue a sequence in the media they studied in their freshman year or elect to study in another studio area. In this case they MUST enroll in the Foundations or Contemporary Practices course in the new studio area. Once they've done that, they can apply to the next level in that discipline if they are approved for the honors program.

2. The Honors sequence begins in 11th grade. Admission requires a B+ or better in the previous art course. Please see the following Placement Policy.

3. Completion of a year of art (visual or performing) must be completed by the end of 10th grade and is required for graduation.

Upper School Visual Arts
Departmental Overview

The Visual Art Department at Germantown Academy is committed to providing a comprehensive education in the arts within the context of a liberal arts education. Our foundation and advanced curriculum is a well-rounded and versatile approach to the study and application of art. It is designed to provide a creatively stimulating education in a studio environment. While these courses extend excellent opportunities for the general study of art and life-long arts advocacy, they are also designed to cultivate serious talents in the visual arts. Many of our students have gone on to prominent careers in commercial, fine, and applied arts.

The visual arts program as a whole and the honors program in particular are designed as an opportunity to explore imagination while working to master craft. Additionally, students have sustained practice at key skills that educators and corporate leaders have identified as most critical to success in the 21st century – creative and innovative thinking, complex communication and collaboration, problem solving and critical thinking, and the ability to self-regulate progress and productivity.

Our program offers introductory, advanced, and honors courses in painting, drawing, sculpture, silver photography, digital design and filmmaking, studio recording, art history, and small metals. In addition, students have the opportunity to exhibit in a variety of arenas outside of school, train at area universities in their weekend programming for art students, and participate in open studios and art club at the Academy.

The study of art teaches students how to solve old problems in new ways, to think differently, progressively, and with great confidence in their ideas while cultivating original thinking. Increasingly, the most successful people will combine training in creative thinking with excellence in other fields. We see the study of art throughout the duration of a student's high school career as an opportunity to train students for careers in the arts and a necessary component of their success in any future field of study.

Upper School Visual Arts
Course Placement Policy

Class enrollment in the Visual Arts is determined by studio and facility space. Enrollment caps indicate the upper most number a studio can accommodate due to access to facilities and space.

Foundations Courses in All Media:

- Open to all students in the Upper School. The registrar fills the classes from the course selection forms submitted to House Heads

Contemporary Practices Course in All Media:

- Open to all students in sophomore, junior, or senior year.
- Will be enrolled by lottery and will be asked to rank their top 3 choices for studio practice. Students can choose between Painting and Drawing, Photography, Sculpture and 3D Design, and Digital Media.
- Non-honors.
- No prerequisite.
- May be taken only once in a specific media area.

Honors Courses in All Media:

- Honors Arts applications are available to students from their art teachers at the beginning of second semester of their sophomore year for placement in their junior and senior year. To qualify for honors, art students must have earned a B+ or better in their last art course and exhibit the potential for further growth. The arts faculty selects students designated for honors by a blind jury of a portfolio and short essay. <u>Note that due to space limitations final decisions are frequently based on grades in the current art class</u>. All honors arts students must make a 2 year commitment to their chosen studio area, must create a portfolio, must attend two yearly critiques, must attend visiting artist lectures, and provide leadership in their art classes. Students who do not fulfill these expectations will first be put on probation; if the situation does not improve, the student will be removed from the honors program.

Upper School Visual Arts
Introductory Courses

2D Foundations

Course Number: 1111

Credit: 1

Placement: To fulfill arts requirement, freshman receive priority, but others are also permitted to enroll.

Enrollment: Limited to 14 students per section

This dynamic full-year studio course is an introduction to the principles, materials, and processes of two dimensional art making (drawing, painting, design, and printmaking). The course explores concepts, universal to all disciplines and is structured to nurture a dialogue between art forms. Class work will explore basic elements and principles of art/design through creative problem solving and will employ observational studies, abstraction, and the student's imagination. Considerable emphasis will be placed on nurturing and embrace of the process of art making and the development of sound practices. This foundation level class is perfectly suited for students with all levels of experience, but as it provides an excellent set of introductory skills for creative study, it is particularly appropriate for those considering future studies in the arts.

3D Foundations

Course Number: 1114

Credit: 1

Placement: To fulfill arts requirement, freshman receive priority, but others are also permitted to enroll.

Enrollment: Limited to 14 students per section

This full year class operates with the philosophy that human beings inherently want to build, create, and express themselves by making and building things. This class gives students the tools, design principles, information, time and space to do just that. 3D Design is a dynamic studio course that serves as an introduction to the concepts, materials and techniques of three-dimensional art making. The year-long course explores concepts universal to all artistic disciplines and is structured to nurture a dialogue between art forms. Class work will explore basic elements and principles of design through creative problem solving and will employ scale studies, material exploration, abstraction, and the student's imagination. This foundation level class is perfectly suited for students with all levels of experience, as it provides an excellent set of introductory skills for creative study.

Digital Media Foundations

Course Number: 0161

Credit: 1

Placement: To fulfill arts requirement, freshman receive priority, but others are also permitted to enroll.

Enrollment: Limited to 14 students per section

This class is an introduction to and exploration of the use of the computer as a medium for artistic expression and graphic communication. Beginning with simple motion graphic exercises that explore the elements and principles of

design, followed by the use of editing and sound, students will gain a basic understanding of digital media. They will look at how to manipulate, edit, and combine graphics, photographs, and digital video in order to make creative art works. Students will learn about and explore traditional forms of animation, and computer animation, along with the use of titles and text. In the second term, students create their own digital video works through hands on experience with the digital camera, computer based editing, sound production, digital output and file management. This studio-lab course studies the problems and aesthetics of film and video production in theory and practice while exploring movement, image, montage, point of view, and narrative structure in masterworks.

Digital Songwriting & Audio Production

Course Number: 1710 (Digital Songwriting & Audio Production (H): 1712)

Credit: 1

Placement: Enrollment in Digital Songwriting & Audio Production (H) is limited to students who have been accepted to the honors arts program according to the criteria above.

Enrollment: Limited to 7 students
Freshmen are not permitted to enroll in this course

This full year, full credit studio-lab course introduces students to a highly collaborative environment for experimenting with the songwriting/recording process and instrumental music design. Students will learn digital audio recording techniques, MIDI programming, and sound design to create original music and audio recordings. Students are expected to be able to work independently and in small groups. Prior music and computer experience is helpful but not required.

Photography Foundations

Course Number: 0110

Credit: 1

Placement: To fulfill arts requirement, freshman receive priority, but others are also permitted to enroll.

Enrollment: Limited to 12 students per section

This full year studio-laboratory course introduces students to the techniques and aesthetics used in black and white photography. In one semester, students will learn the basics of camera operation, exposure control, film developing, printing, and finishing. In the other semester, students will learn digital photography and Photoshop. In both the silver and digital sessions, students will acquire a knowledge and understanding of the history and language of photography as a fine art and the commercial applications of photography and design. At the end of each semester, students will be required to submit a portfolio that demonstrates inventive thinking, imagination, and craftsmanship. Students will need a digital camera. Film cameras are supplied by the school for student use during the term. Class incorporates studio work, demonstrations, research, and critiques. The total cost of materials is approximately $150.00.

Contemporary Practices in Sculpture and Design

Course Number: 1115

Credit: 1

Prerequisite: None

Enrollment: Limited to 14 students

Students will practice mastering foundation skills in sculpture and design while grappling with themes in contemporary art that relate to image making, social relevance, the elements and principals of design and the cultivation of a personal aesthetic. This course introduces the concepts and processes of studio art through sculpture, design and object making. The work will involve traditional and nontraditional approaches to representation and abstraction, and investigate such problems as appropriation and the media, symbolism, narrative, craft, and site specificity. No prerequisite.

Contemporary Practices in Painting and Drawing

Course Number: 1112

Credit: 1

Prerequisite: None

Enrollment: Limited to 14 students

Students will practice mastering skills in drawing and painting while grappling with themes in contemporary art that relate to image making, social relevance, the elements and principals and design and the cultivation of a personal aesthetic. This course introduces the concepts and processes of studio art through two-dimensional methods. The work will involve traditional and nontraditional approaches to representation and abstraction, and investigate such problems as appropriation and the media, symbolism, narrative, and site specificity. Open to students in their sophomore, junior and senior years. No prerequisite.

Contemporary Practices in Digital Media

Course Number: 1117

Credit: 1

Prerequisite: None

Enrollment: Limited to 14 students

Students will practice mastering skills in computer-based media while grappling with themes in contemporary art that relate to image making, social relevance, the elements and principals and design and the cultivation of a personal aesthetic. This course introduces the concepts and processes of studio art through digital methods. The work will involve traditional and nontraditional approaches to representation and abstraction, and investigate such problems as appropriation and the media, symbolism, narrative, and site specificity. Open to students in their sophomore, junior, and senior years. No prerequisite.

Contemporary Practices in Photography

Course Number: 1119

Credit: 1

Prerequisite: None

Enrollment: Limited to 12 students

Students will practice mastering skills in silver and digital photography while grappling with themes in contemporary art that relate to image making, social relevance, the elements and principals and design and the cultivation of a personal aesthetic. This course introduces the concepts and processes of studio art through photographic methods. The work will involve traditional and nontraditional approaches to representation and abstraction, and investigate such problems as appropriation and the media, symbolism, narrative, and site specificity. Open to students in their sophomore, junior, and senior years. No prerequisite.

Contemporary and Historical Studio Practices

Course Number: 1121

Credit: 1

Prerequisite: None

Enrollment: Limited to 14 students

This companion class to the Contemporary Practices course offerings provides students with an opportunity to develop their own aesthetic, while exploring foundation skills and the work of artists across the ages. Students will work in a variety of disciplines (sculpture, painting, photographic/digital processes), while utilizing materials, techniques and processes, both historic and contemporary. Abstraction and representational work will be explored. No prerequisite.

Digital Media Honors

Course Number: 1118

Credit: 1

Placement: Enrollment in Digital Media (H) is limited to students who have been accepted to the honors art program according to the criteria above.

Prerequisite: Digital Media Foundations or Contemporary Practices

Enrollment: Limited to 14 students

This class continues the exploration into the use of the computer as a medium for artistic expression and graphic communication. It is designed for students who have completed Digital Media Foundations and/or Contemporary Practices in Digital Media and wish to pursue their interests in digital video at the advanced honors level. This class will focus on the communication of ideas through visual images. Comprised of junior and senior honors students, this advanced course provides students with the most sophisticated opportunities to explore and develop a variety of production techniques applied to narrative, commercial, and experimental forms of digital video. The class emphasizes independent small group productions and emphasizes an intense exploration of the skills the students have acquired so far in the previous levels. Media project concepts will be developed in collaboration with faculty, visiting artists, and occasionally with students from other disciplines. Several long-term projects will be produced during the year. This course is recommended for students preparing video portfolios for festivals and college applications. **Students are required to fulfill a 2 year commitment to this course of study.**

Drawing and Painting Honors

Course Number: 1113

Credit: 1

Placement: Enrollment in Drawing and Painting (H) is limited to students who have been accepted to the honors art program according to the criteria above.

Prerequisite: 2D Foundations or Contemporary Practices

Enrollment: Limited to 28 students

These full year advanced studio courses are designed for students who have completed 2D Foundations and/or Contemporary Practices in Drawing and Painting and wish to go deeper into their concepts and processes. Course are comprised of a junior and senior level and are designed to further understanding of foundational skills, while developing each individuals own unique aesthetic. Courses will develop sequentially, moving through observational and spatial studies, which expand into areas of organic form, color systems, scale and point of view, while embracing imagined and invented works. Studies culminate with open-ended thematic projects encouraged to nurture students' own personal and individualistic approach to image making, all geared towards the creation of a portfolio of works that may be used for college admission. Additional projects include The Senior Print Folio and works inspired by the collaborative process, the written word, and contemporary artists. **Students are required to fulfill a 2 year commitment to this course of study.**

Sculpture and 3D Design Honors

Course Number: 1116

Credit: 1

Placement: Enrollment in Sculpture & 3D Design H is limited to students who have been accepted to the honors art program according to the criteria above.

Prerequisite: 3D Foundations or Contemporary Practices

Enrollment: Limited to 28 students

The study of Sculpture builds on the foundation established in 3D Design and/or Contemporary Practices. This course comprised of juniors and seniors, operates with the philosophy that human beings inherently want to build, create, and express themselves by making things. This class gives students the tools, information, time and space to become more sophisticated at that critical work. Students explore the creative, communicative, and structural possibilities of materials and the poetic/expressive qualities of form in space. The course covers the fundamentals of building and casting three-dimensional forms and techniques using a variety of materials, along with the use of hand and power tools. Students work with paper, wire, was, foam, clay, wood, aluminum, plaster and more in the application of principles of balance, sequence, weight, and structural dynamics in Sculpture. This course of study exposes the content and context of past and present art forms, including the application of the three scales of sculpture: (i) the intimate, which relates to the hand or head; (ii) the human, to which the body relates; and (iii) the architectural, into which the body fits. **Students are required to fulfill a 2 year commitment to this course of study.**

Photography (H)

Course Number: 1120

Credit: 1

Placement: Enrollment in Photography (H) is limited to students who have been accepted to the honors arts program according to the criteria above.

Prerequisite: Photography Foundations and/or Contemporary Practices

Enrollment: Limited to 24 students

This full year advanced studio-laboratory course is designed for students who have completed Photography Foundations and/or Contemporary Practices and wish to pursue their interest in fine art photography. This course comprised of a junior and senior level is designed as an exploration to further deepen understanding of the medium and to develop skill with the camera and the ability to think critically about photography. Students focus on the following: genre studies, conceptual art independent projects, and an exploration of photographic practices. Other topics covered include: alternative processes, medium and large format cameras, novelty cameras, advanced darkroom techniques, archival processing, studio lighting and digital imaging. At the close of each semester, students will assemble a portfolio of photographs that demonstrate imagination, skill, and craftsmanship. Students are required to provide their own 35mm film camera, film and photographic papers. The total cost of materials is approximately $200. **Students are required to fulfill a 2 year commitment to this course of study.**