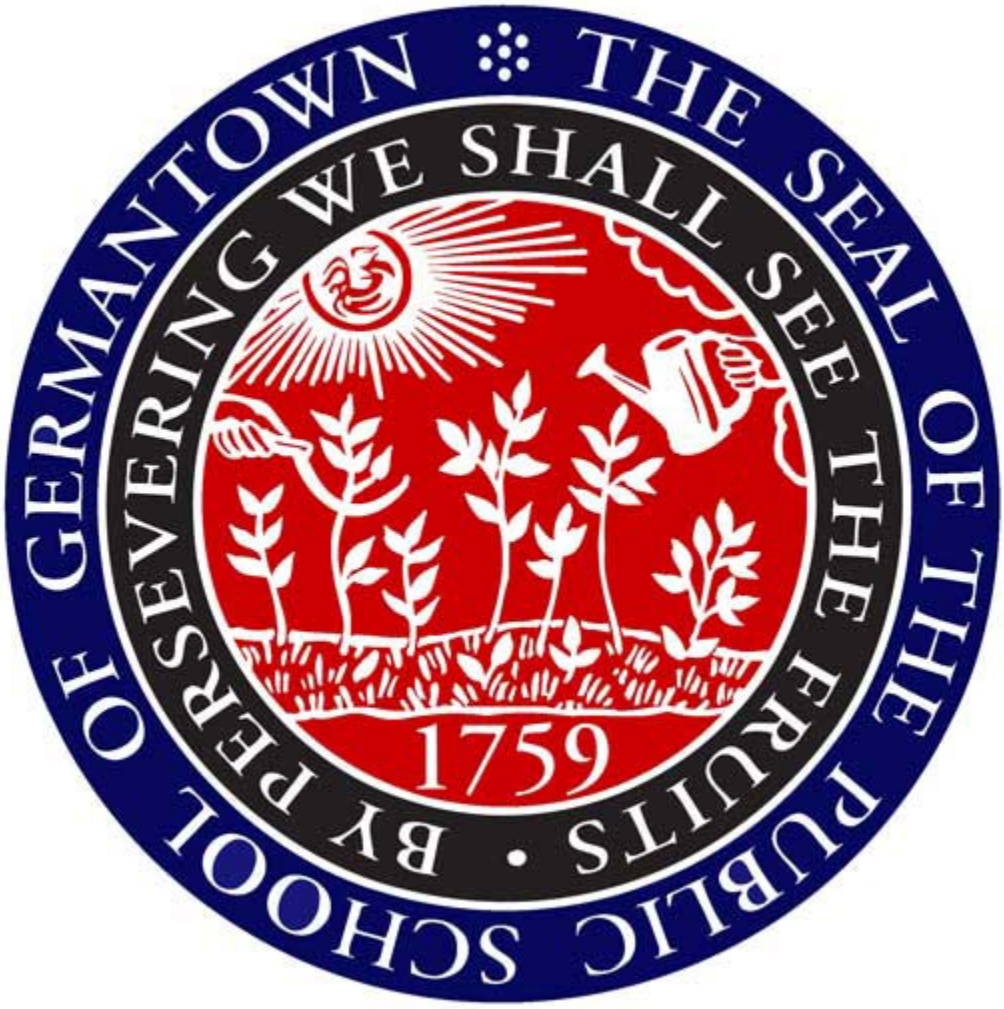
GERMANTOWN ACADEMY



UPPER SCHOOL COURSE DESCRIPTION BOOKLET

2022-2023

Updated 4/13/22

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, 9th Grade 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 5/7 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, <u>both</u> 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)
- 9th Grade Seminar (2x/rotation for whole year)

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 3x/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. Junior College Seminar meets in the spring semester..

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 900 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.

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 formal course defined by the school; it is an opportunity for students to design a program of research, learning, and productive work in a field of study not offered by the school. Within the program, students apply their research and learning to a project that creates new knowledge, addresses a problem in an original way that contributes to solutions, or produces an original creative work that has value and meaning. Students must secure a faculty mentor to provide feedback on their work.

The program is open to sophomores who gain the approval of the Advisors 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 exploring a theme.
- Composing, performing, and recording original works of music.
- Conducting and publishing original research into a compelling question.
- Producing an advanced portfolio of visual art that explores a theme.
- Developing and implementing an advocacy campaign.
- Creating a new device or 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 mentor from the school department most closely affiliated with their project. That mentor will serve as a consultant, but not as a project director. Academy Scholars projects are student-initiated, planned, and conducted. The following courses will appear retroactively on the transcript as credit courses graded "P" for "pass" if the Advisor(s) decides that the work completed merits doing so.

Academy Scholars Research

Course Number: 0080
Credit: 1/2

This credit is awarded to Academy Scholars candidates who have completed a formal project proposal and who have been accepted into the program. Students will explore their proposed essential questions through significant research using a variety of sources and culminating in a research portfolio and report. In addition, students will develop a plan for applying their research to a project that creates new knowledge, addresses a problem in an original way that contributes to solutions, or produces original creative work that has value and meaning.

Students are also required to participate in workshops, keep a journal, and hold regular meetings with a project mentor. 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 a course (averaging 1.5 hours per week). Students who receive credit for Academy Scholars Research are eligible to pursue the Academy Scholars Project Development course.

Academy Scholars Project Development

Course Number: 0081
Credit: 1/2

In this year, student build on their research to develop a project that addresses a problem in an original way that contributes to solutions, creates new knowledge, or produces original work that has value and meaning. Students will work with a mentor to carry out their project but will take primary responsibility for directing and managing their own work. Student will design and keep to a schedule for completing work needed to move the project forward toward completion. At the conclusion of this year, the student will have completed a substantial portion of their proposed project.

Students are also required to participate in workshops, keep a journal, and hold regular meetings with a project mentor. 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 a course (averaging 1.5 hours per week). Students who receive credit for Academy Scholars Project Development are eligible to pursue the Academy Scholars Leadership (H) course.

Academy Scholars Leadership (H)

Course Number: 0082
Credit: 1/2

Students enter the year with a project that is completed or nearly completed and meets program objectives. They will focus on sharing their work within the GA community and beyond and acting as mentors to younger students pursuing projects.

As leaders, students must be able to showcase work that demonstrates a high level of achievement within the program. In addition, they 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 Advisor(s), including the student's project mentor and another faculty member of the student's choice, is set up specially to review the project. Projects that effectively meet objectives and are presented at the culmination of Academy Scholars Leadership will receive transcript recognition and graduation honors.

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**	**N/A**
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 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 ancient literature 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 of 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 Computer Science
Sequence of Courses

Grades 10-12	Computer Science 1
Grades 10-12	Computer Science 1 Honors
Grades 10-12	AP Computer Science Principles*
Grades 11-12	Advanced Topics in Computer Science

*Check below for requirements. Students are required to take the AP Computer Science Principles exam in May.

Departmental Overview

Germantown Academy's Computer Science Department prepares students by developing an understanding of the capabilities of the computational tools around us, the algorithmic and abstraction skills to wield those tools to solve a variety of problems, and the ethical behavior to do so responsibly. Students will incorporate their own interests into their work and are expected to integrate their work with their other subjects.

Course Placement Policy

Students with little to no prior experience with coding or Computer Science will typically begin their Upper School Computer Science studies by taking Computer Science 1. Students with prior experience at Germantown Academy, work done at another school, and/or work completed independently can enroll in CS1 Honors or AP CS Principles following a discussion with, and approval of, the Chair of Computer Science.

Upper School Computer Science
Course Offerings

Computer Science 1

Course Number: 0909

Credit: 1

Class Meetings: 5/7

Max. Enrollment: 16

Note: Available to Grades 10-12

This course introduces students to computational thinking, problem-solving, and ethical computing through creative coding, cross-curricular projects, and interest-driven challenges. Students develop foundational coding, problem decomposition, program design, data abstraction and manipulation, and analytical skills.

Computer Science 1 Honors

Course Number: 0910

Credit: 1

Class Meetings: 5/7

Max. Enrollment: 16

Note: Available to Grades 10-12. Approval of Chair of Computer Science is required.

In comparison to their CS1 counterparts, students taking CS1 Honors will cover material at greater depth and produce projects of greater sophistication and complexity. Honors students will additionally be responsible for more interest-driven projects, as well as completing an ethical computing reading over the course the year.

AP Computer Science Principles

Course Number: 0907

Credit: 1

Class Meetings: 5/7

Max. Enrollment: 16

Prerequisites: Available to Grades 10-12. Approval of Chair of Computer Science is required. Students who previously passed Intro to Computer Science in good standing may take AP CS Principles.

This project-based course extends students' computational thinking, problem solving, and ethical computing skills while learning to apply those skills both in broader technical ways—more complex coding techniques and analysis, deeper understanding of data manipulation, and introducing topics in networking and security—and across fields and disciplines as we discover the impact that computing has in our world. Students will be introduced to a broad set of tools and techniques and be tasked with designing projects in pursuit of their individual interests.

Advanced Topics in Computer Science (Honors)

Course Number: 0911

Credit: ½

Class Meetings: 2/7

Prerequisites: Completion of a previous Computer Science course in good standing and approval of the Chair of Computer Science

Advanced Topics in Computer Science is a project-based class where students will design and implement real-world projects. Students engage in developing feature lists with clients in the GA community, choosing tools and environments appropriate to the project, formulating a timeline for their project, and creating and delivering the final product.

Students choosing this elective must demonstrate curiosity, personal initiative, and independence. Grades for the course will consist of a series of developmental milestone check-ins, culminating in successful completion of the project to specification. Therefore, the ability to meet deadlines is of utmost importance.

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**	**First Semester Seminar; Second Semester Seminar; Personal Essay Writing (5 weeks)**	**First Semester Seminar; Second Semester Seminar**
English 9	**English 10**	***First Semester Advanced English Seminar Second Semester Advanced English Seminar; Personal Essay Writing (5 weeks)**	***First Semester Advanced English Seminar; Second Semester Advanced English Seminar**
English 9	**English 10**	**First Semester Seminar; Second Semester Seminar; Personal Essay Writing (5 weeks)**	***First Semester Advanced English Seminar; Second Semester Advanced English Seminar**

***** Students must qualify for Advanced English Seminars. 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, as well as Personal Essay Writing.

2. Students who are admitted and choose to take Advanced English are required to take Advanced English for both semesters; Advanced credit will not apply if a student takes only one semester at the Advanced level.

3. Students must maintain at least a B- average in Advanced English their junior year to continue in Advanced for their senior year.

4. The English Department no longer offers AP English courses; however, 11th and 12th grade students in any level may elect to take either the AP English Language Exam or the AP English Literature Exam. Students are responsible for enrolling for these exams with the Director of Testing.

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 the many factors that influence and shape human identity, from culture and religion to race, gender, and sexuality. These courses also teach fundamental reading and writing skills that will serve students throughout their Upper School English career and beyond. The seminars 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. Advanced level courses offer similar opportunities while challenging students to delve into more rigorous texts and produce more complex and nuanced interpretations both verbally and in writing. We expect all students to grapple intellectually, to engage actively in their own learning, 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
- Eleventh graders take two semester-long seminars and Personal Essay Writing, a five week mini-course in May
- Eleventh graders who qualify may take two semester- long Advanced seminars, plus the five-week Personal Essay Writing
- Twelfth graders take two semester-long seminars
- Twelfth graders who qualify may take two semester-long Advanced seminars
- Requirements for Advanced courses—open to both eleventh and twelfth graders:
    1. Minimum B+ for Semester 1 English grade. Expectation that this grade will be maintained through the Semester 2 Interim.
    2. Successful completion of qualifying essay, blind-graded by two Advanced English teachers.

Note: The English Department makes placement decisions based on students' demonstrated skills both in class and on the qualifying essay.

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 seminar before students can petition to add a second upper level seminar for either semester.

3. Advanced English requires a full-year commitment. Students who enroll in Advanced for only one semester will not qualify for Advanced designation on their transcripts. Students who are not admitted to Advanced 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 10

Course Number: 0304

Credit: 1

English 9 and English 10 are our foundational courses, intended to provide students with a strong knowledge and skills base to prepare them for success in junior and senior year and beyond. Over the course of two years, students will engage in an in-depth exploration of human identity development, using literature to explore how factors such as family, culture, race, religion, gender, sexuality, and class shape who we are and how we see the world. Through the exploration of a range of texts, students will develop critical thinking and literary analysis skills as they work to become more mature readers and thinkers. Students will also hone their skills as analytical writers, learning to develop and support persuasive arguments based on text. As students progress through the curriculum, they will develop increasingly complex arguments and express those arguments in increasingly sophisticated ways. To support students' development as readers and writers, both courses emphasize the development of vocabulary and grammatical concepts. These courses seek to develop competencies in students that will serve them both at the Harkness table and in the world beyond the classroom.

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. Over the course of the five-week class, students work to develop and refine a personal essay.

*Note: This course is pass/fail. In order to pass the course, students must engage in all activities and submit all assignments.

Note that enrollment in all junior-senior courses is capped at 16 students. Minimum enrollment is 12. Students will have the chance to rank courses in order of preference during course selection; however, preference is only one of many factors that go into scheduling, and we cannot guarantee students the classes of their choice. The following courses are anticipated offerings and may be subject to change.

Upper School English Seminars
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."

Fiction Writing

Course Number: 0392

Credit: 1/2

Instructor: Ms. Graffam

Semester(s): First

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.

Happiness in Literature

Course Number: **0344**

Credit: 1/2

Instructor: Ms. McPhillips

Semester(s):

At first glance, a reader might think that all authors are depressives. It must not be literature if characters aren't suffering, right? In this course, we will challenge that assumption and look at the topic of happiness in literature. What makes characters happy? What makes them suffer? How do they get in the way of their own happiness? What can we learn about happiness by looking at its opposites: despair, misery, and downright gloom? Course texts may include *The Little Prince* by Antoine de Saint-Exupéry, *The Midnight Library* by Matt Haig, as well as collected articles and poems connected to the theme of happiness. Writing in a variety of modes including personal writing, creative writing, and traditional literary analysis, students will build upon the foundational writing skills they have learned in previous courses and employ them to explore the topic of happiness in both fictional and real circumstances.

Historical Fiction

Course Number: 0310

Credit: 1/2

Instructor: Ms. Evans

Semester(s): First

As George Washington reminds Alexander Hamilton in *Hamilton* the musical, "who tells your story" and *how* they tell your story has a lot to do with what people believe—whether that story matches up with actual events or not. In this class, we will explore both nonfiction and fictionalized accounts of the same events, exploring the ways in which storytelling shapes our understanding of history and the moments when fiction feels more "true" than nonfiction. Texts may include *Hamilton: The Revolution* (Miranda), *Homegoing* (Gyasi), and *The Sympathizer* (Nguyen).

The Victorian Gothic

Course Number: 0311

Credit: 1/2

Instructor: Ms. Peters

Semester(s): First

The label "Victorian" often connotes a society ruled by propriety and order, while the label "Gothic" connotes the fears and anxieties within a society. What makes Victorian Gothic literature so interesting is not what appears on the surface, but what lies underneath. Victorian expectations for codes of behavior were unyielding and those who deviated from them were often ostracized. This course will focus on the stories of those seen as "The Other" because they refuse to adhere to societal boundaries. In reading this literature, we will pay particular attention to how the tensions surrounding class, race, gender, and sexuality appeared in coded ways. Texts may include a selection of poetry as well as short stories by Hawthorne and Poe, Stevenson's *The Strange Case of Dr. Jekyll and Mr. Hyde,* and excerpts from Stoker's *Dracula*.

What You Want to Be: Career Choices and Identity in Literature

Course Number: **0342**

Credit: 1/2

Instructor: Ms. Vutz

Semester(s):

What do you want to be when you grow up? What kind of person do you want to be? What do the phrases "want to be" and "kind of person" entail exactly? 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 and seek it out? 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 present and final project demonstrating their understanding of the role of work in defining personal morality and identity. Texts may include: Ben Hamper's *Rivethead,* James Blake's *Ways of Grace,* short readings from Studs Terkel's *Working* and the film *American Factory*.

Wild Justice: Revenge Across the Ages

Course Number: 0379

Credit: 1/2

Instructor: Dr. Torrey

Semester(s): Second

During the English Renaissance, Francis Bacon famously described revenge as "a kind of wild justice, which the more man's nature runs to, the more ought law to weed it out." Despite his sentiments, however, numerous writers have continued to explore the desire to seek revenge. In this course we will read some of those works, including a classical revenge tragedy and more recent explorations of revenge in poetry, short fiction, drama, and film. Throughout the semester, we will ask why revenge remains such a persistent theme, what questions it raises—be they moral, philosophical, religious, social, political, or gender-related—and whether revenge can ever represent true rather than "wild" justice.

Readings will likely include Euripides' *Medea*, Ariel Dorfman's *Death and the Maiden*, Stephen Fry's *Revenge: A Novel*, Sherman Alexie's *Flight*, Dennis Lehane's *Mystic River*, short fiction by various authors, and perhaps a film or two (possibilities include *Mystic River*, *Thelma and Louise,* and *Memento*).

Note: the films this course may include are R-rated.

Upper School English Seminars
SECOND SEMESTER

The Art of Persuasion

Course Number: 0316

Credit: 1/2

Instructor: Ms. Evans

Semester(s): Second

Have you ever known someone who was incredibly persuasive? Have you ever wondered what their secret is? In this class, we will explore the art of persuasion through language. Students will become experts at employing persuasive rhetorical techniques and at analyzing how others employ those techniques to persuade. Students will write their own persuasive arguments and explore how authors use persuasive techniques to encourage readers to believe certain things about such topics as: language and identity; school and education; family life and gender roles; government and politics; sports and leisure; nature and the environment; and science and technology. Possible texts may include *The Norton Sampler of Short Essays and Composition* and *The Art of Voice: Language and Composition.*

Introduction to Film

Course Number: **0352**

Credit: 1/2

Instructor: Mr. Ferrier

Semester(s):

This course will offer a broad introduction to the study of film as an art form and area of critical analysis. The beginning of the course will teach students the basic vocabulary of cinematic language and techniques, asking students to recognize and examine the formal and artistic choices that filmmakers make in telling stories. We will also survey the styles, genres, and historical landmarks of American and global cinema, to examine how contemporary visual media shapes our understanding of ourselves and society. This course will also provide students with key critical and theoretical approaches to analyzing and writing about films. In terms of assessments, there will be a variety of approaches: two short formal essays on mise-en-scène analysis and shot sequence/breakdown analysis, a longer critical essay of a film, tiered project-based simulations, creative writing of a short scene, and ongoing viewing and film review journals. The main required course text will be *Looking at Movies: An Introduction to Film*, 7th edition (eds. Dave Monahan & Richard Barsam), which will be supplemented by some short fiction (that was adapted into films), excerpts from screenplays, and critical essays posted on Canvas. Our film viewings will focus on masterworks of 21st century American and global cinema.

Introduction to Journalism

Course Number: **0354**

Credit: 1/2

Instructor: Ms. McPhillips

Semester(s):

In the words of Kurt Vonnegut, writing in journalistic style means this: "be clear and don't bluff." In this course, you will learn the foundational principles of journalism. We will begin by exploring what makes a good story, learning about journalistic rights and ethics, and determining how to maintain an objective mindset. We will study the mechanisms of how a story moves from an idea to a draft, through research, interviewing, and reporting. Students will also learn editorial processes including fact checking and adhering to AP style. Using a course textbook, along with collected articles from reputable journalistic sources from across the web, students will study and practice writing in a variety of journalistic modes including news, features, and opinion.

Jewish American Literature

Course Number: **0313**

Credit: 1/2

Instructor: Dr. Friedman

Semester(s):

This course will introduce students to some of the central themes and concerns of Jewish American literature. Given the complex history of Jewish culture in America, a history marked by immigration and displacement, anti-Semitism and assimilation, the authors of these texts must wrestle with what it means to be both Jewish and American and how, at times, these identities can seem in conflict with one another. By reading a selection of short stories, poetry, drama, and fiction produced over the last century, we will consider how Jewish American writers address this conflict and how they explore the meaning of identity and culture, family and community, immigration, and exile. Possible texts may include short stories by Grace Paley, Philip Roth, and Molly Antopol; poetry by Emma Lazarus, Allen Ginsberg, and Alicia Ostriker; Neil Simon's *Brighton Beach Memoirs*, and Art Spiegelman's *Maus*.

Literature of Time Travel

Course Number: 0319

Credit: 1/2

Instructor: Ms. Peters

Semester(s): Second

We've all wished we could have a do over, something in our lives we wish we could change. Sometimes, we wish we could speak to our past selves to let them know we turned out okay or our future selves to know we made the right decisions. For many of us, time travel offers an ideal fantasy where we can imagine a different past and future for ourselves—and possibly for the world. In this course, we will read stories about individuals who have been given the opportunity to travel through time, whether out of sheer curiosity or because they've been tasked with preserving their present and future. We will examine the larger societal and ethical questions that arise when considering time travel. Texts will include a selection of short stories, H.G. Wells' *The Time Machine*, Octavia Butler's *Kindred*, and Sherman Alexie's *Flight*.

When Nature Strikes: Literature of Climate Events

Course Number: **0350**

Credit: 1/2

Instructor: Ms. Vutz

Semester(s):

Despite rapid technological advancement, or perhaps spurred by it, the welfare of human cultures increasingly depends on our relationship with the natural earth. Stories rooted in climate events are a useful way to grapple with our individual identities and our connection to a diverse array of others as we struggle to navigate a world of shifting resources and vast ecological change. Climate fiction addresses questions of survival, control, satisfaction of desire, reconciliation with the inevitability of death, and the role of family and community traditions and values. Underneath the unique perspectives that emerge in response to natural disasters and climate events, the shared themes in these narratives tie people together in revealing ways. The readings for this course will seek to answer questions about how we define the relationship between humankind and the earth. What is the human response to cataclysmic change, and how do such events further refine our definitions of humanity? Texts may include: Marcel Theroux's *Far North,* Louise Erdrich's story collection *The Red Convertible,* readings of Henry Thoreau, and relevant selections of poetry and film.

The World Turned Upside Down

Course Number: **0318**

Credit: 1/2

Instructor: Ms. Lintgen

Semester(s): Second

There is comfort in predictability. While the occasional surprise might be fun, we are often guided by what we expect of the world around us to be. But what happens when things are not as we have always known them to be? Imagine a nation whose sole purpose was to oppress and impoverish its people. Consider what it would mean to read a newspaper with the full knowledge that *nothing* in it was true. Contemplate a world where *women* were the dominant gender, where history was rewritten with women as the central figures of power and supremacy. In this course we will read George Orwell's *1984* and Naomi Alderman's *The Power* in order to explore worlds where our expectations are upended at every turn and traditional notions of good and bad, dominance and submission are turned inside out. Students will conclude the semester with an independent project.

Upper School English
Advanced Seminars
FIRST SEMESTER

Advanced English: Behind Bars

Course Number: **0348**

Credit: 1/2

Instructor: Mr. Ferrier

Semester(s):

The United States currently has the largest prison population in the world--a nation with about five percent of the world's population yet twenty-two percent of its prisoners. The Russian novelist Fyodor Dostoevsky, reflecting on his four years in exile in a Siberian prison camp, once wrote, "The degree of civilization in a society can be judged by entering its prisons." What story does this unparalleled escalation of incarcerated populations tell us about American society? What can we learn from those who work for, live in, and resist against the modern prison system? This course will explore what it means to live in this age of mass incarceration by examining the emerging genre of prison literature and film. We will ask complex questions about freedom and punishment, and we will explore different theories and models of justice, as well as the purposes and effects of imprisonment. Course texts may include: non-fiction essays from Michel Foucault, Henry David Thoreau, Martin Luther King, Jr., Michelle Alexander, and Ta-Nehisi Coates; fiction from Ursula LeGuin ("The Ones Who Walk Away from Omelas"), Franz Kafka ("In the Penal Colony") and Tayari Jones (*An American Marriage*); and films including *Cool Hand Luke*, *13th,* and *Just Mercy.* The course will conclude with an independent reading unit on prison memoirs, with selections from Jimmy Santiago Baca (*A Place to Stand*), Shane Bauer (*An American Prison*), Piper Kerman (*Orange is the New Black*), and Neil White (*In the Sanctuary of Outcasts*).

Advanced English: Crazy Love

Course Number: 0320

Credit: 1/2

Instructor: Ms. Lintgen

Semester(s): Second

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 a play by Shakespeare, *Brokeback Mountain* by Annie Proulx, *Wuthering Heights* by Emily Bronte, and *This is How You Lose Her* by Juno Diaz.

Advanced English: Writing Our Selves into the World

Course Number: **0322**

Credit: 1/2

Instructor: Dr. Friedman

Semester(s):

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 will include Sherman Alexie's *Flight*, excerpts from Walt Whitman's *Song of Myself* and Claudia Rankin's *Citizen*, and Maxine Hong Kingston's *The Woman Warrior*. Students will conclude the semester with an independent project in which they consider how these essential questions pertain to them and their own lives.

Upper School English
Advanced Seminars
SECOND SEMESTER

Advanced English: Beyond the Binary

Course Number: 0323

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.

Advanced English: Imaginary Worlds

Course Number: 0326

Credit: 1/2

Instructor: Dr. Torrey

Semester(s): First

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*.

Advanced English: Madmen and Geniuses

Course Number: 0321

Credit: 1/2

Instructor: Ms. Graffam

Semester(s): Second

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.

Upper School History
Sequence of Courses

9th	10th	11th	12th
World History I (Atlantic World History)	**World History II (Modern Global Interactions)** **Advanced World History II**	**Modern America** **Advanced U.S. History** **Electives***	**Electives***

Notes:

- **History is not required in 12th grade.**
- **Each year there are a few electives available to Juniors.**
- **Senior electives are semester-long courses.**
- **Honors Electives will be offered each semester, and they require minimum grades in current history courses and teacher recommendations.**

Upper School History
Departmental Overview

History classrooms at GA foster the skills and habits essential for citizenship: empathy, critical thinking, and clear communication. Through the study of History and related disciplines, you will learn to approach problems using historical thinking, global perspectives, and an awareness of diverse experiences. You will engage with multiple viewpoints, listen actively to others, evaluate sources of information, conduct research, and practice constructing your own evidence-based arguments. Graduates will possess the skills needed to engage in the world with compassion and confidence.

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 Studies, Art History, Modern China, Economics, Indigenous America, Military History, and Women and Gender in American History. Advanced and regular level courses are offered each year. Three years of history are required, but most students opt to take history in all four years.

Upper School History
Course Placement Policy

All Advanced and Honors courses in the History Department have prerequisites, but they vary depending on the course.

10th grade— Advanced World History II:
In order for 9th grade students to be considered for admission into this course, the following requirements must be met:

- minimum grade of A- in 9th grade World History I
- 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 world history.

11th grade— Advanced U.S. History:
A 10th grader in Advanced World History II may choose to continue in Advanced U.S. History if they have performed acceptably in their current Advanced course.

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 A- in 10th grade World History II course
- interview with 10th grade WHII teacher
- 10th grade WHII teacher's recommendation
- excellent performance on the competitive qualifying exam

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

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

Honors Senior 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 current History course
- 11th grade history teacher's recommendation

Advanced Topics in Economics
This rigorous course requires a solid foundation in both history and math. To enroll, students must:

- Have an A- or better in Modern America OR a B+ or better in Advanced US History.
- Have an A- or better in Pre-Calculus OR a B+ or better in Pre-Calculus (H).

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 Atlantic World. The course begins with the first encounters between Europe, Africa, and the Americas, and examines how the interaction between these three areas transformed the Atlantic World between 1492 and 1900, 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.

Advanced World History II

Course Number: 1404

Credit: 1

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

Major themes of the Advanced World History II curriculum include interaction among societies (through trade, war, and diplomacy), continuity and change across all time periods of human history, 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 as well as monographs.
**** 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.

Advanced U.S. History

Course Number: 0406

Credit: 1

Placement: Admission to this course is by permission only. The criteria for selection include at least an A- average in 10th grade World History II, an interview with the current 10th grade history teacher, a recommendation from that teacher, and a placement test administered in the spring of sophomore year. Sophomores in Advanced World History II, if they have performed acceptably, may expect to be asked to continue in Advanced 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.

This advanced 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: Honors Courses

China from Mao to Now (H)

Course Number: 1409

Credit: 1/2

Instructor: Mr. Moyer

Semester(s): Second

Placement: A grade of B+ or better in 11th grade Modern America or a B in Advanced U.S. History is required.

Seniors in this elective will closely examine the economic, political, social, cultural, and environmental state of China today through primary sources, historical works, contemporary journalism on the internet and social media, and Chinese films. We will cover many events and issues from the broader history of China to provide the necessary context for better understanding the changes that have taken place over the past century in China and in the world.

Topics in Advanced Economics (H)

Course Number: Sem 1 0414; Sem 2 0415

Credit: 1/2

Instructor: Ms. McVicar

Semester(s): First or Second

Placement: Minimum grades of A- are required in both of the following courses: 11th grade Modern America and Precalculus. Minimum grades of B+ are required in both of the following courses: Advanced U.S. History and Precalculus (Honors). Students who met all of the necessary grade requirements will be placed into a lottery, which will then be used to fill the limited spaces of the course.

Advanced Economics is designed to help students cultivate their understanding of the principles that apply to individual economic decision-makers by using models to describe economic situations and predict and explain outcomes. This course also introduces the principles that apply to an economic system as a whole. Students will learn to use graphs, charts, and quantitative data to analyze, describe, and explain economic concepts. The course is taught as a fast-paced introductory economics course.

Topics in Neuropsychology (H)

Course Number: 0417

Credit: 1/2

Instructor: Ms. Merrill

Semester(s): Second

Placement: A minimum grade of B+ in 11th grade Modern America or a B in Advanced U.S. History is required.

How do you know what is real? Do you have free will? Do you have control over your thinking, learning, personality, and senses? How does the teenage brain function in a world run by adults? This course introduces you to the systematic and scientific study of the mind and how that shapes the behavior and mental processes of human beings. Through the lens of a neuroscientist, we will explore psychological facts, principles, and phenomena associated with three major sub-fields within biopsychology: Attention, Perception and Sleep, Intelligence, and Cognitive Psychology. By the end of the semester, you will think like a psychologist and perhaps even question the world as you *think* you know it.

Power and Politics (H)

Course Number: 1408

Credit: 1/2

Instructor: Mr. Moyer

Semester(s): First

Placement: A minimum grade of B+ or in 11th grade Modern America or a B in Advanced U.S. History is required.

Seniors in this elective will closely examine the rise of authoritarian political systems currently taking place throughout the world. Students will examine the history of tyranny through case studies and try to construct a better understanding of why these systems persist throughout history. Students will be expected to construct and participate in a school-wide assembly based on political events and issues taking place at the time.

Topics in Social Psychology (H)

Course Number: 0416

Credit: 1/2

Instructor: Ms May

Semester(s): Second

Placement: A minimum grade of B+ in 11th grade Modern America or a B in Advanced U.S. History is required.

This course is designed as a survey course of theory and research in social psychology. The goal of this class is to explain how our thoughts, feelings, and behavior are influenced by the actual, imagined, or implied presence of other people. We will discuss social thinking (social identity, judgments, and attitudes), social influence (culture, conformity, and obedience), and social relations (prejudice, aggression, attraction, helping, and conflict resolution). Throughout the course, students will be encouraged to think about how research in social psychology can shed light on events in the world around us and in our own lives and how psychology can help us to be better humans.

Women and Gender in American History (H)

Course Number: 0460

Credit: 1/2

Instructor: Ms. Lloyd

Semester(s): Second

Placement: A minimum grade of B+ in 11th grade Modern America or a B in Advanced U.S. History is required.

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.

Upper School History
Electives: Semester Courses

American Studies

Course Number: 1410

Credit: 1/2

Instructor: Mr. Bratton

Semester(s): Second

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

This history course will identify and analyze what are often considered to be traditional American values, such as independence, freedom, individualism, and activism through an interdisciplinary approach of addressing primary sources and excerpts from works of literature and popular media. Discussion and exploration of topics may include examinations of how Americans express our views on sexuality, poverty, climate change, and sustainability. The class will be asked to apply theories and research techniques to ethical problems taking place around them. Each student will be asked to construct their own case study that addresses the historical background and proposes possible solutions.

African American Studies

Course Number: 0426

Credit: 1/2

Instructor: Mr. Bratton

Semester(s): First

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

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.

Indigenous America

Course Number: 0428

Credit: 1/2

Instructor: Mr. Freedland

Semester(s): First

Note: This elective is open to Seniors and Juniors

The Americas, especially the United States, has long been considered one of the most diverse nations in the world. For hundreds of years, the western hemisphere has drawn people from all corners of the world with promises of religious freedom, economic opportunity, and political liberty thanks to one of the greatest democratic experiments in world history. The United States has represented "A City Upon a Hill" for countless millions. The "American Dream", however, has often come despite the presence and at the expense of millions of indigenous people who inhabited this land for tens of thousands of years prior to European colonization. In this course, we will explore the history of the First Nations and those who inhabited the "New World" before conquest. We will wrestle with the challenging history and legacies that evolved after first contact and seek to better understand the experiences of the diverse people that considered "America" home long before Columbus sailed the ocean blue. By understanding the history of indigenous peoples, we seek to better understand our own nation's history and our place in it.

Military History

Course Number: 0464

Credit: 1/2

Instructor: Dr. Rabuck

Semester(s): Second

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

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

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

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.

America's Pastime: History and Culture of Sport

Course Number: **0424**

Credit: 1/2

Instructor: Ms. Lloyd

Semester(s): First

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

Throughout the recorded history of the North American continent—and certainly before written histories became commonplace—sports have held a uniquely important position within American societies. This course will explore the foundational sports of this country—amateur, professional, organized, and sacred—and examine the relationship between sports and race, class, gender, and regional or national identities, as well as the use of sports as platforms for social and political change. With an in-depth look at lacrosse, baseball, basketball, football, and Olympic sports, students will use the lens of sports to better understand the history of the United States and those living within its boundaries.

Topics in Art History (H)

Course Number: **0430**

Credit: 1/2

Instructor: Dr. Rabuck

Semester(s): Fall

Placement: A minimum grade of B+ in Modern America or B in Advanced US History.

Human civilization literally began when our ancestors first created art. In the moment humans began using symbolic representation of the world around them, they ceased to be tool-using apes and became creatures who struggled with many of the same issues we grapple with today: the nature of the universe, the nature of the soul, and the nature of the individual. In this course, we will look at each of these themes in turn and explore how artists and architects across time and continents have used their media to communicate personal and cultural responses to these questions. Students will look for common elements as they compile a portfolio of important works, and learn to understand why changing times and civilizations produce differences in expression.

Topics in Psychology (H)

Course Number: **0422**

Credit: 1/2

Instructor: Ms. May and Ms. Merrill

Semester(s): Fall

Placement: A minimum grade of B+ in Modern America or B in Advanced US History.

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

This course is a survey of the science of psychology and an introduction to the complexities of human nature. We will examine the world of psychological research through landmark studies that shaped the field and will discuss the ethical concerns of testing human and animal subjects. Students will explore the methods involved in the scientific investigation of human behavior, stressing such topics as emotion, personality, cognition, biology, development, and social influence. Students will produce an APA-style research paper on a topic of their choosing.

Visualizing Power: Nations and Popular Media
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Course Number: **0432**

Credit: 1/2

Instructor: Dr. MacKean

Semester(s): Fall

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

Visualizing Power is a trans-historical study of the evolving strategies of nation-states to use popular media and popular culture to shape the actions of their citizens. Over the course of the semester, students will consider three essential questions in turn: through the lens of Benedict Anderson's *Imagined Communities*, how do nations seek to use popular media to help in the imagining of nations? How has advanced technology affected nations' leveraging of popular media to shape domestic and international dialogue? Finally, when and how are narratives of nations disrupted by groups of citizens, and how effective are those contestations? In the early part of the semester, historical case studies will explore the origins of national identity creation, including the foundation of mass propaganda campaigns throughout the twentieth century. In the latter part of the semester, students will focus increasingly on current events, with conversations driven by student interest. Potential topics include: the controversy over Confederate monuments; the use of mass media by performance protest artists; international moments of spectacle like the Olympic games; and contemporary (dis)information campaigns through social influencers.

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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 B*	**Geometry**	**Algebra 2**	**Algebra 3/Trig**	**Statistics****
		Algebra 2 Accelerated	**Precalculus**	**Statistics** Statistics (H)*****
Geometry	**Algebra 2**	**Algebra3/Trig**	**Statistics****	
	Algebra 2 Accelerated	**Precalculus**	**Calculus**	**Statistics** Statistics (H)*****
Geometry (H)	**Algebra 2 (H)**	**Precalculus (H)/ Differential Calculus**	**AP Calculus AB********	**Statistics (H)*****
			AP Calculus AB/BC*******	**Statistics (H)*****

* Students taking Algebra B in 9th grade will typically take Geometry in 10th grade. Capable mathematics students may take both Geometry and the appropriate level of Algebra 2 during their sophomore year. Students who complete department-approved summer work in geometry after taking Algebra B may be placed in an appropriate level of Algebra 2 for 10th grade.

Students enrolled in an Honors-level mathematics course may **not sign up for this course without departmental permission.

*** This course is open to all students who meet the prerequisites, but priority will be given to seniors. Please refer to the Statistics (H) description for the prerequisites. Students enrolled in this course who wish to take the AP Statistics exam will need to do extra work independently to prepare for the exam because Statistics (H) does not cover all topics in the AP Statistics curriculum.

**** Students enrolled in AP Calculus AB are required to take the AP Calculus AB exam.

***** AP Calculus AB/BC is for students who are highly motivated and who can proceed through the material at a very fast pace. Students enrolled in AP Calculus AB/BC are required to take the AP Calculus BC exam.

Notes:

1. Mathematics is required each year except in grade 12, but math is 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.

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 us. The mathematics department believes in presenting each student with a mathematics program which meets as many of their 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.

We offer different levels of many of our courses in order to meet the various needs of our students (i.e., Geometry and Geometry (H), or Algebra 2, Algebra 2 Accelerated, and Algebra 2 (H)). We offer AP Calculus AB and AP Calculus BC courses to prepare students for the requisite AP exams. Statistics, Statistics (H) and Calculus classes are available to students who meet the prerequisites for enrollment (see specific course descriptions for details).

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 6 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 in the 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 9^{th} grade must have earned a minimum A- average; those enrolled in an honors mathematics course in 9^{th} grade 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 Middle School mathematics teacher or the Middle School Math Department Chair.

- **Students New to Germantown Academy Upper School**
  The scope and sequence of mathematics courses differ from school to school. To help with placement, most students new to GA take a placement exam in April prior to their first year at GA.
  - Students that have not yet studied Algebra 1 will be placed in GA's Algebra B course and will not need to take a placement exam.
  - Students who are taking Algebra 1 or Geometry at their current school will be given an initial placement recommendation for a GA math course based on the student's admissions file. A placement exam and/or a conversation with the Upper School Math Department Chair may be needed, depending upon a student's previous coursework.
  - Students studying courses at their current school beyond Algebra 1 and Geometry will have a conversation with the Upper School Math Department Chair to determine what placement makes sense for them. A placement exam may be required to help determine placement in a GA math 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 their previous mathematics courses. Although we believe that students are placed in the level that is appropriate for them, we recognize the fact that each student is a "work in progress" and for that reason offer a process for students to try to change their placement level for the subsequent academic year, as described below.

  If you are <u>currently taking Geometry</u>, the criteria for placement in Algebra 2 Honors are below.
  Students must meet ALL FOUR of these requirements in order to request to enroll in Algebra 2 Honors.
  1. Submitting an online form by February 11, 2022 (the form requires initials from a parent/guardian). The form is emailed to students in December and again in January.
  2. Earning a final exam grade of A- or above.
  3. Finishing the year with a final course grade of A or above after the final exam.
  4. Earning a passing score on the level-change exam (an assessment of algebra and problem-solving fluency), which is administered on Monday, March 7, 2022 from 3:15 – 4:45 pm.

  If you are <u>currently taking any course other than Geometry or Algebra B</u>, the criteria for placement in a higher-level course are below. Students must meet ALL FOUR of these requirements in order to request to enroll in a higher-level course.
  1. Submitting an online form by February 11, 2022 (the form requires initials from a parent/guardian). The form is emailed to students in December and again in January.
  2. Earning a final exam grade of A- or above.
  3. Finishing the year with a final course grade of A or above after the final exam.
  4. Completing the required, substantial, summer assignment in a timely fashion.

Upper School Mathematics
Course Offerings

Algebra B

Course Number: 0645

Credit: 1

Prerequisite(s): MS Algebra A or Pre-Algebra

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 A 8, MS Algebra 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): **(1)** Algebra B or Algebra 1 **(2)** 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): **(1)** Algebra B or Algebra 1 **(2)** Geometry

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, systems of equations and inequalities, linear programming, linear regression, counting principles and probability, 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 many of the topics of AP Calculus AB, the pace is slower and the depth and breadth of study are not as great.

Statistics

Course Number: 0644

Credit: 1

Prerequisite(s): Open to students who have taken Algebra 3/Trigonometry, or to students that have taken Precalculus and who do not already qualify for Statistics (H).

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.

Upper School Mathematics
AP/Honors Course Offerings

Geometry (H)

Course Number: 0612

Credit: 1

Prerequisite(s): MS Algebra B Honors 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 Geometry, and the course will proceed at a faster pace and in greater depth. This course will also be problem-based (see Geometry).

Algebra 2 (H)

Course Number: 0615

Credit: 1

Prerequisite(s): **(1)** Geometry (H) **(2)** MS Algebra B Honors or Algebra B or Algebra 1

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): Open to students with a B+ or higher in their current math course (Algebra 2 Honors, Precalculus, Precalculus (H), or a higher-level course). Students who do not meet the B+ grade requirement may be admitted with departmental permission.

Note: In the event of over enrollment, spaces will be filled via lottery.

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. Students who wish to take the AP Statistics exam will need to independently study some topics to prepare for the exam. This course **does not** cover all topics in the AP Statistics curriculum.

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. Students enrolled in AP Calculus AB are required to take the AP Calculus AB exam.

*A substantial summer assignment will be required for this course.

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

After a review of the basics of limits and differentiation first addressed in Pre-Calculus Honors/Differential Calculus, 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 expected to interpret problems graphically, numerically, algebraically, and verbally. Students enrolled in AP Calculus AB/BC are required to take the AP Calculus BC exam.

* A substantial summer assignment may be required for this course

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 or AP Spanish Language 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 Accelerated	French 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

9th	10th	11th	12th
		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
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 Spanish, honors sections are offered from MS Level B through Level 5, providing there is sufficient enrollment. Honors sections are currently offered in French and Chinese levels 2 through 5. 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:**
- have a grade in the A range in their current class, be highly motivated and engaged
- have excellent speaking and writing skill
- be recommended by his or her teacher
- must write an essay and be interviewed in the target language by the department head and/or small panel of teachers. In the case of Chinese, by the Chinese honors teacher
- must plan to do summer work to help them to be on par with their peers and to be prepared for the more challenging course

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

US Modern Language Policy for Heritage Speakers

The Upper School Modern Language Department welcomes and celebrates all students from various cultural backgrounds, while striving to meet our student's individual needs. Our goal is to broaden each student's horizons and

interests by challenging them to explore a new target language, different from their own native one. Heritage speakers who already communicate proficiently/fluently in their own language or who are bi-lingual should plan to take one of the other languages offered by our department.

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 or teacher 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 teacher recommendation.

The basics of Chinese level 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 teacher 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 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 teacher 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.

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 teacher 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 teacher 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 teacher 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 teacher recommendation.

This fundamental 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 teacher 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 teacher recommendation.

Spanish 2 Honors continues the rigorous study of grammar and Hispanic culture along with the introduction of literary works, cultural projects and films/videos. 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 teacher recommendation.

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

This fundamental 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 teacher recommendation.

Spanish 3 Honors continues the rigorous study of grammar and the culture of Spanish-speaking countries while exploring authentic 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 and/or teacher recommendation.

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 teacher 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. In addition, students who

successfully finish Spanish 4 H generally proceed to the AP level the following year. 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: Completion of Spanish 4 Honors or AP Spanish Literature and Culture.

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, 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 may be 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.

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<tr><th>MUSIC</th><th>THEATRE</th><th>TECHNICAL THEATRE</th></tr>
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Singing Patriots Select**(9)</td><td>Foundations of Acting***(9)</td><td>Foundations of Technical Theatre***(9)</td></tr>
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Honors Strings**(9)</td><td>Music Theatre*</td><td rowspan="4">Theatrical Design & Production</td></tr>
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</table>

* 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 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. 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 the vast majority of students taking theatre classes performs or participates in one or more of our Belfry Club productions, which includes musicals, comedies, and dramas offered as extracurricular activities. Recently, the Belfry Club was cited as the best high school theatre program in the Philadelphia area by *Philadelphia Magazine.*

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, woodwind, and percussion) Honors Strings*):

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
9. Engagement with PMEA and local Youth Orchestras, Bands, and Community Groups encouraged.

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; Advanced Technical Theatre Design*):

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, collaboration, 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)

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: 5/7

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: weekly

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 String Orchestra

Course Number: 1756

Credit: 1

Class Sessions: 5/7

Prerequisite: All interested string students will schedule an audition with Mr. Horner

Requirements:
-Students must also participate in Academy String Orchestra.
-Students must take weekly private lessons.
-Students are expected to participate in Honors Strings for all four years of their Upper School careers.
-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.
Honors Strings students are expected to show leadership in the Academy String Orchestra. Students enrolled in Honors Strings will receive one full Honors credit each year.

String Orchestra

Course Number: 0716

Credit: 1/2

Class Sessions: 3/7

Placement: All interested string students will schedule a placement meeting with Mr. Horner

Note: Academy String Orchestra meets three times per rotation, during different days from Singing Patriots. This creates an opportunity for students to participate in Singing
Patriots (non-honors) in addition to being members of Academy String Orchestra (non-honors).
Students in this ensemble are eligible to participate in co-curricular Jazz Band

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. Regular practice at home is required. Private lessons are strongly recommended.

Honors Symphonic Band (H)

Course Number: 1755

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.
Students are expected to participate in Honors Symphonic Band for all four years of their Upper School careers.
Note: Limited availability in the Percussion Section. All interested students must audition, please set up interview with Mr. Doyle: Delane.Doyle@germantownacademy.org

Note: Students in this ensemble are eligible to participate in co-curricular Jazz Band

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.

Academy 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 different days from Singing Patriots. This creates an opportunity for students to participate in Singing
Patriots (non-honors) in addition to being members of Academy Symphonic Band (non-honors).
Note: Limited availability in the Percussion Section. All interested students must audition, please set up interview with Mr. Doyle: Delane.Doyle@germantownacademy.org

Note: Students in this ensemble are eligible to participate in co-curricular Jazz 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 at home, effort, collaboration, energy, and willingness to experience various styles of guitar are 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. Consistent practice at home, effort, collaboration, energy, and willingness to experience various styles of guitar are required. Students may enroll in Advanced Guitar for more than one year.

Advanced Music Theory (H)

Course Number: 1736

Credit: 1

Class Sessions: 5/7

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
Acting 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: 5/7

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. 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: 5/7

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.

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. 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): Music Theatre students are also expected to develop a performance piece. 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: 5/7

Enrollment: Limited to 6 students. Two sections will run, if needed.

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

Advanced Technical Theatre Production (H)

Course Number: 1759

Credit: 1

Class Meetings: 5/7

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

Prerequisite: Foundations of Technical Theatre

Enrollment: Limited to 10 students. Two sections will run, if needed.

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 & Production

Course Number: 1763

Credit: 1/2

Class Meetings: 3/7

Prerequisite: Currently enrolled in Foundations of Technical Theatre, Two Years of Advanced Technical Theatre, and permission of instructor - Please contact Paul Moffitt for interview: Paul.Moffitt@germantownacademy.org

Enrollment: Limited to 1 student, with multiple sections as needed.

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 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 Design, Set Design, Technical Direction, or Sound Design. 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.

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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: 0825 (9th grade)
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.

The Germantown Academy Physical Education program is designed to develop healthy, responsible, and physical fit students through a variety of activities. We encourage our students to develop a healthy attitude towards competition, sportsmanship, collaboration, self-discipline, and leadership. The program utilizes all available spaces on our campus. Each grade level focuses on a different theme to foster lifelong fitness. All activities encourage different forms of movement. Students learn to use their hand-eye coordination, foot-eye coordination as well as their perceptual/motor skills. There is continued emphasized are basic manipulative skills including throwing, catching, bouncing and dribbling using both hands and feet. Throughout the curriculum, all activities are designed to promote cooperation, creativity, innovation, critical thinking, and problem solving in the context of class challenges.

Sample Units in the Upper School:

9th & 10th grades: Disc Golf – Field Hockey – Pickle Ball – Personal Fitness – Basketball – Lacrosse – Yoga – Self Defense – Softball – Speedball – Floor Hockey – Field Games - Sockey

11th grade: Tennis – Game Creation/Aerobic Activities - Badminton - Volleyball - Archery- Golf

Lessons in Wellness

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

Credit: 1/2

Class Meetings: 3/7u

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

Lessons in Wellness supports students' physical, mental, and emotional wellness by providing information that promotes healthy decision-making now and in the future. This discussion-based, interactive course uses various modalities to advance students' understanding of mental health, nutrition, substance use and abuse, and human sexuality. Through its focus on rights, responsibility, and agency, the course encourages students' growth as independently thinking, compassionate individuals and community members. Students will be equipped with resources to support their continuing, evolving learning.

9th Grade Seminar

All 9th graders are automatically enrolled in 9th Grade Seminar. It is a year-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

Ninth Grade Seminar is a two-semester course that provides students with the opportunity to build community and 21st century skills as they transition into the Upper School. It is an ungraded class where students learn about and discuss subjects related to the health and well-being of adolescents while developing literacy surrounding technology. Topics in semester 1 include GA rules and procedures, decision making, anxiety and depression, consent and healthy relationships, gender and sexuality, justice and fairness, race and identity, and substance use. Topics in semester 2 include integrating SEL awareness and strategies into students' digital lives, understanding persuasive technologies and the privacy issues they raise through computational thinking and data awareness, and building student capacity for online activism through project-based design.

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 Science
Sequence of Courses

Physics	**Chemistry**	**Biology 1**	**Anatomy & Physiology** **Environmental Science** **Marine Biology** **Robotics**
Physics 1	**Chemistry 1**	**Biology 1**	**Anatomy & Physiology** **Environmental Science** **Marine Biology** **Robotics** **Engineering (H)*** **Organic Chemistry (H)*** **AP Biology **** **AP Chemistry **** **AP Environmental **
Physics (H)	**Chemistry (H)**	**Biology (H)**	**Anatomy & Physiology** **Environmental Science** **Marine Biology** **Robotics** **Adv. Math for Science (H)** **Engineering (H)*** **Organic Chemistry (H)*** **AP Biology **** **AP Chemistry **** **AP Environmental **** **AP Physics C**

Independent Science Research (Honors) is available to interested students in every grade (see course description below).

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.

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 physics and chemistry and two placement levels for biology. 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. These include Engineering, 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 following review of transcripts and other admissions materials.
- 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 Chemistry Honors must have at least an A average for the first semester of Physics 1 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 Physics 1:
    - Minimum final grade: A
    - Minimum exam score: B

  Students who do not satisfy this requirement will be registered for Chemistry 1.
- Students enrolled in Physics Honors 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 Chemistry 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

- Students from Chemistry and Chemistry 1 will move into Biology 1.
- Students interested in moving into Biology Honors must have at least an A average for the first semester of Chemistry 1 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 grade requirement at the end of Chemistry 1 (described in the third bullet of the 10th grade process).
- Students enrolled in Chemistry Honors 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 Biology by meeting the grade requirements described in the fourth bullet of the 10th grade process.

11th and 12th grade Electives

- Entry into AP Chemistry will be predicated on an entry exam given in March.
- 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 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.

** 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: 5/7 + one lab (four single periods and one double period per seven-day rotation)

This course introduces students to the fundamental concepts and laws that govern the physical 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 measurable 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: 5/7 + one lab (four 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: 5/7 + two labs (three single and two 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, ideal gases, waves, light, electromagnetism, direct-current circuits and atomic and nuclear 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 Teams and OneNote 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.

Chemistry

Course Number: 0930

Credit: 1

Class Meetings: 5/7 + one labs (four single periods and one double period per seven-day rotation)

Prerequisite: Physics

This Chemistry course uses the text *An Introduction to Chemistry, Chemistry First*. 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. Topics covered in this course include the structure of matter, naming compounds, chemical reactions, counting particles, modern atomic theory, structure of molecules, behavior of gases and solution dynamics. Each unit provides students with opportunities for direct and indirect student-regulated learning, with inquiry-based labs and projects being a cornerstone of the program. Assessments include regular quizzes and opportunities for students to reassess their understanding. The structure of this course shifts the focus of learning away from what the student does not understand toward meaningful comprehension and authentic assessments.

Chemistry 1

Course Number: 0917

Credit: 1

Class Meetings: 5/7 + two labs (four single and one double period 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 solutions. 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, and calculating the molar volume of a gas. The use of basic laboratory techniques and technology are stressed throughout the curriculum.

Chemistry (H)

Course Number: 0932

Credit: 1

Class Meetings: 5/7 + two labs (three 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.

Biology 1

Course Number: 0918

Credit: 1

Class Meetings: 5/7 + one lab (four single 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 evolution. 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. 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: 5/7 + two labs (three 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 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.

Upper School Science
Electives

Grades 9 – 12

Independent Science Research and/or Project (Honors)

Course Number: 0999

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) science fair and the Montgomery County Science Research Competition, which could place them at the state PJAS science fair and the Delaware Valley Science Fair, respectively. Seniors can enter the Regeneron Science Talent Search.

Students choosing this elective must demonstrate curiosity, personal initiative, and independence. 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 must take the initiative in the spring or early summer to find a professional scientist to mentor them for the following school year. Grades for the course will consist of a series of small assignments that will eventually culminate with the more comprehensive manuscript and presentations. Therefore, the ability to meet deadlines is of utmost importance. Students who are unable to meet the deadlines might 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.

Grades 10 – 12

Robotics

Course Number: 0906

Credit: 1/2

Class Meetings: **5/7** (fall semester)

Prerequisites: Physics

Max. Enrollment: 10

Robotics is designed to introduce students to the process of designing, building, and programming a robot using the Lego Mindstorms EV3 robotics system. Robots will be programmed to operate autonomously as well as remotely.

This course is project-based, with the understanding that in addition to individual tests and quizzes, students will be assessed on the completion of group-based projects. Students will learn new concepts through discussions, virtual coding simulations, and challenges that their robot must complete.

Robotics 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.

Grades 11 – 12

AP Chemistry

Course Number: 0934

Credit: 1

Class Meetings: 5/7 + two labs (three single and two 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.

AP Physics C

Course Number: 0953

Credit: 1

Class Meetings: 5/7 + two labs (three single and two double periods per seven-day rotation)

Prerequisites: Successful completion of Physics (H) and concurrent enrollment in or prior completion of Calculus AB/BC. Students whose physics 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 university 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 Teams and OneNote 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.

Engineering (H)

Course Number: 0944

Credit: 1

Class Meetings: 5/7 + one lab (four 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: 12

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 possibly one outside 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 this group work, which requires thoroughly documented engineering notebooks, reports, and presentations. Several individual assessments each interim (essays, quizzes, and tests) make up the remainder of the student's cumulative grade.

Organic Chemistry (H)

Course Number: 0945

Credit: 1

Class Meetings: 5/7 + one lab (four 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. Students will also learn about NMR Spectra interpretation and interpret these spectra to infer chemical structure. 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.

Grade 12

AP Biology

Course Number: 0924

Credit: 1

Class Meetings: 5/7 + two labs (three 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 using PCR, 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 Environmental Science

Course Number: 0929

Credit: 1

Class Meetings: 5/7 + two labs (three 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, a summer reading and writing assignment will prepare students for the ecology unit at the start of the year. It will be due on the first day of class.

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

Advanced Mathematical Methods in the Physical Sciences (H)

Course Number: 0903

Credit: 1

Prerequisite(s): Minimum grade of A- in AP Calculus AB/BC, minimum grade of A- in Physics (H), and completion of, or simultaneous enrollment in, AP Physics C. (Students not meeting these minimum criteria may enroll with permission of course instructor.)

This course is intended to introduce the motivated and well-prepared student to topics in mathematics beyond first-year calculus, with a strong emphasis on application (physics and some physical chemistry). This course picks up where AP Calculus AB/BC leaves off: with a discussion of infinite series and their application. It then quickly moves on to functions of a complex variable, followed by topics in linear algebra, differential equations, multivariable calculus, vector analysis, and Fourier series. Additional topics may include the calculus of variations, partial differential equations, and special sets of orthogonal functions (Legendre polynomials, spherical harmonics, and Bessel functions). This course will well serve those students with strong backgrounds in science and mathematics interested in pursuing careers in Physics, Engineering, Theoretical Chemistry, and Applied Mathematics. Both Teams and OneNote are used regularly for communication between teacher and students.

Anatomy and Physiology

Course Number: 0959

Credit: 1

Class Meetings: 5/7 + one lab (four single periods and one double period per seven-day rotation)

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

Through the use of technology, direct instruction, project-based learning, and case-study analysis, students will develop an understanding of the human body and its systems. This course will delve into the organization of each system to study how structure and function maintains homeostasis within the body. Students will be required to keep a daily journal in which they will answer analytical warm-up questions that apply the information covered in class. Working individually or in small groups, students will participate in inquiry-based laboratory experiences that engage them to ask valid scientific questions. Students will be required to draw, sketch, color, generate graphic organizers, and build models to further enhance their learning. Students will also choose and explore different medical careers and give presentations on their findings. Material learned in this course can be applied to medical, health & fitness, and biological research careers.

Environmental Science and Natural History

Course Number: 0927

Credit: 1

Class Meetings: 5/7 + one lab (four 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.

Marine Biology

Course Number: 0960

Credit: 1

Class Meetings: 5/7 + one lab (four 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. 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 Visual Arts
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
2D / DIGITAL MEDIA FOUNDATIONS * (1 credit/year long course)	**2D FOUNDATIONS II OR ANY FOUNDATIONS II COURSE (1/2 credit, one semester courses-students can take a new course or retake course(s) already taken)****	**DRAWING/PAINTING HONORS*** Or ANY FOUNDATIONS II COURSE (½ credit, one semester courses-students can take a new course or retake course(s) already taken)****	**DRAWING/PAINTING HONORS*** Or ANY FOUNDATIONS II COURSE (½ credit, one semester courses-students can take a new course or retake course(s) already taken)****
	DIGITAL MEDIA FOUNDATIONS II OR ANY FOUNDATIONS II COURSE (1/2 credit, one semester courses-students can take a new course or retake course(s) already taken)**	**DIGITAL MEDIA HONORS*** Or ANY FOUNDATIONS II COURSE (½ credit, one semester courses-students can take a new course or retake course(s) already taken)****	**DIGITAL MEDIA HONORS*** Or ANY FOUNDATIONS II COURSE (½ credit, one semester courses-students can take a new course or retake course(s) already taken)****
3D/ PHOTOGRAPHY FOUNDATIONS * (1 credit/year long course)	**3D FOUNDATIONS II OR ANY FOUNDATIONS II COURSE (½ credit, one semester courses-students can take a new course or retake course(s) already taken)****	**SCULPTURE/3D HONORS*** Or ANY FOUNDATIONS II COURSE (½ credit, one semester courses-students can take a new course or retake course(s) already taken)****	**SCULPTURE/3D HONORS*** Or ANY FOUNDATIONS II COURSE (½ credit, one semester courses-students can take a new course or retake course(s) already taken)****
	PHOTOGRAPHY FOUNDATIONS II OR ANY FOUNDATIONS II COURSE (½ credit, one semester courses-students can take a new course or retake course(s) already taken)**	**PHOTOGRAPHY HONORS*** Or ANY FOUNDATIONS II COURSE (½ credit, one semester courses-students can take a new course or retake course(s) already taken)****	**PHOTOGRAPHY HONORS*** Or ANY FOUNDATIONS II COURSE (½ credit, one semester courses-students can take a new course or retake course(s) already taken)****

	Digital Songwriting & Audio Production	**Digital Songwriting & Audio Production H Or any Foundations II Course**	**Digital Songwriting & Audio Production H Or any Foundations II Course**

Notes:

*2D/DM Foundations and 3D/Photo Foundations are the two visual art course options for 9th graders and students new to GA. They are also appropriate for students in grades 10-12 who want to explore art and design fundamentals. Please note that these classes cannot be taken more than once. These full credit, year-long courses feature one semester of each discipline and provide an opportunity to explore both traditional and digital art making processes. Successful completion of this course fulfills the US Arts requirement. Completion of one full credit of art (visual or performing) must be completed by the end of 10th grade and is required for graduation.

** These ½ credit, semester Foundation II art classes are open to all 10th, 11th and 12th graders. Students may enroll in more than one class, but they may not take the same Foundation II class twice. The Department recommends students explore as many different art disciplines (3D, 2D, Photo, Dig.Med) as possible, but students may retake a Foundation discipline already taken in a previous year (ex.- if you have already taken 3D/Photo Foundations, you may take 3D Found. II or Photo Found. II)

***Considering Honors Art? It's important to note that while it is not required, it is highly encouraged that all future Honors candidates take as many different Foundation area courses as possible over 9th and 10th grades. The department feels strongly that these four courses would provide an important and full range of artistic experiences which would enable potential Honors Art candidates to make the best decision in which area to study. The department requires students to take the Foundation class in a given discipline if they intend to apply to that discipline's Honors Art Program. Ex. To apply to the Sculpture Honors Program, a student must have taken the 3D/Photo Foundations course and/or the 3D Foundations II course.

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

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, filmmaking, and studio recording. 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.

Year -long Foundations Courses (2D/Digital Media and 3D/Photography):

> Course designed for freshman and new students, but 10-12 grade students may also enroll. The registrar fills the classes from the course selection forms submitted to House Heads

½ credit Semester Foundations II classes (3D, 2D, Digital Media, Photography)

- Open to all students in sophomore, junior, or senior year.
- Provides an excellent opportunity for students to explore new art making processes which might inform future Honors Art decisions
- Will be enrolled by lottery. Students may be asked to rank their top choices. Students can choose between 2D, 3D, Digital Media and Photography
- The Department recommends students explore as many different art disciplines (3D, 2D, Photo, Dig.Med) as possible, but students may retake a Foundation discipline already taken in a previous year (ex.- if you have already taken 3D/Photo Foundations, you may take 3D Found. II or Photo Found. II)
- Foundation II courses are semester length courses and students may sign up for more than one course. For scheduling purposes, students should enter both course numbers at course selection. Registrar will place student in the appropriate class/term
- Non-honors.
- No prerequisite.

Honors Courses in All Media:

- To apply to the Honors Art Program, interested sophomores should plan on attending the Honors Art Presentation which occurs late February each year. To qualify for honors, art students must have completed the foundations art course in the discipline they are applying to; earned a B+ or better in their art course; and exhibit the potential for further growth. The arts faculty selects students designated for honors by a required portfolio and short essay. Note that due to space limitations final decisions are frequently based on the quality of the portfolios, essays and grades in the current art class. All honors arts students must make a 2-year commitment to the program; create a portfolio, attend critiques and visiting artist lectures, and provide leadership in their art classes.

Upper School Visual Arts
Introductory Courses

2D/Digital Media Foundations

Course Number: 1140; 1141 (enter both course numbers)

Credit: 1

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

Enrollment: Limited to 14 students

This dynamic studio course is an introduction to the principles, materials, and techniques of two-dimensional and digital media art making. The year-long course will be taught by two different instructors and divided into a semester of Foundations of 2D Design, Drawing and Painting and the Foundations of Digital Media and Film Making. 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 design through creative, hands-on problem solving in the 2D studio and digital media lab. Students will experiment with a broad range of traditional and non-traditional art making materials focusing on observational studies, composition, time, and storytelling techniques. Class incorporates studio work, demonstrations, research, and critiques. 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 fulfills the pre-requisite for Drawing/Painting Honors and Digital Media Honors classes.

3D/Photography Foundations

Course Number: 1142; 1143 (enter both course numbers)

Credit: 1

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

Enrollment: Limited to 12 students

This dynamic studio course is an introduction to the principles, materials, and techniques of three-dimensional art making and traditional photography. The year-long course will be taught by two different instructors and divided into a semester of Foundations of 3D Design and Sculpture and Foundations of Photography. 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 design through creative, hands-on problem solving in the sculpture and photography lab. Students will experiment with a broad range of traditional and non-traditional art making materials focusing on observational studies, composition, and storytelling techniques. 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 fulfills the pre-requisite for Sculpture/3D Honors and Photography Honors courses. 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.

Upper School Visual Arts
Introductory/Intermediate Courses

3D Foundations II

Course Number: **1132 (Fall) 1136 (Spring)** Students should enter both course numbers on their course selection. Based on enrollment, registrar will place students in the appropriate course/term.

Credit: ½

Placement: Open to sophomores, juniors and seniors. Students that previously took 3D/Photo Foundations are encouraged to explore other arts courses, but they are allowed to take this course as the course content will change.

Enrollment: Limited to 14 students per section

This semester 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 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. This course and/or 3D/Photo Foundations fulfills the prerequisite to apply to Sculpture /3D Honors

2D Foundations II

Course Number: **1133 (Fall) 1137 (Spring)** Students should enter both course numbers on their course selection. Based on enrollment, registrar will place students in the appropriate course/term.

Credit: 1/2

Placement: Open to sophomores, juniors and seniors. Students that previously took 2D/Dig Med Foundations are encouraged to explore other arts courses, but they are allowed to take this course as the course content will change.

Enrollment: Limited to 14 students per section

This dynamic semester 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. This course and/or 2D/Dig. Media Foundations fulfills the prerequisite to apply to Drawing/Painting Honors

Digital Media Foundations II

Course Number: **1134 (Fall) 1138 (Spring)** Students should enter both course numbers on their course selection. Based on enrollment, registrar will place students in the appropriate course/term.

Credit: 1/2

Placement: Open to sophomores, juniors and seniors. Students that previously took 2D/Digital Media Foundations are encouraged to explore other arts courses, but they are allowed to take this course as the course content will change.

Enrollment: Limited to 15 students per section

This semester 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, and will create their own digital video works through hands on experience with the digital camera. 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. 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. This course and/or 2D/Digital Media Foundations fulfills the prerequisite to apply to Digital Media Honors

Photography Foundations II

Course Number: **1135 (Fall) 1139 (Spring)** Students should enter both course numbers on their course selection. Based on enrollment, registrar will place students in the appropriate course/term.

Credit: 1/2

Placement: Open to sophomores, juniors and seniors. Students that previously took 3D/Photo Foundations are encouraged to explore other arts courses, but they are allowed to take this course as the course content will change.

Enrollment: Limited to 12 students per section

This semester studio-laboratory course introduces students to the techniques and aesthetics used in black and white photography and photo-based artwork. Students will learn the basics of camera operation, exposure control, film developing, printing and will be introduced to digital photography and Photoshop. In both the silver and digital, 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 the semester, students will be required to submit a portfolio that demonstrates inventive thinking, imagination, and craftsmanship. 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 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. This class and/or 3D/Photo Foundations fulfills the perquisite to apply to Photography Honors.

Digital Songwriting & Audio Production

Course Number: 1710 regular (Non-Honors)
1712 (Honors)

Credit: 1

Placement: After a successful interview, accepted students may enroll/re-enroll in this course for sophomore, junior and senior year. But all students must enroll in the regular Songwriting class (1710) for their first year. In subsequent years, and based on the instructor's approval, advanced students may enroll in the Honors (1712) class.

Prerequisite: Prior music experience required. Acceptance based on successful interview with course instructor.

Enrollment: Limited to 10 students
Freshmen are not permitted to enroll in this course

This full year, 1 credit studio-lab course introduces students to a highly collaborative environment for experimenting with the songwriting/recording process and instrumental/vocal music design. Students will learn the foundational elements of song structure, including melody, chords, lyrics, backgrounds, and related elements. Through deep immersion in listening and analysis, students will gain understanding to best guide their own music productions. Working in both independent and group settings, students will construct songs in multiple styles and genres. Students will have the opportunity to share ongoing progress in a masterclass environment.

On the technical side, students will be introduced to the theory and operation of essential audio tools ranging from microphones to mixers, as well asl receive hands-on instruction and practical experience with computer-based recording systems (DAW's or Digital Audio Workstations) typically found in modern recording studios. The use of programs like Ableton, Logic, and GarageBand will be emphasized. As a follow-up, students will be encouraged to share their compositions and recorded works during class critiques and live performances.

Since this is a studio-oriented class, students are expected to work independently and collaboratively, in a positive and constructive manner.

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: Any Digital Media Foundations Course

Enrollment: Limited to 15 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 one of the Digital Media Foundations courses 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: Any 2D Foundations Course

Enrollment: Limited to 28 students

These full year advanced studio courses are designed for students who have completed one of the 2D Foundations courses 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 individual's 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: Any 3D/Sculpture Foundations Course

Enrollment: Limited to 28 students

The study of Sculpture builds on the foundation established in the 3D Foundation courses, one of which is a prerequisite to enroll in this course. 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 Honors

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: Any Photography Foundations Course

Enrollment: Limited to 24 students

This full year advanced studio-laboratory course is designed for students who have completed one of the Photography Foundations courses and wish to pursue their interest in fine art photography, photo-based artmaking and storytelling. 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, studio lighting, storytelling and independent projects. At the close of each semester, students will assemble a portfolio of photographs that demonstrate imagination, skill, and craftsmanship. Students are required to purchase Lightroom software for their personal computer and are strongly encouraged to use their own digital camera. The total cost of materials is approximately $150. **Students are required to fulfill a 2-year commitment to this course of study.**