GROTON SCHOOL

ACADEMIC POLICIES

and

COURSE CATALOG

2026–27

The Course Catalog is subject to change; this version was last edited on 3/9/2026.

2026–27 CALENDAR

All scheduled events are subject to change.

Fall Term

Monday, September 7 Varsity football, field hockey, cross country, soccer, and volleyball athletes arrive, by invitation from coaches (11a.m.–2 p.m.)

Tuesday, September 8 Theater preseason arrives (1–2 p.m.)

Thursday, September 10 Remaining Sixth Form students arrive (9–11 a.m.)

Friday, September 11 Remaining Fifth Form students arrive (11 a.m. –1 p.m.)

New international family orientation, by invitation (11 a.m.–2 p.m.)

Saturday, September 12 New students and all Third Form students arrive (9–11 a.m.)

Sunday, September 13 Remaining returning students arrive (11 a.m.–1p.m.)

Tuesday, September 15 Classes begin

Friday, October 16 Fall Long Weekend (departure at 11:30 a.m. or after Varsity/JV games)

Monday, October 19 Students return by 9:00 p.m.

Friday, October 23 – Parents Weekend
Sunday, October 25

Saturday, November 21 Thanksgiving Vacation (11:30 a.m. departure)

Winter Term

Wednesday, December 2 Students return by 9:00 p.m.

Friday, December 18 Christmas Vacation (11:30 a.m. departure)

Monday, January 4, 2027 Students return by 9:00 p.m.

Thursday, February 11 Winter Long Weekend (11:30 a.m. departure)

Monday, February 15 Students return by 9:00 p.m.

Saturday, March 6 Spring Vacation (11:30 a.m. departure)

Spring Term

Monday, March 29 Students return by 9:00 p.m.

Saturday, April 24 Spring Long Weekend (departure at 11:30 a.m. or after Varsity/JV games)

Tuesday, April 27 Students return by 9:00 p.m.

Sunday, June 6 Prize Day

Friday, June 11 Summer Vacation

Because we are not prepared in our dormitories or Dining Hall to accept students early, students should return at their scheduled time and not before, both in September and following vacations.

- **Please note that Groton School is closed over winter Long Weekend.**
- **No vacations or long weekends may be extended on either side.**
- **When leaving Groton, airline flights should not be scheduled before 2:00 p.m.**

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TABLE OF CONTENTS

ACADEMIC PHILOSOPHY

"What is the purpose of a Groton education?" Endicott Peabody answered that question by declaring, "To prepare for the active work of life." Early in the school's history, Endicott Peabody stated: "From the first, we rejected the idea of its being regarded as a preparatory school, which implies a scholastic standard simply adequate to the preparation for college...the training of the mind aimed at should be such as was described by the graduate of the French *lycée* who found himself able to take up successfully any subject owing to his early training."

ACADEMIC PROGRAM

The Groton curriculum is designed to prepare students for "the active work of life" by encouraging breadth of intellectual exposure and depth of study. Beginning in the Second and Third Forms, with programs of study prescribed and continuing on through the Fourth, Fifth, and Sixth Forms, the curriculum as a whole introduces students to a wide variety of courses in the belief that this broad exposure will challenge and engage interests and capabilities that might otherwise lie dormant. The curriculum also fosters the development of critical and disciplined thinking, precise communication and scientific analysis, creative problem-solving, careful and logical thinking, and empathetic understanding of the social, scientific, and political background of Western and non-Western civilizations. This curriculum plan has been and continues to be in a constant state of review and evolution. We feel it will enable our students to address the challenges of the twenty-first century with confidence, compassion, and sound judgment.

All students will take five full-credit courses. In Second and Third Forms, students will also take art. Fourth, Fifth, and Sixth Form students may add an art class to five other credits. Should students be interested in taking another sixth full-credit course, they must petition the Studies Committee, who will review all such petitions after the previous term's meetings have ended.

ACADEMIC REQUIREMENTS

Diploma requirements for the four high school years are as follows:

- English – through the fall of the Sixth Form year
- Math – through Precalculus or Fifth Form, whichever comes later
- Science – two years of lab science
- History – Modern Global History (in Fourth or Fifth Form), US History (in Fifth or Sixth Form)
- Religion – one-term course in the Upper School
- Art – three credits of art in the Upper School, as well as a Third Form art
- Languages – All students take at least three years of language. Those who enter Groton in the Third Form will take Latin that year and then may choose to continue Latin or switch to a World Language, which they will take at least through level 2.

Second Formers will take English, math, science, Latin, a World Language (Chinese, French, or Spanish), and art (one term each of Steel Drums, visual art, and theater).

Third Formers will all take English, math, one language, art, and then choose two from science, Foundations of Global History, and a second language.

- All incoming Third Formers will take Latin.
- Art choices include a year of visual art, theater, shop, music lessons, Choir, Chamber Orchestra, or Jazz Ensemble.

Upper Schoolers will take five full credits plus an art should they so choose.

Incoming students are placed in math and languages based on placement tests taken in the spring during the course sign-up process.

Students who feel they have fulfilled any requirement or should be exempted from a requirement should reach out to the Assistant Head for Academics.

Within and beyond the requirements, students choose from a broad spectrum of courses in all disciplines to explore areas of interest in depth. Advanced Placement (AP) courses are available in several departments; in others, courses are taught at a level that prepares students for the Advanced Placement examination, such as US History and Fifth Form English. Options exist for independent study in the Sixth Form.

HONOR CODE (Adopted by vote of the student body, June 2000)

"Groton is a small community in which trust and honesty are of the highest value and in which any form of cheating or dishonesty creates undercurrents of distrust throughout the students and faculty. Groton is an institution of learning and moral development, established with the purposes of intellectual growth and ethical awareness. Dishonesty and cheating impede both, and work against the creation of trust. We, the students of Groton School, feel that each individual must take full responsibility for his or her own integrity. For these reasons, we do not tolerate any lying or cheating, and uphold honor and integrity.

"A major aspect of the Honor Code is a 'reminder statement' to be written by all students on their tests, papers, quizzes, and exams. The statement is: *On this work, I have upheld Groton's Honor Code*. The implication is that the student did not receive improper help, copy from another source, or witness any other student doing this on the assignment. The statement is brief and memorized by every student. Its presence during the academic day serves as a reminder to Groton students of our Honor Code and the integrity we value."

COURSE SELECTION AND SCHEDULE

In the spring, students will work with their faculty advisors to plan their courses for the entire next year, taking into account form and diploma requirements. The school year includes three terms: fall, winter, and spring. Some courses require a full-year commitment, and others are offered on a term basis; changes may be made to term course selection for the winter and spring terms if new electives are offered.

Entering students will select courses using materials provided by the Assistant Head for Academics; however, students will be placed in appropriate courses by department heads who interpret the placement materials.

Each student's program of study is subject to the approval of the student's faculty advisor, a member of the Studies Committee, and the Assistant Head for Academics.

Students should be aware that if a particular course lacks sufficient enrollment, that course may not be offered. On the other hand, students should also realize that if sufficient interest is expressed for an elective course that is not included in a department's program, the department will make every effort to make that course available.

Listed in this online catalog are all the courses to be offered this coming fall. Most of the courses likely to be offered in winter and spring terms are also listed. Periodic updates to the catalog will be posted online.

Important Scheduling Notes:

A. When planning their courses, students should understand that they might have to choose between two courses that meet in the same time block, though time blocks may not be known until the schedule is completed in the summer.

B. **YEAR COURSES**: If a course is designated as a year course, the student must take it for the full year—**ALL THREE TERMS**—in order to receive credit. A student who signs up for a year course cannot withdraw from that course unless he or she has the approval of the appropriate department head and of the Assistant Head for Academics. Any term grades earned before the course is dropped will be used in calculating averages for honors diplomas. The transcript will show WP (withdrawn passing), WF (withdrawn failing), or WM (withdrawn for medical reasons).

C. The Mathematics/Computer Science and World Languages departments will determine which particular section a student will enter.

D. Sectioning is not assigned on the basis of preference for individual teachers. Resectioning will occur later in the year if deemed appropriate by the teacher and department head.

E. Students may add or drop elective courses in the first week of a new term without penalty. A student carrying six full-credit courses may extend that drop period for the sixth course until the end of the second week of the term without penalty (in the winter and spring, this applies only to term courses, not year courses). On occasion, in the fall, a student will be encouraged or allowed to drop a course at the midterm.

F. No student can enter a course for credit after the first week of a new term.

G. After Latin 1, a student who begins a new language must continue it through level 2.

OTHER ACADEMIC ISSUES

Classes: A full course meets 180-240 minutes a week. Most have four 45-minute class meetings; in some courses one or two of those meetings is extended by 30 minutes. A half course usually meets three (2x45 + 1x75 minutes) or four times (4x45 minutes) a week with no expectation of preparation.

Homework time: Teachers will expect the following amounts of homework preparation time from students:

- Second and Third Form courses: about 30 minutes for each class meeting;
- Fourth Form courses: about 40 minutes for each class meeting;
- Fifth Form courses: about 50 minutes for each class meeting;
- Sixth Form courses: about 60 minutes for each class meeting.

Conference Period: Any student who is having difficulty in a course should seek extra help. The best time for this is during Conference Period or at the convenience of the teacher and student.

If any student is having difficulties or problems, teachers inform and consult with the student's faculty advisor.

Tutors: Peer tutors, students who have designated themselves as tutors in particular disciplines of strength, are available to younger students in need. The Director of Academic Skills will compile a list of such tutors at the beginning of the school year and will help anyone interested in finding an appropriate tutor.

Because Groton is a residential school and teachers are readily available for extra help outside of the class, the school does not support the use of outside tutors for any reasons in any classes during term-time, whether in person or via Zoom or with shared Google docs.

Exams: All full-credit courses end with two-hour term examinations, papers, or projects in November (the end of fall term) and in June (the end of spring term). Exams count for 20-33 percent of the term grade. There are no term examinations at the end of winter term. Sixth Formers are excused from June examination, unless a course fulfills a diploma requirement.

Protected Period: The final two weeks of winter term (late February and March) is specified as Protected Period. During this time students may have only two major commitments (tests, projects, papers, reports, etc.) each day in order to protect them from being overextended.

Grade Reports: Grade reports are posted on myGroton at the end of each of the three terms. They include numerical grades from 50 to 100 (in whole numbers), narrative comments, and at the end of the fall and spring terms, a letter from the advisor. It is the practice of the school not to give a term or year grade lower than a 50. Anything below 60 is a failing grade.

Course Failures: Departments differ in their approach to course failures and have different policies regarding make-up work. Options may include preparing for a make-up exam by going to a summer school or by working with a tutor, taking an approved summer course elsewhere to fulfill the work, repeating the course the following year, or taking another course in the department in the future.

Upper School students must take and pass five one-credit courses per term, fifteen credits per year. If a student fails a course, that course credit must be made up. In such a case the student must seek the advice of the Assistant Head for Academics.

A senior who fails a term course in the spring will need to make up the credit before a diploma is awarded, no matter how many extra courses or credits the student may have accumulated.

Students in the Upper School who pass a course but fail the final exam will be handled separately by each department since some departments feel that the year grade is determinative, and others feel the exam grade in a cumulative or sequential course is more important.

Vacation Work: It is often important for students who have failed exams, especially exams in cumulative courses, or who have shown particular weakness, to do make-up work over the winter, spring, or summer breaks and perhaps even to take a re-examination at the beginning of the new term. Teachers and departments retain discretion with regard to requiring vacation work and re-examination for students.

The grades that a student receives at the end of a term are not altered if the student does vacation work. The purpose of the vacation work and re-examinations is to put the student in a stronger position to continue a course, especially a cumulative course.

Plagiarism: Plagiarism occurs when one puts forward or uses as one's own the ideas, words, data, or work of another person or people without attributing those ideas, words, data, or work to the proper source. If a fact or idea is part of general knowledge (e.g., a molecular weight from the periodic table of elements, or a historical date), it is not necessary to give credit to a specific source. Any data, ideas, opinions, or other original expressions of thought, however, that come from a particular source, print or electronic, must be attributed to the original author or source. Plagiarism can occur across the academic disciplines and, in every instance, is regarded as a very serious violation of honesty.

It is very important that students seek their teachers' help in deciding what information is part of general knowledge and what information must be attributed to its source. Teachers will discuss plagiarism with

students, including how to attribute ideas to sources in collaborative efforts. In every case in which a student has a question, it is the student's responsibility to seek help from a teacher or other faculty member.

Each academic department sets its own expectations regarding academic integrity and what amounts to plagiarism in that department. If a teacher has a concern about plagiarism, the teacher will confer with the department head and other appropriate faculty, including the Assistant Head for Academics and the Dean of Students. The teacher will discuss the concern with the student. If the department determines that plagiarism has occurred, then the teacher will refer the incident to the Deans' Office as a violation of a major school rule.

Please refer to the *Student/Parent Handbook* for information on the disciplinary response to academic integrity violations.

Diplomas with Distinction: The nature of the diploma is determined by the cumulative average that a student earns in his or her Fourth, Fifth, and Sixth Form years at Groton.

> Form averages are determined by adding the year and term grades and dividing by the potential number of credits. A half course receives half weight, and an H-P-F grade is not used in determining the average.
>
> A cumulative Upper School average of 86-88 makes a student eligible for a diploma ***cum laude***.
>
> A cumulative Upper School average of 89-91 makes a student eligible for a diploma ***magna cum laude***.
>
> A cumulative Upper School average of 91.5 or higher makes a student eligible for a diploma ***summa cum laude***.
>
> **Note**: In the case of a course failure or a course withdrawal (where a term grade has been recorded), the grade and potential credits earned in the discipline are included in calculating the cumulative average.

Honor and Merit List: The Honor and Merit Lists provide recognition for students in the Second, Third, and Fourth Forms who have achieved at a high level in their courses. There is no Honor or Merit List for the Fifth or Sixth Forms.

> In determining eligibility for the Honor or Merit List for the Second and Third Forms, the classwork grade, not the term average, is determinative. For Fourth Formers, the term average is used.
>
> **Merit List**: To be on the Merit List, a student must have a grade of 80 or better in all courses except two; these two can be between 75 and 79.
>
> **Honor List**: To be on the Honor List, a student must have a grade of 85 or better in all courses except two; these two can be between 80 and 84.

SPECIAL PROGRAMS FOR SIXTH FORM

Tutorials: The tutorial program is designed for Sixth Formers to allow serious students to do advanced study in a particular area not currently available in the school's curriculum. Since students are expected to do considerable independent study, they should not contemplate taking tutorials unless they already have fairly strong backgrounds in the particular fields.

The tutorial program assumes that students will push and extend themselves to a degree not usually invited by regular courses. The quality of scholarship is expected to be high, and the amount of work to be produced is expected to exceed that of a regular course.

Unless there are special circumstances, all tutorials are worth one credit. If a tutorial is taken for half-credit, it is taken in addition to the normal five-credit roster of courses.

Tutorial applications are due at the same time as regular course sign-ups. Each tutorial is subject to the review and approval of the Studies Committee.

Intensives: Sixth Formers have several options open to them in the spring term. They may take a minimum of five full courses or the equivalent, they may design tutorials or courses of their own, they may undertake on-campus or off-campus projects, or they may apply for admission into the Intensive Program. In the Intensive Program, a student takes one regular classroom course (in order to protect those students who are committed to a year course). The rest of his or her academic program is an intensive involvement in one area. The spring term is divided into three equal segments, each segment lasting about three weeks. For each segment, the student designs an academic program with a member of the faculty and writes up a contract.

The Intensive Program affords a great deal of freedom and time for the student to pursue an area that is of interest. The emphasis is upon independent study. The student does not attend classes in the traditional sense nor does he or she receive prescriptive assignments in the traditional sense. Since an Intensive is the equivalent of four regular courses, the student's time commitment is approximately thirty hours per week. Any student who thinks that he or she might be interested in applying for the Intensive Program should be sure to fulfill all diploma requirements before the end of the Winter Term.

Any student who would like to apply for an Intensive Program, an off-campus project, or any variation from the normal academic program should first consult with the Assistant Head for Academics. Applications for Intensives are due with course applications for the spring term.

ACADEMIC SKILLS

A student may face individual challenges to learning unrelated to intelligence. These challenges can take the form of problems with approach and organization, and learning style differences. Early identification of learning challenges and appropriate intervention is important to enhancing the opportunity for success for every student at Groton.

Students can access the Academic Skills Office at any time. This office focuses primarily on helping students develop skills such as time-management, planning, prioritizing, note-taking, writing skills, and test-taking strategies. In the event that learning differences emerge and testing is recommended, complete neuropsychological testing that is performed by a licensed practitioner, including a diagnosis and full summary of findings, is required to obtain reasonable accommodations.

FINAL EXAM GUIDELINES

Integrity, Behavior, and Study Materials: In addition to the school rules about integrity and personal conduct outlined in the *Student/Parent Handbook*, students should observe the following guidelines with regard to taking exams at Groton School:

- Study materials should be left in the dorm or in the front of the exam room, not deposited in an out-of-the-way and potentially tempting private spot in the Schoolhouse.
- No studying is allowed during chapel.
- Students should not carry into the exam any unauthorized material, whether in any device or written or concealed on one's person. Exam issues or questions should not be discussed except with the teacher, nor should any materials or sources be consulted, during the exam or during breaks, until all exams have been collected.
- Above all, students should use common sense and avoid even the appearance of impropriety; one's conduct should keep one above the suspicion of inappropriate behavior.

Unexcused absences from final exams

1. A student may only be excused from an exam by the Health Center, the Dean of Students, or the Assistant Head for Academics. Excused absences must be granted before the start of the scheduled exam, but reasonable and unforeseen conflicts that make such permission impossible will be considered. The student must make up for the missed exam as soon as possible (as determined by the teacher, Department Head, and Assistant Head for Academics). Any student who takes an exam after its originally scheduled time must make certain to adhere to the guidelines of the Groton School Honor Code and refrain from any action that may offer him/her an unfair advantage.
2. Any student who fails to appear for an exam should contact the instructor (or Deans Office or Academic Office) immediately and explain the reason for being late or for missing the exam. The instructor will confer with the department head and other appropriate faculty, including the Assistant Head for Academics and the Dean of Students to determine if the exam will be taken and whether there might be a penalty assessed.
3. Teachers will make a reasonable effort to locate students who are missing at the start of an exam and will alert the Dean of Students or the Assistant Head for Academics when a student is missing. However, it is the sole responsibility of each student to arrive on time for scheduled exams or to contact his/her teacher directly and immediately to explain an unexcused absence or lateness.
4. While the College Board has its own standards and protocol for the administration of Advanced Placement examinations, all students enrolled in AP-designated courses are expected to take the AP exam unless they have made prior arrangements with the teacher of the course and the Department Head.

MUSIC

The music program at Groton provides students with opportunities to discover their talents, acquire skills necessary for artistic expression, and develop an understanding and appreciation of music of all kinds. Importantly, through their music studies, students may discover passions and interests that they pursue for the rest of their lives as creators, performers, or audience members. By studying music, students hone critical thinking skills and learn about self-expression, creativity, and collaboration. Furthermore, they empower themselves to be intelligent consumers of music.

Students have opportunities to explore coursework in the performance, creation, and understanding of music. In addition, students who are passionate about music may pursue projects in composition, performance, or analysis during the afternoon program. A hands-on approach to learning lies at the core of Groton's arts requirement, which emphasizes the value of being actively engaged in a creative process. Groton's performing arts courses and activities provide essential opportunities for students to express themselves, become more perceptive, develop discipline, support their mental and emotional health, and enjoy fulfilling lives.

All Second Formers spend a term studying visual arts, a term studying drama, and a term studying music. Third Formers may take Choir, Jazz Ensemble, Chamber Orchestra, or half-credit music lessons as their required half-credit arts course. All students take a minimum of three credits of art in any discipline(s) in the Upper School.

Requirements: All students entering Groton in Third Form take a half-credit, year-long art course in music, wood shop, or visual arts. All students are required to take three credits of art in any discipline(s) in the Upper School.

SECOND FORM MUSIC COURSES

For one term, each Second Former takes a two-period per week course as a member of the Second Form Steel Drum Ensemble combined with a two-period per week course in Music. Students with experience or who are interested should reach out to the Assistant Head for Academics to ask about being in the Choir, the Chamber Orchestra, or the Jazz Ensemble on a non-credit basis.

8111 Second Form Steel Drum Ensemble **A. Finch**

Students participate in a hands-on introduction to music through the use of traditional Caribbean instruments. Students apply their knowledge of music theory while also exploring traditional steel band repertoire and transcriptions from other idioms. Through these activities, students learn the skills of listening, teamwork, imagination, and risk-taking needed to play in a musical ensemble. The class culminates in an end-of-term performance.

8151 Second Form Musicianship **D. Moriarty**

Second Form Musicianship encourages active involvement in different forms of music-making, both individual and communal, helping to develop a sense of group identity and togetherness. Music can influence students' development both academically and as a member of the Groton School community by fostering personal development and maturity, creating a sense of achievement and self-worth, and increasing students' ability to work with others in a group context.

As an integral part of the culture, past and present, music helps students understand themselves, relate to others, and develop their cultural understanding, forging important links between home, school, and the wider world. Music develops students' critical skills: their ability to listen, appreciate a wide variety of music, and make judgments about musical quality. It also increases self-discipline, creativity, aesthetic sensitivity, and fulfillment.

THIRD FORM MUSIC ELECTIVES

Third Formers may elect one of the following year-long courses in music as their half-credit Third Form arts course. A student who selects Jazz Ensemble, Chamber Orchestra, or Choir may still take music lessons as a non-credit option.

Music Lessons (Y) ½ credit per term **Music Faculty**

Offered to students with prior or no study as an instrumentalist or singer. Students meet one period per week with their instructor and maintain a journal of daily practice. During the year, students participate in two juries and two community or workshop performances. In addition to practice and performance, students attend the five professional music concerts in the annual Gammons Concert Series.

Banjo	Composition	Harp	Percussion	Tuba
Bassoon	Electric Bass	Harpsichord	Saxophone	Viola
Cello	Flute	Jazz Piano	String Bass	Violin
Clarinet	French Horn	Oboe	Trombone	Voice
Classical Piano	Guitar	Organ	Trumpet	

8360 Jazz Ensemble (Y) **K. Kikuchi**

The Jazz Ensemble studies and performs music from both the traditional and contemporary jazz repertoire. Music is selected based on the instructor's goals, student interests, and the solo potentials of individual students. The ensemble rehearses one double and two single periods per week and performs in a variety of venues throughout the year. Membership is by audition or permission of the instructor. A concert tour (domestic or international) is scheduled every third year.

8370 Choir (Y) **D. Moriarty**

Choir is open to all students who are members of the Evensong Choir. The Choir sings for all services on Sundays throughout the year as well as Lessons and Carols, the Spring Concert, Baccalaureate, and Prize Day. The Choir participates in all Evensong Choir rehearsals as well as an additional 1-2 rehearsals a week for a total of 4 rehearsals weekly plus all Sundays. The Choir also tours internationally once every 3 years and does an away camp in late August each year.

8390 Chamber Orchestra (Y) **T. Terranella**

The Chamber Orchestra is an ensemble dedicated to learning and performing works at levels that represent hard work and individual concern for the larger group. The Chamber Orchestra meets one double and two single periods per week and performs in a variety of community venues throughout the year. Membership is by audition or permission of the instructor. A concert tour (domestic or international) is scheduled every third year.

8470 Evensong Choir (Y) **D. Moriarty**

Evensong Choir is open to all students. It meets for 2-3 rehearsals weekly and sings for 1-2 services per month on Sunday evenings. The Evensong Choir also sings for Lessons and Carols, the Spring Concert, Baccalaureate, and Prize Day. The Evensong Choir participates in the Choir Tour during the years when a tour takes place.

UPPER SCHOOL MUSIC ELECTIVES

8350 AP Music Theory (Y) **M. Lanier**

Open to Sixth, Fifth, and Fourth Formers. Prerequisite: permission of instructor and prior study of a musical instrument required. Students hone skills and acquire knowledge in music theory that will provide the necessary tools to compose and analyze musical works representing a wide range of styles and forms. In the fall term, students review musical notation; memorize key signatures and scales; study intervals, harmony, tonality, principles of voice-leading, melodic organization, and four-part choral writing; and compose original works. In the winter term, students learn to add harmonic flavor in their compositions through the use of dominant seventh chords, leading-tone chords, and non-dominant seventh chords. The spring term introduces more advanced topics including key modulations, secondary dominants, and several twentieth-century techniques in composition. Throughout the course, ear training skills are developed in musical software programs, classroom dictation, and sight-singing. Score analysis is included to provide context in which music theory and composing techniques are illustrated. Students will take the AP exam in Music Theory in May.

8410 Jazz Combo (Y) **K. Kikuchi**

Offered to jazz musicians. Prerequisite: membership in the jazz ensemble and competitive auditions. Limited enrollment. Jazz combo studies a variety of jazz styles and techniques of improvisation. Students present their work in chapel services and special school events on campus and in the greater Groton community.

8360 Jazz Ensemble (Y) **K. Kikuchi**

See the Jazz Ensemble (8360) course description above.

8370 Choir (Y) **D. Moriarty**

See the Choir course description above.

8390 Chamber Orchestra (Y) **T. Terranella**

See the Chamber Orchestra course description above.

8400 Select Chamber Music (Y) ½ credit per term **M. Lanier**

Open to Sixth, Fifth, and Fourth Formers. Prerequisite: audition or permission of instructor. Students experience the challenge of playing soloistic parts in the intimate context of a small ensemble by choosing, studying, preparing, and performing selections from the rich chamber music literature.

Music Lessons (Y) ½ credit per term **Music Faculty**

Open to Sixth, Fifth, and Fourth Formers. See the course description and course numbers for Third Form Lessons above.

Full-Credit Solo Performing Arts (Y) **Music Faculty**

Open to Sixth, Fifth, and Fourth Formers. Prerequisite: audition or permission of Ms. Lanier. Solo Performing Arts (SPA) is a year-long course offered to students who demonstrate an intermediate to advanced level of proficiency as an instrumentalist or singer. Students who are interested in having longer practice sessions and approaching their overall training more comprehensively match well with the objectives of this course. Students meet two periods per week with their instructors and maintain journals of daily practice. During the year, students will participate in two juries and two community or workshop performances. In September, students take a music theory placement test. Their instructor uses the results of this music theory evaluation to develop a course of study for music theory to complement their applied lessons. Students who do not qualify for the SPA option may enroll in either Non-Credit Music Lessons or Half-Credit Music Lessons for further training. In addition to performance and practice, students attend the five concerts in the annual Gammons Concert Series.

Banjo	Composition	Harp	Percussion	Tuba
Bassoon	Electric Bass	Harpsichord	Saxophone	Viola
Cello	Flute	Jazz Piano	String Bass	Violin
Clarinet	French Horn	Oboe	Trombone	Voice
Classical Piano	Guitar	Organ	Trumpet	

UPPER SCHOOL FALL, WINTER, and SPRING MUSIC ELECTIVES

8357 The Musical Improvisation Laboratory (F) **M. Lanier**

Open to Sixth, Fifth, and Fourth Formers. Improvisation, the practice of creating original music in real time, is an important element of global musical practices. In this course, students will learn to create new music together extemporaneously without sheet music. Students will learn how to use rhythm, pitch, harmony, movement, words, and the power of imagination to start a musical creation, join in, stand out, and find an ending together without predetermined musical rules or structures. There are no prerequisites for this course. The only requirement is that participants listen, respond, and explore.

8364 Bach to Beethoven Plus (F) **M. Lanier**

Open to Sixth, Fifth, and Fourth Formers. In this exploration of Western art music from the Baroque and Classical periods, Students will focus on listening to, contextualizing, and writing about music from the time period of 1600-1830. By the end of this course, students will know the names and major works of the best-known and some of the previously overlooked composers of this time when the system of major/minor tonality which is still in use today came to fruition.

8365 Music Technology: Creating and Recording Music in the 21st Century (W) **K. Kikuchi**

Open to Sixth, Fifth, and Fourth Formers. This course begins with an introduction to the software program, Logic Pro X, a tool for recording and creating music. Students study electronic instruments, MIDI, fundamentals of recording, manipulation and transmission of sound, current developments, and film scoring. Knowledge will be applied as students create their own electronic music and recording projects. Music Technology is a highly practical course with an emphasis on utilizing technology to conceive, create, and produce musical ideas, compositions, and productions. Students will be expected to support class time with an independent study on a computer and recording equipment. The course caters to a wide range of musical interests. Assignments allow an element of choice, and the opportunity to apply one's own style and musical ideas in creating and manipulating musical material.

8355 Romanticism: Forging New Pathways in Music (W) **M. Lanier**
Open to Sixth, Fifth, and Fourth Formers. In this course, we will investigate the expansion of musical form and the emphasis on self-expression, originality, and experimentation of the Romantic era in music. The rise of the virtuoso, the music critic, an emphasis on emotion, the expansion of harmonic vocabulary, and the interweaving of social and political issues with art are some of the musical trends of this time in music. As we focus on Romanticism in music during the years from 1820-1900, we learn through listening and research, with an emphasis on listening culminating in a final research project.

8356 The Songwriting Workshop (S) **M. Lanier**
Open to Sixth, Fifth, and Fourth Formers. The goal of this course is to develop and refine the ability of class members to express themselves through songwriting. A powerful means for personal expression, songs incorporate aspects of culture, individuality, poetry, and music. Students will study the basic tools of songwriting: melody, lyrics, harmony, rhythm & grooves, and song structure. They will learn these skills by analyzing songs by outstanding songwriters and by writing and performing their own songs. Students will share their work with the class throughout the term as they develop their individual styles and sounds, deepen their understanding of musical expression, and hone critical listening skills.

8376 Introduction to Music Theory (S) **D. Moriarty**
Open to Sixth, Fifth, and Fourth Formers. This course gives students a working knowledge of the fundamentals of Western music theory. This knowledge is applied through a series of compositional projects on the student's instrument of choice, or with the aid of notation software. No prior musical training is required, although those with proficiency on an instrument will be challenged accordingly.

8349 Music of Resistance (S) **M. Lanier**
(*not offered in 26-27*)
Open to Sixth, Fifth, and Fourth Formers. In this course, students explore music from various periods and styles to study music as an expression of resistance to power and as supporting/promoting social change. Possible topics include Estonia and the Singing Revolution, Jazz and Civil Rights, Verdi and the Risorgimento, Amandla: Music and the Anti-apartheid Movement in South Africa. The course will be team-taught by music faculty members. In addition to topics presented by faculty, students will conduct their own research, make presentations, and pen research papers on musical topics of personal interest.

INSTRUMENT AND VOICE LESSONS PROGRAM

(Credit and Non-credit options)

The design of the Instrument and Voice Lessons Program provides opportunities for students of varying levels of skill and interest and is complementary to any student's course load. A student may elect to register for half-credit, full-credit, or non-credit lessons. Electing full-credit music lessons places a student in the Solo Performing Arts course. The study of a musical instrument or voice is a commitment that should not be entered into lightly. Lesson preparation requires self-discipline, motivation, and well-structured independent work. All students are expected to attend a weekly class period with their instructors and maintain daily practice routines.

Lessons are offered in all band and orchestral instruments as well as voice, piano (classical and jazz), guitar (classical and electric), banjo, electric bass, bagpipes, piano, organ, and harpsichord. A fee of $57 is applied to each period lesson. Students who receive financial aid toward tuition will also receive the same percentage of aid toward music lessons.

Half-Credit Music Lessons (Y)
Open to Sixth, Fifth, and Fourth Formers. See the course description for Third Form Lessons on p. 12.

Full-Credit Music Lessons - Solo Performing Arts (Y)
Open to Sixth, Fifth, and Fourth Formers. See the course description above.

Non-Credit Music Lessons (Y) and (W, S)
Weekly lessons with an instructor and daily practice are the main components of music lessons as a non-credit option. This course is open to all students and faculty in the Groton community. Students may sign up for non-credit music lessons during spring course registration by completing the registration form they receive with their other course sign-up materials.

SMALLER MUSIC ENSEMBLES

(Non-credit)
In the setting of a small ensemble, students develop and hone musical and interpersonal skills essential to effective rehearsals and engaging performances. Much responsibility is placed on the players to present their music confidently while understanding the interlocking roles of all parts. The ensembles meet with a coach from the music faculty for one period every other week to rehearse and discuss the selected work(s). The full ensemble spends a second period without the instructor during alternating weeks to work on specific goals outlined in the coaching session. If the ensemble members and coach choose, they may meet more frequently.

The following smaller ensembles are offered as non-credit courses. Once a commitment has been made, students are expected to prepare for and attend all rehearsals and performances.

Chamber Ensembles (F, W, S) **Music Faculty**
Offered to all singers and instrumentalists including pianists. Prerequisite: prior study on an instrument or voice. Pre-formed groups are encouraged. Students are placed in trios, quartets, quintets, and other combinations and present their work in performances on campus and beyond the gates. For placement purposes, students should prepare to perform a solo work for the instructor at the time of registration or at the beginning of the term.

Piano Ensemble (Y)
Offered to pianists. Prerequisite: prior piano study. Students are assigned to one piano, and four-hand duos to explore this vast and engaging repertoire. Piano duos perform at student recitals, chapel services, special school events, and other performing venues on campus and in the greater community.

Brass Ensemble (Y)
Offered to brass instrumentalists. Prerequisite: prior study on an instrument. The Brass Ensemble studies and performs original work and other arrangements found in the brass literature from various periods. The Ensemble presents its work in chapel services, special school events, and other performing venues on campus and in the greater community.

Jazz Combo (Y)
Offered to jazz musicians. Prerequisite: prior study on an instrument and some experience playing in jazz idioms. Limited enrollment. Jazz combo studies a variety of jazz styles and techniques of improvisation. Students present their work in chapel services and special school events on campus and in the greater community.

The Guitar Project (Y)
Offered to guitarists and bass players (limited number). Prerequisite: prior study of the instrument and working knowledge of chord progressions. Limited enrollment. Auditions will take place if registration exceeds the class size. The Guitar Project explores a wide range of literature including rock, jazz, folk, ethnic, classical, and world music. Students present their work in performances on campus and in the greater community.

THEATER AND DANCE

The Theater and Dance experience at Groton takes a hands-on approach to all aspects of theater education. Our classes take place on the stage and in the studio where students learn by doing. Experienced theater practitioners often make guest teaching appearances and help guide students as they acquire practical techniques in acting, improvisation, direction, design, playwriting, and public speaking. The goal of our program is to offer access to the necessary tools for effective and artistic self-expression.

8627 Directing for the Stage (F) **L. Sales**

In this course, students will learn how to take a scripted piece through the various stages that culminate in performance. Lessons will focus on reading texts for playable actions and theatrical throughline, creating vision and implementing design ideas, understanding staging and basic directing principles, and working through the final stages of the technical process and dress rehearsal. This class will feature guest artists who are professionals in the fields of design, directing and choreography. Students will walk away with a toolkit of practical skills that will enable them to see a piece of dramatic literature through to fruition.

8441 Lighting and Sound Design (F) **E. Phan with Erik Fox**

Open to Sixth, Fifth, and Fourth Formers. This course will focus on the development of technical skills and artistic vision specific to the theatrical disciplines of lighting and sound design. Class time will function as a laboratory in which students will learn hands-on approaches to building cues and applying them to the stage. Students will have an opportunity to study theatrical works through videos, field trips and on-campus productions. Each student will have the chance to build an original sound and light project by the end of the term. No prior experience is necessary.

8144, 8145, 8146 Second Form Theater (F), (W), (S) **L. Phan**

Theater is a performing art form that brings a story to life. In this course, students learn how to engage in storytelling through expressive elements such as lighting, set, costumes, acting, directing, and sound. Working as a team, they will find their creative role and produce a performance at the end to demonstrate their understanding of the audience's perspective and how to create a sensory experience from their imagination. Given the resources to explore global theater methods such as shadow puppetry, students will have the opportunity to express themselves through a universal language.

8440 Storytelling and Stagecraft (Y) **L. Sales and L. Phan**

Open to Third Form only. This course will offer an interdisciplinary approach to theater-making, integrating various theatrical skills including lighting, sound, costume, character development, and stage direction. In the Fall term, students will focus on the production of Climate Change Theatre Action short plays and will have an opportunity to show their work to a public audience. The Winter Term focuses on personal storytelling and presentation skills, enabling students to develop a signature storytelling performance. In the Spring term students learn the basics of improvisation and then move into one of our design shops where they can learn to weld, construct costumes, design stage props, or practice the basics of stage lighting.

8637, 8632, 8639 Costume Design and Construction (F), (W), (S) **L. Phan**

Open to Sixth, Fifth, and Fourth Formers. From eco-friendly upcycled projects to traditional costume-making projects, students will have hands-on experience with the costume shop in terms of how to design and construct costumes for characters in various plays we read throughout the course. Through the process of fully realizing their vision, students will sketch, hand sew, embroider, knit/crochet, and machine sew. We will focus on how these various crafts can tell stories. The purpose is to collaborate as a team on an installation piece to create an experience for an audience. Students may take the class for more than one term.

8655 Choreography (W) **N. Harris**

Open to Sixth, Fifth, and Fourth Formers. Body language is our first method of communication and choreography, defined as any movement with meaning, is an organized extension of that. Whether you're thinking about the exact distance a trial lawyer should be standing from the jury at a vital moment in a closing argument or performing onstage in a piece of musical theater, choreography is a skill all of us use every day. This course will provide students with tools and methods to create original choreography. The work of this course will happen through in-class exercises and creative assignments. By the end of the term, all students will learn ways of communicating without words that translate beyond the dance studio. Students in this course will have the opportunity to participate in NACHMO Boston, a choreography mentorship program. This course can be taken multiple times.

8666 Performance of Choreography (S) **N. Harris**

Open to Sixth, Fifth, and Fourth Formers. This course can be taken as a continuation of the winter term Choreography class or independently. Over the course of the term students will focus on the skills needed to learn and perform choreography. Students who choreographed in the winter term will have the opportunity to set their work on other performers. Performers will have the chance to learn new choreography and improve their performance skills. By the end of the term, all students will have a piece that they may choose to perform onstage as a part of the Annual Short Works Festival. No previous dance or theatre experience is required.

8646 Theatre and The Creative Process (S) **L.Sales**

Open to Sixth, Fifth, and Fourth Formers. In this course, students will develop an understanding of the creative process and will practice skills and methods to bring about an original piece of theatrical art. Students will start with a series of essential questions and will use a variety of theatrical techniques to build creative "moments" in response to these questions. The course will foster facility with understanding and "scripting" theatrical pieces that center design elements, creative direction and audience relationship. Class time will function as a laboratory in which students can experiment with symbolism, juxtaposition, layering, intercutting and sequencing as ways of making meaning on stage. Students will learn skills for creating individually, as well as in pairs and small groups. The final in this course will be a public showing of original theatre pieces created by the students.

WOODSHOP

8200 Third Form Woodshop (Y) ½ credit per term **P. Benedict**

This year-long course is an introduction to the foundations of furniture making. Third Formers will spend the year building a classic shaker table from rough lumber to a finished piece. The table is built using traditional hand skills such as dovetailing, mortise and tenon construction, cutting, and planning. All finished pieces are displayed outside of the school room on Prize Day. Students passionate about woodworking can continue more independent projects in Upper School Woodshop.

8300 Upper School Woodshop (Y) **P. Benedict**

Open to Sixth, Fifth, and Fourth Formers. Previous woodworking skills are not required for this year-long furniture-making course. Returning woodshop students may choose more ambitious projects using their foundational knowledge. Examples of work done in past years include desks, lowboys, tables, chairs, and clocks. The exact project is chosen by the student with the advice and consent of the teacher. Upper Schoolers are expected to maintain a high level of safety and craftsmanship while working in the shop.

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VISUAL ARTS

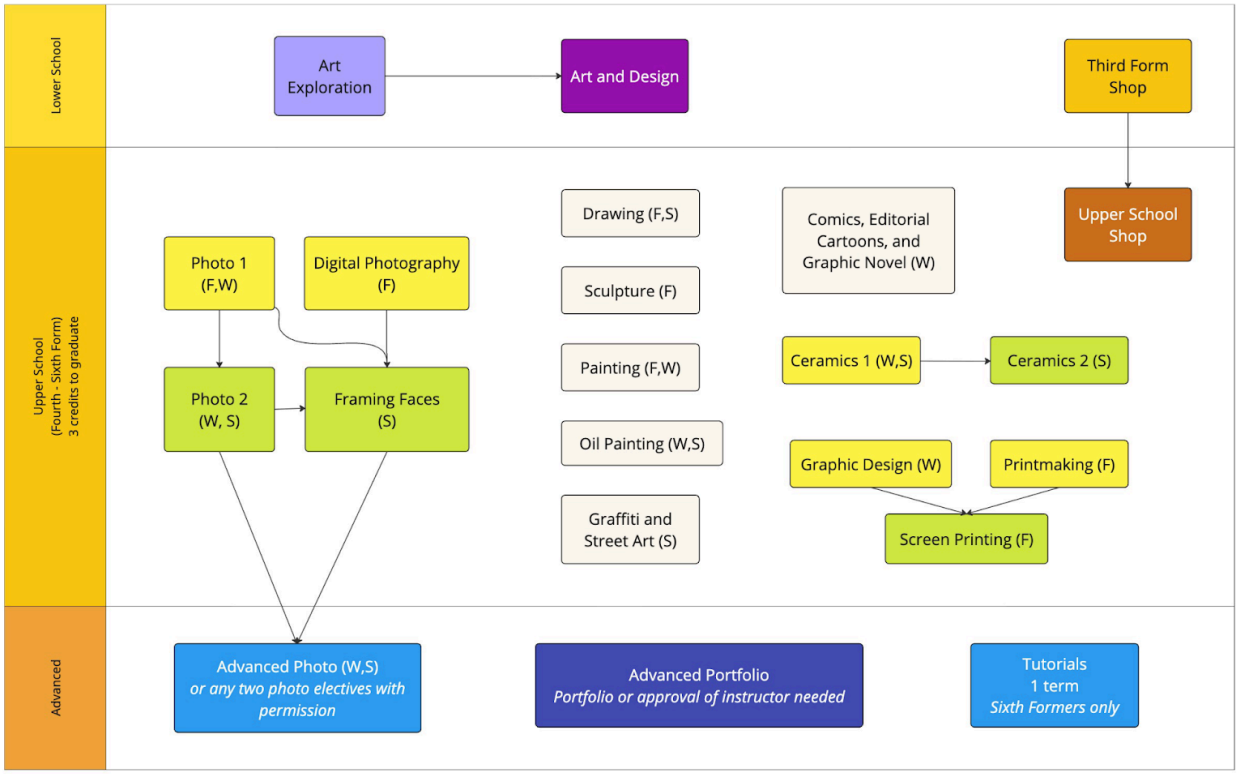
The Visual Arts Program at Groton School immerses students in a studio-centered environment where creativity, inquiry, and craftsmanship intersect. Through hands-on learning, students develop critical thinking, collaboration, and an artistic voice by engaging in socially conscious, concept-driven, and culturally responsive projects. They study historical and contemporary artists from diverse backgrounds, explore a wide range of media—including photography, graphic design, ceramics, sculpture, drawing, painting, printmaking, and woodworking—and have opportunities to directly learn from practicing professionals through the Visiting Artist Program. Our rich curriculum fosters experimentation and ideation, while encouraging students to address important issues and see the world from multiple perspectives.

Students seeking greater challenge can pursue advanced coursework in studio art, woodworking, photography, and ceramics, or apply for the Sixth Form Tutorial Program: an independent, mentorship-driven course in a subject not otherwise offered at Groton. Lower Schoolers build a strong foundation in art and design, while Upper School students complete at least three arts credits, cultivating artistic skill, personal voice, and global awareness. Through these experiences, students deepen their understanding of art while broadening their perspective on the world, becoming thoughtful, empathetic, and engaged participants in both creative and global communities.

8121, 8122, 8123 Art Exploration (F), (W), (S) ½ credit per term **J. Ho**

This is a one-term Second Form visual arts course that exposes students to the elements and principles of design through various materials and techniques. We will refer to historical and contemporary artists in the 21st century to create a framework for personalized projects. Students will discover their voice through the exploration of materials associated with architecture, drawing, printmaking, graphic design, and clay. Our class discussions will stress ways to look at, analyze, and discuss the art of others and ourselves. Students will learn how to display their work and make a reflective statement at the end of the term showcase. Artists will walk away with an appreciation for visual art and preparation for the Third Form course, Art and Design.

Course Sequence



8240 Art and Design (Y) ½ credit per term **K. Donovan and J. Ho**

This Third Form year-long course provides every artist with a foundation for studio and fine art making. A wide variety of materials and artistic methods will be introduced, and emphasis will be placed on exploratory thinking and visual problem-solving. The practice of a studio artist begins by expanding their skill set with new tools and techniques, and observing the work of others. Students will use drawing, printmaking, painting, photography, sculpture, ceramics, and design as avenues for conceptual thinking. This opportunity will expose them to Upper School electives we offer in the art department. Participation comes in the form of showcasing their work for exhibitions, writing artist statements, giving and receiving feedback about each other's work. By listening and looking at the work of others, students will find an appreciation for many art forms. The curriculum is further enhanced by the work of visiting artists–complementing studio activity to help students understand the historical, cultural, and contemporary context in which art is created.

8610 Advanced Portfolio (Y) **K. Donovan**

This is a course for upper school students who have shown artistic proficiency and an interest in submitting an AP portfolio in 2-D Art and Design, 3-D Art and Design, or Drawing. In the media of choice, a student will investigate materials, processes, and ideas, making works of art and design by practicing, experimenting, and revising. Students will communicate their artistic voice through their visual expressions while documenting their work process and artistic journey. Each student will have a complete portfolio which will include fifteen pieces of a sustained investigation of an idea, concept, or working style, and five pieces of selected works that are technically strong and highlight one's artistic vision, and they will submit the portfolio for AP review in May. Students will learn and utilize safe studio practices and should understand the time commitment beyond class. Permission from the instructor is required.

FALL TERM STUDIO ELECTIVES

8524 Printmaking (F) **J. Ho**

Open to Sixth, Fifth, and Fourth Formers. This is an introductory course to the printmaking methods of linocut and drypoint etching. Prints are created by reversing their images through scratching, carving, or drawing on a surface and then printed onto paper by hand or through our printing press. Printmaking is appealing to artists searching for a mixed media outlet, as one might combine their love for drawing, painting, and sculpture to create multiple prints. We will learn how famous artists such as Pablo Picasso, Andy Warhol, and Frida Kahlo, all used printmaking to make a living, and their influence on modern printmaking techniques. Students will use personal imagery and ideas as references for their projects.

8537 Screen Printing (F) **J. Ho**

Prerequisite: Printmaking or Graphic Design. This printmaking course introduces students to the art of silkscreen (serigraphy), focusing on translating original graphic logos and drawings into bold, editioned prints on fabric and paper. Students will move from sketchbook to screen through a hands-on, process-driven approach that emphasizes composition, contrast, typography, layering, and mark-making. Students will learn studio-based stencil and hand-drawn emulsion methods that prioritize craftsmanship, precision, and registration. Historical and contemporary references—including artists such as Andy Warhol, Shepard Fairey, Jermaine Rogers, Laurie Hastings, and professional print studios such as the Tamarind Institute—will support discussions about repetition, production, and the cultural impact of printed imagery. By the end of the course, students will produce a series of conceptual prints and various wearable items, such as tote bags and t-shirts. This course is ideal for students interested in graphic design, fashion, illustration, branding, or fine art printmaking. *Enrollment is limited to 6 students.*

8501 Drawing (F) **K. Donovan**

Open to Sixth, Fifth, and Fourth Formers. This course is designed to teach the technical skills of drawing. The art of drawing is studied through the formal elements of values, perspective, and composition. Focusing on mark-making techniques we will use a variety of media: graphite, charcoal, conte pastel, and pen and ink. Academic pieces support technical and observational skills. Final pieces will be inspired by artists from different cultures and different art movements. Students will have artistic license to pursue their own vision and emerging artistic voice. Safe studio practices and care of tools and materials will be demonstrated and utilized. This course can be taken in continuation in the spring term. The spring Drawing elective is offered as an option for continued skill and technique development.

8547 Sculpture (F) **K. Donovan**

Open to Sixth, Fifth, and Fourth Formers. This course is designed to teach the technical skills of three-dimensional art through additive, subtractive, and casting sculptures. The art of sculpture focuses on the formal elements of art: space, light, shape, composition, and the relationship of form and function. Students will build and engineer armatures for additive sculpture utilizing many different materials. Subtractive sculpture will focus on positive and negative space and carving tools and techniques. Casting and mold-making will allow students to explore serial art forms. Students will be inspired by sculptors from many different cultures and artistic movements while having artistic license to pursue their own vision and emerging artistic voice. Safe studio practices and care of tools and materials will be demonstrated and utilized.

8504 Painting (F) **K. Donovan**

Open to Sixth, Fifth, and Fourth Formers. This course is designed to teach the technical skills of painting using water-based media. The art of painting is studied through color theory, values, perspective, and composition. Focusing on water-based painting techniques we will use a variety of media: watercolor, gouache, and acrylic. Academic pieces support technical and observational skills. Final pieces will be inspired by artists from different cultures and various art movements. Students will have artistic license to pursue their own vision and emerging artistic voice. Safe studio practices and care of tools and materials will be demonstrated and utilized. This course can be taken in continuation in the winter term.

8561 Photo 1 (F) **B. Fitch**

Open to Sixth, Fifth, and Fourth Formers. This course introduces students to the basic techniques of shooting, developing, and printing photographs in a darkroom. Using 35 mm cameras with black-and-white film, students will work on short-term projects designed to develop their abilities to create vital and effective visual images. *Enrollment is limited to 8 students.*

8571 Digital Photography (F) **B. Fitch**

Open to Sixth, Fifth, and Fourth Formers. This class covers the basics of digital imaging software, digital camera usage, and printing. The focus is on creating expressive, original artwork with an emphasis on artistic quality. Some assignments are given; some are self-generated. *Enrollment is limited to six students.*

8604 Digital Illustration (F)

(not offered 26-27)

Open to Sixth, Fifth, and Fourth Formers. This is an introductory course that provides a wide variety of basic skills including digital painting, drawing, and short animations in the form of GIFs. Using Procreate, students will explore artistic styles through a range of projects and create characters, illustrate book covers, design self-portraits, social justice posters, patterns and textures, and many more exciting design elements. Students can look forward to learning about design principles such as color theory and composition. We will draw from personal imagery as a source of inspiration, and reference contemporary illustrators such as Andrea Pippins, Tomi Um, So Lazo, Randy Bishop, and Minna Sundberg.

WINTER TERM STUDIO ELECTIVES

8505 Painting (W) **K. Donovan**

Open to Sixth, Fifth, and Fourth Formers. This course is designed to teach the technical skills of painting using water-based media. The art of painting is studied through color theory, values, perspective, and composition. Focusing on water-based painting techniques we will use a variety of media: watercolor, gouache, and acrylic. Academic pieces support technical and observational skills. For final pieces, students will have artistic license to pursue their own vision and emerging artistic voice. Safe studio practices and care of tools and materials will be demonstrated and utilized.

8508 Ceramics 1 (W) **J. Ho**

Open to Sixth, Fifth, and Fourth Formers. This course provides a hands-on, comprehensive study of clay and the ability to work three-dimensionally to create basic tableware forms. Students will practice studio safety and establish independent workstations within the classroom. Hand-building methods and techniques will be emphasized to give ideas visual form. Students can expect to create projects including a tile, draped tray, coiled vessel, and slab mug. This course can be continued in the spring (Ceramic 2) as a directed study on wheel throwing, offering a substantial exploration of tableware and abstract forms. Enrollment is limited to ten students.

8568 Oil Painting (W) **K. Donovan**

Open to Sixth, Fifth, and Fourth Formers. This course is designed to introduce students to the technical skills of oil painting while expressing originality and their emerging artistic voice. Through a variety of subjects, we will explore the language of mixing colors, brushstrokes, mediums, and canvas preparation. Students will learn and utilize safe studio practices and care of oil painting materials. Outside of class time, students will be required to paint in the studio. Group critiques will model how to use a vocabulary of art terms to discuss the various aspects of the piece including composition, technical elements, and artistic choices. This course can be taken in continuation in the spring term.

8575 Graphic Design (W) **J. Ho**

Open to Sixth, Fifth, and Fourth Formers. This design course explores digital marketing content and discovers how graphic design can transform our lives. Examining current trends, advertisements, consumer products, political campaigns, and analytics, provides insight into the power and ethics of visual communication. We will uncover how color psychology, typography, and specific visual elements are used to manipulate decision-making for a specific objective or outcome. Students will design vision boards, logos, package designs, and advertisement posters using Adobe Illustrator, InDesign, Photoshop, and Procreate. The term will culminate in a branding suite designed for a consumer of the student's choice.

8578 Comics, Editorial Cartoons, and Graphic Novel (W) **K. Donovan**

Open to Sixth, Fifth, and Fourth Formers. Artists will develop original characters and creative storylines utilizing the many techniques of comic panel illustration and text. Students will study the history of comics as a visual dialogue through artists Stan Lee, Liza Donnelly, Will Eisner, and Osamu Tezuka. Comics study will be a combination of the development of an original character and a multi-paneled piece while studying the drawing and inking techniques of panel shots. A one-shot editorial cartoon will incorporate the artist's opinion on a current event with pen and ink. Graphic Novels will introduce storyline and character development through a multi-page floppy with splash page cover art.

8562 Photo 1 (W)

See course description for 8561.

8565 Photo 2 (W) **B. Fitch**

Open to Sixth, Fifth, and Fourth Formers. *Prerequisite: Photo 1*. This course builds upon the photographic knowledge from Photo 1, expanding students' understanding of the descriptive powers of photography and honing technical skills in camera mechanics, lighting, and darkroom techniques. *Enrollment is limited to 8 students.*

8585 Advanced Photography (W) **B. Fitch**

Prerequisites: Two photography electives and the instructor's permission. This upper school course is for students who possess a strong foundation in photography and a desire to build a cohesive portfolio. Intended for those enthusiastic about visual storytelling and eager to further develop their craft. Coursework focuses on establishing a personal vision, embracing the entire creative process, and achieving technical excellence. Through class critiques, readings, and written reflections, students hone their critical thinking and photographic style. Emphasis is placed on a collaborative and productive studio environment and on recognizing the dedication required outside of class. At the end of the course, students will showcase their work in an end-of-school-year exhibition.

SPRING TERM STUDIO ELECTIVES

8503 Drawing (S) **K. Donovan**

Open to Sixth, Fifth, and Fourth Formers. This course is designed to teach the technical skills of drawing with a focus on color and illustration. The art of drawing is studied through the formal elements of values, perspective, color, and composition. Focusing on mark-making techniques we will use a variety of media: graphite, colored pencils, conte pastel, ink and markers. Academic pieces support technical and observational skills. Final pieces will be inspired by illustrators from different cultures and different art movements. Students will have artistic license to pursue their own vision and emerging artistic voice. Safe studio practices and care of tools and materials will be demonstrated and utilized. This course can be taken with the fall Drawing course.

8509 Ceramics 1 (S) **J. Ho**

See course description 8508.

8539 Ceramics 2 (S) **J. Ho**

Prerequisite: Ceramics 1. Open to Sixth, Fifth, and Fourth Formers. This course introduces students to creating ceramic forms using the potter's wheel. A range of techniques will be demonstrated as starting points for using the wheel to create forms. Handbuilding skills are required as students develop their skill of centering and evenly distributing clay on the wheel to make cups, bowls, and plates. The design, function, artistic voice, and presentation of the thrown forms will be emphasized through course assignments. Gaining control of these skills further prepares each student for more advanced techniques. In addition to using the potter's wheel, students will learn about several different finishing surfaces that can be applied to ceramics, how to recycle clay, and how to load and unload an electric kiln. Using the potter's wheel is a skill that must be learned through practice, patience, perseverance, and the ability to make mistakes and learn from them. This course will prepare students for the AP 3D portfolio. Enrollment is limited to 7 students.

8549 Graffiti and Street Art (S) **K. Donovan**

Open to Sixth, Fifth, and Fourth Formers. Humans have been leaving their mark on walls since the beginning of time. Learn the techniques of Graffiti and Street Art through an exploration of airbrushes, stencils, paint markers, and spray paint. We will look at street art and its impact on social and political justice throughout the world. Shepard Fairey, Banksy, and local artists have used public spaces to display their art, bypassing the art gallery culture thus making art accessible to everyone. We will study how graffiti culture intersects with Hip-Hop music, skateboard culture, and political and social change. Artists will learn and utilize safe studio practices for the media covered in class.

8569 Oil Painting (S) **K. Donovan**

See course description for 8568.

8566 Photo 2 (S) **B. Fitch**

See course description for 8565.

8593 Framing Faces: Portrait Photography (S) **B. Fitch**

Prerequisite: Photo 1, Digital Photo, permission of instructor. Open to Sixth, Fifth, and Fourth Formers. In this hands-on course, students will learn the essentials of portrait photography. They will be introduced to the

vocabulary of portraiture, best camera settings, and posing fundamentals. Through technical exercises, students learn the tools needed to control and manipulate natural and artificial light to achieve both practical and artistic effects. The coursework includes: lab time, studio and location shooting assignments, and photo presentations. By the end of the course, students develop a body of work and an accompanying artist's statement.

8586 Advanced Photography (S) **B. Fitch**
See course description for 8585.

ENGLISH

The English Department focuses on supporting students as they work to become engaged close readers as well as clear and cogent writers. At each form level, students study prose, poetry, and drama from a diverse range of authors, cultures, traditions, and time periods. The department values the canon as well as contemporary works, and we incorporate texts that showcase this range into each form level. At Groton, students will read and study Sophocles, Shakespeare, F. Scott Fitzgerald, James Baldwin, and Toni Morrison alongside contemporary writers like Colson Whitehead, Jhumpa Lahiri, Ocean Vuong, Natasha Tretheway, Richard Blanco, Celeste Ng, and Kazuo Ishiguro. These varied texts and authors offer students unique challenges and perspectives while also providing a compelling resource to hone close reading skills and a student's analytical and creative writing. In their own writing, students are encouraged to be authentic, imaginative, and precise. Ultimately, we hope that the skills students develop here will engender a life-long love of reading and writing that will ensure them an active intellectual life beyond Groton.

1110 Second Form English (Y)
Second Form English is designed to develop students' foundational reading and writing skills. Students are introduced to a range of texts which include novels, drama, and poetry by a diverse group of authors including Shakespeare, Martha Southgate, Elie Wiesel, Patricia McCormick, Marge Piercy, Harryette Mullen, Nicki Giovanni, and Pablo Neruda, among others. Students also receive formal grammar instruction. The class focuses on developing close reading skills and enhancing students' ability to understand plot, character, and thematic elements as well as extending their ability to make inferences. Students work collaboratively during class discussions and small group exercises. Writing assignments range from the personal to the analytical, from journal entries to formal papers, with an emphasis on analytical and argumentative essays.

1210 Third Form English (Y)
In Third Form English, students develop close reading skills and writing with precision and confidence. Students work closely with teachers on their writing process which includes skills like brainstorming, organization and structure, thesis statements, topic sentences, introductions, conclusions, and proofreading strategies. Students also receive formal grammar instruction. Readings consist of novels and drama from authors including Sophocles, Shakespeare, Zora Neale Hurston, and Celeste Ng. Poetry is also studied and includes selections from poets such as Billy Collins, Gwendolyn Brooks, Langston Hughes, Shakespeare, Amanda Gorman, and Robert Frost among others.

1310 Fourth Form English (Y)
In Fourth Form English, students examine a range of literary works including the novel, short fiction, drama, and poetry. Authors that students will study include, but are not limited to, Shakespeare, William Faulkner, James Baldwin, Gabriel García Márquez, Nathaniel Hawthorne, Charlotte Perkins Gilman, Jhumpa Lahiri, Ha Jin, and F. Scott Fitzgerald. Teachers emphasize close reading and clear, focused writing that exhibits an understanding of literary and poetic devices. The majority of Fourth Form writing is analytical, though students will also write personal narrative and creative works.

1410 Fifth Form English (Y)
In Fifth Form English, students study a range of prose, poetry, and drama with a focus on expanding their analytical, creative, and personal narrative writing. The expectation in Fifth Form English is that students will move from a general understanding of structural, thematic, and stylistic elements in their written work, to more nuanced and sophisticated interpretations of texts. Readings come from a range of authors, time periods, and genres, and the focus in class is to hone close reading skills and for students to showcase a keen understanding of

literary and poetic devices. All students read Shakespeare's *Hamlet* and Morrison's *Beloved*, with additional works chosen from authors such as Kazuo Ishiguro, Margaret Atwood, Ted Chiang, Nathaniel Hawthorne, Cormac McCarthy, and William Faulkner. Most Fifth Form students choose to take Advanced Placement examinations in English Language and/or Literature at the end of the year, and teachers offer support and resources for students to excel in those examinations.

Sixth Form English: The only **required** English course for Sixth Formers at Groton is the fall term Exposition. **Note**: While they are required to take only one course in English, we encourage Sixth Formers to consider their programs carefully to be sure that they feel sufficiently prepared in this central subject area. Writing electives will be limited to ten students, and enrollment for other English electives will be limited to twelve or fourteen students. Any student selecting an elective for winter or spring should put down an alternate choice in case of over-enrollment.

1511 Exposition (F)
Exposition is a required fall term course for Sixth Form students that focuses on the personal essay. Students read a range of published essays that might include works by James Baldwin, Joan Didion, Ocean Vuong, David Foster Wallace, Zadie Smith, Amy Tan, and E.B. White. Students typically produce four essays, and the course utilizes the workshop model which requires clear, consistent, and thoughtful feedback from the teacher and students. After receiving feedback, students are expected to revise their work extensively before submitting a final draft. In this way, the course emphasizes the role of revision in the writing process and the deep relationship between good thinking and good writing.

WINTER TERM ENGLISH ELECTIVES

1618 Literature of Resistance and Resilience (W) **V. Maqubela**
Open to Sixth and Fifth Formers. The course is about human rights. It gives a voice to the marginalized through the study of narratives that speak to their strength and resilience. These narratives show there can be strength in shared suffering and that people aren't only victims. The content requires students to think critically about concepts like courage, resistance, empathy, and forgiveness. The course asks students to consider the role of the bystander in the presence of discrimination and persecution. Texts and supplementary materials include: *Mother to Mother* by Sindiwe Magona, *Bound for the North Star: True Stories of Fugitive Slaves* by Dennis B. Fradin, and *Sing, Unburied, Sing* by Jesmyn Ward.

1632 Magical Realism (W) **G. Hadyk-DeLodder**
Open to Sixth and Fifth Formers. Despite Isabel Allende's worry in 2009 that magical realism was no longer *vigente* [prevalent], the commercial success of *Coco* (2017) and *Encanto* (2021)—which together grossed over $1 billion dollars—suggest that contemporary audiences are still drawn to the mode's narrative potential. This course will explore some of the literary and cultural roots of magical realism, in which the quotidian is combined with the fantastical, a narrative alchemy that prompts readers to question reality, identity, and more. We will study novels, poems, art, and movies from Central and South America in an effort to better understand the significance of their "magical" elements, examining the degree to which it reveals a deeper structure that is at once political, revolutionary, and philosophical. Course readings will include Allende's *The House of the Spirits* and different stories, poems, and excerpts from a range of authors (Jorge Luis Borges, Gabriel García Márquez, Gabriela Mistral, Mario Vargas Llosa, and others).

1645 Global Science Fictions (W) **I. Aigbedion**
Open to Sixth and Fifth Formers. This course will examine science fiction and speculative fiction within a variety of media from around the world. We will explore the broader genre of "speculative fiction," which refers to fictional works that envision alternate, parallel, possible, or imagined worlds. As students investigate the ways in which these texts reimagine the past and visualize the future, they will also gain knowledge of the regional,

cultural, and historical differences and forms of change that have impacted the development of the genre internationally. Students will learn how to formally analyze a variety of media, including novels, films, graphic narratives, music, and radio broadcasts. Some sample texts: Lucian of Samosata, Excerpts from *The True History,* Selections from *Iraq + 100:* Hassan Blasim, "Foreword," Hassan Abdulrazzak, "Kuszib," Ra Page, "Afterword", Yoshikazu Yasuhiko, *Mobile Suit Gundam: The Origin, Vol. 1: Activation,* Isaac Asimov, "Introduction," "Robbie" and "Evidence" from *I, Robot,* "The Last Question", Jericho Brown, "Dear Dr. Frankenstein", Walter Mosley, "Black to the Future", Nalo Hopkinson, "Greedy Choke Puppy" and "A Reluctant Ambassador".

1652 Poetry Reading and Writing (W) **J. Capen**

Open to Sixth and Fifth Formers. The class will read selections of poems from the past 4000 years from all over the world as students learn to emulate the styles of a broad range of poets and develop their own creative voices on the page. Some poets the class may focus on include Basho, Li Po, Sappho, William Shakespeare, John Keats, Rainier Maria Rilke, Pablo Neruda, Emily Dickinson, Robert Frost, Gertrude Stein, E.E. Cummings, Langston Hughes, Maya Angelou, Lawrence Ferlinghetti, Audre Lorde, Carol Ann Duffy, Billy Collins, Tracy K. Smith, and Ocean Vuong. Students will learn to write ballads, odes, haikus, sestinas, sonnets, villanelles, and free verse. They will also research the life and poetry of one poet in detail and present that poet and her/his work to the class.

1672 The Waste Land (W) **S. Sen-Das**

Open to Sixth and Fifth Formers. T.S. Eliot's modernist masterpiece, *The Waste Land*, is widely considered one of the most important poems of the twentieth century. Woven through the poem are allusions to texts that span across time, such as Dante's *The Divine Comedy*, the legend of the Holy Grail, Shakespeare's plays, art, popular song lyrics, Eastern and Western philosophy, the Bible, and the Upanishads. By studying excerpts from these texts, students will explore the way in which Eliot's intertextuality transformed the way poetry was written. The class will culminate in a writing project where students will spend the last few weeks of the course writing their own prose poem, in imitation of Eliot, using material from their own lives - books, mythology, songs, film, media, art, history, sports, politics, cultures and traditions, etc.- as sources of inspiration.

1702 Southern Literature (W) **K. Chaput**

Open to Sixth and Fifth Formers. Writers from the American South have a vision of American life that is complex and problematic. How does this literature speak to conflicts we recognize within our country today? The harsh realities of slavery and of prejudice, of long-lasting discrimination are part of the difficult past of life in the South. The writers we will read take on this topic and what it means to have the past haunt the present, from the era of the Civil War through the modern day. The authors we will study may include Mark Twain, Eudora Welty, Flannery O'Connor, William Faulkner, and Natasha Trethewey. We will consider the burdens and beauties of this rich literary tradition. We will do a variety of writing assignments in response to the literature we read.

1732 Jane Austen (W) **S. Gilchrist**

Open to Sixth and Fifth Formers. Before there was *Bridgerton*, there was Jane Austen! In this class, students will study Austen's works, likely *Lady Susan* and two other novels (*Pride and Prejudice*, *Sense and Sensibility, Persuasion,* or *Emma*). We will explore Austen's biting wit and her cultural critiques, revealing the backdrop to the famous love stories that continue to inspire adaptations for the last 200 years. Through her brilliant writing, we will learn more about the Regency period and its expectations of women, courtship, marriage, class structures, and more. Students will be assessed through class discussions, presentations, and a variety of writing assignments.

1735 "American" Stories (W) **J. Martinez**

Open to Sixth and Fifth Formers. In Ronald Takaki's *A Different Mirror*, he writes that "America is a nation peopled by the world, and we are all Americans." However, the history of America is fraught with violence and

subjugation, specifically toward marginalized groups of people. In this course, we will read a diverse group of authors whose fiction examines the interaction with and integration into American society. We will discuss the formation and erasure of identity, intergenerational conflict, and why these recurring themes of violence and subjugation continue to pervade our society today. Course readings might include works by Philip Roth, Julie Otsuka, Dinaw Mengestu, Leslie Marmon Silko, Ronald Takaki, and Arturo Islas.

8368 Playwriting (W) **L. Sales**

Open to Sixth and Fifth Formers. As an introduction to the art of writing for the stage, this course will encourage students to create their own one-act plays while developing an understanding of structure, character, and motivation. Students will produce a series of written assignments, each of which will emphasize a particular aspect of the playwright's art, such as developing conflict, believable dialogue, and thematic ideas. The class participates in the Massachusetts Young Playwrights' Festival. Particularly successful plays may be produced in the One Act Play Festival. Students may take the course more than once. Enrollment is limited to eight students.

SPRING TERM ENGLISH ELECTIVES

1536 Reading Film (S) **S. Sen-Das**

Open to Sixth and Fifth Formers. In this course, we will turn our critical lens to the moving image and "read" and write on a variety of seminal films. We will study the cultural and social impact of film on 20th-century thought, learn the specific language of film, read film theory, and examine the filmmaker's use of literary devices such as symbolism, narrative viewpoint, and foreshadowing as they move from the page to the screen. In our study, we will explore the work of influential national and international, as well as classic and contemporary, directors or "auteurs" such as Alfred Hitchcock, Orson Welles, Akira Kurosawa, Vittorio di Sica, François Truffaut, Francis Ford Coppola, Jane Campion, Kathryn Bigelow, Jordan Peele, Alfonso Cuaron, Bong Joon-Ho, and Hayao Miyazaki amongst others. Assessments will be in the form of papers (shot-by-shot analysis, critical readings of films); the final assessment will be "Anatomy of a Scene" from a film of your choice.

1613 Literature of the Americas (S) **I. Aigbedion**

Open to Sixth and Fifth Formers. Who (or what) is an American? What has the term "American" meant throughout history to the people living in what we call North and South America? How might issues of race, ethnicity, class, and gender among other social constructs inform and impinge on our definitions of "American" identity and culture? How do literature and film help to create a national and/or transnational community? Through an introduction to the literary and cultural productions of the Americas from the pre-Columbian era to the present, this course seeks to explore the complexities of and broadness of the terms "America" and "Americanness."

The course will expose students to a broad range of films and literature emerging from the United States, Canada, the Caribbean, and Latin America. (All readings will be in English translation where applicable.) As this is a class with a comparative focus, students will be encouraged to draw connections between and highlight differences among authors throughout the Americas. Topics for the course may include: inter-American creation stories and foundational myths, formation of American republics, North-South dialogues, and American modernism(s). Possible authors and directors for the course include, but are not limited to: Langston Hughes, Walt Whitman, Maya Angelou, Walter Salles, José Enrique Rodó, José Vasconcelos, José Martí, Elena Garro, Fernando Ortiz, Ruben Dario, Herman Melville, Nicolás Guillén, Fernando Meirelles, Jorge Luis Borges, Carlos Fuentes, Tomás Gutiérrez Alea, Clarice Lispector, Rachel de Queiroz, and Laila Lalami.

1619 "Passing" in Literature (S) **V. Maqubela**

Open to Sixth and Fifth Formers. This course explores the concept of "passing" – when one hides his or her identity with respect to, for example, race, religious affiliation, gender identity, sexuality, and socio-economic status. The course will ask such questions as - What does it mean when one lives a life of passing? What are the

underlying factors that prevent an individual from showing up as themselves? Is passing about coping or about escaping? How do these narratives help us better understand ourselves? What does it take for individuals to be their true selves? Students will explore their own experiences with passing as the class examines how identity is shaped, concealed, and revealed. Texts may include: *Passing* by Nella Larson, *The Autobiography of an Ex-Colored Man* by James Weldon Johnson, *We Wear the Mask: 15 True Stories of Passing in America*, edited by Brando Skyhorse and Lisa Page, and a selection of short stories.

1623 Writing Short Fiction (S) **J. Capen**

Open to Sixth and Fifth Formers. In a workshop setting, writers in this class read a selection of stories from *The Best American Short Stories* of the year, study Ursula LeGuin's *Steering the Craft* (exercises and recommendations for fiction writers), and evaluate each other's short stories. Students typically present a piece of short fiction once a week.

1653 Utopias and Dystopias: "Pictures of the Future" (S) **G. Hadyk-DeLodder**

Open to Sixth and Fifth Formers. We have turned to images of the future in literature for hundreds of years, often projecting our fears, anxieties, and hopes onto imagined lands and times. Utopian and dystopian narratives encompass a range of different possibilities, shifting from so-called paradises to hellish landscapes that uncover and voice core questions that we must contend with as a society—what communal values do we hold most dear? What do we most fear? Can we imagine a place free of inequality? How do we define identity in relation to authority? Could a "perfect" society last? These stories have also offered the theoretical possibility of an escape from different systems of power, even those so deeply embedded that they seem immovable and eternal. We will study accounts from the 16th century on to explore what these narratives can tell us about some of these societies in the past as well as our own, an urgent register now as we confront the active dismantling of democracies around us and the haunting image of what might replace them. Course readings might include works by Thomas More, H.G. Wells, Ursula Le Guin, Philip Roth, Suzanne Collins, Mat Johnson, Octavia Butler, Cormac McCarthy, and Arundhati Roy.

1713 Monstrosity in Gothic Literature (S) **S. Gilchrist**

Open to Sixth and Fifth Formers. In this class, we will start with some excerpts of Gothic literature from the 18th and 19th centuries, then trace the genre's tendrils as they continue to reappear again and again in literature, art, and pop culture. The villains and supposed heroes depicted in these texts can tell us about the fears of the cultures/people we will explore, which will open our discussions to topics of race, gender, class, sexuality, and ability/disability. This class will draw on a range of authors that may include Tracey Baptiste, Ambrose Bierce, Octavia Butler, Neil Gaiman, Shirley Jackson, David Hoon Kim, Florence Marryat, and Edgar Allan Poe. In writing assignments that will likely include three papers, students will not only consider how the monsters in these texts reflect the fears of the people creating and reading the stories, but they will also confront the monstrosity within their own histories and narratives.

1716 What is Truth? - Non-Fiction Reading and Writing (S) **K. Chaput**

Open to Sixth and Fifth Formers. Where do you draw the line between fiction and non-fiction, between true and imaginary? In this course, we will look at a spectrum of writing, beginning with historical writing and hard journalism and moving to the more nuanced genre that has become the nonfiction novel. Students will produce their own forms of the genre along the way, as well as some analytical essays on the texts, developing their credo as they work through example texts. In the final paper, students may be asked to draw their own line between fiction and non-fiction by explaining and defending the choices in their own research and writing. Possible texts include: essays by Lee Gutkind and David McCullough, Frederick Douglass' *Narrative of the Life of Frederick Douglass*, Truman Capote's *In Cold Blood*, John Krakauer's *Into Thin Air,* Rebecca Skloot's *The Immortal Life of Henrietta Lacks*, Lorraine Cary's *Black Ice.*

1706 Western Fictions (S) **J. Martinez**

The Western genre has traditionally celebrated rugged individualism, justice, masculinity, and conquest. This course interrogates those conventions while considering the origins of Western narrative tropes. We will examine fiction that exposes the limits of romanticized frontier myths. The texts we read will destabilize archetypes, critique traditional representations of masculinity and femininity, and use satire as a mode of political and cultural inquiry. Selected works: "Brokeback Mountain,"by Annie Proulx, *Blood Meridian* by Cormac McCarthy, *God's Country* by Percival Everett, and *My Ántonia* by Willa Cather.

HISTORY AND SOCIAL SCIENCE

The History and Social Science Department strives to provide students with an understanding of past events and the differing viewpoints of those who participated in them. We seek to encourage the development among our students of certain historical skills: intelligent questioning, gathering and interpreting data, analyzing concepts, recognizing the significance of historic occurrences, understanding cause and effect, and synthesizing information to produce one's own interpretation of the past. As a natural consequence of encouraging the development of these skills, we teach students to express their ideas with clarity and vigor in both class discussions and in their writing. Ultimately, we hope that the study of history will become for them a life-long process and provide them with an awareness of complexity and ambiguity as they confront ethical choices in their lives and seek to unravel meaning in the world around them.

6130 Foundations of Global History (Y)
Open to Third Formers. Taught jointly by the Religious Studies and Philosophy Department and the History and Social Sciences Department, this course surveys the histories and cultures that have shaped world civilizations and supports students in gaining the requisite skills, intercultural knowledge, and experience for success in the humanities. Global in scope, the course surveys peoples and histories of Africa, Asia, the Americas, and the Mediterranean and a plurality of religious and philosophical traditions, including Hinduism, Buddhism, Jainism, Confucianism, Daoism, Judaism, Christianity, Islam, and indigenous religions. The course develops students' skills for note-taking, critical inquiry, academic dialogue, scholarly research, and analytical writing. Assessments are designed to help students discover, interpret, evaluate, synthesize, and cite scholarly sources to prepare students for the requirements of Upper School courses in history and religious studies.

7320 Modern Global History (Y)
Open to Fifth and Fourth Formers and required of all students in the Upper School. *Modern Global History* is a year-long course that carries the human story forward from the year 1200 to the present. The course examines the role played by Western and non-Western societies in the development of the modern world and focuses in particular on the cross-cultural interchange between the world's societies during the past millennia. Because of the broad time span it covers, *Modern Global History* fills an important role in the larger school curriculum by enabling students to place knowledge acquired in other courses in its proper chronological context, as well as providing the historical context to understand our contemporary society.

In *Modern Global History* skill-building is foundational to the mission of the course. Students will further gain the tools to be critical readers, analytical writers, and thoughtful contributors during discussions. Students will enhance their ability for strong arguments with an effective thesis and strong topic sentences. Note-taking and organizing information independently are emphasized, and students should be prepared to gain an enhanced capacity for abstract reasoning beyond that expected in the Lower School. In addition, among the many other skills taught in *Modern Global History*, an important array includes: an understanding of point of view and the ability to make judgments concerning relative reliability when using primary sources, the ability to use these primary sources in document-based essay questions, the ability to handle multiple-choice questions of a type generally used on standardized national exams, and the ability to engage in spirited but civil class discussions. As they continue to hone their critical thinking and essay-writing skills, students will also undertake a major research paper during the year. Their instructors lead them through all phases of the process including identifying an appropriate historical question as a topic, orientation to the library, finding and discriminating among sources (whether accessed in person or online), developing an argument based upon this research, understanding of what plagiarism is and how it can be avoided, and formatting proper footnotes and bibliography according to the University of Chicago style.

Though this course is not explicitly designed to prepare students for the Advanced Placement Examination in World History: Modern, they are welcome to take the exam if they wish. They will, however, need to do extra reading during school vacations in advance of the exam.

7410 United States History (Y)
Open to Sixth and Fifth Formers who have completed *Modern Global History* and required of all students in the Upper School, *United States History* is a survey course that begins with the pre-Revolutionary War Period and continues through the post-Cold War Era. While recognizing the different cultures that have contributed to the American experience, this course emphasizes the values we all share in common: democratic participation in government, freedom of expression and basic civil liberties, the rule of law, and the relationship between liberty and equality. In addition, students also explore the changing role the United States has played in the world.

Enrollment in *U.S. History* assumes that students will have a thorough grounding in the foundational skills for historical inquiry taught in *Foundations of Global History* and *Modern Global History*, including researching and writing a major research paper. During the year, students will continue to develop as analytical writers, critical readers, and inquiring discussants in pursuit of an understanding that history may be interpreted in many and varied ways.

Though this course is not designed to prepare students for the Advanced Placement Examination, students are welcome to take the exam if they wish. They should, however, prepare during school vacations in advance of the exam.

FALL TERM HISTORY ELECTIVES

Open to members of the Sixth, Fifth, and occasionally Fourth Forms, elective courses allow students to return to topics touched on briefly in one of the survey courses or to encounter new material not offered in the sequence of required courses. They attempt to provide a capstone experience for the Groton students most interested in historical study, and they presume a high level of motivation.

7564 The Rise and Fall of the Soviet Union (F) **R. Spring**
Open to Sixth and Fifth Formers. This course will examine the rise and fall of the Soviet Union. Our study will begin with Lenin and the Bolsheviks and progress through the revolutionary period and the emergence of Stalinism. We will follow Stalin's leadership through the Great Patriotic War (World War II) and the emergence of the Cold War in its aftermath. From there, we will focus on the Soviet role in Eastern Europe and elsewhere as well as the decline and stagnation of the Soviet Union in the 1970s. Finally, we will conclude with Gorbachev's failed reforms and the ultimate collapse of the empire in 1991.

7621 Microeconomics (F) **R. Bai**
Open to Sixth and Fifth Formers. This course introduces students to the fundamentals of microeconomics. The course begins with a study of the basic forces that determine an equilibrium in a market economy. Next, it introduces a framework to analyze how consumers and producers make decisions. We then look at the role of competition and the impact of market structure on firms' behavior. At the end of the course, we will use microeconomics theory to analyze some of the more advanced topics, such as international trade, behavioral economics, game theory, and equity versus efficiency trade-offs in economics policy. Though this course is not designed to prepare students for the Advanced Placement Examination, students are welcome to take the exam if they wish. They should, however, need to do substantial extra reading during school vacations in advance of the exam.

7624 Asian American History (F) **M. Ishizuka**

Open to Sixth and Fifth Formers. U.S. History required or could be taken concurrently. This course will explore and analyze the history of Asian immigrant groups and their American-born descendants in the United States from 1850 to the present, beginning with the first wave of Chinese immigrants in the mid-19th century through the Stop AAPI Hate campaign during the COVID-19 pandemic. Themes of immigration, assimilation, imperialism, discrimination and racism, legal and civil rights, generational trauma, ethnic and cultural pride, joy, and identity, diplomatic relations and conflict, racial triangulation and the "model minority" myth, and more, will be interrogated. One of the highlighted objectives of this course is to contextualize and illuminate Asian and Asian American experiences for students who are curious or eager to understand and engage with race in the United States through this lens. Students will be expected to participate in class discussions, write essays or create presentations and conduct basic research.

7627 African American History I (F) **A. Williams**

Open to Sixth and Fifth Formers who have completed or are currently enrolled in U.S. History. In this course, we will examine major topics and themes in African American history from the African origins of humanity to the rise of the movement to abolish slavery in the nineteenth century. Topics include West Africa's medieval empires, the rise of the transatlantic slave trade, the Middle Passage, slave societies in North America, African Americans in the American Revolution, slavery and the U.S. Constitution, the domestic slave trade, slave revolts, Frederick Douglass, Martin Delany, Harriet Tubman, and the growth of Black institutional life in the antebellum North. African American History I is the first course in a three-part, year-long survey of the African American past; though recommended, completion of African American History II and III is not required.

7591 Political Polarization (F) **E. Spierer**

Open to Sixth and Fifth Formers who have completed or are currently enrolled in U.S. History. "America Is Exceptional in Its Political Divide," claimed the Pew Research Center in March 2021. This course seeks to examine why this dynamic exists in our present day. This course will trace the last half-century of United States history and society to understand the present political moment and the roots of the current era of tribalism and partisan hostility. We will also ask how and why American politics became so polarized and what can be done to stem the tide. We will consider the role of media and other factors in creating this divide and consider the ways polarization influences many aspects of American life. With a special eye to the United States's semiquincentennial, we will also consider how these trends might play out in the summer of 2026. Students taking this course will be encouraged to speak about current events with notable depth, and an interest in politics is necessary to add to the lively spirit of this course.

WINTER TERM HISTORY ELECTIVES

7538 International Relations (W) **R. Spring**

Open to Sixth and Fifth Formers. What is the liberal international order? What is the security dilemma? This course examines major issues in international relations today. The course begins with a look at competing theories of international relations, including realism, liberalism, and idealism. Students then conduct extensive research to prepare for role-plays, simulations, and debates on a variety of topics like: the role of NATO, decision-making by the National Security Council, and humanitarian intervention. Most readings are articles from the archives of *Foreign Affairs* magazine and the Council on Foreign Relations. Students are expected to conduct independent research and engage with classmates in spirited discussion and debate. Creative problem solving, an appreciation and respect for differing points of view, and an embrace of the world's complexity are essential in this course.

7555 Court and the Constitution (W) **E. Spierer**

Open to Sixth and Fifth Formers who have completed or are currently enrolled in U.S. History. This course examines the role of the Constitution and the Supreme Court in American life. The focus in the term will be on a variety of topics, including individual rights, executive power, and equal protection, in the development of the Court's jurisprudence from the framing of the Constitution to the work of the contemporary Court. The readings for this class include excerpts from relevant monographs, legal briefs, Court opinions, and other sources. Students are expected to possess an interest in US History, a passion for debate, and an ability to compose clear analytical essays. By the end of the term, it is hoped students will be more purposeful and persuasive in their ability to engage in textual analysis of legal briefs and opinions, summarize and assess historical and constitutional concepts and themes, and recognize that the Court's work is best understood as an interrelated thematic whole. The term usually ends with a public mock court simulation, which includes written briefs, oral arguments, and written opinions of either a recent Court decision or a hypothetical case.

7622 Microeconomics (W) **R. Bai**

See the course description for 7621.

7625 Revolutions (W) **M. Ishizuka**

Open to Sixth and Fifth Formers. What is a revolution? What makes revolutions distinct from the ebbs and flows of historical change? What motivates people to risk their lives or engage in violence to shift social and political circumstances? How do you measure the "success" of a revolution? These are some of the essential questions students will engage with in this course, which will expand beyond the American Revolution taught in U.S. History courses and explore a sampling of international revolutions from the 18th through 20th centuries. These could include but are not limited to the Haitian Revolution, the Russian Revolution, the Chinese Communist Revolution, the Vietnamese August Revolution, the Anti-Apartheid Movement in South Africa, the Iranian Revolution, and various Latin American and European Revolutions. The course will begin by studying historians' and social and political scientists' work on revolutions and then diving into various examples of revolutions to analyze and interrogate our essential questions. Students will be expected to participate in class discussions, write essays or create presentations, and conduct basic research.

7628 African American History II (W) **A. Williams**

Open to Sixth and Fifth Formers who have completed or are currently enrolled in U.S. History. In this course, we will examine major topics and themes in African American history from the coming of the Civil War to World War II. Topics include Reconstruction, Redemption, the rise of Jim Crow, the politics of uplift and respectability, Booker T. Washington, W.E.B. Du Bois, Ida B. Wells, Marcus Garvey, Hubert Henry Harrison, the Great Migration, jazz, blues, gospel, black soldiers in the Great War, the Harlem Renaissance, and African American responses to the Great Depression, the New Deal, and World War II. African American History II is the second course in a three-part, year-long survey of the African American past; though recommended, completion of African American History I and III is not required.

SPRING TERM HISTORY ELECTIVES

7516 Capitalism: A Global History (S) **E. Spierer**

Open to Sixth and Fifth Formers who have completed or are currently enrolled in U.S. History. In the 21st century, capitalism's global reach is truly unprecedented. How did we get here? This course examines the development of capitalism from its theoretical beginnings to its most contentious political and cultural conflicts in the present day. This course is rooted in economic history and engages with the political, cultural, and social forces that have come to define modern capitalism. We will consider several frontiers of global economics to grasp the ways capitalism has morphed and manifested over time. Students will read original thinkers and grapple with the development of capitalism in its global manifestations from a variety of academic and popular sources.

7519 Sports and Society Since 1945 (S) **R. Spring**

Open to Sixth and Fifth Formers. Students in this course will use sports as a lens for exploring and understanding recent history. We will consider how the growth and development of sport, as well as the notoriety and power of specific athletes, has influenced and reflected broader trends in history, like decolonization and globalization, as well as themes like race, gender, politics, and economics. Questions of inquiry may include:

How did some Africans use soccer to develop national independence movements?
How do the lives of Bill Russell and Muhammad Ali help us understand Black Power?
How did Billie Jean King personify the broader fight for gender equality and gay rights?
Is hosting the Olympics or World Cup a good decision for a city or country?
How did Michael Jordan and Nike embody the challenges and opportunities of globalization?

Students will also be given opportunities to pursue areas of their own interest through individual research. This course will draw on a variety of sources from historians, journalists, and documentary filmmakers rather than a single text.

7623 Microeconomics (S) **R. Bai**

See the course description for 7621.

7626 History Through Genres (S) **M. Ishizuka**

Open to Sixth and Fifth Formers. U.S. History is required or could be taken concurrently. Memoirs, music, historical fiction, documentaries, and feature-length films are all valuable literary and film genres through which we can learn about history, illuminating both the historical content they contain and also the context in which they were created. This course will zoom in on touchpoints in 20th-century U.S. history through the critical examination of a variety of genres in conjunction with historical texts. Example units could include but are not limited to: indigenous representation in film and television from traditional Westerns to Martin Scorsese's *Killers of the Flower Moon* and Hulu's *Reservation Dogs*, Japanese American internment as depicted through memoirs and photographs, Cold War anxieties and paranoia as depicted in popular literature and films like James Bond and *Dr. Strangelove*, and the Vietnam War through historical fiction, documentary, and protest music. Discussions will center around questions of perspective, authorship, authenticity and affect, creating a rich conversation about the ways in which we learn about history, consume history, and create historical narratives, memory, and legacy.

7629 African American History III (S) **A. Williams**

Open to Sixth and Fifth Formers who have completed or are currently enrolled in U.S. History. In this course, we will examine major topics and themes in African American history from World War II to the present. Topics include the growth and transformation of the civil rights movement, the legal battle for civil rights, the opportunities and challenges of black life in the urban North and West, the March on Washington, Martin Luther King, Jr., Fannie Lou Hamer, Malcolm X, A. Philip Randolph, Stokely Carmichael, Huey P. Newton, Angela Davis, black nationalism, black power, the Black Arts Movement, black feminism, backlash politics, hip hop, the carceral state, the election of Barack Obama and Black Lives Matter. African American History III is the third and final course in a three-part, year-long survey of the African American past; though recommended, completion of African American History I and II is not required.

RELIGIOUS STUDIES AND PHILOSOPHY DEPARTMENT

Religious Studies and Philosophy are academic disciplines both distinct from and complementary to other humanistic fields such as history, art, and literature. Religious literacy, or knowledge and awareness of the principles and practices of traditions across time and place, is a central component of education, contributes to intercultural competency, and fosters an appreciation for the value of pluralism for civil life in global, interconnected societies. Course offerings in the Religious Studies and Philosophy Department share a common commitment to the reasoned and respectful exploration of a multiplicity of worldviews, ethical frameworks, and essential questions related to meaning, truth, justice, and beauty.

Upper School students must complete a minimum of any one-term departmental course offering as a diploma requirement.

6130 Foundations of Global History (Y)
Taught jointly by the Religious Studies and Philosophy Department and the History and Social Sciences Department, this course surveys the histories and cultures that have shaped world civilizations and supports students in gaining the requisite skills, intercultural knowledge, and experience for success in the humanities. Global in scope, the course surveys peoples and histories of Africa, Asia, the Americas, and the Mediterranean and a plurality of religious and philosophical traditions, including Hinduism, Buddhism, Jainism, Confucianism, Daoism, Judaism, Christianity, Islam, and indigenous religions. The course develops students' skills for note-taking, critical inquiry, academic dialogue, scholarly research, and analytical writing. Assessments are designed to help students discover, interpret, evaluate, synthesize, and cite scholarly sources to prepare students for the requirements of Upper School courses in history and religious studies.

FALL TERM

6504 Women, Gender, and Ethics (F) **C. Ibrahim**
Open to Sixth, Fifth, and Fourth Formers. Students gain exposure to the works of major philosophers, ethicists, and cultural theorists from the late twentieth and twenty-first centuries while developing their voices on pressing social issues related to sex, sexuality, and gender. This course introduces theories and methods in women's studies research, emphasizes the works of female moral philosophers, and probes ethical issues related to sex and gender in the contemporary world, including reproductive ethics, intersectional feminist social movements, gender-based political activism, masculinity studies, and more. Students hone advanced writing and media skills by creating podcasts, opinion pieces, long-form journalism, and critical reviews. Through collaborative projects and independent research, they analyze how gender shapes moral frameworks and social change in contemporary society. The course emphasizes both academic rigor and real-world engagement, preparing students to think critically about gender justice and contribute meaningfully to public discourse.

6570 Religious Art, Music, and Architecture (F) **A. Read**
Open to Sixth, Fifth, and Fourth Form students. This course explores the historical, cultural, and theological significance of sacred arts across spiritual and religious traditions. Students will have opportunities for demonstration and instruction in relevant studio arts as well as liturgical music. Through independent research, students will explore religious art and architecture from various traditions, cultures, and geographic regions. The course aims to enhance students' religious literacy, intercultural knowledge and competency, critical thinking, and research skills, allowing them to interpret, discuss, and appreciate knowledgeably religious art, music, and architecture.

WINTER TERM

6635 Ethics of Love and Nonviolence (W) **A. Read**

Open to Sixth, Fifth, and Fourth Form students. In this course, we will study the central teachings of Jesus alongside essays and sermons written and compiled by The Rev. Dr. Martin Luther King, Jr. in *Strength to Love.* We will examine Christian scriptures in light of their original historical and cultural context; consider their theological, social, and ethical implications; and identify how they frame King's writing and leadership. We will explore other theological and philosophical influences on King, including Mahatma Gandhi, Howard Thurman, and the ideal of "Beloved Community." Through independent research, students will trace the legacy and ongoing practice of the ethics of love and nonviolence.

6632 Qur'anic Arabic and Islamic Ethics (W) **C. Ibrahim**

Open to Sixth, Fifth, and Fourth Formers. This course offers a journey into classical Arabic and Islamic ethical thought, using the Qur'an as a gateway for linguistic exposure and ethical inquiry. Through close engagement with Qur'anic verses, students discover how Islamic ethics emerge from the rich interplay of scriptural interpretation and applied ethical reasoning. Students develop foundational skills in reading and writing Arabic script in handwritten and digital forms, while simultaneously exploring how Qur'anic rhetoric has shaped Muslim ethical discourse. Themes include the philosophical foundations of Islamic virtue ethics and Muslim approaches to gender equity, environmental stewardship, and economic justice, and more. Students develop a nuanced understanding of Islamic ethical frameworks while gaining basic literacy in classical Arabic, equipping them for further language study, cultural immersion experiences, or future coursework in religious studies and philosophy. The course offers a framework for engaging with Muslim ethical traditions—a foundation valuable for fields ranging from history to international relations. This course fulfills the requirement for a one-term upper-level departmental course in Religious Studies and Philosophy; it does not fulfill a Groton School language requirement.

SPRING TERM

6623 Mysticism in Christianity (S) **A. Read**

Open to Sixth, Fifth, and Fourth Form students. Mysticism appears throughout Christian history, and this course explores its expression across cultures and tradition from the ancient ascetics of Egypt's desert, to medieval Roman Catholic women religious, modern Black Protestant activists, and contemporary indigenous American Christians. In this course, we will study Christian scripture, mystical theology, and "classics" of the mystical tradition as well as the writings and practices of everyday contemplatives.

6633 Peacebuilding and the Israel–Palestine Crisis (S) **C. Ibrahim**

Open to Sixth, Fifth, and Fourth Formers. Drawing on the ideas of leading scholar-practitioners of religion, peacebuilding, and conflict transformation, this course offers students a deep dive into the history of the crisis in Israel–Palestine. Students gain perspective on the origins of the crisis and its contemporary ripple effects by engaging with historical and theological resources, as well as the lived examples of community builders, educators, interreligious leaders, and peace activists. Through exposure to multiple perspectives and interpretive frameworks, students learn strategies for holding the tensions in divergent historical and theological narratives. The course encourages students to develop cognitive tools to engage insightfully and empathetically with themes such as intergenerational suffering and collective grief. Throughout the course, we ask questions fundamental to the human experience: How can we encourage people to affirm and express their common humanity across disparate identities and ideological positions? What are the impacts of ritualized gestures and liturgy on transforming conflict? How do platforms for truth-telling and justice-seeking contribute to peacebuilding? In part by examining how violent ethnic conflicts have been transformed, we draw lessons applicable to peace-oriented activism in the Israel–Palestine context.

CLASSICS

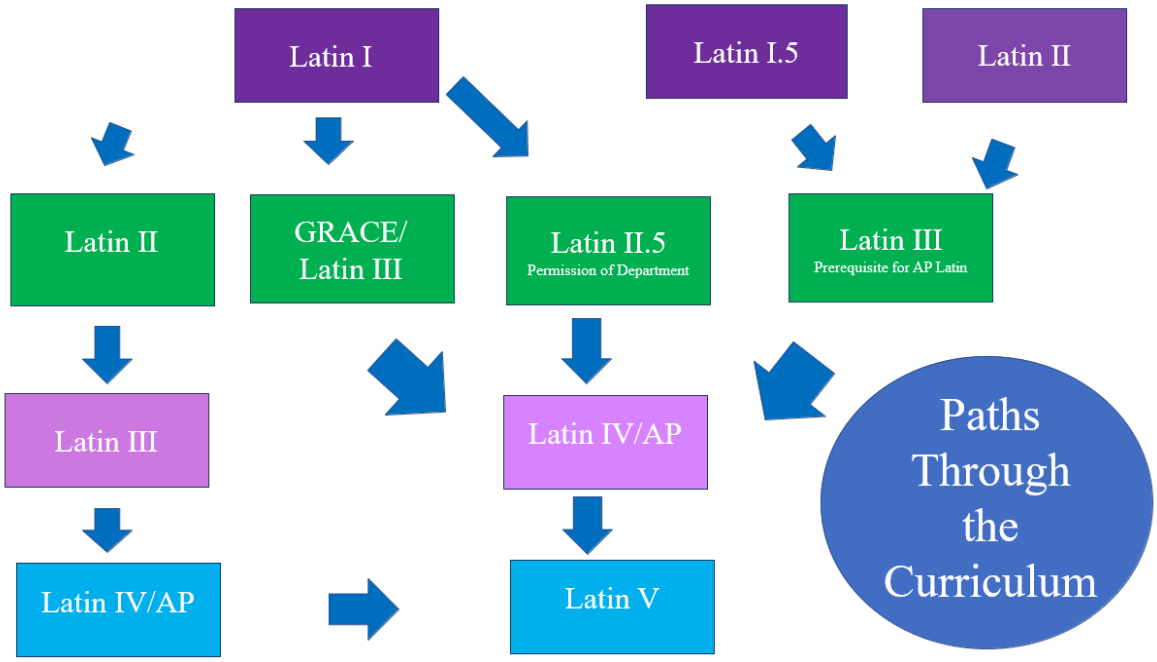
Classics is a unique, interdisciplinary endeavor that is dedicated to studying all aspects of the Greek and Roman world. It incorporates the study of the language, history, and culture of a vast array of peoples from parts of Africa, Europe, and the Middle East. Given this geographical breadth and diversity, Classics involves the study of stories and histories that reflect every aspect of the human experience and condition.

At Groton, students begin their study of Latin and Greek at the intersection of mythology, history, and grammar. The Classics faculty takes great care to provide compelling and engaging texts that promote acquisition, understanding, and discourse at all levels of language study - from beginner to advanced.

Latin and Greek are the foundation of many languages, including English, and are useful aids for learning and appreciating them. At the same time, the development of vigorous critical and computational thinking skills, along with the honing of analytical and communication skills, underpin our study of Latin and Greek. The benefits of this type of intellectual training enhance the development of language skills and the ability to analyze texts and grapple with timeless, human questions. Studying Latin and Greek provides a perspective into many different cultures and prepares students for all manners and modes of learning and problem-solving at Groton and beyond.

Classical studies specialize in close reading and mental discipline while diving into a wide range of subjects from a readily grasped core.

NOTE: All entering Second and Third Form students are required to take at least one year of Latin. If a student has studied Latin prior to Groton, they will take a placement test to determine the appropriate skill level. Students who begin Greek must complete at least two years of the language, unless they start Greek in their Sixth form year. In particular, Upper Schoolers who begin Greek should plan their future schedules accordingly.



LATIN

4120 Latin 1 (Y)
The Latin 1 curriculum covers the language's essential grammar and basic syntax within a year. Daily, students translate practice sentences and longer narrative passages designed to reinforce grammatical topics and to help develop fluency in the language. The discussion of various topics associated with these readings expands students' awareness of a wide range of Roman realities. The *Oxford Latin Course College Edition* is the required text for the class.

4220 Latin 2 (Y)
Latin 2 begins with a quick, thorough review of the essential grammar and syntax covered during the first year of study. In conjunction with this review, students also translate Latin from the *Liber*, an episodic survey of Roman history excerpts from Livy and other Roman authors, before reading selections from Caesar's *Gallic Wars* in the spring term. This course aims to make students proficient readers of Latin while providing a good overview of Roman history and literature through the lens of both Romans and other peoples within the Roman Empire.

4320 Latin 3 (Y)
Latin 3 aims to further develop students' language proficiency while introducing them to representative works of Latin prose and poetry. Students study prose in the first half of the year, typically selections from the works of Cicero, Sallust, and Perpetua, as well as poetry in the second half of the year with selections from Vergil's *Aeneid*.

4420 Latin 4 (Y)
Latin 4 allows students to continue to read, analyze, and discuss representative works of Latin prose and poetry. In recent years this course has focused on selections from a range of Roman authors including Ovid's *Metamorphoses*, Catullus' *Carmina*, Horace's *Odes,* and Vergil's *Aeneid*. Readings may vary from year to year and are chosen at the discretion of the instructor and the Classics Department.

Sixth Formers take this course on a term-by-term basis.
4421 Latin 4 (F), 4422 Latin 4 (W), 4423 Latin 4 (S)

4430 AP Latin (Y)
In this course, students continue to expand their work from Latin III, reading selections from Books 2, 4, 6, 11, and 12 of Vergil's *Aeneid* and selected *Letters* from Pliny the Younger and other authors from the Classical Period through the Enlightenment, as required for the Advanced Placement Examination. In addition to translating, discussing, and analyzing these passages, attention will be given to historical and cultural connections between the readings and their impact on our understanding of the Greco-Roman civilization.

Latin III or permission of the Classics Department is the prerequisite for this course. It is designated as an Advanced Placement course and, thus, requires a full-year commitment for all students. The AP Exam is also required.

4524 Latin 5 (F), 4525 Latin 5 (W), 4526 Latin 5 (S)
The literature studied in Latin 5 may vary at the discretion of the instructor and the Classics Department. In recent years, course topics have included the lyric poetry of Catullus and Horace, the philosophical writings of Cicero, the didactic poetry of Lucretius, the comedies of Plautus, and selections from the works of Ovid, Seneca, Apuleius, and other Latin authors.

4621 Latin 6 (F), 4622 Latin 6 (W), 4623 Latin 6 (S)
Readings are chosen by the instructor.

GREEK

Students may also begin Ancient Greek as an elective course in the Fifth or Sixth Form. Anyone beginning Greek prior to the Sixth Form is expected to take it for a minimum of two years. A Sixth Former who has already completed the language requirement may take Advanced Attic Greek on a term-by-term basis.

4000 Beginning Ancient Greek (Y)
The Beginning Ancient Greek curriculum is designed to cover most of the essential grammar and basic syntax of the language within a year, along with vocabulary-building and practice in reading. *Athenaze Parts I and II* are the required texts for the course.

4500 Intermediate Ancient Greek (Y)
In Intermediate Ancient Greek, students review and expand upon the grammar and syntax they studied during the first year through the close reading of Greek literature. Readings include selections from Xenophon's *Anabasis* in the first half of the year, followed by selections from Homer's *Iliad*. The prerequisite for this course is Greek I at Groton School.

4700 Advanced Ancient Greek (Y), or for Sixth Formers, 4701 (F), 4702 (W), 4703 (S)
Advanced Ancient Greek is a reading course. In recent years works read have included Sophocles' *Antigone* and *Oedipus Rex*, Plato's *Apology* and *Phaedo* and selections from Homer's *Odyssey*. Readings may vary from year to year and are chosen at the discretion of the instructor and the Classics Department.

4400 Ancient Greek 4 (Y), or for Sixth Formers, 4401 Ancient Greek 4 (F), 4402 Ancient Greek 4 (W), 4403 Ancient Greek 4 (S) (Tutorial)
Readings are chosen by the instructor.

WINTER and SPRING TERM CLASSICS ELECTIVES

4618 The Mythology of Greece and Rome (W)
(Not offered 26-27)
Open to Sixth and Fifth Formers. This course will read a selection of stories from Greco-Roman mythology and examine the different ways that those stories were told in antiquity and have been reimagined and repurposed in the years since, with a particular focus on recent reinterpretations. We will examine examples from literature, art, music, movies, and theater, considering the choices that authors and artists make in telling these stories through their own lenses and how those retellings affect our readings of the original myths. One unit will focus on examples of possible PTSD in myth and to what extent some of those suffering from PTSD in the modern world, particularly veterans and the incarcerated, can better understand their trauma through myth. Students will finish the term by presenting their own creative retelling of an ancient myth. All readings and papers will be in English, and no prior knowledge is required.

4619 Archaeology of Ancient Mediterranean (S) **A. Martin-Nelson**
Open to Sixth and Fifth Formers. This class will explore the archaeology, history, and cultures of the Near East, North Africa, and Europe from the Bronze Age until the end of the Roman Empire. Students will explore the major archaeological and historical topics from each period, including the display of human remains in museums, the repatriation of antiquities, the Trojan War, the reception of *Black Athena*, and the archaeology of mass violence. The class will combine illustrated lectures with discussions of the major artistic, architectural, and historical periods. No prior knowledge of Classics is required for this class.

WORLD LANGUAGE AND CULTURE

The study of World Language is an integral part of the Groton curriculum. By learning to speak a new tongue, Groton students open windows to other peoples and to other cultures. It is imperative in the present day that citizens of the world be able to communicate with each other; learning a language may offer one of the best paths to understanding another culture. Our curriculum offers students the skills needed to speak, read, write, and understand other languages, and enables students to be well-prepared for college courses or for opportunities to study abroad. Students must take one language through level 3 or continue through the Fifth Form, whichever comes later. Students taking a second World Language must continue through level 2 of that language unless given special permission by the Department.

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CHINESE

3140 Chinese 1 (Y)
This beginning course lays the foundation for modern Mandarin Chinese language study. Speaking, listening, reading and writing are all components of this course. Students learn tones, radicals (the building blocks of Chinese characters), practical vocabulary, and basic grammatical structures through storytelling. Stories will be in the context of family, school, and social life. Classes are conducted in Chinese; students are encouraged to speak as much Chinese as possible from the very beginning. Throughout the year, cultural elements will be introduced via videos, movies, and hands-on activities.

3240 Chinese 2 (Y)
This course continues to develop listening, speaking, reading, and writing skills in daily situations, emphasizing grammar, and vocabulary expansion. Classes are conducted entirely in Chinese to encourage students' oral and aural skills. Contents are organized around natural conversational topics, such as weather, hobbies, doctor's visits, sports, and travel. Students practice speaking and writing via cultural activities, songs, poetry, and small skits.

3340 Chinese 3 (Y)
This course focuses on deepening cultural competence and understanding through authentic texts, articles, and video material. Oral skills are stressed; students learn to apply grammar and vocabulary in conversations, skits, oral presentations, and debates. Students also read an exciting series of short stories and practice more lengthy writing in different genres and topics.

3440 Chinese 4 (Y)
This course reviews more advanced grammatical structures with an emphasis on fluency and accuracy in writing Chinese across a variety of genres. Students are exposed to current events and social issues in China through newspaper articles, movies, television broadcasts, and literature. Topics include education, social reforms, and economic development. Students will improve their listening, speaking, reading, writing, and analytical skills through class discussions, oral presentations, debates, and essay writing. Sixth Formers may use the following course sequence: 3441 Chinese 4 (F), 3442 Chinese 4 (W), 3443 Chinese 4 (S).

3540 Chinese 5 (Y)
This course prepares students for the AP Chinese and Culture Examination in May. Students continue to explore China's social issues from the previous year; topics include gender, environment, investment, etc. Besides, cultural topics—festivals, music, culinary culture, ancient philosophies, and so on— will be studied both in breadth and in-depth. Students will be familiar with the AP Exam format and improve their language and analytical skills through class discussion, oral presentations, debate, and essay writing. Any Sixth Former who chooses this course as a term elective will have it listed as Chinese 5 and may take it for one, two, or three terms. Sixth Formers may use the following course sequence: 3541 Chinese 5 (F), 3542 Chinese 5 (W), 3543 Chinese 5 (S).

3651, 3652, 3653 Chinese 6: Advanced Readings (F), (W), (S)
The course is open to students who have completed the Chinese 5 course or heritage students who want to strengthen their Chinese reading and writing skills. In this course, students will explore Chinese literature through the reading of both contemporary and classic works. The course's purpose is for students to further develop comprehensive language skills with a focus on analytical and writing skills. The course material will encompass a wide range of cultural, political, and economic topics. Students will acquire more sophisticated vocabulary through reading and discussion and will reflect and share their thinking via research papers and presentations. Each year the topics and course materials will be different. Therefore, students are able to take this course consecutively.

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FRENCH

3150 French 1 (Y)
This class lays the foundation for language study. Classes are conducted entirely in French to develop strong oral and aural skills. Students study the present, the passé composé, the imperfect, and other grammatical structures. Vocabulary is introduced in the text, in class, through short stories, and visual aids.

3250 French 2 (Y)
There is an increased focus on grammar, verb form and usage, and vocabulary in the second year of French. Every verb tense is introduced for both regular and irregular verbs. Vocabulary expansion is a priority. Classes are conducted entirely in French to encourage students' oral and aural skills. Cultural conversations, small skits, and oral drills are designed to encourage students to speak French as much as possible. Vocabulary is introduced in the text, in class, through short stories, simple poems, and visual aids.

3360 French 3 (Y)
This course offers a total review of grammatical structures, including the subjunctive mood. It emphasizes speaking and writing, as well as vocabulary development. Oral skills are stressed, including pronunciation, conversation, and oral presentations. The current textbook is *Breaking the French Barrier, Level III*. Students also read and discuss a collection of short stories.

3450 French 4 (Y)
This course includes reading short stories, plays, and novels, as well as reviewing current events through newspaper articles and television broadcasts. Teachers will use situational vocabulary, oral presentations, essay writing, reading comprehension practice, and a thorough review of complex grammatical structure when needed, emphasizing making vocabulary and grammar practical both orally and in writing. Sixth Formers may use the following course sequence: 3451 French 4 (F), 3452 French 4 (W), 3453 French 4 (S).

3550 AP French Language (Y)
This advanced course focuses on developing fluency in all areas of the language, including reading, writing, listening, and speaking. It follows the AP Language curriculum and discusses various themes through current events, movies, literature, and other sources. Students present their work in creative skits, debates, and essays. Classes are conducted in French for an immersion experience. Students signing up for this class as a year-long commitment will be expected to take the AP Language and Culture examination. Any Sixth Former who chooses this course as a term elective will have it listed as French 5 and may take it for one, two, or three terms. Sixth Formers may use the following course sequence: 3551 French 5 (F), 3552 French 5 (W), 3553 French 5 (S).

3671, 3672, 3673 French 6: Advanced Readings (F), (W), (S)
Prerequisite: French AP Language. In this course, students will continue their study of French literature. They will also read and study poetry, plays, short stories, or novels from the Francophone world. A unit might be devoted to the history and evolution of French cinema. Students will continue to be immersed in a French-speaking environment. They will work on developing their oral and analytical skills through discussion of literature, using a more sophisticated vocabulary. This course can be taken multiple times, as each term is an independent unit.

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SPANISH

3110 Spanish 1 (Y)
This course lays the foundation for language study. Students learn three tenses: present, preterite, and imperfect. They learn many practical vocabulary words related to families, houses, school, food, and transportation. Writing, speaking, listening, and reading are all components of this course. Classes are conducted in Spanish, and students have numerous opportunities to speak. The current text is *Breaking the Spanish Barrier, Level I*. Throughout the year, students read short chapter books and periodically watch video programs.

3210 Spanish 2 (Y)
In the second year, students expand their grammatical foundation. The present perfect, pluperfect, future, conditional, future perfect, and conditional perfect are considered. In addition, the subjunctive mood is presented, including the present perfect subjunctive, as well as formal and familiar commands. Vocabulary expansion is a priority. Students give oral presentations, participate in skits, listen to dialogues and songs, and speak and write extensively. They also read an exciting series of short fiction. The current text is *Breaking the Spanish Barrier, Level II.*

3310 Spanish 3 (Y)
This year is the final intense year of grammatical study. The subjunctive mood is studied in great depth, including the imperfect subjunctive. Intensive review and amplification of grammar, vocabulary, and sentence structure occur throughout the year. The current text is: *Breaking the Spanish Barrier*, *Level III.* Students also read collections of short stories and poetry, which they discuss in class. Short videos and movies are viewed periodically for cultural articles.

3410 Spanish 4 (Y)
The focus of this course is on improving language skills, written and oral—vocabulary, grammar review, reading, and conversation. A student will do periodic reviews of important grammar and will make frequent presentations in class. Speaking and listening skills are especially emphasized. Thematic units include travel, high-tech, food, animals, music, and sports. Films and television documentaries are viewed periodically. Sixth Formers may use the following course sequence: 3411 Spanish 4 (F), 3412 Spanish 4 (W), 3413 Spanish 4 (S).

3510 AP Spanish Language (Y)
This course is an advanced-paced course focusing on developing fluency in all areas of the language, including reading, writing, listening, and speaking. Students present their work in creative skits, debates, and essays. In class, students continue to acquire vocabulary, review grammatical rules, and read representative literature. Students are immersed in Spanish-speaking cultures through literature, television programs, music, and presentations. Students will be expected to take the AP Language and Culture in May. Any Sixth Former who chooses this course as a term elective will have it listed as Spanish 5 and may take it for one, two, or three terms. Sixth Formers may use the following course sequence: 3511 Spanish 5 (F), 3512 Spanish 5 (W), 3513 Spanish 5 (S).

3611, 3622, 3619 Spanish 6: Advanced Readings (F), (W), (S)
The course is open to students who have completed AP Spanish Language. In this course, students will delve into Spanish and Latin American literature through the reading of different authors as well as viewing films by different cinematographers. The purpose of the course is for the students to develop their conversational and analytical skills while acquiring more sophisticated vocabulary through the discussion of the course material. All courses will be conducted in Spanish. Term courses might come from the following: Borges, Historical Fiction, *Matute, Allede, 20th Century poetry, García Márquez*; *Historias sobre la historia*; a survey of Spanish literature from Spain to the Americas; *La ciudad y los perros*; Mexico and its Ghosts; *Cien Años de Soledad*; *Periodismo Narrativo*.

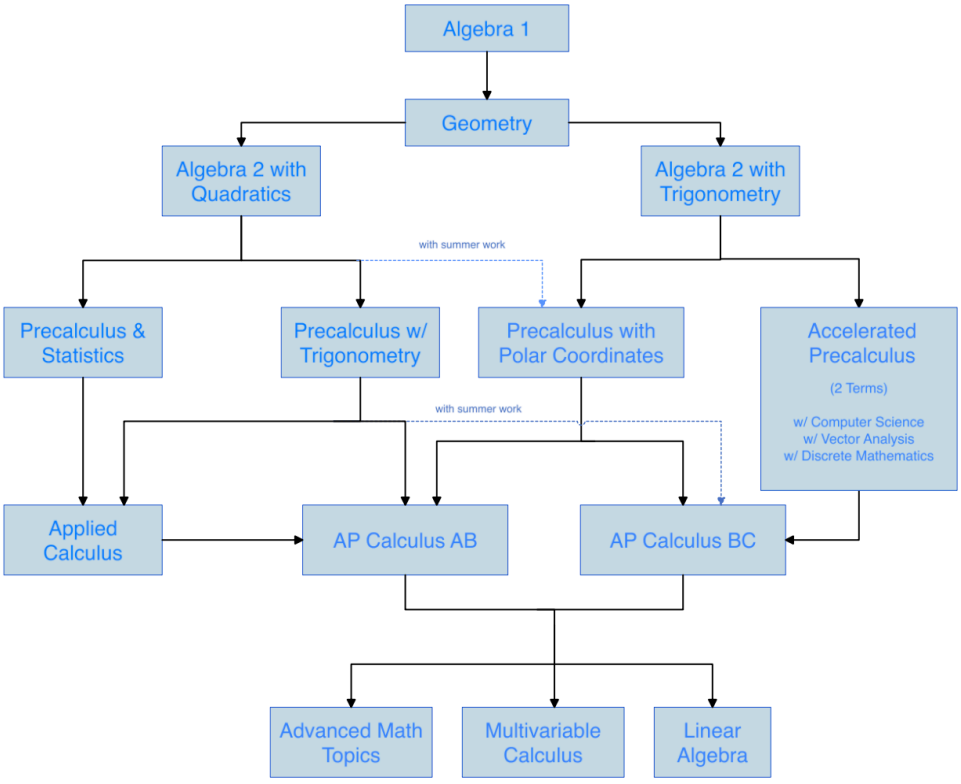
MATHEMATICS AND COMPUTER SCIENCE

The goal of the Groton School math and computer science program is to provide students with quantitative information, problem-solving techniques, and the analytical skills required by the changing landscape of the 21st century. Through student-centered discussions, technology-based explorations, discovery exercises, and lectures, we encourage students to investigate and analyze a variety of mathematical models. By exposing students to questions that emphasize theory as well as real-world applications, we instill the ability to reason quantitatively and to arrive at solutions in an organized, detailed, and concise way. The Department encourages students to work both individually and collaboratively to solve real-world problems. Students are expected to use a range of technological tools including CAS graphing calculators, graphing software, spreadsheets, geometric modeling software, and computer programming to analyze and solve challenging problems. To meet the demands of a rapidly changing world the Department seeks to provide students with essential mathematical and technological skills.

We place students in courses and sections relevant to their skill level. We offer courses that are designed to provide students with skills in a range of topics in algebra, geometry, probability, statistics, calculus, discrete mathematics, and computer science. Students who complete the math program through Advanced Math Topics are encouraged to pursue the study of more advanced topics on a self-selected tutorial basis. Some notable past tutorials include: Game Theory, Graph Theory, Differential Equations, Chaos and Fractals, and Artificial Intelligence, to name just a few.

Students must successfully complete mathematics through the Fifth Form year or Precalculus, whichever comes later.

2025-26 Math Department Core Offerings



2110 Algebra 1 (Y)
This course is a thorough introduction to algebraic techniques and their applications. Basic algebraic skills will be emphasized and practiced. Topics include linear, exponential, and quadratic functions, along with polynomials, factoring, and radicals. Technological tools such as *Desmos* will be used to investigate various relationships and functions.

2210 Geometry (Y)
Prerequisite: Algebra 1. Geometry is a full-year course exploring Euclidean geometry with an emphasis on reinforcing and expanding algebraic skills. Topics covered include fundamentals of Euclidean geometry, parallel lines, congruence and proof, quadrilaterals, similarity, and circles. Polygons and polyhedra, the trigonometry of triangles, and area and volume will also be covered. Students will explore these topics using both analytical and quantitative methods, with a significant component of the course being both individual and collaborative problem-solving on the whiteboard.

2230 Geometry with Advanced Problem Solving (Y)
Prerequisite: Algebra 1 and permission of department. Geometry with Advanced Problem Solving is a full-year course covering all topics from Geometry but in more depth and breadth. The course will focus on problem-solving strategies and skills while developing mathematical communication and proof-writing. Additional topics include work with vectors, conic sections, graph theory, and algebraic representations of geometric objects. The department determines placement for this course.

2340 Algebra 2 with Quadratics (Y)
Prerequisites: Algebra 1 and Geometry. This course involves reinforcing and building upon the skills and concepts presented in Algebra 1. Topics include linear, quadratic, exponential, and logarithmic functions, with emphasis placed on modeling real-life situations. Polynomial functions, rational and irrational functions, and transformations of functions are also presented. In addition, students will explore sequences and series and receive an introduction to statistics. Graphing calculators and *Desmos* are used as exploratory and computational tools. By the end of the year, students are expected to have a solid grasp of how to simplify, solve, and graph the elementary functions. After completing this course, students will be prepared to take Precalculus with Trigonometry.

2350 Algebra 2 with Trigonometry (Y)
Prerequisites: Algebra 1 and Geometry. This course is for students who have already demonstrated proficiency with quadratic functions. In addition to the topics covered in Algebra 2 with Quadratics, this course expands upon the trigonometry students learned in Geometry with an in-depth exploration of trigonometric functions. Problem-solving and a focus on real-world applications will be highlighted. By the end of the year, students are expected to have a solid grasp of how to simplify, solve, and graph the elementary and trigonometric functions. After completing this course, students will be prepared to take Precalculus with Polar Coordinates or Accelerated Precalculus.

2420 Precalculus and Statistics (Y)
Prerequisites: Geometry and Algebra 2 (2340 or 2350). This course introduces students to foundational topics in trigonometry, intermediate algebra, probability, and statistics. As students learn to use mathematical concepts to model the real world, significant emphasis is placed on reviewing topics covered in previous courses. This class aims to prepare students for 2720 Applied Calculus. Students wishing to take an AP-level calculus course should enroll in Precalculus with Trigonometry, Precalculus with Polar Coordinates, or Accelerated Precalculus.

2430 Precalculus with Trigonometry (Y)
Prerequisites: Geometry and Algebra 2 (2340 or 2350). This full-year course introduces students to the advanced algebraic and trigonometric topics that serve as the basis for advanced courses in mathematics and physics. In particular, students will learn about sinusoidal functions, sequences and series, combinatorics, probability, and vectors. The course also includes a review of both exponential and logarithmic functions. The

investigation of infinite series motivates the study of introductory calculus in the spring term. After completing this course, students will be prepared to take either Applied Calculus or AP Calculus AB. Students wishing to advance to AP Calculus BC may be able to do so at the discretion of the department if they complete additional summer work.

2440 Precalculus with Polar Coordinates (Y)
Prerequisites: Geometry and Algebra 2 with Trigonometry. Designed for students who have already done significant work in trigonometry, this class supplements the curriculum for Precalculus with Trigonometry with an additional in-depth study of polar coordinates and complex numbers. After completing this course, students will be prepared to take either AP Calculus AB or AP Calculus BC.

2510 Accelerated Precalculus with Computer Programming (Y)
2520 Accelerated Precalculus with Vector Analysis (Y)
2530 Accelerated Precalculus with Discrete Mathematics (Y)
Prerequisites: Geometry and Algebra 2 with Trigonometry. This fast-paced course begins with an introduction to both differential and integral calculus. Using these concepts, we examine the same topics as those covered in Precalculus with Polar Coordinates with a particular emphasis on proofs and the application of vectors, polar coordinates and complex numbers to the physical sciences. Students planning to enroll concurrently in AP Calculus BC and Advanced Physics: Mechanics are encouraged to consider taking this class instead of Precalculus with Polar Coordinates.

- After completing their study of the traditional elements of the precalculus curriculum, students enrolled in this class will have the opportunity to select between one of three options in the spring:
- Students who enroll in Accelerated Precalculus with Computer Programming will learn to program in Java and will follow the curriculum for Computer Science: Object Oriented Programming (see the description for 2963). Students wishing to take Data Structures and Advanced Programming (2970) without first taking AP Computer Science should select this option.
- Students who enroll in Accelerated Precalculus with Vector Analysis will continue their study of vectors and matrices by considering challenging problems in 3D geometry and linear mapping.
- Students who enroll in Accelerated Precalculus with Discrete Mathematics will round out their study of precalculus with an in-depth look at a single topic in discrete mathematics. Topics will vary from year to year. See the course description of 2813 for details.

2720 Applied Calculus (Y)
Prerequisite: Precalculus. This course introduces students to the big ideas and many applications of calculus. It covers many of the topics included in the AP Calculus AB syllabus, including limits, methods of differentiation, related rates, optimization, advanced graphing, Riemann sums, methods of integration, area, and volume, but it is not designed to prepare students for the AP Calculus exam. Throughout the course, the tools of calculus are applied to answer questions from physics, biology, chemistry, economics, and medicine. Technology (CAS, spreadsheets, and graphing tools) is utilized to help the focus remain on the ideas of calculus more than algebraic manipulation.

2760 AP Calculus AB (Y)
Prerequisite: Precalculus with Trigonometry or Precalculus with Polar Coordinates. This is a year-long course covering differential and integral calculus. Students will be required to take the Advanced Placement Calculus AB examination in May.

2770 AP Calculus BC (Y)
Prerequisite: Successful completion of Precalculus with Polar Coordinates or Accelerated Precalculus or permission of the department. This year-long course covers the material of AP Calculus AB as well as polar coordinates, parametric functions, Taylor and Maclaurin series, and advanced integration techniques, among other topics. Students will be required to take the Advanced Placement Calculus BC examination in May.

2860 AP Statistics (Y)
Prerequisite: Algebra 2 and permission of the department. This course will use a sequence of projects using publicly-available data to explore the topics covered in the AP Statistics syllabus. Students will build proficiency with both spreadsheet software and the TI-Nspire CAS calculator as they explore ways to describe distributions of data, design studies and collect data, analyze the data, and draw and communicate valid conclusions. In all that they do, students will be required to write accurate conclusions that are supported by statistical analysis. Students will be required to take the Advanced Placement examination in May.

2750 Multivariable Calculus (Y)
Prerequisite: Successful completion of AP Calculus AB or AP Calculus BC. This yearlong course will cover differential, integral and vector calculus for functions of more than one variable. Topics covered will include but not be limited to the following: the geometry and extrema of three-dimensional surfaces, calculus-based probability models, finding the area of regions and volumes of solids using double and triple integrals in a variety of coordinate systems, line integrals and their applications, Green's Theorem, and Stokes' Theorem. If time allows, we will also study second-order differential equations and their applications.

2880 Linear Algebra and Cryptography (Y)
From the secret codes of ancient civilizations to the unbreakable encryption that secures the internet today, this course unveils the fascinating world of cryptography through the lens of mathematics. We will begin by exploring the ciphers of ancient history, from the coded messages that sealed the fate of Mary, Queen of Scots, to the brilliant deception of the Vigenère cipher. As we journey through World War II, we will unravel the genius of Alan Turing and the Enigma machine before diving into the revolutionary discovery of asymmetric cryptography with RSA. Along the way, we will study the number theory that makes these cryptographic methods work, encountering prime numbers, modular arithmetic, and the foundations of encryption.

From there, we shift our focus to linear algebra—the mathematical backbone of modern technology. We will explore vector equations, linear transformations, eigenvalues, and eigenvectors, unlocking their powerful applications in computer graphics, digital signal processing, and even Markov chains, which help model everything from web searches to financial markets. This course is an intellectual adventure into the hidden patterns that shape our digital world, offering students a deeper understanding of the mathematical structures behind security, communication, and computation.

2960 AP Computer Science (Y)
Prerequisite: Geometry and permission from the department. Collectively, courses 2951, 2955, and 2963 constitute the equivalent of a one-semester college-level course in computer science. Students wishing to take them in sequence may opt to take them as a year-long course under the AP designation. Students enrolled in AP Computer Science will be required to take the Advanced Placement Computer Science Principles exam in May.

2970 Data Structures and Advanced Programming (Y)
Prerequisites: Either AP Computer Science or Algorithm Design and Analysis, or a demonstrated proficiency with textual programming language and permission of the department.

This course takes a project-based approach to learning advanced programming techniques. Using the Java programming language, we will study object-oriented design and other software engineering principles. We will program Conway's Game of Life to study the behavior of cellular automata and emergent behaviors; we will puzzle over the Towers of Hanoi and contemplate the running time of programs, and we will dabble in artificial intelligence as we code Martin Gardner's game of Hexapawn (a simplified version of chess). Along the way, we will encounter data structures such as stacks, queues, and trees — and we will learn about how to use them to solve various programming challenges. Students who do well in this course will be encouraged to take the AP Computer Science A exam in May, but this course will also address additional topics that go beyond the scope of the AP curriculum.

FALL TERM MATHEMATICS and COMPUTER SCIENCE ELECTIVES

2811 Discrete Mathematics (F)
Open to Sixth, Fifth, and Fourth Formers. Prerequisite: completion of Algebra 2. The topic for fall 2025-26 is Sports Analytics. In this course, students will learn a variety of ways to represent team and player data. With those in hand, we'll introduce regression tools that we can use to analyze that data, model past results, and build predictive models. Examples will come from a variety of sports, including baseball, basketball, football, hockey, and soccer. The goal will be for students to transition from being consumers of sports statistics and analytics created by others to producing their own analyses and predictive models. Students do not need any background in working with data (sports or otherwise), just curiosity about the topic.

2881 Advanced Math Topics (F) **J. Creamer**
Open to Sixth, Fifth, and Fourth Formers. Prerequisite: AP Calculus or permission of the department. The topic for fall 2025-26 is Non-Euclidean Geometry. Who would have known there are over 300 ways to prove the Pythagorean Theorem? And though we won't look at all of them, we will start by attempting to prove it a handful of different ways along with a few other interesting theorems from Euclidean Geometry not traditionally covered in a high school Geometry course, before moving on to studying a few Non-Euclidean Geometries: primarily Spherical Geometry and Hyperbolic Geometry, worlds in which the sum of the angles in a triangle is not 180° and worlds in which squares may or may not exist. If time allows, we will also look at a number of Finite Geometries; Young's Geometry in which there are only 9 points and 12 lines being one possibility. This is primarily a proof-based class.

2951 Computer Science (F)
Prerequisites: Geometry and permission of the department. No prior programming experience is required. This is the first course in computer science and introduces students to the fundamentals of computer programming. Using the Python programming language, we will study concepts such as iteration, conditional code execution, and procedural decomposition. This will be a heavily project-based course, with students developing 4 larger programs throughout the term. First, we'll create a simple drawing program for making modern art with polygons. Then, we'll learn about random number generators and use them to render a variety of different fractals. As the term draws to a close, we'll develop our own versions of some classic games: a digital version of the arcade game *Whac-A-Mole* and a platformer similar to Nintendo's *Super Mario Bros*.

WINTER TERM MATHEMATICS and COMPUTER SCIENCE ELECTIVES

2812 Discrete Mathematics (W)
Open to Sixth, Fifth, and Fourth Formers. Prerequisite: completion of Algebra 2. The topic for winter 2025-26 is Numeracy in a Data-Driven World. In our current world, data are collected and used at unprecedented rates; this course will help you make sense of the barrage of information. Can you spot misrepresentations of data in popular media? How does a neighborhood map of crime tell a different story than city-wide totals? How do statistical experts from each side of a college admissions discrimination lawsuit come to different conclusions from the same data? How do biases inherent in the design of systems like loan approvals and AI play out? How do politicians rearrange voting districts so that representation in government doesn't accurately reflect the population they serve? What can we learn from the census? If you're curious about these and/or similar questions, this course is for you. We'll also explore what types of data are publicly available, what gets presented, and how the presentation of data tells a story.

2882 Advanced Math Topics (W) **J. Creamer**

Open to Sixth, Fifth, and Fourth Formers. Prerequisite: AP Calculus or permission of the department. The topic for winter 2025-26 is Mathematical Modeling. In this course, we will learn how to use discrete dynamical systems and occasionally differential equations to solve advanced counting and probability problems, as well as to model and analyze situations one finds in the physical and social sciences. In addition, we will look at how the body absorbs and eliminates medicines, various models for how populations grow, the economics of harvesting, why one should think twice before playing roulette, and the basics of genetics.

2955 Computer Networks and the Internet (W)

Prerequisites: Geometry. In this course, students will explore what the internet is and how it works. Upon completing this course, students will have a solid understanding of what's happening behind the scenes whenever they visit a website or send an email. We will learn about how computers store and transmit data, and we will consider cybersecurity questions that arise as we try to keep that data safe and private. We will study the basics of encryption and the algorithms that power modern search engines. Beyond technical details, we will examine the global impact that the internet has on society, the economy, and culture. This course is not primarily a programming course, but it will include several Python programming labs. Prior knowledge of a text-based programming language is recommended but not required.

SPRING TERM MATHEMATICS and COMPUTER SCIENCE ELECTIVES

2813 Discrete Mathematics (S)

Open to Sixth, Fifth, and Fourth Formers. Prerequisite: completion of Algebra 2. The topic for spring 2025-26 is Foundations of Personal Finance. The ability to understand and manage personal finances can make a big difference in young adults' long-term financial health. This course is designed to help students make wise spending, saving and credit decisions in their college years and beyond. Topics include preparing a personal budget, managing a checking account, making investments, understanding insurance and housing needs, managing credit, and saving for retirement.

2883 Advanced Math Topics (S) **J. Creamer**

Open to Sixth, Fifth, and Fourth Formers. Prerequisite: AP Calculus or permission of the department. The topic for spring 2025-26 is Game Theory. Game Theory is the study of how and why we make decisions and the outcomes based on the choices that are made in our interactions, outcomes which can often be counterintuitive and/or surprising. After spending a little time investigating games of chance, we will discuss and analyze some of the classic Game Theory problems; The Prisoner's Dilemma, The Volunteer's Dilemma, Kuhn Poker, and Blotto, to name a few. We will often do so in the hopes of learning something about morality and efficiency in choice making. A basic understanding of probability and a willingness to think critically in our game playing are the prerequisites for this course.

2963 Computer Science: Object Oriented Programming (S)

Prerequisites: Geometry and permission of the department. No prior programming experience is required. This course introduces students to the Java programming language and the basics of object-oriented programming. We will study Java's type system, why it exists, and how it helps programmers write code that is both correct and efficient. Students will learn techniques for analyzing programming problems and breaking them into simple parts. Additionally, students will master debugging skills and will learn how to reduce redundancy in their code. In short, this course aims to give students the tools they need to become successful programmers. Students wishing to take the AP Computer Science A exam are strongly encouraged to enroll in this course the year before they wish to take the AP exam.

SCIENCE

Groton offers a spectrum of courses in the life and physical sciences. These fields are presented as dynamic and subject to rigorous testing and revision, as has been reflected in the histories of each discipline. Instructors are aware that those histories have not been inclusive and therefore take pains to describe past omissions and to explicitly promote diversity in current investigators and future practitioners of their respective disciplines.

Teaching of subject content is balanced with work in the laboratory, in the field, and on the computer and is designed to hone the students' analytical prowess and to foster an appreciation for the experimental and collaborative nature of science. Our goal is that all students gain, over the course of their Groton careers, significant exposure to key STEM skills and habits, and our continued curriculum evolution recognizes the inclusion of these skills and habits as a selective force.

Students who feel that they have already taken the science course suggested for their form should write to the Science Department head by May 1 and include a description of their course syllabus and the name of their text. The Department will determine the most appropriate course assignment for the student and may administer a placement test to provide additional data for its decision.

SECOND FORM: Second Form Science

THIRD FORM: Life Sciences

FOURTH, FIFTH, AND SIXTH FORMS: The Upper School science requirement for a Groton School diploma involves the election of one full-year laboratory course in science during these last three years. Students who do not study science in Third Form must take two full-year laboratory courses to graduate. Enrollment in all Upper School science courses is by permission of the Science Department. The following courses meet the diploma requirements for lab science and can be taken in the years listed:

Fourth Form: Chemistry, Chemistry Honors, AP Chemistry
Environmental Science
Advanced Physics (for those taking Calculus concurrently or previously)
AP Biology (with previous formal study of chemistry)

Fifth Form: Chemistry, Chemistry Honors, AP Chemistry
Environmental Science
Physics, Calculus-Based Physics Honors, Advanced Physics
AP Biology

Sixth Form: Chemistry, Chemistry Honors, AP Chemistry
Physics, Calculus-Based Physics Honors, Advanced Physics
AP Biology

SINGLE TERM COURSES: Fall term, winter term, and spring term courses for Fifth and Sixth Formers will be offered on a regular basis. However, term courses will not fulfill the diploma requirement. Term course offerings are subject to staffing considerations; not all of them may be available in any given year.

5110 Second Form Science (Lab) (Y)
This course is designed to inspire curiosity while encouraging critical thinking and rigor to prepare students for future science courses. Through various course modules varying from astronomy to anatomy, students will learn how to be a scientist by employing critical thinking via the scientific method. The students will design and test hypotheses, execute experiments in the lab, analyze data and properly present data for projects spanning environmental conservation, chemical element formation, and fetal pig dissection. Since collaboration is key to

successful science, students will also be working closely in groups throughout the course in order to develop interpersonal skills.

5300 Life Sciences (Y)
This course introduces third form students to the fundamental principles of life science through the lenses of biology and ecology. Students explore the structure, function, and behavior of living organisms, and examine the complex interactions between organisms and their environments. Emphasis is placed on critical thinking, scientific inquiry, lab skills, and real-world applications of life science concepts.

5400 Environmental Science (Lab) (Y)
Open to Sixth, Fifth, and Fourth Formers. Environmental Science will explore the relationship between the human population, the physical environment, and its resources. The fall term will be devoted to the study of our natural environment, including the biogeochemical cycles that support ecosystems and ocean-atmosphere interactions. In the winter term, students focus on energy resources and consumption, including fossil fuels, nuclear, and renewables. In the spring term, we will discuss human activities that cause damage to the environment at both local and global scales, such as urbanization, overpopulation, pollution, and climate change, and how we can start to mitigate the deleterious effects of such activities. Throughout the year, students will be engaged in laboratory work; in the spring, students will carry out ongoing fieldwork and data analysis around the campus to shed light on anthropogenic impacts on our local ecosystem. Enrollment is limited to 16 students, and preference will be given to students who have completed a year of physical science.

5410 Chemistry (Lab) (Y)
Open to Sixth, Fifth, and Fourth Formers. Chemistry is a subject concerned with energy and the properties of matter. The introductory course emphasizes problem-solving. By combining molecular visualization and mathematical analysis with laboratory experience, students work individually and in small groups to solve problems ranging from the design of molecules that serve as therapeutic agents for diseases, to the design of instruments that measure the amount of heat energy released in combustion reactions. Topics covered include: atomic and molecular structure, solution chemistry, properties of the liquid, solid and gaseous states of matter, nuclear chemistry, thermochemistry, kinetics, quantum mechanics, organic chemistry, and chemical reactivity. The laboratory component of the course emphasizes analytical chemistry skills and scientific communication.

Third Formers may petition to take Chemistry. Decisions will include consideration of performance in the Third Form (or equivalent) life science class and one's level in math.

5450 Chemistry Honors (Lab) (Y)
Open to Sixth, Fifth, and Fourth Formers. Introductory Chemistry and Introductory Chemistry Honors will follow the same general progress of topics, but Honors students will be expected to be more comfortable with and adept in mathematical analysis. The Honors course moves at a faster pace in order to allow time to explore topics in greater depth so that the fundamental chemistry concepts and skills can be applied to contemporary topics. Students in the Honors course will be strong candidates for AP Chemistry. Enrollment in the Honors course is subject to the approval of the Science Department.

5510 Physics (Lab) (Y)
Open to Sixth and Fifth Formers. Prerequisite: Algebra 2. This is a full-year course intended for students who have not previously taken a course in calculus and are not taking one concurrently. Class time will consist of lecture/discussion sessions and laboratory work. The course is designed to familiarize students with the principles of classical physics that govern our everyday experiences. Topics will include Newtonian mechanics, wave behavior, and electricity and magnetism. The material will be approached from both conceptual and mathematical perspectives. Coursework will include regular problem sets and laboratory experiments summarized in written reports.

5590 Calculus-Based Physics Honors (Lab) (Y)
Open to Sixth and Fifth Formers. Corequisites: Calculus A or Applied Calculus. Through both lecture/discussion sessions and laboratory work, students will be introduced to how experimentation and the techniques of calculus can be used to explore physics. Topics will include classical mechanics, electricity and magnetism, wave mechanics, and optics. Techniques of integration and differentiation will be introduced as needed so students need not have previously completed a course in calculus. Regular assignments will include both problem sets and written laboratory reports.

5620 Advanced Physics: Mechanics (Lab) (Y)
Open to Sixth, Fifth, and Fourth Formers. Corequisite: Calculus B recommended. During two lecture/discussion periods, one problem-solving period and one laboratory session each week, students will learn how experimentation and the techniques of calculus can be used to explore classical mechanics. Techniques of integration and differentiation will be introduced as needed, so students need not have previously completed a course in calculus. Regular assignments will include both problem sets and written laboratory reports. Students who do well in this course will be encouraged to take the Level C AP examination in Mechanics in May.

5630 AP Biology (Lab) (Y)
Open to Sixth, Fifth, and Fourth Formers. Prerequisites: Ecology or Biology and Physics or Chemistry. These prerequisites may be waived with departmental permission for students of demonstrated ability. In addition, all students who take this course must take the AP Biology Examination in May. AP Biology is comparable to a college freshman biology course in both content and rigor.

This course will follow the AP syllabus as closely as possible and will cover both class and laboratory components. The lab work includes the completion of the required labs (2 per "big idea") and allows the investigation of classic and current lab techniques. Major topics covered will include biochemistry, cell anatomy, membrane transport, cellular energetics, cell cycle and cell communications. heredity and genetics, gene expression and regulation, natural selection and evolution, and ecology. Students will complete one presentation that requires them to become conversant with current scientific literature and recent advances/discoveries. Scientific journal readings and discussions will also be utilized to expose students to techniques and protocols prevalent in recent research.

5640 AP Chemistry (Lab) (Y)
Open to Sixth, Fifth, and Fourth Formers. Prerequisites: Introductory Chemistry or equivalent and a strong math background with at least concurrent enrollment in Honors Algebra II. This course will prepare the student for the AP Chemistry Examination, which is taken by all who are enrolled in the course and is designed to be the equivalent of a university-level General Chemistry course.

The course uses a spiraling curriculum, allowing the students to continually expand their understanding of the topics studied. There is a robust laboratory component to the course. The laboratory and class lecture topics are intentionally designed to complement each other. The lab curriculum allows the students to expand their experience with evidence-based conclusions.

5740 Advanced Physics: Electricity and Magnetism (Y)
This course will prepare students who have completed Advanced Physics: Mechanics (5620) to take the Level C AP examination in Electricity and Magnetism in May. Doing so will entail conducting experiments as well as extensive problem solving practice in order to learn how experimentation and the techniques of calculus can be used to explore classical electromagnetism.

FALL TERM SCIENCE ELECTIVES

Foundations of Innate Immunology (F) **A. Jordan**

Open to Sixth, Fifth, and Fourth Formers. This elective introduces students to the principles of innate immunity; the body's first line of non-specific defense against pathogens, present from birth and activated immediately or within hours of inflammatory exposure. Students will examine how organisms, primarily humans, detect and respond to pathogens, how inflammation is initiated and regulated, and how innate immune mechanisms coordinate with adaptive immunity to maintain health. Core topics include physical barriers, cellular components of innate defense, pattern recognition, cytokine and chemokine signaling, and antiviral responses. Through analysis of primary data, lecture, and case studies, students will develop a conceptual understanding of host–pathogen interactions and immune system regulation. Emphasis is placed on mechanistic reasoning, interpretation of experimental evidence, and the integration of molecular and physiological perspectives. This course is designed for upper-level high school students with prior coursework in AP Biology (or by instructor permission) who are prepared to engage with advanced biological concepts at a rigorous level.

Genetics (F) **W. Bainter**

Open to Sixth and Fifth Formers. This is a deep dive into the world of genetics. Students will learn about the structure and function of DNA and RNA, gene expression/regulation and mechanisms of inheritance. This knowledge will be applied to breaking down the mechanism of genetic diseases and the implementations of genetic technologies. Students will also learn to read and analyze cutting edge scientific literature which will expose them to the ever-growing field of genetics. In addition, students will apply this knowledge in the lab by learning techniques such as DNA isolation, PCR, sequencing and gene editing. This course is designed for 5th and 6th form students with prior coursework in AP Biology (or by instructor approval) who are prepared to engage with advanced biological concepts at a rigorous level.

5611 Field Ecology (F) **D. Black**

Open to Sixth, Fifth, and Fourth Formers. The focus of the course will be on gaining an understanding of the ecosystem structure and function of the open spaces around our campus. Students will learn to describe the upland and wetland communities that quantitatively exist in this area, and will use this information to assess these lands as habitat for a state-listed rare species. The class will involve considerable field work and will require students to be able to identify the common plants that exist in our area.

5734 Biochemistry - the Chemistry of Metabolism (F) **N. Lamarre-Vincent**

Open to Sixth and Fifth Formers. Prerequisites: Honors Chemistry or AP Chemistry. *Students may contact the instructor to ask for a waiver from the listed prerequisites.* How does life on Earth transform and manipulate energy to grow and reproduce? In biochemistry, we address this question by exploring the biosynthetic pathways involved in the metabolism of sugars, in order to deepen our understanding of the thermodynamic, structural, and mechanistic properties that govern life at a molecular level. We will accomplish this endeavor by examining the nature and mechanisms of cellular reactions. As proteins are integral to all biochemical pathways, we will begin the term by looking at the structure and function of proteins, and then progress to studying the properties of enzymes, kinetic analysis, and carbohydrate metabolism. In the second half of the term, we will complete sugar metabolism and explore the chemical basis for metabolic regulation.

5751 Engineering and the Design Process (F) **A. Hall**

Open to Sixth and Fifth Formers who have taken a full-year laboratory science course in the upper school. This course will be centered on group projects as students learn the engineering design process, starting from the identification of a need and progressing all the way to prototyping in the fabrication laboratory. The class will be learning and progressing through the design process as they take on projects within the community. The students will be able to work on real-world projects with the potential of having important and valuable input during the projects' design. There will be a significant fabrication component to the course as ideas and designs will become

prototypes and solutions as the students familiarize themselves with material properties and construction methods. In addition, this course introduces the many fields of engineering and the roles of these disciplines in our society.

5754 Organic Chemistry 1 (F) **T. Maqubela**

Open to Sixth and Fifth Formers. Prerequisite: Completion of AP Chemistry. This course introduces many of the basic reactions and concepts students will encounter in their future studies of chemistry, biology, or medicine. Rather than covering a large number of reactions, as might happen in a second-year (full-year) college organic chemistry course, this course emphasizes an understanding of general principles of reactivity and mechanism. The classroom work is supplemented by demonstrations through which students learn some of the fundamental tools of this highly empirical science. In addition, each student gains detailed knowledge of an area of active research related to organic chemistry. After selecting a topic of interest, each student prepares a paper and a class seminar, using current scientific literature. This course may require more than the standard four to five hours per week of homework.

5711 Astronomy (F) **J. Smith**

Pre/Co-requisites: Any physics class. This one term course will cover the basics fundamentals associated with Astronomy and the techniques used to observe astronomical events. The course will cover our Solar System, Stellar Objects and Observational Techniques. Weather permitting, there will be opportunities to get outside of the classroom and observe the night sky using telescopes. The end of the term will involve a research presentation based on the topics covered in class.

WINTER TERM SCIENCE ELECTIVES

The Human Microbiome (W) **A. Jordon**

Open to Sixth, Fifth, and Fourth Formers. This elective explores the human microbiome; diverse communities of microorganisms that inhabit the human body and influence physiology, development, and overall health. Students will examine how microbial ecosystems are established, how they interact with host tissues, and how environmental factors such as diet, antibiotics, and lifestyle shape microbial composition over time. Core topics include microbial diversity and classification, host–microbe interactions, ecological principles within the body, immune system relationships, and the role of microbiota in maintaining biological balance. Students will also consider how disruptions to microbial communities can alter system function. Through lecture, analysis of selected scientific data, and case-based discussions, students will develop a systems-level understanding of the dynamic relationship between humans and their resident microorganisms. Emphasis is placed on scientific reasoning, interpretation of experimental evidence, and integration of molecular, ecological, and physiological perspectives. This course is intended for upper-level high school students interested in biology who are prepared to engage with advanced life science concepts in a rigorous academic setting.

5612 Conservation Biology (W) **D. Black**

Open to Sixth, Fifth, and Fourth Formers. The course will look at the rationale for and strategies to protect biodiversity, both locally and globally. We will begin with the study of the mathematics of extinction and then look at how threats to biodiversity affect the outcome of an analysis. The course would culminate with the development of a conservation plan to preserve a species of the student's choosing. This plan will include a discussion of the benefits of land protection and habitat management to both the native flora and fauna and to the humans with whom they share the landscape. Laboratory work will focus on using wildlife cameras to document the occurrence of large mammals in the study area. Students entering the course without taking Field Ecology will be required to do a 45-minute crash course in the use of GIS software.

5738 Engineering Analysis (W) **A. Hall**

Open to Sixth and Fifth Formers who have taken or are currently taking Advanced Physics - Mechanics. This course applies mathematical relationships and physical laws to analyze internal forces within a variety of structures. Students are introduced to foundational concepts in statics, material properties and section properties to find stresses, and then comparing these to the demands of external loads defined by design standards. Each unit includes a collaborative design project in which students' model, predict, and test the behavior of scaled structures. Computer-aided design (CAD) software is introduced as a tool for designing and fabricating these structures, which are produced using 3D printers and a laser cutter.

5742 Molecular Biology (W) **N. Lamarre-Vincent**

Open to Sixth and Fifth Formers. Prerequisites: AP Biology or Honors Chemistry/AP Chemistry. *Students may contact the instructor to ask for a waiver from the listed prerequisites.* The central dogma in biology refers to the role of nucleic acids in the storage and transmission of information in biological systems. In this course, we will examine the molecular mechanisms by which DNA, RNA, and proteins interact and the research that leads to our current understanding of how biological information allows life to adapt and evolve.

5748 Environmental Chemistry (W) **T. Maqubela**

Open to Sixth and Fifth Formers. Prerequisite: any previous Chemistry course. The course opens with the basic principles of Green chemistry. The discussion of "good ozone" which serves as our filter against harmful UV-C and UV-B rays is juxtaposed against the discussion of "bad ozone" in smog production. The greenhouse effect, as well as the enhanced greenhouse phenomenon (some refer to the latter as "global warming" implicated in climate change), follows next. We will then discuss the use of fossil fuels, their role in the production of smog, and the increased concentration of CO_2 in the atmosphere. The discussion turns next to the replacement of leaded gasoline by the addition of MTBE, ethanol, and related oxygenates to reduce smog. Attention is turned next to the search for sustainable ways, including purification methods, to bring potable water to exploding populations in the developing world. The pros and cons of the roles of chlorine, ozone, and reverse osmosis in the purification of water are compared.

Adaptive Immunity (W) **W. Bainter**

Open to Sixth and Fifth Formers. This course is an introduction to adaptive immunity and is designed to bring students through the development and function of T and B cells. We will learn how T and B cells collaborate to fight infections but also what happens when they fail, causing autoimmunity, allergies, or life-threatening infections. This course will also discuss how these cells are being leveraged to create treatments for disease. Students will learn through analysis and discussion of scientific literature and clinical case studies, as well as guest lessons by clinical immunologists and research scientists working on the cutting-edge of immunology. This course is designed for 5th and 6th form students with prior coursework in AP Biology (or by instructor approval) who are prepared to engage with advanced biological concepts at a rigorous level. Preference will be given to students who have taken Foundations of Innate Immunology.

Wave Mechanics (W) **J. Smith**

Pre/Co-requisite: Advanced Mechanics. This one term course will explore the fundamentals of Waves in the form of mechanical waves, sound and light. The course will begin with a very classical approach looking at wave interference, reflection and transmission and will end with more modern topics such as quantum behavior of waves, diffraction and the Bohr Model. This class will serve as an excellent introduction to Quantum Mechanics and will prepare students for more advanced physics topics such as Nuclear Physics and Quantum Optics.

SPRING TERM SCIENCE ELECTIVES

Foundations of Virology (S) **A. Jordon**

Open to Sixth, Fifth, and Fourth Formers. This elective introduces students to the fundamental principles of virology with an emphasis on understanding how viruses infect cells, replicate, and cause disease. The course begins with a general overview of viral structure, classification, and transmission, along with a review of how the immune system responds to viral infection. Students will then explore the biology of selected human viruses to understand how viral replication strategies influence pathogenesis and public health outcomes. Instruction integrates foundational molecular biology concepts with historical case studies and analysis of selected scientific data adapted for the high school level. Emphasis is placed on mechanistic reasoning, interpretation of experimental evidence, and the connection between molecular processes and real-world disease dynamics. This course is intended for upper-level high school students interested in biology who are prepared to engage with advanced life science concepts in a rigorous academic setting.

Disease Biology (S) **W. Bainter**

Open to Sixth and Fifth Formers. Demystify disease by exploring their underlying origins, pathology, and treatments in this course. Students will put themselves in the shoes of research scientists to discover molecular and genetic mechanisms driving disease, and will support their learning by reviewing published literature, complete hands-on laboratory projects, and establish strong presentation skills covering complex topics. This course is designed for 5th and 6th form students with prior coursework in AP Biology (or by instructor approval) who are prepared to engage with advanced biological concepts at a rigorous level. Preference will be given to students who have taken Genetics, Foundations of Innate Immunology and/or Adaptive Immunity.

5383 Modern Energy & Climate Engineering (S) **R. Tripp**

Students will study a range of topics with an engineering lens. The course will begin with climate dynamics and an overview of earth's energy system before delving into topics such as transmission, the built environment, and transportation. Students will examine efficiency in all stages from energy generation to end usage. The class will also engage with techno-economic analysis, comparing the costs and benefits of different engineering solutions. Students will build literacy in modern energy policy and engineering debates by discussing current events. The course will be heavily project-based, including a final startup pitch.

5613 The Ecology of Climate Change (S) **D. Black**

Open to Sixth, Fifth, and Fourth Formers. In this course, we will study the effects of climate change on the natural world and look at various strategies to adapt to the ongoing changes. This will be done through research and field study of vernal pool breeding species, the forest floor leaf litter community, and the pollination networks that exist on campus. We will discuss the causes of climate change and the uncertainties that come with the prediction of its effects on specific areas. There will be extensive fieldwork required for the class.

5756 Organic Chemistry 2 (S) **T. Maqubela**

Open to Sixth and Fifth Formers. Prerequisite: Organic Chemistry 1. The course will be a continuation of the first Organic Chemistry class, focusing on pericyclic and named reactions. Students will be expected to give an extensive presentation on an aspect of physical organic chemistry.

5783 Experimental Biochemistry (Lab) (S) **N. Lamarre-Vincent**

Open to Sixth and Fifth Formers. Prerequisites: Biochemistry and/or Molecular Biology. Experimental biochemistry is a lab-intensive course. Students will act as independent researchers focusing on a specific research topic for the duration of the term. Topics will range from synthetic biology (constructing novel proteins and/or genetic logic circuits) to biochemistry (cloning, purifying, and characterizing the biological activity of transcription factors *in vitro*). The laboratory research workflow techniques employed in this course will follow laboratory research performed in colleges and universities. Students will learn the research standard

for maintaining a laboratory notebook. Biweekly lab meeting presentations and an end-of-term project presentation will serve as the major assessments.

5733 Modern Physics (S) **A. Hall**

Open to Sixth and Fifth Formers who have taken or are taking a full-year course in physics. This course will trace the development of modern physics through the 20th Century, beginning with the quantum hypothesis proposed by Max Planck in 1900 and concluding with contemporary research. Topics covered will include quantum theory, special relativity, and particle physics. These areas will be approached mathematically where possible, but the primary focus will be on tracing the development of intricate theories and understanding how they inform and alter the way we view the world around us.

Advanced Topics in Physics (S) **J. Smith**

Pre/Co-requisite: Wave Mechanics or Advanced Physics: Electricity and Magnetism. This one term course will cover a variety of topics that take the content from other advanced physics courses and apply them to specific fields of research and other advanced topics. Students will apply fundamental physics concepts in new ways and learn more modern techniques throughout the course. Topics covered are subject to change but will include Nuclear Physics, Quantum Optics, Relativity and Research Techniques. The end of the term will involve research presentations based on the topics covered in class.

NON-DEPARTMENTAL ELECTIVES

9102 Cultural Sociology (W) **L. Sales**

Open to Sixth, Fifth, and Fourth Formers. In this elective, students will explore intercultural dialogue, identity formation, cultural humility, and perspective-taking. Through class dialogue, interactive simulations, short-term research and small-group collaborative projects, students will study how to "research people" as they acquire tools to measure and describe various aspects of culture. By the end of the term students will learn how to build interviews, surveys and other methods of studying cultural behavior. In addition, students will have the opportunity to connect and collaborate with students outside of the circle, fostering empathy, patience, humility, and respect for different cultures and viewpoints.

9362 Globalism and World Perspectives (W) **R. Stanton**

Sixth, Fifth, and Fourth Formers will come together to explore and discuss works of literature, internet sites, news articles, art and music pieces, movies, and animations. The particularity of this class is that students will be encouraged to find resources in their own native language and culture. Discussions will be held in English around weekly common topics that each member of the class will research, and present. The aim of this class is to unfold, examine, understand, and appreciate people's different global perspectives. This class will require a minimum of five (5) students enrolled.

9559 Public Speaking from a Global Perspective (S) **L. Sales**

Open to Sixth and Fifth Formers. In this one-term elective, students will study the skills associated with effective public presentations. Assignments will include the study of famous speeches from political figures, actors, humanitarians, and athletes. As students come to understand rhetoric, they will focus on ethical questions that surround local, community, and global issues. Students will use these studies to write and present their own speeches of conviction. Through the process of preparation, presentation, and critique students will practice the techniques of professional presentation, including command of voice, tempo, gesture, and body language. This class will also include in-class debates that will allow students the opportunity to practice extemporaneous speaking skills. Enrollment is limited to ten students.

9469 Women: An International Perspective (S) **R. Stanton**

Open to Sixth, Fifth, and Fourth Formers. Through world readings and films, students will understand, discuss, and analyze critical topics related to women's experiences around the world. The movies we will be watching --in the original version-- are drawn from different parts of the world, such as Iran, Israel, Chile, Lebanon, Belgium, and China, and will be supported by readings from different countries as well. Their common thread is to provide insight into the role and function of women within their cultural, political, and societal context, as well as a more global view. Discussions will be conducted in English.