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BROOKS SCHOOL  
ACADEMIC POLICIES  
AND  
COURSE CATALOG

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2019-2020

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Brooks School does not discriminate on the basis of race, gender, color, sexual orientation, disability, or religion in the administration of its education policies, admission policies, employment policies, financial aid and loan programs, athletic programs, and other School-administered programs and activities.

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## INTRODUCTION

The Brooks curriculum provides students with a broad-based academic experience in preparation for university. In addition, students develop skills and habits of the mind that will benefit them for the rest of their lives. Ideally, all students will enroll in courses in the five major disciplines for all four years of high school. Students are also encouraged to pursue their interests in the arts throughout their career at Brooks. Students should keep their future career options open as long as possible.

This course catalog will give you a sense of the depth and breadth of our curriculum. Requirements are considered the minimum needed to graduate from Brooks. Students should look beyond what they must take to what they ought to take to make themselves the most attractive candidates for college admission. For example, all students should complete courses in the three basic sciences (physics, chemistry and biology), even though they are not necessary for graduation. Most students graduate with transcripts that far exceed the school's requirements.

Brooks offers students the opportunity to choose academic programs appropriate for their abilities; many courses have multiple levels. Students have more choices as they progress through the curriculum. For example, sixth-formers may wish to double up and take two courses in a particular field of study. As always, consultation between students and parents, advisors, teachers, the college counselors and the academic dean is necessary to ensure students choose the most challenging courses within which they will do well.

# ACADEMIC POLICIES

## REQUIREMENTS

### Diploma Requirements

The Brooks academic year consists of two semesters divided by a three-week winter term in January. Ninety credits are required for a diploma. Credit is assigned for successful completion of a course on the following basis:

- Two-semester major: **four** credits
- One-semester major: **two** credits
- Two-semester minor: **two** credits\*
- One-semester minor: **one** credit\*
- Winter term course: **one** credit

*Credits will be recognized for the successful completion of appropriate courses at previous schools, after review by the academic dean.*

*\*Minor classes that meet twice per week award one credit per semester. Minor courses that meet less than twice per week award one-half credit per semester.*

### Departmental Graduation Requirements

#### Arts

Four semesters (eight credits) in the arts over a minimum of two different arts disciplines. In rare cases, specialization in a single discipline may be granted with the approval of the arts department. Entering fifth-formers must earn four credits in the arts.

#### World Languages

One language through the third level.

#### English

Both semesters, every year.

#### History

*Modern World History* and *U.S. History*.

#### Mathematics

Completion of *Second Year Algebra*.

#### Science

Two years of laboratory sciences, one of which must be a two-semester course.

#### Self in Community

A minor class series running through all four years at Brooks. All students will automatically be enrolled in the class specific to their grade.

The faculty will consider petitions from students wishing exemptions from one or more of these requirements. Such exemptions will not be permitted if the student has failed to compile a satisfactory academic record. For instance, students may secure an exemption from *Modern World History* or one year of Brooks science by committing themselves to completing three years of a second language and two years of another.

### Course Load

The expected course load for all students is either five or six major courses, depending on whether a student is taking a class in the arts, and one minor course. Thus, the typical Brooks student carries 11 or 13 credits per semester: five two-credit majors or six two-credit majors, one of which is a class in the arts, and a required minor, such as *Self in Community* in the third form. Third-form students may enroll in fewer than six major courses only with permission of the academic dean. These requests are considered extraordinary and a student's credit situation must be monitored closely to ensure that they are able to graduate on time.

It is the school's strong feeling that a student taking the prescribed course load is considered taking a full and rigorous program. In rare cases, a student may petition to take six major courses, without one being in the arts and, therefore, doubling up in courses in one discipline. That would require permission from the student's advisor and college guidance counselor, the department head in the discipline where the student is taking two courses, the academic dean, and the consent of the Curriculum Committee.

### Promotion Requirements

For promotion to the fourth form, a student must have:

- Passed *English I* and *Self in Community*.
- Earned an average of at least 70 in the second semester.
- Acquired a total of at least 23 credits.

For promotion to the fifth form, a student must have:

- Passed *English II*, *First Year Algebra* and *Self in Community*.
- Acquired four credits in a language other than English.
- Successfully completed one year of the history requirement, unless exempted or deferred by the academic dean and the history department.
- Earned an average of at least 70 in the second semester.
- Acquired a total of at least 46 credits.

For promotion to the sixth form, a student must have:

- Passed *English III*, *Geometry*, and *Self in Community*.
- Acquired eight credits in a language other than English.
- Completed one laboratory science.
- Earned an average of at least 70 in the second semester.
- Acquired a total of at least 70 credits.

Students who fulfill the appropriate departmental and promotion requirements are in good academic standing and eligible for promotion or graduation. The academic dean and the faculty may recommend that students who do not earn the minimum requirements for promotion not be invited to return. If they do remain at Brooks, they will be considered special students until the promotion requirements are met.

Students with an "incomplete" (I) grade at the end of any semester will be granted one month from the submission of grades to make up the incomplete grade and therefore earn appropriate credit. Incomplete grades are normally granted only for medical reasons or in other emergency situations.

Sixth-formers failing with a third-class effort in the first semester must make up that failure in the second semester to be eligible for graduation. Sixth-formers failing any course in the second semester with a third-class effort will not participate in graduation and will not receive a diploma until they have made up the course.

After the conclusion of AP examinations, sixth-formers are generally exempt from spring exams. However, sixth-formers with an average below 70 in a course will be expected to take a final exam. Also, sixth-formers may have to take exams in required courses.

# GENERAL POLICIES

## Grading System and Progress Reports

Number grades are posted at the midterm and end of every semester for all major courses. Minor courses are graded pass/fail at the midterm and with a number grade at semester's end. Certain performance-based courses in the arts are graded pass/fail. Sixth-formers may petition the academic office to have one elective course below the AP level graded pass/fail (see below). A brief explanation of the number grading system and the Brooks School Honor Roll follows:

100 - 92	Highest Honors
91 - 88	High Honors
87 - 85	Honors
84 - 80	Commendable
79 - 75	Satisfactory
74 - 70	Fair
69 - 60	Passing
59 - 55	Failing

## Effort Marks

Effort marks are awarded at the end of each quarter: I = outstanding; III = poor. They are internal grades only and do not appear on student transcripts. The criteria used in assessing effort include the following:

- Punctuality in class attendance and timely submission of assignments.
- Unexcused class absences.
- Satisfactory makeup of quizzes, tests, examinations.
- Attendance at extra help sessions.
- Class preparation.
- Involvement in class discussion.
- Attitude and cooperation.

The grade and effort mark together attempt to make a clear statement of assessment. A student working hard in a challenging course who receives a 75 and a first-class effort is doing commendable work. The school cannot make a convincing academic recommendation on behalf of students whose cumulative academic average is under 70.

## Policies Regarding Course Assignments

"Incomplete" grades are granted only for medical reasons or in other emergency situations. Assignments longer than overnight that are submitted late to class are normally subjected to a grade reduction for each day late, up to three days. After that time, a failing grade may be recorded for the assignment.

Students should not have three major assessments due the same day. A major assessment is a full class period evaluation of at least a week's worth of material, or a major paper. Students with three scheduled tests/papers due on the same day should consult with their advisor and ask one of the teachers, prior to test day, if a test may be postponed. Generally, students should not be assigned more than one typical night's homework during a vacation break. Students in AP courses are an exception. Also, this guideline is not meant to preclude a struggling student from doing significant make-up work or review if the situation requires it.

## Pass/Fail Status

Members of the sixth form may choose to take one non-required elective course below AP level on a pass/fail basis. Sixth formers may take either a two-semester course or a one-semester course each semester pass/fail. All applications for pass/fail status for the year or fall semester must be submitted to the academic dean within 48 hours of the publication of fall mid-term grades. Sixth-form students may apply for second-semester courses to be taken pass/fail within 48 hours of the publication of spring mid-term grades. These applications are reviewed by the Curriculum Committee and are granted to students wanting to challenge themselves in disciplines in which they may expect to struggle.

### Credit Policies

While enrolled at Brooks, the school recognizes credits taken during the academic year from other institutions only in the following instances: one year or one semester for Brooks-affiliated exchanges with School Year Abroad; or one quarter for other Brooks exchanges or off-campus sixth-form projects. Proposals toward undertaking any other academic work for credit must be approved by the academic dean, Curriculum Committee and the faculty before such work is undertaken.

A student separated from school (dismissed, suspended) may receive credit for courses taken that semester if:

- They are not affected by the 18% attendance rule; and
- They satisfactorily complete all major outstanding work, including exams when appropriate.

Teachers are not expected to teach students from afar. Instead, students should complete the syllabus on their own and submit the required assignments.

### Course Changes

Students are allowed to change courses with approval of their advisors, teachers, department chairs and academic dean during the first two weeks of each semester. If students switch courses within or across departments during this time, the grade from their first course will not follow them to their next course; they receive a clean slate. The last days for student-initiated changes are marked on the school calendar.

Following this period, course changes may only be initiated by a student's advisor. After mid-term grades are submitted, students who drop a course at the initiation of their advisor will have a WP ("withdrawn passing") or WF ("withdrawn failing") recorded on their transcript.

If a level change (e.g. from Honors to non-Honors) should be initiated, the process must be completed within two weeks following the release of mid-term grades during the first semester. If a student moves down a level in the same course (e.g. AP Modern World History to Modern World History, or Honors Physics to Physics) a 10-point upward adjustment will be made to the student's grade point average. If a student moves up a level in the same course, the appropriate adjustment will be made by the teacher in consultation with the department chair. If a student changes levels between first and second semester, there will be no change affected to the first semester transcript.

### Advanced Placement Courses and Exams

Advanced Placement (AP) courses are college-level courses based on a standardized curriculum approved by the College Board. The school recommends that students take no more than three AP courses in an academic year. All students enrolled in AP courses are expected to sit for the appropriate AP exams in May. As with other standardized tests administered at Brooks, parents are billed for the cost of the exams.

Students who wish to take AP exams for courses not offered by the school may do so by arrangement with the academic dean prior to spring break. Typically students not enrolled in AP courses offered at Brooks will not be allowed to sit for those exams administered by the school.

### Independent Study

Students who wish to engage in an independent study must contact the academic dean to discuss the independent proposal. A form will be completed as part of the approval process. This form must be completed with a detailed description of the study, including texts and grade evaluation procedures, and permission of the advisor, department chair, college office and teacher overseeing the course.

### Online Learning

Sixth-formers in good standing and in attendance at Brooks may supplement their Brooks education by taking an approved online course sponsored by the College Board or an institution of higher learning for college credit. The one- or two-semester course, to be supervised by a Brooks faculty member, must be one that is not taught at Brooks.

Students may take only one such course per year. Students should submit a detailed proposal to the advisor, academic dean, department head and the Curriculum Committee. This proposal will include a syllabus and all relevant information about the course and the program sponsor. Once approved, satisfactory completion will typically satisfy our independent study

requirement and earn Brooks credit.

Students should be aware that they are responsible for assuming the entire cost of this optional course. Students enrolled in courses sponsored by another institution are bound by the policies, rules and procedures of that institution. Brooks has no control over the course requirements, instructor or grade earned. A failure in such an independent study course may mean a student does not graduate as scheduled.

Students may also take online courses for the purposes of placement or advanced standing. No credit is earned or awarded in these instances. With approval of the academic dean and the department head, students may engage in scholarship that would allow them to prepare to take a Brooks exam in a particular course. The expectation is that a successful performance on the exam would enable the student to pass out of the course to enroll in a more advanced one.

### Winter Term

Brooks offers a required three-week winter term in January. All students are expected to successfully complete a Winter Term course each year. Winter term courses are graded pass/fail. Note that the 18% attendance rule applies during Winter Term. Students who fail to meet that standard will not receive credit for their Winter Term course.

### Programs Outside of Brooks School

Though we believe the experience of attending Brooks School is an exciting and fulfilling adventure in its own right, occasionally a student may become interested in pursuing a semester-long course of study away from the Brooks campus. The Island School might be an example of this kind of program. Ideally, students need to be thinking about this early in their Brooks career. Bearing in mind that many graduation requirements and AP courses are typically what a student might take in their fifth-form year and that these courses are usually not offered by these types of programs, it can be very challenging to accommodate a fifth-former being away for a semester. Spring of the fourth-form year tends to be the least disruptive time for such a program. Students and their parents interested in applying to these programs should be in touch with the academic dean as early as possible.

### Summer Course Work

Brooks School does not customarily award credit for required or enrichment courses taken during the summer. However, for a number of reasons, students may elect or be required to take essential courses during the summer. In order to do so, they must enroll in a summer course approved by the academic dean and the relevant instructor(s) and department head(s), and/or take a special Brooks exam administered by the appropriate academic department. Arrangements and permissions should be secured well in advance.

Students may attempt to advance a level over the summer (i.e. from *First Year Algebra* to *Second Year Algebra*, by taking *Geometry*). However, students (and their parents) should be aware that mastering a year's worth of coursework (four classes per week for 30+ weeks) over the summer is a difficult challenge, even for the most able student. Another consideration is that the University of California system requires transcript evidence that a course has been successfully completed. It may be that other universities, unbeknownst to us, may require this as well. If a UC school is even a possibility in a student's future, enrolling in formal coursework at another institution is probably the best option.

Students passing a summer course and/or exam do not earn credit from Brooks, but successful completion may mean they have earned the right to advance to the next course in the Brooks curriculum.

## ACADEMIC HONORS

### Honor Roll

Students may attain honor roll status at the end of any semester with the following grade point averages:

Highest Honors = 92

High Honors = 88

Honors = 85

### Cum Laude Society

The *Cum Laude* Society is a national organization that recognizes superior academic achievement. According to the *Cum Laude* constitution, the Brooks chapter may elect up to 20 percent of the members of the sixth form who have earned an honors record. Half may be elected upon the conclusion of their fifth-form year and the remainder in the second semester of their sixth-form year. Inductees must be completing at least their second year of high school at Brooks School at the time of induction.

### Graduation

Beginning with the class of 2022, Brooks will recognize scholastic achievement at graduation with the following designations: the top 10 percent of the class as *Summa Cum Laude*, the next 20 percent as *Magna Cum Laude*, and the following 20 percent as *Cum Laude*.

## ACADEMIC PROBATION

A student will be placed on academic probation if the student meets one or more of the following conditions:

- Earns two or more third-class effort marks.
- Earns two or more grades below 70.
- Has a quarter or semester average below 70.
- Fails one or more of the departmental or promotion requirements at the end of any quarter.
- Fails a course at the end of a semester.

At the end of each quarter, the faculty will review the status of all students not in good standing. The academic dean will write a letter to those students, re-affirming the academic expectations of the school. In the event that students on academic probation are unable to fulfill the minimum standards as stated, they will remain on probation and may be dismissed. Students on academic probation may have their weekend and travel privileges limited by the school. Students on academic probation who are failing two courses with third-class effort marks at the end of a semester should expect to be dismissed from the school.

## ACADEMIC INTEGRITY

### Introduction

Academic honesty is the basis of sound scholarship and integral to proper learning. Students must understand that truthfulness and honesty govern their work at all times. Cheating and plagiarism are considered major violations of school rules. Students are expected to present work that is their own, and to cite references and sources when appropriate.

### Character and Honor

At the beginning of every course and at every semester, teachers inform students of their expectations regarding the proper role of collaboration, use of resources (both printed and electronic), citation practices and other issues related to academic honesty. The range of the school's responses to cheating and plagiarism is outlined below. Students must realize that it is their responsibility to do their work honestly and truthfully. Gray areas are inevitable. The appropriate use of calculators, for example, is determined by the individual departments. When doubt exists, the burden is on the students to have the appropriate teachers clarify issues before work is submitted for evaluation.

### Cheating and Plagiarism

The following types of conduct are prohibited by the school, with Level 1 offenses generally regarded as more significant violations of the school's standards of academic honesty.

Level 1. Buying or copying a significant portion of a paper from the Internet or any other source and presenting it as one's own; stealing or otherwise obtaining a copy of a test or examination before its administration; unauthorized use of a language translator; premeditated cheating, such as the use of a crib sheet on a test; spontaneous cheating on a test or a quiz; unauthorized use of work previously submitted in another course.

Level 2. Reading a book in a language other than the one in which it is assigned; copying another's homework; unacknowledged collaboration or assistance; discussing an exercise, test or quiz with those who have already taken it; and/or using another's data on math or science assignments or someone else's research for an essay or worksheet.

These examples are not meant to be an exhaustive or complete list. They are guidelines to help students recognize a wide spectrum of dishonest behavior. At any level, cheating and plagiarism, or helping others to cheat or plagiarize, are wrong and will not be tolerated.

### Consequences of Academic Dishonesty

Incidents of academic dishonesty should be reported to the academic dean. Major violations (Level 1) or multiple incidents of a serious nature (Level 2) will be referred to the Discipline Committee. A first offense of a Level 2 violation is likely to be handled by the academic dean, in consultation with the teacher, advisor and dean of students. In general, the issue will be addressed with the student, and the parents will be informed as to the nature of the offense and the subsequent consequences. The school may, in its sole discretion, decide upon discipline, including, but not limited to, dismissal, suspension, deans' warning, reduction or loss of credit for an assignment or course based on the underlying conduct, regardless of whether the Discipline Committee is convened.

To honor our school mission, Brooks promotes an academic policy of restorative justice. If a student plagiarizes or cheats, as part of the disciplinary action required of that individual, that student must rewrite the assignment or retake the assessment in question to satisfy the original learning objective. The student may earn up to a failing grade of 59 percent for that assignment or assessment. Therefore, a teacher will not calculate a grade of zero for a total loss of credit into a semester average.

In the case a student is suspended, that student may be asked to serve the suspension in-house. The student will then report to the academic dean at the conclusion of classes for a minimum of two afternoons. This practice will continue until expectations related to the disciplinary decision and restorative justice have been fulfilled.

## CLASS ATTENDANCE

### Attendance and Absences

Students and their families are reminded of the importance of classes and other commitments during the school year. While acknowledging the occasional need for students to be absent from class for appointments, family obligations, personal reasons, etc., the school does expect those absences to be undertaken only with careful consideration and, where possible, with some thought for maintaining the integrity of the school schedule, the guidelines of which are quite clear. Please review carefully the following policies regarding attendance.

Class time is an extremely important and valuable component of the education at Brooks, and it should not be missed casually. Given increased pressure by families to have students out of school for extended periods of time or for personal reasons — medical/short leaves, athletic tournaments, family trips, etc. — the faculty has established a general academic attendance requirement. The faculty believes there is a point at which absences from school — be they excused or unexcused, for reasons of health, convenience or pleasure — so significantly curtail the learning necessary to meet course requirements that a student must forfeit credit in that course. As this policy relates to all absences from class time, it is intended to be clear, fair and liberal enough to allow for a reasonable/expected number of absences, some of which might actually be caused by the school itself (i.e., field trips).

This policy on academic attendance demands that students missing an inordinate amount of school consider carefully the consequences of the choices they are making. It is hoped that this policy will affect very few students, and that the typical student, faced with the typical life circumstances of illness, field trips, long weekends, etc., would not find themselves in any sort of credit jeopardy.

A student absent from approximately 18 percent of the meetings of a course per semester may forfeit credit in that course by being withdrawn from it. For reference, 18 percent corresponds roughly to 11 absences from a class meeting four times weekly, six absences from a class meeting twice weekly. "Absent from" means "not present in," regardless of reason.

### Unexcused Academic Absences

In addition to the general policy on absences from required activities, the academic dean keeps same-class records of class absences on a semester basis. Students with three or more unexcused absences from the same class in a semester may be required to attend a special discipline hearing that includes the advisor, the dean of students and the academic dean. If thereafter a student accumulates additional unexcused absences in that same course, that student may forfeit credit in the course by being withdrawn from it.

## THE LEARNING CENTER

In order for Brooks to achieve its mission of providing “the most meaningful educational experience” for our students, we must do our best to help each student reach their full academic potential. A key part of a student’s success is the knowledge that they have the necessary skills to meet the expectations of their courses. Beyond curriculum content, students need to be empowered with the tools to reach this potential. Many students may need academic help at some point during their time at Brooks. The services available through the Learning Center provides this important complement to their classroom experience.

### Services Offered

The Learning Center provides general academic counseling, study and organizational skills development, time management help, writing support and learning styles education. Although classroom teachers are the best source for content area help, some tutorial support is available in the Learning Center as well. The Learning Center is located in Luce Library and is open throughout the school day, Monday through Saturday. While some students seek support on a regularly scheduled basis, others prefer to drop in only when specific help is needed. Advisors and classroom teachers may refer a student for Learning Center services. Additionally, the Learning Center offers an evening study option, staffed by faculty and peer tutors, four evenings per week.

### Resources for Students with Disabilities

The Learning Center coordinates services and accommodations for students admitted to Brooks with learning disabilities. Students who have documented disabilities are guaranteed certain protections and rights to equal access to programs and services under the Americans with Disabilities Act (ADA). In order to be eligible for accommodations, students must present a current (within the last three years) testing/documentation to the Learning Center prior to the school year in order to ensure these are in place for the school term. In cases where students are tested during the school year, documentation should be submitted as soon as available to the Learning Center. Learning profiles are written for the start of each semester. Based on the documentation, the Learning Center faculty will create a learning profile for the student, which includes a summary of disability/learning style, academic strengths and weaknesses, accommodations, recommendations and student responsibilities. This profile is confidential and is shared only with the student’s advisor and relevant faculty members. Brooks currently offers four academic accommodations: 50% extended time; small group setting; use of computer for essay writing; and use of a four-function calculator.

# COURSE CATALOG

## THE ARTS

### MUSIC

The study and performance of music is a unique vehicle for creativity, emotional expression, and the development of self-discipline. Brooks encourages students to nurture their musical interests and abilities through group and solo performance, private study, and classes in music history and music theory. Through these activities, students can begin to understand music in its greater historical and social contexts and discover connections between music and other academic disciplines.

**INSTRUMENTAL ENSEMBLE.** This course is open to all interested students regardless of prior experience. Each term focuses on a single instrument, and that instrument of choice may change from ensemble to ensemble. The students study the history of the instrument and perform at a recital at the end of each term, as well as in occasional informal performances. Emphasis is placed on reading, aural, rehearsal, performance, and blending skills, which apply to all music. Selected members of the ensemble are occasionally asked to rehearse and perform in collaboration with other ensembles. Major – Third, Fourth, Fifth and Sixth Forms – First or Second Semester. **(NOT OFFERED IN 2019-2020)**

**FESTIVAL CHORUS.** This is a vocal ensemble designed to introduce singers to choral ensembles at a high school level. Students learn basic vocal technique as it pertains to choral and solo singing, to read and notate basic notes and rhythms, to use appropriate musical terminology, to sing simple music at sight using Solfège syllables, and perform music in multiple languages from various genres and musical eras. Each semester's culminating performances are a meaningful and compulsory component of this class. Major – Third, Fourth, Fifth and Sixth Forms – First or Second Semester.

**MUSIC THEORY.** This course is designed to help students develop their visual and aural skills in music. Special attention is given to note recognition on all clefs, rhythm and aural dictation, as well as key, scale and chord recognition. Analysis of diatonic chord progressions in both popular styles as well as figured bass is also covered. Major – Fourth, Fifth and Sixth Forms – First Semester.

#### **The following courses are considered second level:**

**CONCERT CHORALE.** This is an auditioned, intermediate-level vocal ensemble whose focus is on developing higher musical literacy, challenging choral repertoire spanning several genres, languages and time periods, intermediate to advanced level vocal production, and public performance. Emphasis is placed on developing more advanced musicianship and professionalism. Participation in this ensemble requires semi-regular public performances that are a meaningful and compulsory component of this course. Major – Third, Fourth, Fifth and Sixth Forms – First and Second Semesters. Prerequisite: Audition and permission of the instructor.

**AUDIO RECORDING.** To understand the technique and concepts of audio recording, students learn how those ideas were forged and study the development of each new technology. Only with this information are they able to make intelligent decisions in the recording process. Basic concepts of acoustics and their application in the modern studio are emphasized. Past and current technologies are observed and implemented in the classroom as well as in projects. By the end of the course, students record a live performance and mix it in the studio, as well as build a recording one track at a time. Major – Fourth, Fifth and Sixth Forms – Second Semester. Prerequisite: Instrumental Ensemble, Festival Chorus, or permission of the department.

**INSTRUMENTAL AND VOCAL LESSONS.** Private instruction is available for most instruments and voice on a weekly basis and at an additional cost. Instruction is provided by some of the finest musicians in the greater Boston area. No academic credit is granted. Students enroll by completing the summer online form or by speaking directly with the music department head.

**Please see the next section for Instrumental Ensembles, which span second through fourth level skills and content. The following courses are considered fourth level:**

**AP MUSIC THEORY.** This course is designed to be the equivalent of a first-year college course in music theory. Students prepare for the advanced placement examination in May. The ability to read and write musical notation is fundamental. It is also strongly recommended that the student will have acquired at least basic performance skills in voice or on an instrument.

Major – Fifth and Sixth Forms – First and Second Semesters. **(NOT OFFERED IN 2019-2020)**

Prerequisite: Permission of the department.

**INDEPENDENT STUDY.** This semester-long course allows students to study a project in music under the supervision of a member of the department.

Major or Minor – Sixth Form – First and/or Second Semester.

Prerequisite: Written permission of the department head and instructor.

### INSTRUMENTAL ENSEMBLES

**JAZZ BAND.** This is an ensemble that studies and performs music written for large ensembles in a variety of styles including swing, blues, Latin-American, and modern jazz/rock fusion. Members of the group work together to develop their skills in such areas as precision in performance, accuracy of style, and group awareness. Opportunities are provided for those who wish to explore the art of improvisation. This group, also known as “The BrooksTones,” performs at the winter and spring concerts, jazz brunches, and a variety of other events throughout the year. There is an Honors section of this course.

Major – Third, Fourth, Fifth and Sixth Forms – First and Second Semesters.

Prerequisite: Permission of the department.

**CHAMBER MUSIC ENSEMBLE.** This is an intermediate-level orchestral ensemble whose repertoire spans from the Renaissance Era to contemporary 21st century music. With an emphasis on standard orchestral repertoire from the last two centuries, students build skills in music reading, intonation, interpretation, and group dynamics. The Chamber Ensemble regularly performs at school functions, final semester concerts, and outside venues both alone and in collaboration with the choral forces at Brooks School.

Major – Third, Fourth, Fifth and Sixth Forms – First and Second Semesters.

Prerequisite: Permission of the department.

**ROCK BAND.** The band is designed for instrumentalists and vocalists interested in studying, composing and performing music in rock style. The group performs at school functions throughout the year.

Major – Third, Fourth, Fifth and Sixth Forms – First and Second Semesters.

Prerequisite: Audition.

**ADVANCED ROCK BAND.** This course builds upon the work established in Rock Band. The course is a small ensemble class which is geared towards preparing the group for a variety of live performances in the rock and pop genre. Students work as a group and individually to learn the material on their various instruments or vocally, as well as studying other aspects of live performance. Two major and one or more minor performances will be scheduled for the ensemble during the school year.

Major – Third, Fourth, Fifth and Sixth Forms – First and Second Semesters.

Prerequisite: Rock Band and permission from the instructor. This course has a limited number of spots; auditions will determine placement.

## THEATER

The theater program provides the novice and experienced stage performer with opportunities to study the art of the theater. Students examine a variety of theater styles, periods, and cultural traditions, enabling them to gain experience in all aspects of theater: acting, directing, playwriting, and technical theater design. Students develop and perform dramatic pieces based on original material and develop critical and analytical skills through script study and performance observations. In addition to the three full-scale productions that are performed annually, formal course work and

independent studies in acting and directing are available to all students. In addition, visits to performances in art festivals and workshop productions enrich the total theater program at the school.

**INTRODUCTION TO ACTING.** This performance workshop course introduces students to the basics of acting. It emphasizes techniques designed for young actors and audiences. Students focus on ensemble-building and acting techniques that lead them to scene and monologue work at the end of the semester. Students keep a detailed journal in addition to an in-depth study of plays.

Major – Third, Fourth, Fifth and Sixth Forms – First or Second Semester.

**THEATRICAL DESIGN AND PRODUCTION.** With this hands-on course, students will develop an increased awareness of and appreciation for technical theatre and basic design. They will acquire a basic understanding of the tools, techniques and processes used in theatrical production and design.

Major – Third, Fourth, Fifth and Sixth Forms – Second Semester. **(NOT OFFERED IN 2019-2020)**

**The following courses are considered second level:**

**ACTING WORKSHOP.** This performance workshop course introduces students to the basics of acting through class exercises, improvisation, and scene work. Students present a number of scenes throughout the course while working on a production project for the end of the term. Students keep a detailed journal in addition to attending a number of professional theater productions.

Major – Third, Fourth, Fifth and Sixth Forms – First Semester.

Prerequisite: Introduction to Acting, or permission of the department.

**MUSICAL THEATRE.** This is an advanced course in musical theatre performance. Through performance and analysis, students will learn about the art of combining the components of acting, music and dance to create this unique and expressive art form. By exploring the history and the techniques of the genre, students will gain a deeper understanding of the art. The class culminates in a final cabaret-style performance.

Major – Fifth and Sixth Forms – Second Semester.

Prerequisite: Festival Chorus, or permission of the department.

**The following courses are considered third level:**

**ADVANCED ACTING WORKSHOP.** This course deepens the creative work begun in Acting Workshop. It is intended to be a course that can be repeated if a student wishes to continue working on acting skills but does not intend to specialize by taking one of the advanced acting classes. In this performance-based class, students will undertake in-depth character analysis and explore sophisticated ways of expressing their character.

Major – Third, Fourth, Fifth and Sixth Forms – First Semester. **(NOT OFFERED IN 2019-2020)**

Prerequisite: Acting Workshop, or permission of the department.

**CHOREOGRAPHY.** This course examines many dance styles and studies their aesthetic elements. Through class exercises and exploration students will discover the means to communicate their ideas through movement. With a continued study of dance elements and choreographic techniques, students will gain the skills needed to lead a group in creating a new and unique work of art. The culmination of the course will be a final presentation of the students' original compositions.

Major – Fifth and Sixth Forms – First Semester. **(NOT OFFERED IN 2019-2020)**

Prerequisite: Dance, or Permission of Department.

**PLAYWRITING.** Students explore the art and craft of playwriting. They begin the term by writing a scene a week prompted by classroom exercises and script analysis. As the term progresses, students continue to explore issues of dramatic structure, character and setting. They should expect an intensive writing experience as well as the preparation of a series of staged readings and presentations throughout the term. At the end of the semester, students submit a short play based on a topic of their own choice.

Major – Sixth Form – Second Semester. **(NOT OFFERED IN 2019-2020)**

**THEATRICAL DIRECTION: HOW TO CHOOSE, CAST AND DIRECT A PLAY.** So, you want to direct a play? With the aid of textbooks, case studies, directors' notes, performances, and intense hands-on work, students learn the art and science

of theatrical direction. The fundamentals of the course involve the important elements of directing: selecting a play; mining the script; casting, rehearsing, connecting and working with the actors; collaborating with stage managers, tech crews and non-cast personnel; using your space; and, finally, show time! Students complete the course by directing a scene of their choice – either original or already written – for public performance by fellow students.

Major – Fifth and Sixth Forms – Second Semester. (NOT OFFERED IN 2019-2020)

**The following course is considered fourth level:**

INDEPENDENT STUDY. Projects for the stage may vary in content and style, but all include a performance component.

Major or Minor – Sixth Form – First and/or Second Semester.

Prerequisite: Written permission of the department.

## DANCE

INTRODUCTION TO DANCE. This course is an introduction to dance and movement. It is ideal for all students, actors, athletes, anyone who has never danced before, or those who dance at a beginning level. Students explore the basic principles of dance and examine the aesthetic elements of movement. Through both movement and critique, students examine various dance styles. There are explorations and formal exercises to learn how to see, generate and manipulate movement in clear and creative ways.

Major – Third, Fourth, Fifth and Sixth Forms – First or Second Semester.

**The following course is considered second level:**

DANCE. This course is an extension of the work done in Dance I. Students will continue their exploration of dance both physically and intellectually. Through analysis of self and exposure to professional dance elements, the students will progress artistically in both expression and understanding of dance. Students will create original technical movement patterns with close attention to detail in order to thoughtfully and intentionally structure and execute movement to express unique ideas. Students will create small group pieces that combine their historical, critical and technical understanding of dance. Dance may be repeated for those who want to continue to deepen their knowledge and continue to create small-scale works.

Major – Third, Fourth, Fifth and Sixth Forms – Second Semester.

Prerequisite: Introduction to Dance or permission of the department.

## VISUAL ARTS

The visual arts curriculum is designed to provide students with the opportunity to expand their art consciousness and to allow gifted students a chance for serious study in the medium of choice. Through a variety of courses in studio art in which they may work on drawing, painting, printmaking, sculpture, photography and film, students strive for control after experimentation. Courses concentrate on the study of the artists' aims and means. Ample extracurricular opportunities enable students to continue the creative process outside the classroom.

INTRODUCTION TO 2-D STUDIO ART. Students work with a variety of media to explore processes, concepts and ideas to create drawings, paintings and collages. Students come away with a basic understanding of portraiture, still life, figure work, landscape, color theory and abstraction. Elements of art history and design are introduced in the bodies of the lessons.

Major – Third, Fourth, Fifth and Sixth Forms – First or Second Semester.

INTRODUCTION TO 3-D STUDIO ART. This course focuses on the fundamental elements of three-dimensional form. Line, space, plane and volume are explored as students develop visual analysis and critical thinking skills. The course proceeds from work with simple forms and techniques to more challenging and comprehensive problems addressing both additive and subtractive methods. Various materials are explored: wood, paper, plaster, fabric, mixed media, clay, and natural and found objects. All 3-D works have various degrees of functional and decorative purpose as well as degrees of abstraction and realism. Elements of art history and design are introduced in the bodies of the lessons.

Major – Third, Fourth, Fifth and Sixth Forms – First or Second Semester.

INTRODUCTION TO DIGITAL ART. Students create digital work using a variety of sources including text, image, and sound. Various techniques are learned and explored including graphic design, animation, and digital photography. Major – Third, Fourth, Fifth and Sixth Forms – First Semester.

INTRODUCTION TO FILM. This introductory studio art course seeks to take the novice's interest in film production to a more advanced level. As lifelong audience members of visual media, students have subconsciously laid the foundation for mastering film language. In this course, they become familiar with that language and the vocabulary associated with it. Students also learn the basics of pre-production (developing an idea, storyboarding and scripting), production (shooting) and post-production (editing). Students apply these skills to the process of visual storytelling through video production exercises, screenings, critiques and class discussions. Major – Third, Fourth, Fifth and Sixth Forms – First or Second Semester.

INTRODUCTION TO PHOTOGRAPHY. Students learn the basics of black and white photography and darkroom techniques. Projects emphasize learning “how to see” with the camera and developing creatively composed images. Students must provide their own 35mm camera with full manual control of shutter and aperture. Enrollment is limited to 10 students per section. Major – Third, Fourth, Fifth and Sixth Forms – First or Second Semester.

**The following courses are considered second level:**

DRAWING. Students will delve deeply into line quality, tone, shade, mood, effective use of color and narrative in this class. Students will learn and practice strong critique and presentation techniques in order to effectively communicate their work and ideas; they will be charged with creating series of works that address specific challenges. Students will be required to work in a sketchbook and create and maintain a web-based portfolio, along with their in-class project work. Major – Third, Fourth, Fifth and Sixth Forms – First Semester.  
Prerequisite: Introduction to 2-D Studio Art or permission of the department.

PAINTING. Students will delve deeply into the nuances of working with paint to express ideas, explore a concept or tell a story. Students will learn and practice strong critique and presentation techniques in order to effectively communicate their work and ideas; they will be charged with creating series of works that address specific challenges. Students will be required to work in a sketchbook and create and a web-based portfolio, along with their in-class project work. Major – Third, Fourth, Fifth and Sixth Forms – Second Semester.  
Prerequisite: Introduction to 2-D Studio Art, or permission of the department.

SCULPTURE. This course offers an in-depth exploration of 3-D form. While students will continue to use the basic elements of line shape, space and volume, they will be asked to interpret selected subjects in multiple mediums and styles. Students will explore various materials until they discover one they will work with in depth. Likewise, the students will work in degrees of realism and abstraction of different subjects such as the figure, landscape, portraiture and design. A final project will be done in a series of three works based on the students' preference. Major – Third, Fourth, Fifth and Sixth Forms – First Semester.  
Prerequisite: Introduction to 3-D Studio Art, or permission of the department.

CERAMICS. This course expands on the pottery wheel techniques and hand-building methods while introducing ways to combine the techniques for a greater creative experience. Earthenware and stoneware clay will be used with a broad spectrum of surface finishes. Techniques to produce professional quality pottery will be learned. Modeling additions to the pottery will push the functional pieces into more sculptural designs. There will be a final project of creating a complete uniquely styled collection either functional or sculptural. Major – Third, Fourth, Fifth and Sixth Forms – Second Semester.  
Prerequisite: Introduction to 3-D Studio Art, or permission of the department.

ANIMATION. This beginning animation course exposes students to digital techniques used in computer animation. Emphasis is on creating movement and expression utilizing electronically generated image sequences. Students learn basic theory and mechanics behind animation develop observational and drawing skills and study the fundamental principles of design and layout.

Major – Third, Fourth, Fifth and Sixth Forms – Second Semester.

Prerequisite: Introduction to Digital Art, or permission of the department.

**ILLUSTRATION.** This course is an introduction to drawing techniques as they pertain to the commercial illustration strategies, concepts, and specialized illustration techniques used by designers and illustrators. Students create illustrations in digital formats. Emphasis is on creative interpretation and disciplined draftsmanship for the visual communication of ideas.

Major – Third, Fourth, Fifth and Sixth Forms – First or Second Semester. **(NOT OFFERED IN 2019-2020)**

Prerequisite: Introduction to Digital Art, or permission of the department.

**FILM.** Using the student's basic knowledge of film language and production gained in Introduction to Film, Film will apply these skills to the process of visual storytelling through video production exercises, screenings, critiques, and class discussions, with emphasis on the roles of the director and editor.

Major – Third, Fourth, Fifth and Sixth Forms – First or Second Semester. **(NOT OFFERED IN 2019-2020)**

Prerequisite: Introduction to Film.

**PHOTOGRAPHY.** This course offers students an opportunity to further develop their photography skills. Students work closely with the instructor to build and display their portfolios.

Major – Fourth, Fifth and Sixth Forms – First Semester.

Prerequisite: Introduction to Photography, or permission of department.

**JOURNALISM.** Students will learn all aspects of publishing a newspaper (*The Brooks Shield*). The course entails news writing, in-class writing assignments, and journalism ethics discussions. Students will learn about various forms of journalistic styles by reading from texts that will include *In Cold Blood*, *The Right Stuff*, *Consider the Lobster*, and a variety of current news stories from publications such as *The New York Times*, *Boston Globe*, and *Wall Street Journal*. Skills students will master include interview techniques, news writing, and editing. There will also be an opportunity to lead the decision-making process for what gets included in the *The Brooks Shield*...and what doesn't.

Major – Third, Fourth, Fifth and Sixth Forms – First or Second Semester. Cross-listed with English.

Prerequisite: Completion of Introduction to Photography or Introduction to Digital Art for Arts credit. Completion of English III for English credit.

**ARCHITECTURAL DESIGN.** Students study basic elements of architecture, designing spaces through drawing, writing, site plans, sections and elevations. Students also learn how to use the computer program *SketchUp*. Basic architectural history helps students to understand elements of structural design, and further references to structures and spaces are referred to as needed.

Major – Fourth, Fifth and Sixth Forms – First or Second Semester. **(NOT OFFERED IN 2019-2020)**

Prerequisite: Introduction to 2D Studio Art, Introduction to 3D Studio Art, or permission of department.

### **The following courses are considered third level:**

**ADVANCED DRAWING.** In figure drawing classes, students are expected to sketch the human form, often from live models. The skills learned in this class can help students make more accurate human representations.

Major – Fourth, Fifth and Sixth Forms – First Semester.

Prerequisite: Drawing or permission of department.

**ADVANCED PAINTING.** Students will study specific techniques used in oil painting. This course will emphasize the development of a personal and creative use of painting media through an exploration of imagery. While working with an instructor, students are expected to set thematic and practical goals and work toward them in pursuit of a cohesive body of work to use as a portfolio.

Major – Fourth, Fifth and Sixth Forms – Second Semester.

Prerequisite: Painting or permission of department.

**The following course is considered fourth level:**

INDEPENDENT STUDY. This semester-long course allows students to study a project in art under the supervision of a member of the department.

Major or Minor – Sixth Form – First and/or Second Semester.

Prerequisite: Written permission of the department head and instructor.

## WORLD LANGUAGES

Language learning unites cumulative content knowledge with a multitude of skills that challenge students to make connections and comparisons, to understand linguistic patterns, and to express themselves. The acquisition of vocabulary and grammar is inextricably linked to the cultures, both ancient and modern, in which they are used. Active use of language as well as competency in cultural literacy are the goals of the World Languages Department.

In addition, students are encouraged to study abroad to further increase their linguistic and cultural knowledge. Through the Brooks School Exchange Program, School Year Abroad programs, or independent travel programs, students have a variety of opportunities to immerse themselves in another language and culture.

All incoming students are asked to complete a placement evaluation in any language offered at Brooks in which the student has prior knowledge or experience. A student whose proficiency and command of Latin, Mandarin Chinese, French, and/or Spanish demonstrate that he/she places higher than our third level of instruction is strongly recommended either to continue the study of that language in our upper-level courses or to enroll in one of the other languages offered at Brooks.

If a student's prior language experience is in a language other than Latin, Mandarin Chinese, French, or Spanish, that student is required to study a World Language offered at Brooks. The modern languages, in addition to English, are four of the six official languages of the United Nations and are among the most widely used globally. The study of classical languages continues to be a valuable pursuit as these offer unique insight into the structure of the English language as well as the impact of the ancient world on the modern one.

Members of the World Languages Department may teach independent studies in other aspects of language and culture and introductory conversational classes in other tongues as their ability and interest dictate. Examples of this may be in languages such as Ancient Greek, Arabic or German.

## CLASSICAL LANGUAGES

What defines heroism? What are the limits of power? The study of Latin applies intellectual curiosity and reason to such questions as these. Students consider these issues in their own lives as they read and interpret at a deep level. Ultimately all students actively participate in their own education, think and write analytically, and consider carefully the large issues of ancient and current culture.

**LATIN FIRST LEVEL.** Students begin the study of Latin by using Jenney, Baade and Burgess's *First Year Latin*, a text which emphasizes the rapid acquisition of reading skills in Latin.

Major – First and Second Semesters.

**LATIN SECOND LEVEL.** Students continue the study of Latin grammar and vocabulary using *Fabulae Graecae* and *Fabulae Romanae*, while improving their reading and analytical skills.

Major – First and Second Semesters.

Prerequisite: Latin First Level. Placement based on assessment and department approval.

**LATIN READING: DECADENCE AND GREED.** Students define and discuss the Roman view of decadence in a variety of genres: oratory, picaresque novel and didactic poetry. The class reads Latin selections from Cicero's *Pro Caelio*, Petronius and Vergil's *Aeneid*. These texts are also read entirely in English. Students consider historical and cultural influences, compare ancient and modern views and actively participate in discussions. Students translate both prose and poetry, learn stylistic analysis and write cumulative analytical essays.

Major – Fourth, Fifth or Sixth Form – First and Second Semesters.

Prerequisite: Latin Second Level. Placement based on assessment and department approval.

\*Latin courses at the Reading Level are offered in a three-year cycle. Each year considers a different theme and the students read different texts. Thus, students often enroll at this level for two or three years.

LATIN READING: TRANSFORMATION AND CHANGE. This course considers transformation in several ways: myth into history, Republic into Empire, and physical transformation. The class reads Latin selections from Caesar's *Bellum Gallicum*, Cicero's *In Catalina* and Ovid's *Metamorphoses*, as well as selections from *Roma* in English. Students consider cultural and historical influences, transformation in ancient and modern applications, and regularly participate in discussions. Students translate both prose and poetry, learn stylistic analysis, and write cumulative analytical essays. Major – Fourth, Fifth or Sixth Form – First and Second Semesters. **(WILL BE OFFERED IN 2020-2021)**  
Prerequisite: Latin Second Level. Placement based on assessment and department approval.

LATIN READING: LOVE AND FRIENDSHIP. Students define and discuss Roman views on love and friendship in a variety of genres: philosophy, myth and lyric poetry. The class reads Latin selections from authors such as Cicero, Apuleius, Catullus, Ovid and Vergil. Some of these texts may be read entirely in English. Students consider cultural and historical influences, success and failure, and actively participate in discussions. Students translate both prose and poetry, learn stylistic analysis, and write cumulative analytical essays. Major – Fourth, Fifth or Sixth Form – First and Second Semesters. **(WILL BE OFFERED IN 2021-2022)**  
Prerequisite: Latin Second Level. Placement based on assessment and department approval.

HONORS LATIN. Students read unadapted texts such as Catullus, Cicero, Caesar, Vergil and Ovid at an advanced level and pace. They consider genre conventions and thematic connections between the texts. They also write analytical essays of varying scope and increasing depth, consider the historical and cultural influences, and read ancillary texts in English. This course can be taken before or after AP Latin. Major Fifth or Sixth Form – First and Second Semesters. **(NOT OFFERED IN 2019-2020)**  
Prerequisite: Permission of the department.

AP LATIN. This course prepares students for the advanced placement exam in Latin. Major – Fifth or Sixth Form – First and Second Semesters. **(NOT OFFERED IN 2019-2020)**  
Prerequisite: Permission of the instructor.

INDEPENDENT STUDY. This semester-long course allows students to study a project of their own design under supervision of a member of the department. Major or Minor – Fifth and Sixth Forms – First or Second Semester.  
Prerequisite: Permission of the instructor and department.

## MODERN LANGUAGES

Through the study of Mandarin Chinese, French, and Spanish, students develop linguistic and cross-cultural skills in order to prepare for engagement in a global society. Courses are taught in the target language in order to best develop the four basic linguistic skills – listening, speaking, reading and writing. Advanced courses develop analytical skills for understanding literature, investigating current events, and researching important issues in various cultures around the world. Many courses use our language laboratory and incorporate technology into daily lessons. Above all, teachers and students work together in order to examine beliefs and practices and to develop an appreciation for cultures that differ from their own.

### Mandarin Chinese

MANDARIN CHINESE FIRST LEVEL. In this introductory course, students learn the Pinyin Romanization system and use acquired language skills in a variety of classroom activities. While the focus is primarily on oral proficiency and aural comprehension including the mastery of tones, students are introduced to important grammar structures and learn to read and write simplified Chinese characters and to recognize them in context. At the end of this level, students have acquired the following language skills: asking and answering questions; narrating events; describing likes and dislikes; making short oral presentations in Chinese; engaging in short reading and writing activities that show a mastery of approximately 300 characters. These skills are employed within the framework of familiar contexts such as family, leisure activities, and school life and are enriched through the introduction of Chinese culture. Major – First and Second Semesters.

**MANDARIN CHINESE SECOND LEVEL.** This intermediate course continues to build the language skills of first-level Chinese: oral proficiency, aural comprehension, reading, and character formation. Consistent practice develops students' ability to express themselves using more advanced vocabulary, expressions, and grammar structures. Primary emphasis on conversational fluency is complemented by an increasing focus on reading and writing skills. Students master approximately 400 additional characters and are able to recognize significantly more in context. Language study is enriched with China's history and culture through guest speakers and audio, visual, and online sources. An honors section of this course may be offered.

Major – First and Second Semesters.

Prerequisite: Chinese First Level. Placement based on assessment and department approval.

**MANDARIN CHINESE THIRD LEVEL.** This course continues to build the language skills of second-level Chinese: oral proficiency, listening comprehension, reading, writing, and character formation. Consistent practice develops students' ability to express themselves using more advanced vocabulary, expressions and grammatical structures. The primary emphasis on conversational fluency is complemented by an increasing focus on reading and writing skills. Students master approximately 400 additional characters and are able to recognize significantly more in context. Some modern literature is introduced. Language study is enriched with China's history and culture through guest speakers and audio, visual, and online sources. An honors section of this course may be offered.

Major – First and Second Semesters.

Prerequisite: Chinese Second Level. Placement based on assessment and department approval.

**MANDARIN CHINESE FOURTH LEVEL.** This course continues to build the language skills of third-level Chinese: oral proficiency, aural comprehension, reading, and writing. Consistent practice develops students' ability to express themselves using more advanced vocabulary, expressions and grammar structures. Students explore more sophisticated aspects of the language and culture as increased use of authentic materials are employed. The primary emphasis shifts from conversational fluency to formal language usage such as language used in newspapers, modern literature and poetry. Longer texts covering social issues are introduced. Audio, visual and online sources as well as films are used to enhance students' understanding of the modern Chinese language and culture. An honors section of this course may be offered.

Major – First and Second Semesters.

Prerequisite: Chinese Third Level. Placement based on assessment and department approval.

**AP CHINESE LANGUAGE AND CULTURE.** This course prepares students for the College Board's Advanced Placement Chinese Language and Culture exam. Students improve their level of Chinese proficiency across the three communicative modes (interpersonal, interpretive and presentational) and the five goal areas (communication, cultures, connections, comparisons, and communities) as outlined in the American Council on the Teaching of Foreign Languages (ACTFL) standards. Student work focuses on language proficiency as well as cultural knowledge.

Major – First and Second Semesters. **(NOT OFFERED IN 2019-2020)**

Prerequisite: Chinese Third or Fourth Level. Placement based on assessment and department approval.

**ADVANCED MANDARIN CHINESE.** This course is devoted to reading and discussing literature and cultural topics in Chinese. Students increase their knowledge of Chinese culture, history and modern society through classroom reading and outside assignments. They enlarge their vocabulary, improve their reading comprehension and speed, maintain their conversation skills and enhance their writing ability. By the end of the course, students read Chinese short stories with the aid of a dictionary.

Major: First and Second Semesters.

Prerequisite: Chinese Fourth or Fifth Level. Placement based on assessment and department approval.

**INDEPENDENT STUDY.** This semester-long course allows students to study a project in Chinese language, literature or culture under the supervision of a member of the department.

Major or Minor – Third, Fourth, Fifth and Sixth Forms – First or Second Semester.

Prerequisites: Permission of the instructor and the department.

### French

**FRENCH FIRST LEVEL.** This course introduces the French language through reading, writing, speaking and listening exercises. Fundamentals of sentence structure and other grammatical concepts are introduced. Students explore French

and Francophone cultures in Europe, Africa, America, and Asia. French First Level offers an immersion-based curriculum using French in Action texts and video. Class is augmented with authentic materials and conducted in French. French First Level is for students with no previous study of French or whose placement test indicates that they are not prepared to take French Second Level.

Major – First and Second Semesters.

**FRENCH SECOND LEVEL.** This course builds upon the foundations of grammar and vocabulary acquired in French First Level to improve reading, writing, listening, and speaking skills. Students review past grammar and learn new material through a gradual exposure to more abstract concepts. Varied literary genres are explored to increase understanding of the French and Francophone cultures. French Second Level offers an immersion-based curriculum using French in Action texts and video. Class is augmented with authentic materials and conducted in French. An honors section of this course may be offered.

Major – First and Second Semesters.

Prerequisite: French First Level. Placement based on assessment and department approval.

**FRENCH THIRD LEVEL.** This course increases proficiency in listening, reading, and writing while building vocabulary. Students learn more complex grammatical structures and embark on an introduction to literary analysis. Students also continue to develop oral skills through discussions on more advanced works by French and Francophone authors. French Third Level offers an immersion-based curriculum using French in Action texts and video. Class is augmented with authentic materials and conducted in French. An honors section of this course may be offered.

Major – First and Second Semesters.

Prerequisite: French Second Level. Placement based on assessment and department approval.

**FRENCH FOURTH LEVEL. Francophone Cultures.** Students continue to grow their speaking, writing, and conversation skills in order to deepen their understanding of the French language. Through study of the Francophone world, and special attention paid to critique and questioning of cultural differences, students will grow their comfort and abilities with both written and spoken French. Grammar is treated as needed, though focus is on improving fluency and fluidity of communication.

Major – First and Second Semesters, or – First Semester.

Prerequisite: French Third Level. Placement based on assessment and department approval.

**ADVANCED FRENCH: FROM HEXAGON TO GLOBE- CULTURAL EXPANSION THROUGH LITERATURE.** This course offers an overview of the French history from prehistory through the Crusades, the Renaissance, the French Revolution and ending in modern France. Students will read an assortment of literary styles, both ancient and modern, as well as augment this study with authentic visual and audio materials. Students read and discuss selected articles on social, economic and political topics in the Francophone world. This course examines important themes in Francophone literature such as negritude in Aime Cesaire and the philosophy of the absurd in Camus, as well as other authors such as Fanon, Damas, Ben Jelloun, and Dao. They will continue to grow their understanding of historical and global issues and learn to express and compare their opinions thoughtfully and persuasively in an immersive French environment. There is an emphasis on improving written expression and reading comprehension as well as deepening grammatical understanding.

Major – First and Second Semesters.

Prerequisites: French Third Level. Placement based on assessment and department approval.

**ADVANCED FRENCH: THE CHANGING FACE OF “FRENCH” THROUGH FILM.** This course offers an overview of the French speaking world and current events and issues in an immersive French environment. The emphasis of this course is on francophone cultures and comparison with the students’ personal experiences. This course uses Francophone filmography and authentic materials to deepen the exploration of many topics. There is an emphasis on listening comprehension and oral production. Students should expect to challenge their opinions of what “French” is and to increase their cultural awareness.

Major – First and Second Semesters. **(NOT OFFERED IN 2019-2020)**

Prerequisites: French Third Level. Placement based on assessment and department approval.

**AP FRENCH LANGUAGE AND CULTURE.** This course prepares students for the College Board’s Advanced Placement French Language and Culture examination through the study of literature of the 19th and 20th centuries, grammar review,

and vocabulary development. Oral presentations, discussion of literature, French Internet news broadcasts, and written assignments develop reading, writing, listening and speaking for the May examination.

Major – First and Second Semesters. **(NOT OFFERED IN 2019-2020)**

Prerequisites: French Third Level. Placement based on assessment and department approval.

INDEPENDENT STUDY. This semester-long course allows students to study a project in French language, literature or culture under the supervision of a member of the department.

Major – Fifth and Sixth Forms – First or Second Semester.

Prerequisites: French Fourth or Fifth Level, and department approval.

### Spanish

SPANISH FIRST LEVEL. This course introduces the Spanish language through reading, writing, speaking and listening exercises. Fundamentals of sentence structure and other grammatical concepts are introduced. Students explore diverse topics in the Spanish-speaking world such as art, history, and traditions. Spanish First Level is for students with no previous study of Spanish or whose placement test indicates that they are not prepared to take Spanish Second Level.

Major – First and Second Semesters.

SPANISH SECOND LEVEL. This course builds upon the foundations of grammar and vocabulary acquired in Spanish First Level to improve reading, writing, listening and speaking skills. Students review previous grammar and learn new material through a gradual exposure to more abstract concepts. This class explores the customs and traditions, history, geography, music and selected pieces of literature from a variety of cultures. An honors section of this course may be offered.

Major – First and Second Semesters.

Prerequisite: Spanish First Level or placement based on assessment.

SPANISH THIRD LEVEL. This course increases proficiency in listening and speaking in Spanish while building vocabulary. Students learn complex grammatical structures and writing skills in addition to the history, literature and culture of the Spanish-speaking world. Selected short stories are used as an introduction to literary analysis. An honors section of this course may be offered.

Major – First and Second Semesters.

Prerequisite: Spanish Second Level. Placement based on assessment and department approval.

SPANISH FOURTH LEVEL: CULTURE AND COMMUNITY. What does “chicano” mean? Why is Miami considered “Little Cuba?” Is Puerto Rico part of the U.S.? These questions and more are answered through a big-picture approach to understanding the actions and policies of the United States in their historic and current interactions with the Mexican-American, Cuban-American and Puerto Rican communities in this country. Students will reflect on their own cultural values and traditions as they examine these communities through the lenses of film, music, intermediate literature, poetry and history. The capstone of the course is a four-week project examining the Latino immigrant history and experience of Lawrence, Mass. Right next door, students are able to take weekly trips to examine archives, listen to oral histories, eat Dominican food, tour the city and mills, and understand first-hand the past and future possibilities of a city whose identity has always been closely tied to immigration.

Major – First and Second Semesters.

Prerequisite: Spanish Third Level. Placement based on assessment and department approval.

INTRODUCTION TO HISPANIC LITERATURE. Literary selections by Hispanic authors are chosen based on themes including Hispanic identity in the United States, breaking down barriers and stereotypes, and the human community. Literacy skills are enhanced through close readings, vocabulary building, and creating context for the stories with cultural articles, films, and documentaries. By the end of the year the students are prepared for upper-level literature and cultural studies classes.

Major – First and Second Semesters. **(NOT OFFERED IN 2019-2020)**

Prerequisite: Spanish Third Level Honors or Spanish Fourth Level, and department approval.

AP SPANISH LANGUAGE AND CULTURE. This course prepares students for the College Board’s Advanced Placement Spanish Language and Culture exam. Students develop and master proficiency in the four basic linguistic skills: listening,

speaking, reading, and writing. Students expand their vocabulary through weekly assignments and reading selections from Hispanic and Spanish literature. In addition, students prepare presentations on relevant topics. An intensive review of grammar, guided compositions, class discussions and oral exposés reinforces skills in preparation for the AP examination. Major – First and Second Semesters.

Prerequisites: Spanish Third Level Honors or above and department approval.

AP SPANISH LITERATURE AND CULTURE. This course prepares students for the College Board's Advanced Placement Spanish Literature and Culture exam. Students participate in literary discussions, read literary texts in all genres, and prepare critical analysis using appropriate terminology.

Major – First and Second Semesters.

Prerequisite: AP Spanish Language and Culture and department approval.

ADVANCED SPANISH. Advanced Spanish introduces students to the cultural, historical, and literary context of the Hispanic world through the sampling of literature from the medieval to the modern period. It also takes a focused approach to modern Latin American history by studying the emergence and growth of drug trafficking in the Americas, from plant growth to chemical production to money laundering. The capstone of the course is the acquisition and practical application of Spanish for business and the understanding of the emerging markets in the Hispanic world. The course provides opportunities to demonstrate proficiency in Spanish across all the major modes of communication (interpersonal, interpretive, and presentational).

Major – First and/or Second Semester.

Prerequisite: Spanish Third Level Honors or above and department approval.

INDEPENDENT STUDY. This semester-long course allows students to study a project in Hispanic language, literature or civilization under the supervision of a member of the department.

Major or Minor – Fifth and Sixth Forms – First or Second Semester.

Prerequisite: Introduction to Hispanic Literature, AP Spanish Language and Culture, or Literature and Culture, and department approval.

### SCHOOL YEAR ABROAD – CHINA, FRANCE, ITALY, SPAIN

Brooks School is a member of the School Year Abroad (SYA) program. Students may apply to spend their fifth-form year in China, France, Italy or Spain. Participants study in SYA schools and live with local families. All credits earned abroad count toward the Brooks School diploma. For further information, see the SYA coordinator at Brooks and visit the SYA website at <http://www.sya.org>.

## ENGLISH

The principal goals of the English Department are to teach reading and writing in the various forms in which they appear, and to foster interest in and appreciation for the written word. We encourage students to participate in class discussion and to arrive at ideas independently, to evaluate them thoughtfully, and to share them with their peers with confidence. Classes favor a student-centered approach in which speaking and listening skills can be developed. In teaching reading we supply the tools and require their use, but believe that a student should approach a text on their own terms, for comprehension, analysis, and synthesis. Mostly we want to cultivate an appetite for reading, and to make the discovery – of genres, writers, themes, and characters – a source of inspiration and excitement. In choosing texts we recognize our pluralistic society and increasingly international environment.

In teaching writing we encourage students to write for real audiences, about real subjects, and to develop, recognize, and nurture their own voices. Students learn to write through practice – drafting, revising, and proofreading – and by talking about their work with teachers and sharing it with peers. Grammar and usage as well as vocabulary are taught functionally, in context, with occasional formal instruction. Students have an opportunity for additional challenges in Advanced Placement English or in independent projects.

ENGLISH I. The goal of English I is to develop the fundamental skills necessary to read accurately and write clearly. Drawing on the foundational works of western literature, students study the human journey as depicted in canonical and contemporary texts. Students learn the techniques of reading and analyzing texts, focusing on conflict, character development and theme, while introducing grammar as necessary. As readers they analyze the questions raised by the texts; as writers they express how those ideas may influence their sense of self. Throughout the year students collect their best essays into a portfolio, which they take with them into the fourth form. Texts are chosen from the following: *The Kite Runner*, *The Odyssey*, *Beowulf*, *Grendel*, *Macbeth*, *Frankenstein*, *The Color Purple*.  
Major – Third Form – First and Second Semesters.

ENGLISH II. “We read to live other lives, to experience that which we can’t experience at Brooks, so that we can better understand cultural differences, how we can become part of another community and yet remain ourselves.” This course exposes students to canonical and contemporary writers of non-western cultures, emphasizing the universality of the human experience. Organized thematically, the course utilizes novels, short stories, poetry and drama; students develop critical skills that allow them to explore new cultures with sensitivity. By encountering the unfamiliar through literature, students not only become better readers and writers, they begin to develop the skills required of a global citizen.  
Major – Fourth Form – First and Second Semesters.

ENGLISH III. This course offers an exploration through literature of three deeply rooted themes in American culture. In the first semester, we examine all sides of the American Dream and what it means for the many diverse segments of the American population, from the Dream’s gleaming potential to its dark underbelly. In addition to F. Scott Fitzgerald’s *The Great Gatsby*, we read works from authors such as T.C. Bambara, Toni Morrison, James Baldwin, Andre Dubus, Amy Tan, Denis Lehane, Rudolfo Anaya, Langston Hughes, Arthur Miller and Sherman Alexie. In the second semester, we study Americans’ fascination with exploring this vast continent, starting with Mark Twain and *The Adventures of Huckleberry Finn*, then diving into works from authors like William Least Heat-Moon, Jack Kerouac, William Faulkner, Zora Neale Hurston, Annie Proulx, John Steinbeck, Gloria Naylor and John Howard Griffin. We conclude the year by looking forward, as a culture with such a short collective history is wont to do. Works from writers such as Thomas More, Jennifer Egan, Gary Shteyngart, Edward Bellamy, Cormac McCarthy, Margaret Atwood, Ayn Rand, Tocqueville, Ray Bradbury, Kurt Vonnegut and others present a variety of views about America’s possible utopian or dystopian futures. Throughout the year, students engage with multiple genres – fiction, poetry, non-fiction and drama – as well as the different movements in American literature, and with a diverse and multicultural panorama of authors.

English III is committed to student writing in many forms, from journaling to poetry, from memoir and fiction to current digital forms. But building on the English II emphasis on paragraph structure, English III focuses on the organization of the essay and the ability to gather multiple ideas and opinions into a coherent piece, using textual evidence to support an argument.

Major – Fifth Form – First and Second Semesters.

**The following elective courses assume completion of English III or its equivalent as a prerequisite, and are organized alphabetically by semester:**

**AFRICAN-AMERICAN LITERATURE.** A survey of writing by African-Americans from the 18th to 20th centuries, covering early texts, poetry and speeches, narratives of slavery and escape, abolition, the Reconstruction era, the Harlem Renaissance, the Black Arts movement and contemporary black writers. This is a look at how authors have chosen to tell their stories – in order to approach the why of how the African American identity has evolved in history and in literature. We focus on slavery and freedom in the first part of the course and then move on to “coming of age” stories, examining the challenges faced by memorable characters in works by Harriet Jacobs, Frederick Douglass, Ralph Ellison, Zora Neale Hurston, James Baldwin and Alice Walker, Charles Chestnutt and Nella Larsen. Through reading, writing, and student-centered discussion, we explore and redefine concepts of freedom, citizenship, class, color, and gender within the black community.

Major – Sixth Form – First Semester. **(NOT OFFERED IN 2019-2020)**

**BRITISH LITERATURE.** This discussion-based class explores British Literature as interpreted visually, through film and the television series. Though frequently our emphasis will be on versions of the work of classical English writers such as Jane Austin, Oscar Wilde, Charles Dickens, Ford Maddox Ford, and E. M. Forster, we also look at more contemporary dramatists like Tom Stoppard, Andrew Davies, and Irvine Welsh. We’ll take into account how both high and low art figure into British sensibilities. Through frequent writing assignments and creative projects, students gain a greater appreciation for British culture and its literary traditions, but we’ll also learn the language of film (mis-en-scene, editing camera angle, lighting) while taking into account the traditional tropes of theater (method acting, blocking).

Major – Sixth Form – First Semester.

**COMEDY AND SATIRE.** This course will examine the nature of comedy and satire in literature. Students will read and discuss a wide range of techniques and genres, including comedy, parody, irony, farce, and satire. How these techniques function within the work, and how the author explores societal, political, and cultural elements through the literature will be a central charge. Students will also build their literary vocabulary and use appropriate terminology to explain how writers achieve the satirical effects. The reading list may include Joseph Heller’s *Catch-22*, Margret Atwood’s *The Handmaid’s Tale*, Shakespeare’s *Much Ado About Nothing*, and George Orwell’s *Animal Farm*.

Major – Sixth Form – First Semester.

**DYSTOPIAN LITERATURE.** While not an entirely new genre, we have recently witnessed an explosion in dystopian literature. What is it about contemporary society that has given rise to such books as *The Hunger Games* and *Divergent*? Why is much of this popularity focused in YA literature? In this course, we will explore this fascinating phenomenon by reading authors such as Tom Perotta’s *The Leftovers*, Justin Cronin’s *The Passage*, Anthony Burgess’s *A Clockwork Orange*, Margaret Atwood’s *Oryx and Crake*, Cormac McCarthy’s *The Road* and Octavia Butler’s *The Parable of the Sower*, among others.

Major – Sixth Form – First Semester.

**THE HERO IN LITERATURE.** The focus of this course is literary heroes and their journeys and transformations. Though each hero exists in a unique time and place, students discover the one archetypal hero in them all. Joseph Campbell’s *The Hero With A Thousand Faces* provides the foundation for this course. Other works may include Charles Frazier’s *Cold Mountain*, Cormac McCarthy’s *All The Pretty Horses*, Joseph Conrad’s *Heart of Darkness*, and James Dickey’s *Deliverance*.

Major – Sixth Form – First Semester. **(NOT OFFERED IN 2019-2020)**

**IMMIGRANT VOICES.** Though America’s identity and literature have evolved significantly since its founding, at some level we remain a nation of immigrants, and their voices lend important perspective on the American experience. From stories of immigration (simply making it here; living day to day as someone viewed as “different”; carving out a new identity) to new Americans’ views of their adoptive land (how can one nation honor both diversity and assimilation?), students of immigrant literature stand to gain significantly in their understanding of our ever-evolving nation through reading, research, class discussion and writing. Students also spend time crafting their own family’s immigrant story, where applicable. Works studied may include *How the Garcia Girls Lost Their Accents* (Alvarez), *The Woman Warrior* (Hong Kingston), *The Joy Luck Club* (Tan) and *The Brief Wondrous Life of Oscar Wao* (Diaz).

Major – Sixth Form – First Semester.

MEMOIR WRITING. Writing about yourself...what could be easier? But doing it well so that you really benefit from the process of telling the stories of your life requires honesty. It can be challenging, even painful, to write about formative moments in your life transparently, but doing so helps you derive meaning from them, and is thus incredibly valuable. This course will use a combination of journaling, prompted autobiographical writing, reflective free-writes and other exercises to develop the technical skill of effective memoir writing. Students will also sharpen their ability to learn from their own (and their classmates') experiences and delve into the emotions elicited by and through writing, with the hope that they leave the class with a clearer understanding of themselves and their place in the world.  
Major – Sixth Form – Second Semester.

ORATORY. In this course, students read and analyze the texts of speeches throughout history through a rhetorical lens as we examine the foundational elements of a great speech. Throughout the semester, students write both analytically and creatively and engage in an extensive revision process that develops and sharpens their writing skills. Visual literacy is also explored and expanded through an examination of video recordings. Our goal is to enhance the skill and confidence our students have in written and oral communication. The class provides innovative instruction to help students refine their speech writing and delivery styles in small groups and in a classroom setting. The capstone project centers on writing, developing, and delivering a ten minute-long speech to the Brooks School community. Students engage in thorough analysis of historical speeches while receiving meaningful personal speaking instruction, which helps students to organize their thoughts, capture them on paper, and then deliver their speeches (and themselves) with purpose and confidence.  
Major – Sixth Form – First or Second Semester.

SHAKESPEARE. In this seminar-styled course, the class examines three tragedies in depth: *Romeo and Juliet*, *Hamlet* and *King Lear*. The class also studies a number of Shakespeare's sonnets using a wide range of references on reserve in the Luce Library and the OED online. In addition, the class reads Tillyard's *Elizabethan World Picture* and Anthony Burgess' *Nothing Like The Sun*.  
Major – Sixth Form – First Semester.

EXISTENTIALISM AND LITERATURE. Shakespeare began *Hamlet* with the words "Who's There?". This seminar encourages each student to answer that question through a focused examination of meaning in modern text. Through reading, viewing, writing, and video production, students develop the skills of analysis, thinking, and communication while considering the question of humankind's search for a reason to exist, and our own quotidian answers.  
Major – Sixth Form – Second Semester.

FICTION WRITING. In this class students present and perfect their own original fiction (short stories or novel excerpts) in a workshop setting. Students should expect an intensive writing experience as well as the preparation of a series of portfolios for presentation throughout the semester.  
Major – Sixth Form – Second Semester.

JOURNALISM. Students will learn all aspects of publishing a newspaper (*The Brooks Shield*). The course entails news writing, in-class writing assignments, and journalism ethics discussions. Students will learn about various forms of journalistic styles by reading from texts that will include *In Cold Blood*, *The Right Stuff*, *Consider the Lobster*, and a variety of current news stories from publications such as *The New York Times*, *Boston Globe*, and *Wall Street Journal*. Skills students will master include interview techniques, news writing, and editing. There will also be an opportunity to lead the decision-making process for what gets included in the *The Brooks Shield*...and what doesn't.  
Major – Third, Fourth, Fifth and Sixth Forms – First and/or Second Semester. Cross-listed with Arts.  
Prerequisite: Completion of Introduction to Photography or Introduction to Digital Art for Arts credit. Completion of English III for English credit.

NATURE WRITING. This course focuses on our connection with nature as expressed through literature. Students learn to blend observation with reflection and to build metaphors so that observations carry meaning beyond themselves. Drafting, revising and editing are emphasized. We examine fiction, nonfiction, memoir and poetry. Sample texts include works by Emerson, Thoreau, Whitman, MacLean, Abbey and Williams. A component of the course is an introduction to Native American literature by writers such as Momaday, Welch and Silko, in order to understand the strong connection Native peoples have to the land. Students write in a nature journal, compose descriptive essays and respond in writing to the texts covered. A final project addresses each student's sense of belonging.  
Major – Sixth Form – Second Semester.

POETRY SEMINAR. Students in this course study examples, write original works and compile a final portfolio. Students use as a text *Visions and Voices*, a poetry anthology by Mark J. Shovan based on James Moffet's *Theory of Discourse*. Literary terminology, elements of prosody and a variety of poetic forms are examined and employed.

Major – Sixth Form – Second Semester.

WOMEN IN LITERATURE. This course introduces images of women in literature. Students look at women in literature from the 18th century through contemporary representations, focusing on the portrayal of women as daughters, sisters, friends, wives, mothers, and alone in society through a variety of genres. Course texts may include *Antigone*, *A Doll's House*, *Daisy Miller*, *The Awakening*, *Great Short Stories by American Women*, *The Handmaid's Tale*, *Beloved* and *House of Spirits*. Essays and in-class reports focus more particularly on specific writers and themes and stress the skills of close reading, annotation, research, and uses of multimedia.

Major – Sixth Form – Second Semester. **(NOT OFFERED IN 2019-2020)**

AP ENGLISH. This course in literary analysis prepares students for the Advanced Placement examination in English Literature. Authors read vary, but usually include Shakespeare and Faulkner.

Major – Sixth Form – First and Second Semesters.

Prerequisite: Permission of the department.

INDEPENDENT STUDY. This course is ordinarily open only to sixth-formers and then by permission of the department, after approving a formal proposal submitted by the student. Meeting times are arranged in consultation between student and instructor.

Major – Sixth Form – First or Second Semester.

Prerequisite: Permission of the instructor and department.

# HISTORY

In teaching history, Brooks trains students to think for themselves. The role of a secondary school in a democratic republic is to prepare students for citizenship. Students must know how to ask questions, seek answers, and communicate their findings. That is, they must be their own historians. Our curriculum is built on the notion of steadily increasing responsibility and skill so students can take charge of their own education. The History Department believes in the writing of research papers and encourages students to embark on independent study.

The sequence of required courses constitutes world history from late antiquity to the present. However, once students have demonstrated the ability to ask, seek, and communicate on a sophisticated level, they are encouraged to step up to the challenge of Advanced Placement courses or to explore another culture, preferably in a non-Western tradition.

All students are expected to follow the Pre-Modern World, Modern World, U.S. History sequence unless exempted by the department. To qualify for an exemption, students must present evidence that they have mastered the skills as well as the material covered in the specific course. The history department recommends that third-form students take one or both of the Pre-Modern World History elective courses before taking the required sequence starting in the fourth form year. Unless a student is taking two languages (see General Policies), Modern World History is required in the fourth form. Students entering the fifth form who have not completed a U.S. History course must take a full year or secure department permission to be exempt.

PRE-MODERN WORLD HISTORY I/II. – Elective descriptions below:

In Pre-Modern World History, students learn how to read and annotate both primary and secondary history texts for understanding, and how to take effective notes. They learn to work collaboratively and practice presentation skills through different mediums. Students receive instruction on information literacy and scholarly reliability in cooperation with the school librarians. They learn how to craft thesis statements, topic sentences and form paragraphs. They work on multi-paragraph essays and familiarize themselves with Chicago citation practices before transitioning into a larger research paper project process. In this process, students learn to draft topic proposals, annotated bibliographies and outlines before completing a six- to seven-page research paper in the spring semester.

Major – Third Form – First and Second Semesters.

## Death and Disease in the Ancient World

Did you know cat fat and fly droppings were remedies in Ancient Egypt? Or that Babylonian doctors thought sleeping next to a human skull for a week would end nightly teeth grinding? In this course, students examine how people of the ancient world came to view sickness and health. Studying doctors such as Hippocrates and Galen, students gain an understanding of the changing role of both physician and patient. This course also examines the roots of various medical methods, including the four humors of Western medicine and the importance of Yin and Yang in Chinese medicine. Ultimately, the course uses death and disease as a lens in which to better understand ancient culture.

## Discovering Women of the Ancient World

Empires have been ruled by them, cults have idolized them and mythological wars have been fought over them: women in the ancient world. The veneration of fertility and importance of motherhood has long provided for the recognition and celebration of half the world's population. However, patriarchal societies have also marginalized women in the public sphere and limited their legal rights and ability to wield power. This course examines the lives and legacies of women across a number of early civilizations, both eastern and western, such as ancient China, India and Mesopotamia.

## Explorers in the Ancient World

Before planes, trains and automobiles, people navigated the world by foot, horseback and boat. This course focuses on the travels of people from centuries BCE and consider geography, trade and the concept of globalization as students gain a window into ancient multicultural interactions. Students examine the motives for exploration, the means of transportation, and the challenges posed by ancient travel. The legacies of explorers, such as Pytheas of Greece and Nehsi of Egypt, are debated as their discoveries led to both prosperity and conflict. Students connect the past and present as they understand the impact that exploration, innovation and imperialism have had on the world.

### Heroes and Villains of the Ancient Mediterranean

From Odysseus to Caesar, from Hannibal to Attila the Hun, the period from 1500 BCE to 500 CE was filled with warriors, thinkers and leaders who would go on to represent both the best and the worst of the worlds from which they came. In this course, students examine the civilizations that gave birth to some of the most infamous historical figures of the Ancient Mediterranean world and debate whether they should be remembered as heroes or villains. By examining the political, cultural and economic legacy of key individuals, students gain a greater understanding of the interplay between individuals and their larger civilizations. **(NOT OFFERED IN 2019-2020)**

### Journeying the Silk Roads

Spanning more than 5,000 miles from China to the Mediterranean world, the Silk Roads linked pre-modern Eurasia for more than two millennia. This course focuses on the movement of trade, religions, cultural practices, art, technology, disease and people along the Silk Roads and considers how the natural environment shaped these exchanges. We explore Eurasia both through ancient travel narratives and the accounts of contemporary travelers. Along the way, we virtually visit great Silk Roads cities like Chang An, the oases of the Taklamakan, Samarkand, Baghdad, Damascus and Constantinople. So pack your bag, grab a map and put on your traveling shoes.

### Making of the Muslim World

The 7th century saw the prophet Muhammad give voice to what would become a dominant world religion, Islam. His word, and that of Allah, extended into Asia, Africa and Europe and exerted significant social, political and cultural influence across continents. Spanning 500 years, this course considers the life and work of Muhammad, the Islamic caliphate and the Umayyad and Abbasid dynasties, the Sunni and Shia schism, and the Crusades in the 11th and 12th centuries.

### Uncovering Ancient Africa

The Nile River gave birth to one of the earliest, longest-lasting and most influential civilizations on earth: Ancient Egypt. This course examines the power of the Nile, Egypt's emergence, unification and history under pharaonic rule, and its trade and conquest with, or at the hands of, Nubians, Hyksos and Assyrians. Sleuthing mummy mysteries, examining ancient engineering and deciphering hieroglyphs helps us to understand Egyptians' henotheistic worship and fixation with the afterlife. We progress beyond the New Kingdom to investigate Greek, Roman and Arab occupation of Egypt during the early Common Era. **(NOT OFFERED IN 2019-2020)**

### Unlocking Ancient Mesoamerica and South America

How important were ritual human sacrifices to the Aztecs, Maya, and Inca? Why did the Mayans believe the world was going to end in 2012? What was the cultural significance of Machu Picchu for the Incas? Ancient Mesoamerican and South American civilizations were some of the most developed and complex in the ancient world; however, much history has been lost due to European conquest. Using current findings from archaeologists, anthropologists and historians, this course rebuilds the histories of these complex civilizations. We examine the political, cultural, and economic developments of Mesoamerica and South America and also uncover the latest discoveries to help understand the long-term significance of these ancient cultures.

**MODERN WORLD HISTORY.** The first course of the required history sequence is a comparative study of political, economic, social and cultural history focusing on Europe, East Asia and Africa. The emphases are cultural interactions as well as autonomous and distinctive developments. In the second semester, students explore the more recent past, paying particular attention to the nature of and bases for Western hegemony as well as reactions to that domination. Students learn to analyze source materials and construct historical arguments based on those sources.

Major – Fourth Form – First and Second Semesters.

Prerequisite: Pre-Modern World History or the permission of the department.

**AP WORLD HISTORY.** This course follows a similar syllabus to that of Modern World History but prepares students for the Advanced Placement examination in World History.

Major – Fourth Form – First and Second Semesters.

Prerequisite: Permission of the department.

**BUILDING THE AMERICAN REPUBLIC.** This course is a survey of U.S. history from the colonial period to Reconstruction. The focus is on the political and economic development of the American Republic. Major topics include colonial America, the American Revolution, the Constitution, slavery, the Civil War, and Reconstruction.

Major – Fourth, Fifth and Sixth Forms — First Semester.

Prerequisite: Modern World History or the permission of the department.

**THE AMERICAN CENTURY.** This is a continuation of U.S. history from the Gilded Age to the present. Political and economic development and the modernization of the United States are emphasized. Major topics include industrialization, imperialism, progressivism, the Great Depression, the World Wars; the Cold War; and the Civil Rights Movement. The required sequence of the two electives prepares students for the SAT subject test in United States history.

Major – Fourth, Fifth and Sixth Forms — Second Semester.

Prerequisite: Building the American Republic or the permission of the department.

**AP UNITED STATES HISTORY.** This course is taught as an introductory-level college course. Students are challenged to read and write intensively, with understanding and skill. They must be facile with both facts and ideas. Much self-discipline and dedication is required to stay abreast of the daily assignments, review regularly and prepare a substantial research paper. Students take this course to prepare for the Advanced Placement examination in United States History.

Major – Fifth and Sixth Forms – First and Second Semesters.

Prerequisite: Permission of the department.

**AP ART HISTORY.** This course is an introduction to the development of painting, sculpture and architecture from the ancient world to the modern period. Students build from the course text, Gardner's *Art Through The Ages*, with supplementary readings and visits to the Museum of Fine Arts and the Isabella Stewart Gardner Museum. Students take this course to prepare for the Advanced Placement examination in Art History.

Major – Sixth Form – First and Second Semesters. **(NOT OFFERED IN 2019-2020)**

Prerequisite: Completion of the history requirement and permission of the department.

**AP EUROPEAN HISTORY.** This course develops an understanding of the main themes in modern European history including political and diplomatic, intellectual and cultural, and social and economic history. Analyzing historical evidence and reading critical literary narratives are integrated into the course from 1450 CE to present. The course begins with the Renaissance and concludes with the demise of communism in Eastern Europe, the reunification of Germany, and the crisis of global terrorism. A significant amount of time is spent exploring the impact of intellectual and ideological history on culture, art, class, and state politics. Students take this course to prepare for the Advanced Placement examination in European History.

Major – Sixth Form – First and Second Semesters. **(NOT OFFERED IN 2019-2020)**

Prerequisite: Completion of the history requirement and permission of the department.

**AP UNITED STATES GOVERNMENT AND POLITICS.** This course introduces students to the institutions and procedures of the American political system, the roles of the three branches of the federal government, the operation of state and local systems and the interrelationship of government at its various levels. Students take this course to prepare for the Advanced Placement examination in United States Government and Politics.

Major – Sixth Form – First and Second Semesters.

Prerequisite: Completion of the history requirement and permission of the department.

**LATIN AMERICA AND THE CARIBBEAN.** This course explores the conquest, colonization and development of Latin America and the Caribbean. From initial encounters between Iberians and indigenous peoples, through the destruction of European colonial bonds, to the cultural legacy left behind, this class examines how this region of the world defines its independence. Art, music, literature and film are discussed in an effort to familiarize students with a rich and diverse cultural heritage.

Major – Fifth and Sixth Forms. **(NOT OFFERED IN 2019-2020)**

Prerequisite: Completion of the history requirement.

**HISTORY OF HUMAN RIGHTS.** This course explores the history of human rights at both the national and international level. This course begins by discussing what it means to be a human and considers what rights should be universal and inalienable. Using case studies, students also explore violations of human rights where discrimination has been based on stereotypes, race, minority groups, gender, disability, and ethnicity. Within these case studies, we discuss the development of human rights theories and practices, early efforts at an international response, and the creation of a modern human rights agenda. Students examine humanitarian interventions in Rwanda, South Africa (Apartheid), Darfur, Nazi Germany (Holocaust/Nuremberg Trials), and the United States (Civil Rights). Each of these places has undergone a violation of human rights in regards to either wars of aggression, war crimes, or crimes against humanity. In addition, students examine globalization, terrorism, and the role of the United States and the United Nations in the current human rights debate.

Major – Fifth and Sixth Forms – First Semester.

Prerequisite: Completion of the history requirement.

**AFRICAN-AMERICAN STUDIES.** This discussion-based course looks at the African-American journey towards emancipation. Beginning with the early stages of enduring slavery, Jim Crow, and full citizenship by the 1960s, the course analyzes the emergence of African-American religion, literature, poetry, music, and art. Students critique this journey through the lens of literary works by Ellison and Morrison, the music of Tupac Shakur, conversations regarding the Harlem Renaissance, and the rise of “black is beautiful” during the 1960s as well as a field trip to the African-American History Museum in Boston.

Major – Fifth and Sixth Forms – Second Semester. **(NOT OFFERED IN 2019-2020)**

Prerequisite: Completion of the history requirement.

**MICROECONOMICS.** An introduction to product and factor markets, this course covers such core economic concepts as supply and demand, elasticity and efficiency. Focused on the operation of particular markets, the course examines both competitive and less competitive market structures and explores the causes and consequences of market failure. Students consider topics ranging from Wal-Mart’s economic power to the salaries of professional athletes. As we explore how markets operate, we pay particular attention to governmental policies that affect markets, such as minimum wage laws, rent control, and environmental regulations. Later in the semester, students participate in a labor-management contract negotiation simulation. Text readings are complemented with current articles of economic interest.

Major – Fifth and Sixth Forms – First Semester.

Prerequisite: Completion of the history requirement.

**MACROECONOMICS.** An introduction to the national economy, this course covers such core concepts as gross domestic product, economic growth, unemployment, inflation and trade. Students explore economic models characterizing GDP growth, fiscal policy and monetary policy. In considering the U.S. economy, we focus on income distribution, public goods and externalities, government regulation, and international trade and trade policy. The course culminates with students presenting an oral and written summary and forecast of the U.S. economy including recommendations for discretionary policies.

Major – Fifth and Sixth Forms – Second Semester.

Prerequisite: Completion of the history requirement.

**HONORS ECONOMICS.** Honors Economics will provide students a more in-depth approach to the study of economics. Students will explore supplementary units to the traditional micro and macro courses. Additionally, each student will independently research a specific topic of interest with the goal of creating a project by the end of the course. This project could be in an area such as environmental economics, international trade, labor economics, or economic history, to name a few. Some topics may also help those who are interested in independently preparing for the AP Micro and Macro exams. Overall, the course seeks to provide a more intensive study for those students who are passionate about economics.

Major – Fifth and Sixth Forms – First (Micro) and/or Second (Macro) Semester.

Prerequisite: Completion of the history requirement and permission of the department.

**THE MIDDLE EAST.** This course examines the history of the Middle East and develops an understanding of major political, economic, religious, and cultural events, issues and conflicts from the post-colonial era to the present. We focus on five countries/case studies including women’s rights in Saudi Arabia, the Palestine/Israel conflict, the causes and consequences of the Islamic Revolution in Iran and the rise of ISIS and recent developments in the region. The course will culminate in independent student research.

Major – Fifth and Sixth Forms – Second Semester.

Prerequisite: Completion of the history requirement and permission of the department.

RACE, GENDER & CLASS IN AMERICA. In this elective, we use historical case studies to explore the gap between American ideals and the reality of inequality and discrimination based on race, gender, and class. Topics of reading and discussion include the O.J. Simpson case, Leonard Peltier, the death penalty, the coeducation movement, busing, and Title IX. Students are required to write a substantial research paper and make an oral presentation of their work.

Major – Fifth and Sixth Forms – First Semester.

Prerequisite: Completion of the history requirement and permission of the department.

INDEPENDENT STUDY. Students may propose projects at or away from the school under the supervision of a member of the department.

Major – Sixth Form – First or Second Semester.

Prerequisite: Completion of the history requirement and permission of the instructor and department.

EXCHANGE PROGRAM. This course is the academic component to the Exchange Program. The purpose of the course is to prepare students to participate as active, informed and inquisitive ambassadors, and upon their return, to constructively reflect upon their experiences with the Brooks community. Students apply in November for six- to nine-week stays in the spring at our sister schools in Botswana, France, Hungary, Scotland, and Spain, or a stay in the summer at our sister school in Peru. Selection is competitive. The course is required for those selected.

Minor – Fifth and Sixth Forms – Second Semester.

# MATHEMATICS

Mathematics is a combination of science, language and art. The math department strongly believes that it is only through early discipline that creativity is possible. Students learn formulas, translate words into symbols, and finally graph the results. Introductory courses teach the fundamentals, enabling students to manipulate numbers and formulas with confidence. Intermediate courses reiterate previously learned concepts while building upon definitions and terminology. In the process, students develop models, turning data into equations, defining their meanings, and depicting them on graphs. From this a larger picture appears, one in which individual topics merge into a coherent whole. At the upper level, the study of calculus provides the backdrop for the use of statistical measures, derivations, rigorous proof, and real-world applications.

## A NOTE ON CALCULATORS

The Brooks School mathematics department uses the Texas Instruments TI-83 or TI-84 graphing calculator and overhead in all levels of mathematics. By allowing the calculator to do the tedious arithmetic, students have a greater opportunity to more thoroughly understand the concepts involved, to find more than one solution method, and to recognize relationships between the algebraic and graphical solutions. The mathematics department requires that all students have a TI-83 or TI-84 graphing calculator. The TI-89 is a very different kind of calculator and is useful in the upper-level mathematics courses. A departmental statement on calculator use is introduced to all students at the start of the school year.

**FIRST YEAR ALGEBRA.** The first semester introduces the language of algebra and functions while emphasizing reading, writing, and evaluating algebraic expressions. In addition, it deals with the fundamental operations of polynomials, linear equations, and linear inequalities. The second semester covers linear systems, quadratic equations, factoring, fractional equations, radicals, and radical equations.

Major – First and Second Semesters.

**In all courses from Geometry through Second Year Algebra, there are “Honors” sections, which are so designated on a student’s transcript. Students enter such sections by invitation of the Department.**

**GEOMETRY.** The first semester introduces students to the terms, definitions, postulates, and theorems that form the basis of Euclidean geometry. It also explores the notion of formal proofs. Topics covered include parallel lines, congruent triangles, similar triangles, right triangles, and polygons. The second semester covers right triangle trigonometry, oblique triangle trigonometry, circles, area of planar figures, surface areas and volumes of three-dimensional objects, and an introduction to vectors and/or matrices. In both semesters, students utilize Geometer Sketchpad.

Major – First and Second Semesters.

**SECOND YEAR ALGEBRA.** The first semester reviews, reinforces, and explores more deeply the concepts of a first-year algebra course. The concept of functions, particularly linear and quadratic functions, is more fully developed. The second semester explores the logarithmic, exponential, rational, irrational, and variation functions. The study of sequences, series, and probability completes the course. There is an emphasis on modeling realistic examples from life and using the full capabilities of the graphing calculator.

Major – First and Second Semesters.

**At the conclusion of the Second Year Algebra course, the student has fulfilled the mathematics requirement at Brooks School. Based on department recommendation, students may then pursue the following elective courses.**

**PRE-CALCULUS.** This is a two-semester course that serves as an introduction to the elements of Pre-Calculus. It is designed for students who have not been recommended for the Advanced Pre-Calculus course. It is also designed for those who may be interested in pursuing the non-Advanced Placement Calculus course or math electives during the following year. Topics include the study of polynomial, exponential, logarithmic and trigonometric functions. The graphing calculator is used extensively, and students create mathematical models to solve realistic problems. The syllabus also includes some preparation for the SAT subject tests.

Major – First and Second Semesters.

Prerequisite: Completion of Second Year Algebra.

ADVANCED PRE-CALCULUS. The first semester of this course continues the study begun in *Second Year Algebra* of the modeling of linear, quadratic, logarithmic, exponential, and variation functions. Composite and inverse functions are also examined. The trigonometric and circular functions are also introduced in this course. The second semester studies trigonometric equations and identities; non-right triangle trigonometry; conic sections; complex numbers; polar numbers, equations and graphs; parametric equations and graphs; sequences and series; probability; and vectors.

Major – First and Second Semesters.

Prerequisite: Completion of Second Year Algebra with an honors grade and permission of the department.

HONORS ADVANCED PRE-CALCULUS AND DIFFERENTIAL CALCULUS. This full-year course is a fast-paced and rigorous introduction to Pre-Calculus. It is designed to be the first year of a two-year program that concludes with the study of AP Calculus (BC). This course is open only to students who have been invited by the mathematics department.

Major – First and Second Semesters.

Prerequisite: Completion of Second Year Algebra with an honors grade and permission of the department.

CALCULUS. This is a full-year course that introduces students to the elements of Calculus. It is designed for students who do not elect to study the Advanced Placement syllabus. A thorough understanding of Pre-Calculus is needed.

Major – First and Second Semesters.

Prerequisite: Completion of Pre-Calculus or Adv. Pre-Calculus and permission of the department.

PROBABILITY & STATISTICS. Students develop the skills to collect, analyze and interpret data, as well as develop proficiency in the use of spreadsheets. We are inundated by numbers that communicate powerful messages. As a citizen in today's society, one must be able to interpret the real story behind the numbers. Likewise, given the overwhelming amount of data available to us, we must be able to make sense of the data – to tell its story. This is not a math-intensive course, but rather a class focused on building analytic skills and writing stories about data. Students complete several projects, at least one of which is based on data of the student's own choosing.

Major – Fifth and Sixth Forms – First and Second Semesters.

Prerequisite: Completion of Second Year Algebra.

AP STATISTICS. This year-long course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding. All students are required to take the Advanced Placement examination.

Major – First and Second Semesters.

Prerequisite: Completion of Pre-Calculus or Advanced Pre-Calculus and permission of the department.

AP CALCULUS (AB). This course follows closely the syllabus as outlined by the Advanced Placement program of The College Board. The first semester includes the topics of limits and derivatives with attention given to the concept of rate of change, optimization and graphing techniques. The second semester continues with work in the trigonometric, exponential and logarithmic functions. It also explores the concept of the integral and all of its applications including the fundamental theorem of calculus. Students need to have done honors-level work in Pre-Calculus and must have departmental permission to gain entrance to this course. All students are required to take the Advanced Placement examination.

Major – First and Second Semesters.

Prerequisite: Completion of Advanced Pre-Calculus with an honors grade and permission of the department.

AP CALCULUS (BC). This course continues the study of calculus begun in the second semester of *Honors Advanced Pre-Calculus and Differential Calculus*. After completing the course work as defined in *AP Calculus (AB)*, students proceed to the more advanced topics for the Advanced Placement BC examination. These topics include infinite series, Taylor series, differential equations, delta-epsilon proofs, vector analysis, length of curves, surface area, advanced integration techniques, and parametric functions.

Major – First and Second Semesters.

Prerequisite: Completion of Honors Advanced Pre-Calculus and permission of the department.

MULTIVARIABLE CALCULUS. The first semester of this full-year course includes vector algebra and geometry, cylindrical and spherical coordinates, three-dimensional surfaces, vector functions, velocity and acceleration, speed, tangent and normal vectors, arc length and curvature. The second semester covers functions of several variables, partial differentiation, grad, div, curl, tangent plane, normal line, level curves/surfaces, extrema and Lagrange's method, multiple integrals, change of variables, Jacobian applications, vector analysis, and more complex differential equations.

Major – First and Second Semesters.

Prerequisite: Completion of AP Calculus BC and permission of the department.

AP COMPUTER SCIENCE PRINCIPLES. This year-long course introduces students to the foundational concepts of computer science and computational thinking, and explores how computing and technology impact our world. As outlined by the Advanced Placement program of the College Board, students will focus on the “7 Big Ideas”: creativity, abstraction, data and information, algorithms, programming, the Internet, and global impact. All students are required to take the Advanced Placement examination, which consists of a written exam and two artifacts.

Major – First and Second Semesters.

Prerequisite: Permission of the department.

ENGINEERING: PRODUCT DESIGN. Students have a hands-on introduction to the product design process from conceptualization to prototype construction through 3D printer and testing. Students learn many skills including engineering graphics communications, technical sketching, and CAD (Computer-Aided Design). Students work in groups and learn to function effectively in a team.

Major – Fifth and Sixth Forms – First Semester. **(NOT OFFERED IN 2019-2020)**

Prerequisite: Permission of the department.

ENGINEERING: DIGITAL DESIGN. Students have a hands-on introduction to the principles and practices of digital design, one of the first core courses in the discipline of electrical and computer engineering in college. Students study topics such as analog vs. digital, different number systems, Boolean algebra, transistor network design, combinational circuits, sequential circuits and more. Design methodology using both discrete components (using breadboard) and hardware description languages (using FPGA) is implemented in the laboratory portion of the course.

Major – Fifth and Sixth Forms – Second Semester. **(NOT OFFERED IN 2019-2020)**

Prerequisite: Permission of the department.

COMPUTER PROGRAMMING & CODING THROUGH APPS. Students are introduced to programming with creating an app in mind, either iOS or Android. Students explore simple coding through their TI calculators and transition to learning MIT's AppInventor, a GUI-based coding. After gaining some experience in simple programming, students learn Java or Objective-C and eventually create apps starting with classic games such as Tic-Tac-Toe or Flappy Bird.

Major – Fifth and Sixth Forms – Second Semester. **(NOT OFFERED IN 2019-2020)**

Prerequisite: Permission of the department.

INDEPENDENT STUDY – TOPICS. The content depends upon the interests of the students and the instructor involved, and allows a student to work in close association with a teacher in an area of mutual mathematical interest.

Major or Minor – Sixth Form – First or Second Semester.

Prerequisite: Permission of the instructor and department.

## SCIENCE

Living in a highly technological society requires that all students have some background in the sciences. Thus the major objectives of the Science Department are:

- To create an interest in and help students understand a body of useful scientific knowledge of the organic and inorganic worlds.
- To train the students in the scientific approach – critical thought, inductive and deductive reasoning to solve problems.
- To give the student sufficient background in a specific science to continue study at a higher level.
- To help the student prepare for SAT subject tests and Advanced Placement examinations in science.
- To develop skills in scientific writing.

**In Physics, Chemistry, Biology, Environmental Science and Anatomy & Physiology, there are “Honors” sections which are so designated on a student’s transcript. Students enter such sections by invitation of the Department.**

**PHYSICS.** This first laboratory science course covers all the principle topics in physics, with an emphasis on conceptual understanding as well as problem solving. Labs and demonstrations play a central role in the course, with much learning taking place through doing and discussion. Extensive use is made of technology. Computers are used routinely for data collection, data analysis, simulation exercises, research, and practice tests. Topics studied include mechanics, properties of matter, waves and optics, and electricity and magnetism. This course serves as a foundation for further study in all the sciences, including chemistry and biology.

Major – Third, Fourth and Fifth Forms – First and Second Semesters.

**CHEMISTRY.** Designed with the belief that science is best learned through first-hand experience and discussion with peers, this course uses a theme-based curriculum designed to ground the study of chemistry in the natural world and everyday life. Guided inquiry promotes scientific reasoning, critical thinking and a greater understanding of concepts. The course consists of six possible units – Alchemy, Smells, Weather, Toxins, Fire, Show Time – each organized around a specific body of chemistry content that students can relate to common life examples. The ultimate goal is to lead students to think like scientists and understand the nature of scientific discovery. The course promotes the development of the skills and scientific literacy that students need to become citizens who can make informed decisions about their health, the environment, energy use, nutrition and safety.

Major – Fourth, Fifth and Sixth Forms – First and Second Semesters.

Prerequisite: Physics.

**BIOLOGY.** This course emphasizes an analytical approach to the study of biology. Classes involve at least one lab per week and culminate with a year-end independent investigation. Development of critical thinking and independent learning prepares students for college-level lab sciences. Major topics include ecology, cell biology, genetics (Mendelian and molecular), biotechnology, evolution, human physiology, and plant and animal classification.

Major – Fifth and Sixth Forms – First and Second Semesters.

Prerequisites: Physics and Chemistry or permission of the department.

**AP BIOLOGY.** This advanced placement course is designed for the student who wishes to specialize in biology. It presupposes one year of biology and one year of chemistry. The course is equivalent to a first-year college course in biology, and course materials used are college-level texts, laboratory manuals, and supplementary readings in periodicals and paperbacks. All students take the Advanced Placement examination which may lead to credit and/or advanced placement in college. The course is laboratory-oriented, with two periods of laboratory and four of recitation. Content includes the characteristics, variants and organization of life, metabolism, responsiveness and coordination, reproduction, evolution, and ecology. Some of the areas covered in the laboratory include work with the centrifuge and the living cell, enzymes and the biochemistry of living organisms, genetics and evolution, and biotechnology equipment for running polymerase chain reactions and electrophoresis.

Major – Fifth and Sixth Forms – First and Second Semesters.

Prerequisites: Physics, Chemistry, Honors Biology and permission of the department.

AP CHEMISTRY. This advanced placement course covers topics introduced in Honors Chemistry in greater depth, and is the equivalent of a first-year college chemistry course. As such, students study college texts and laboratory experiments, and gain valuable preparation for any further science courses. All students take the Advanced Placement Chemistry examination, which may lead to college credit and/or advanced placement. Topics covered include atomic and molecular structure, chemical equilibria, chemical kinetics, thermodynamics and electrochemistry. Laboratory work is a key component of this course.

Major – Fifth and Sixth Forms – First and Second Semesters.

Prerequisites: Honors Chemistry, Second Year Algebra and permission of the department.

AP ENVIRONMENTAL SCIENCE. This college-level course provides a framework for understanding the complex interactions between the physical environment and human populations globally and locally, long-term and short-term. The fast-paced, demanding class covers topics including ecology, population growth, chemistry of the atmosphere, water quality, energy resources, agricultural productivity, biodiversity and environmental ethics. Self-motivated and curious students will find opportunities for independent research and projects in addition to the laboratory work required in the class. All students take the Advanced Placement Environmental Science examination.

Major – Fifth and Sixth Forms – First and Second Semesters.

Prerequisites: Two previous laboratory science courses and permission of the department.

AP PHYSICS. This course is designed for the student wishing to specialize in a physical science or any of the engineering disciplines including civil, mechanical, electrical or biomedical engineering. All students take the Advanced Placement Physics C-Mechanics examination. Students explore topics in the six following content areas: kinematics; Newton's laws of motion; work, power and energy systems; circular motion and rotation; oscillations; and gravitation. The course focuses on the application of introductory differential and integral calculus to solve problems related to the topics above. The course utilizes guided inquiry and student-centered learning to foster the development of critical-thinking skills through problem-solving and independent lab work.

Major – Sixth Form – First and Second Semesters.

Prerequisites: Calculus or higher, taken concurrently, or permission of the department.

ANATOMY AND PHYSIOLOGY I. An introduction to human anatomy and exercise physiology, this course surveys the structure and function of the major systems of the human body and how they are related to attain maximum physiological potential. Laboratory work and dissections plus student presentations (on diseases and disorders) and hands-on activities are an integral part of this course. Anatomy I focuses on the language of anatomy, homeostasis, and the muscular, skeletal, and nervous systems.

Major – Fifth and Sixth Forms – First Semester.

ANATOMY AND PHYSIOLOGY II. An introduction to human anatomy and exercise physiology, this course surveys the structure and function of the major systems of the human body and how they are integrated with each other to attain maximum physiological potential. An integral part of this class includes case studies, forensics labs, and student presentations. The final project of the course is completion of a cat dissection. Anatomy II focuses on the cardiovascular, respiratory, digestive, immune and excretory systems. Prior enrollment in Anatomy I is not a prerequisite. However, students who enroll in Anatomy II without Anatomy I are asked to complete an assignment prior to the beginning of the semester.

Major – Fifth and Sixth Forms – Second Semester.

HONORS ANATOMY AND PHYSIOLOGY. This full-year course surveys the structure and function of the major systems of the human body including skeletal, muscular, nervous, endocrine, immune, cardiovascular, respiratory, digestive, and excretory. Laboratory work and dissections plus student presentations and projects are an integral part of this course. Students also have an opportunity to learn more about careers in medicine and health professions through partnerships with surgeons who work in the Merrimack Valley and Boston.

Major – Fifth and Sixth Forms – First and Second Semester.

Prerequisite: Physics, Chemistry and Biology, and permission of the department.

ENVIRONMENTAL SCIENCE I. The biosphere, our home, is a unique place providing humans not only with what we need to survive, but also delivering destructive forces which humans are unable to control. This course is designed to

understand the natural world and our relationship to it. Students will examine the role and impact of humans in the world. Environmental Sciences draws on natural and applied sciences such as chemistry, engineering, and biology, while also exploring the social sciences and humanities such as economics, literature, and anthropology. First semester focuses on ecology, evolution and biodiversity, human populations and environmental economics.

Major – Sixth Form; Fifth Form with permission –First Semester.

Prerequisite: Physics, Chemistry, Biology or permission of the department.

ENVIRONMENTAL SCIENCE II. The biosphere, our home, is a unique place providing humans not only with what we need to survive, but also delivering destructive forces which humans are unable to control. This course is designed to understand the natural world and our relationship to it. Second semester focuses on water and food resources, conventional energy, alternative energy, and pollution. Prior enrollment in Environmental Science I is not a prerequisite. However, students who enroll in Environmental Science II without Environmental Science I are asked to complete an assignment before the beginning of the semester.

Major – Sixth Form; Fifth Form with permission –Second Semester

Prerequisite: Physics, Chemistry, Biology or permission of the department.

HONORS ENVIRONMENTAL SCIENCE. This full-year course examines the biosphere, our home. It is a unique place providing us not only with what we need to survive but also delivering destructive forces which humans are unable to control. This course is designed to understand the natural world and our relationship to it. Students will examine the role and impact of humans in the world. Environmental Sciences draws on natural and applied sciences such as chemistry, engineering, and biology while also exploring the social sciences and humanities such as economics, literature, and anthropology. Environmental problems are incredibly complicated. Each problem offers its complexity, and any solution involves tradeoffs, and no response will present an ultimate solution. This course encourages students to engage with tough problems and work to think creatively.

Major – Fifth and Sixth Form – First and Second Semester. **(NOT OFFERED IN 2019-2020)**

Prerequisite: Physics, Chemistry, and Biology, and permission of the department.

ROBOTICS. This course is designed to introduce the student to the field of engineering and technical problem solving. Students work in teams while applying scientific principles in designing, constructing and operating efficient and economical structures and systems. Projects involve data acquisition systems, remote sensing, field monitoring and robotics, among others. In addition to projects, students may be involved in contests or competitions outside of the classroom. Topics covered include basic electronics, analog and digital communications, binary logic, input-output devices, computer programming, materials engineering, structural design and cost-benefit analysis.

Major – Sixth Form; Fifth Form with permission – First and/or Second Semesters.

Prerequisites: Two lab sciences including Physics, Second Year Algebra and/or permission of the department.

ROYCE INDEPENDENT RESEARCH PROJECT. Students may propose projects at or away from the school under the supervision of a member of the department. Expenses for such projects are financed by the generous support of the Robert Royce Fund.

Major or Minor – Fifth and Sixth Forms – First or Second Semester.

Prerequisite: Permission of the department.

## SELF IN COMMUNITY

Self in Community is a comprehensive four-year program designed to provide discussion-based learning opportunities for students throughout their careers at Brooks. Students will have the opportunity to explore and develop their understanding of self, expectations and responsibilities of a citizen within the Brooks community and beyond, and their understanding of relationships with others. The curriculum seeks to explore developmentally appropriate aspects of wellness such as identity development, physical, emotional, and spiritual health, diversity and ethics, as well as leadership and transition after Brooks.

Classes within the Self in Community series will be held annually for all grades, will be automatically scheduled for students and will meet either once or twice per week.