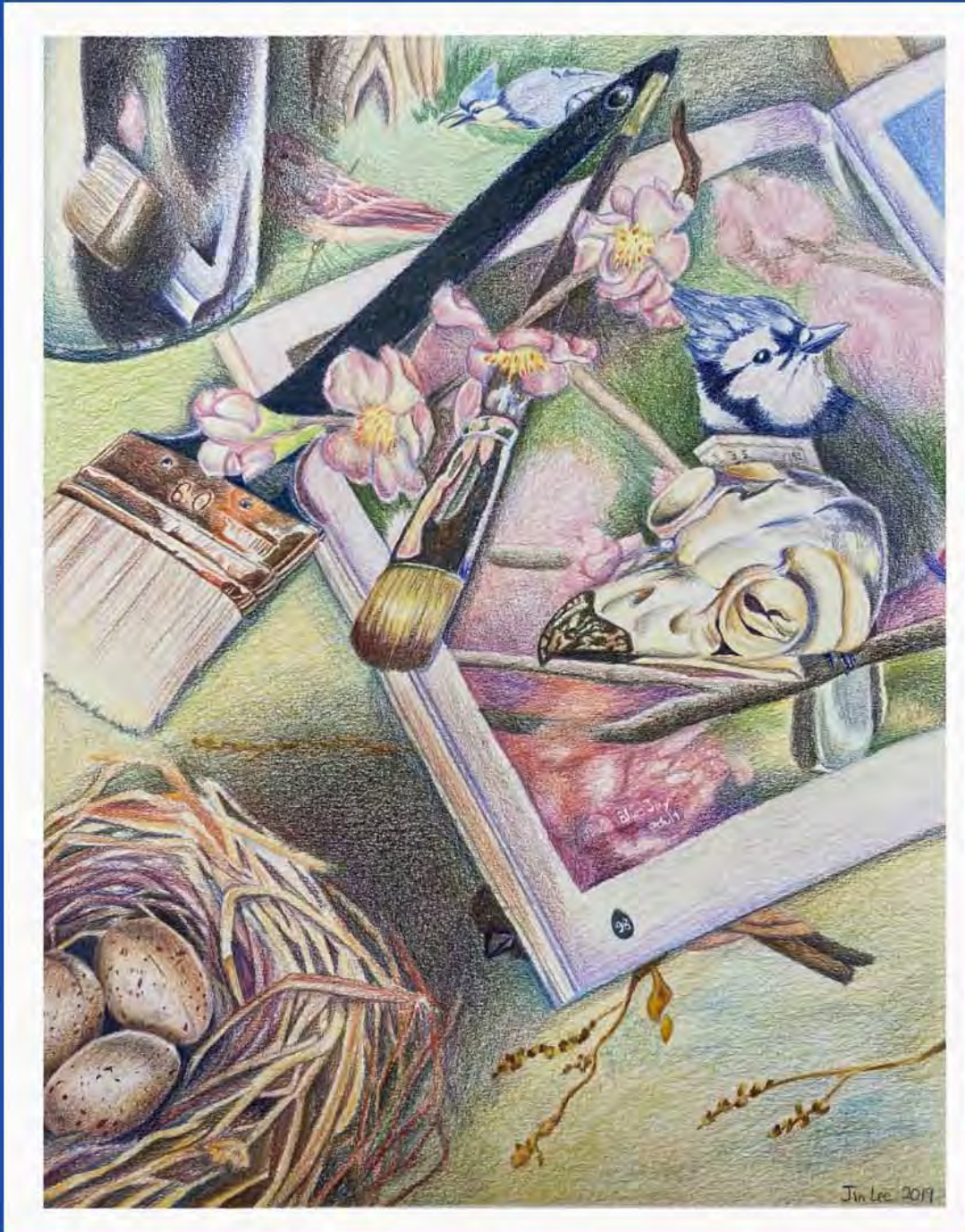


Brookline High School



2020-2021 Course Catalog

BROOKLINE HIGH SCHOOL

Anthony Meyer, Head of School
Harold Mason, Assistant Head of School

Brian Poon, Dean of Student Support
Jenee Ramos, OLS Dean
Lisa Redding, Dean of Students
Wendy Ryder, Director Special Education

Melanee Alexander, Associate Dean
Rachel Eio, Associate Dean
Marisel Figueroa-Marrero, Associate Dean
Brendan Kobus, Associate Dean OLS
Alexia Thomas, Associate Dean OLS
Summer Williams, Associate Dean

ACE (ALTERNATIVE CHOICES in EDUCATION)

Amy Bayer, Coordinator

METCO

J. Malcolm Cawthorne, Coordinator

SCHOOL WITHIN A SCHOOL

Dan Bresman, Coordinator

WINTHROP HOUSE

Owen Minott, Coordinator

* * * * *

SCHOOL COMMITTEE

Julie Schreiner-Oldham, Chair

Suzanne Federspiel, Vice Chair

Sharon Abramowitz

Helen Charlupski

Susan Wolf Ditkoff

Michael Glover

Jennifer Monopoli

David A. Pearlman

Barbara Scotto

* * * * *

CENTRAL ADMINISTRATION

Ben Lummis, Interim Superintendent of Schools

Nicole Gittens, Deputy Superintendent for Teaching & Learning

Casey Ngo-Miller, Deputy Superintendent for Student Services

Mary Ellen Normen, Deputy Superintendent for Administration and Finance

Cover image by Jin Lee '20



BROOKLINE HIGH SCHOOL

ANTHONY MEYER, HEAD OF SCHOOL
OFFICE OF THE HEAD OF SCHOOL

February 5, 2020

Dear Brookline High School Students and Families,

The most sacred work of Brookline High School is the learning and teaching that occurs every school day on our campus. Our teachers develop engaging, relevant, challenging curriculum and teach with great skill, care, and joy.

This Course Catalog is an articulation of the myriad educational opportunities we offer at Brookline High School. To be fair, there is learning outside of the classroom, too: in athletics, performing arts, clubs, and other extracurriculars. That said, the courses we make available are the most palpable evidence that we value rigor for all students and take seriously our responsibility to balance challenge with support and differentiation.

Students need to choose the most appropriate and challenging program. We encourage you to read the catalog carefully, and discuss it with your teachers, your counselor, and your families—all to insure that you make the best selections you can. Please remember that students are responsible for knowing and meeting all our graduation requirements, which are explained in the catalog. In particular, be sure that you are on track to complete the elective requirement and health/fitness requirement. If you have questions, please work with your counselor.

Also, it is important for us to state that the course selections you make this spring determine how we staff the high school. Assigning the right number of teachers to the specific courses that students select will become even more crucial this spring as the district works to prepare the best and most fair budget for all Brookline schools. This means we need you to choose courses very carefully this spring and commit to those courses as the ones you will take for 2020-2021.

Good luck in the second half of this school year, and, again, make sure that you make thoughtful and intentional decisions. Let us know if we can help or advise you in any way.

Sincerely,
Anthony Meyer
Head of School

Hal Mason
Assistant Head of School



115 GREENOUGH STREET
BROOKLINE, MA 02445
617.713.5003
ANTHONY_MEYER@PSBMA.ORG

TABLE OF CONTENTS

<u>The Core Values of The Public Schools of Brookline</u>	<u>i</u>
<u>Mission Statement</u>	<u>i</u>
<u>Institutional Goals</u>	<u>i</u>
<u>Expectations for Student Performance</u>	<u>ii</u>
<u>Planning Your High School Program</u>	<u>iii</u>
<u>Graduation Requirements</u>	<u>iii</u>
<u>FAQ on Graduation Requirements and Electives</u>	<u>v</u>
<u>Preparation for College/ Technical School/Work</u>	<u>vii</u>
<u>Grading System</u>	<u>viii</u>
<u>Grade Point Average</u>	<u>viii</u>

<u>The Courses</u>	<u>1</u>
<u>Career and Technology Education</u>	<u>2</u>
<u>English Department</u>	<u>19</u>
<u>English Learner Education</u>	<u>27</u>
<u>Mathematics</u>	<u>30</u>
<u>Performing Arts</u>	<u>36</u>
<u>Science</u>	<u>42</u>
<u>Social Studies</u>	<u>49</u>
<u>Visual Arts</u>	<u>56</u>
<u>Wellness Education</u>	<u>64</u>
<u>World Language</u>	<u>68</u>
<u>Special Education</u>	<u>79</u>
<u>ACE (Alternative Choices in Education)</u>	<u>96</u>
<u>School Within a School</u>	<u>108</u>
<u>The BHS Innovation Fund: Exploration, Inspiration, Excellence</u>	<u>114</u>
<u>BHS Tutorial</u>	<u>116</u>
<u>African-American & Latino Scholars Program</u>	<u>116</u>
<u>Metco</u>	<u>116</u>
<u>Community Service</u>	<u>117</u>

THE CORE VALUES OF THE PUBLIC SCHOOLS OF BROOKLINE

HIGH ACADEMIC ACHIEVEMENT FOR ALL STUDENTS

EXCELLENCE IN TEACHING

UNDERSTANDING AND RESPECT FOR HUMAN DIFFERENCES

COLLABORATIVE RELATIONSHIPS

EDUCATIONAL EQUITY

MISSION STATEMENT

The mission of Brookline High School is to develop capable, confident life-long learners who contribute to their community, participate thoughtfully in democracy, and succeed in a diverse and evolving global society.

INSTITUTIONAL GOALS

- To provide intellectual and personal challenge with support for all students
- To deliver instruction which blends the traditional with the innovative, emphasizing both the acquisition of knowledge and its application
- To encourage in students the curiosity to ask questions and the resourcefulness to find answers
- To develop clear communication and creative expression in a variety of media
- To celebrate diversity so that our students gain an understanding of differences and an appreciation of our essential kinship

To these ends, the administration, faculty, staff and students work together to provide a safe setting in which all can flourish as members of this community.



EXPECTATIONS FOR STUDENT PERFORMANCE

I. CONTENT KNOWLEDGE AND UNDERSTANDING

Brookline High School students:

- develop the skills and knowledge described in the BHS course syllabi.
- develop the skills and knowledge to succeed on a variety of mandated internal and external assessments.
- meet Graduation Requirements as defined by the Brookline School Committee.

II. COGNITIVE POWERS/CRITICAL THINKING

Brookline High School students:

- analyze, synthesize, and draw reasonable conclusions.

III. COMMUNICATION

Brookline High School students:

- develop skills to communicate clearly and persuasively through writing, speaking, technology, and the arts.
- develop skills in listening and reading.

IV. CITIZENSHIP/SOCIAL VALUES

Brookline High School students:

- adhere to community standards as defined by the Code of Conduct in the BHS Handbook.
- demonstrate proficiency in collaborating and negotiating with individuals of varied backgrounds.
- behave in a respectful and ethical manner.
- demonstrate understanding of multiple perspectives and respect for human differences.

V. LIFE SKILLS

Brookline High School students:

- develop organizational and time management skills.
- set goals and work to achieve them.



PLANNING YOUR HIGH SCHOOL PROGRAM

Whether you are planning to go on to college, a technical school, or a job, it is important to build your high school program carefully. You want to be sure that you will first meet Brookline High School's graduation requirements in addition to those for a college and/or job, and also take advantage of the wide range of course offerings at The High School.

GRADUATION REQUIREMENTS

In order to graduate from Brookline High, students must satisfy the following Graduation Requirements:

Minimum Course Requirement =22 total credits

#	English: 4 credits # %	four years
	World Languages: 2 credits %	two years in one language
	Mathematics: 3 credits	three years (four years required for UMASS colleges)
	Science: 3 credits	three years
	Social Studies: 3 credits	three years (World History I and II, U. S. History/American Studies) #
	Electives: Career and Technology Education, Performing Arts and Visual Arts, Community Service: 3 credits	three years distributed across at least three of these program areas
	Wellness 1 credit *	Wellness must be taken each year
	Additional courses 3 credits minimum	Taken in any discipline to meet the required of 22 credits
	Massachusetts MCAS exams	Exams passed in 3 areas: ELA, Mathematics, and Science & Technology

These course requirements are mandated by the State and cannot be modified.

% *Some students will achieve some of these credits by studying English as a Second Language*

* *Performing Arts dance classes can be used to fulfill the Wellness requirement, except in 9th grade where all students are required to take and pass WE0900*



Exceptions to the Graduation Requirements:

We have a responsibility to provide a challenging program for every student which reflects the particular strengths of the student. Alternative programs and/or some modification of the Graduation Requirements are available. In appropriate circumstances, the student's administrator may recommend a modification to the Graduation Requirements for approval by the Head of School and Superintendent of Schools. The alternatives below offer reasonable flexibility to satisfy Graduation Requirements and enable all students to experience academic success.

1. Elective Pathway Alternative –

A) A “pathway” of three progressively advanced credits in Performing Arts, Visual Arts, or Career and Technology Education may substitute for the distribution requirement in electives.

For example: a student may take PA4000 Drama 1, PA4100 Drama 2, and PA4300 BETCo courses to fulfill the elective requirement and thereby be excused from taking the required Visual Arts and CTE classes.

B) A “pathway” may also be used to satisfy up to two credits of academic coursework, with a maximum one credit each in World Languages, Mathematics, Science, or Social Studies. Such pathways must be planned and approved in advance.

For example: a student may take the PA3000 Beginning Dance, PA3100 Intermediate Dance, and PA3600 Choreography, and use two of those credits to substitute for the required third course in Science and the required second course in World Language.

2. **Academic Support Alternative** - Students enrolled in Learning Center or another academic support program (like the BHS Tutorial) may substitute two of those support credits to satisfy up to two credits of academic coursework, with a maximum one credit each in World Languages, Mathematics, Science, or Social Studies. (This exception may not be combined with 1(B).)

For example: a student taking TU1000 BHS Freshman Tutorial, TU2000 BHS Upper-Class Tutorial may use two of those credits to substitute for the required third course in Math and the required third course in Science.

3. A “**Waiver of Graduation Requirements**” may also be recommended, in writing, by the Head of School for approval by the Superintendent of Schools. A waiver may be recommended for students who, because of extraordinary circumstances, have not satisfied all of the Graduation Requirements but, in the considered view of the Head of School, have achieved the learning expectations of The High School.

These rare cases are done in coordination with the student's administrator and are typically planned far in advance of graduation.

*A student may use either Option 1B or Option 2, but not both.

**Option 1A can be used with Option 2.



Frequently Asked Questions on Graduation Requirements and Electives

I am not sure whether to select a given course at the standard level or the honors level. Will I be able to change after the year starts?

There is no guarantee that such changes will be accommodated. Priority goes to students who are clearly, as identified by their teacher, misplaced in a course. Second priority would go to students newly enrolled in the high school. After those, if there is available space at the other level, it is possible with the consent of the curriculum coordinator to make the change. (For some courses and some school years this is not an issue – in other courses there is little possibility to make the change.) Courses will not be oversized to accommodate such requests.

Do I need to have a teacher recommendation in order to take an Advanced Placement course at BHS?

No. Students and their parents do have the option to select advanced placement, or any honors course, provided they do so **before the April 1, 2020 deadline**. Such overrides must be discussed with guidance counselors and curriculum coordinators.

Is it advisable to attempt to push and take honors courses when the teacher has recommended for standard?

Students, parents, and guidance counselor should jointly be involved in such decisions. We find the recommendations made by teachers – eighth grade teachers as well as teachers at the high school – are the most accurate and appropriate recommendations for students. Nevertheless, if a student and parent evaluating the entire load of courses a student will be taking decide that there is room for the student to take the more rigorous course, the option is available. Again such decisions must be made **by April 1, 2020**.

How many honors courses should I take?

The most important element of scheduling is for students to find a balanced schedule. Many students take a mixture of Honors and Standard classes.

It is better to get an A in a Standard or a B in Honors?

There is no simple answer to this question. For example, it may be that taking the standard level course and earning an “A” is what allows a particular student to take other honors courses and earn high grades in those courses. The increased homework and reading load with an honors course that might result in a “B” could adversely affect the other courses a student is taking. The two most important elements of your schedule are balance and appropriate level of challenge. We want students to feel successful while working to their full potential.

Can a student take two courses in the same discipline in the same year?

Yes, though such opportunities are not always available due to space. The first priority goes to having all students enrolled in one course in a given discipline. Such scheduling possibilities must be discussed with the guidance counselor, and must be done with a plan for fulfilling all graduation requirements.

If my child takes two academic courses in one year (language, science, etc.) can one count toward the elective credit requirement?

No. Such courses count towards the additional course credits needed to attain the 22 credit requirement.

What are the options for Wellness credit? Do students need Wellness every year?

All Grade 9 students are required to take WE0900, Integrated Health and Fitness which meets for one semester, 4 blocks per week. All students must have one Wellness course on their schedule every year. In Grades 10-12, it can be a course at BHS, a BHS sport offered through Athletics, or an outside contract.

Can I use a Performing Arts dance class to fulfill the Wellness requirement?

Yes, dance classes can be used to fulfill the Wellness requirement, except in 9th grade where all students are required to take and pass WE0900.

Can I use Global Leadership, Social Justice, or other “Option” course to count toward my elective credit requirement?

No. Global Leadership, Social Justice, and all option courses, do not count toward the elective requirement. Only courses taken in the CTE, PA, or VA departments (as well as Community Service) count toward the requirement.

Can I just do Community Service to fulfill the elective requirement?

No. While it is possible (and many students do) earn multiple credits in Community Service, only 1 credit counts toward fulfilling the Elective Requirement.



I've been playing an instrument, taking dance classes, and/or doing drama for years, can I take an upper level Performing Arts class that has prerequisites?

Possibly. We hold auditions for a number of our upper level Performing Arts classes, and encourage students to audition if they would like. We also find that often our entry level and non-leveled Performing Arts classes are challenging and stimulating for students with prior experience. Performing Arts classes at Brookline High meet four or five days a week, which is significantly more than our elementary music classes meet, and generally more than performing arts classes that students take outside of school. Through our auditions, teachers will give students the best placement for them, whether that is in an upper level class, or an entry level or non-leveled class. Auditions generally happen in March. You can contact the Performing Arts Coordinator for specific audition details.

Can I take classes outside of Brookline High School that will count for BHS graduation credit?

Other than students transferring to BHS this is typically not allowed.

Is it a good idea to get involved with extracurricular activities, clubs, and/or athletics? I am worried that it will take up too much time from my studies.

Students should take part in activities they enjoy. Even though many clubs and activities and athletics involve a large time commitment, every study and all of our experience at the high school indicates that students do better in school and are more focused on their work when they are engaged in such activities. It might seem counterintuitive, but typically we find actively engaged students feel more in control of their time and their workloads. Years from now students are not going to remember fondly the afternoons spent doing homework – it will be playing on the baseball team, singing in the school musical, or being engaged in the Red Cross Club, that will be remembered.

What supports are there at the high school if I am feeling challenged with a certain course?

There are a number of resources at BHS. The most important resources are the teachers and the extra help they provide. Success in high school often is predicated on students making appointments to meet with teachers before, during, or after school. In addition, students are strongly encouraged to take advantage of the Math Center and the Writing Center. Many students, especially as freshmen, are scheduled for BHS Tutorial, a large program staffed by teachers which helps students with their studies.



PREPARATION FOR COLLEGE/ TECHNICAL SCHOOL/WORK

Most colleges suggest that you take a challenging and well-rounded academic program. Four-year colleges generally require:

- four years of English
- at least two or three years of a foreign language
- three or four years of mathematics (Geometry, Algebra II, Advanced Algebra, Pre-Calculus)
- two or three years of a laboratory Science (Physics, Biology, Chemistry)
- three years of social studies (including U. S. History)

Students should keep in mind the following minimum requirements for admission to Massachusetts state colleges and universities. Seventeen college preparatory courses distributed as follows are required. A course is equivalent to one full school year of study.

English	4 courses
World Languages	2 courses (in a single language)
Mathematics	4 courses of high school math, including in their senior year
Science	3 courses of lab-based science, including the natural/physical sciences or technology/engineering courses
Social Studies	2 courses (including 1 course in U. S. History)
Electives	2 courses (taken from above subjects or from the Arts & Humanities or Computer Sciences)

This is a reliable guideline to follow for most colleges. If you are interested in a specialized field or a specific college, however, you should consult your counselor and check the college catalogue for any additional requirements. For example, engineering schools may require extra mathematics and science courses. Every college catalogue lists that college's requirements for admission.

It is helpful to draw up a tentative four-year program when you are entering the ninth grade. By doing so, you can ensure that you will have a balanced program each year. Many courses are sequential, so it is necessary to plan ahead. Of course, this will only be a "blueprint" and you may want to revise it as you progress and your interests change during your high school years.

Perhaps the most important rule to follow is: Keep all your options open. If you are uncertain about your long range goals (and most high school students are), follow a broad, general program of studies which will prepare you for almost any college major. Then you will have the freedom to choose among your options as a senior, and you will not find yourself missing important courses necessary to pursue your goals. You will also want to check the Career Center for information on colleges, technical schools, and the world of work.



GRADING SYSTEM

A HONOR	B+	C+	D+	E FAILING
A-	B GOOD	C AVERAGE	D PASS	
	B-	C-	D-	

N = Failure due to lack of attendance.

I = Incomplete: Incomplete grades must be made up by the end of the next marking period if credit is to be received. The Dean's Office will determine eligibility for issuance of an "incomplete" mark.

P/F = Pass/Fail: If a student selects a course to be marked with pass/fail option, a contract needs to be negotiated IN ADVANCE. See your counselor.

L = If a course level change occurs within ten class periods of the end of a marking period the student will earn a grade of "L" (Late entry) in the new course for that marking period.

GRADE POINT AVERAGE

Grade Point Averages are computed at the close of the junior year. All marks earned for grades 10 and 11 are averaged on a 4 point scale:

	A = 4.0	A- = 3.7
B+ = 3.3	B = 3.0	B- = 2.7
C+ = 2.3	C = 2.0	C- = 1.7
D+ = 1.3	D = 1.0	D- = 0.7
	E = 0	
I, L, P, F = Not computed into GPA		

COURSE OFFERINGS

ALL COURSES IN ALL DEPARTMENTS ARE COEDUCATIONAL. In most instances, courses at Brookline High School will not be offered when there are fewer than 15 students registered. The Head of School will recommend exceptions to the Superintendent when the elimination of a course would (1) interrupt a sequential course, e.g., second year of a language sequence, (2) affect specific courses which are a vital part of an academic high school program, e.g., advanced placement courses, (3) affect courses for seniors which are an integral part of career pursuits or post-secondary educational plans; or other good cause.

Unless otherwise noted, all courses meet 4 periods/blocks per week and have no prerequisites.

NON-DISCRIMINATION POLICY

Brookline Public Schools prohibits discrimination on the basis of race, religion, gender, sexual orientation, national origin, age, disability, pregnancy or marital status. This policy provides equal access to courses and programs, counseling services, physical education and athletics, vocational education, instructional materials and extra-curricular activities. Report violations of this policy to the Superintendent's Office, 617-730-2401



THE COURSES

CAREER AND TECHNOLOGY EDUCATION

TEACHING SKILLS THAT TAKE YOU WHERE YOU WANT TO GO

The Career and Technology Education Department offers more than 25 unique courses that allow students to explore project-based and experiential learning related to their future educational and/or employment aspirations. Enrollment in these courses offers opportunities for students who will pursue post-secondary education at either the 2 or 4-year level as well as students who will enter employment or the military upon graduation. Please note: Some of our course pathways allow students who complete certain CTE classes at BHS to receive college credit through articulation agreements and dual-enrollment opportunities.

In addition to providing valuable career information and experiences, courses in Career and Technology Education are intended to provide transferable life and professional skills. Some of our courses offer certifications and/or industry-recognized credential upon completion of the course work and a standards-based examination. Currently, these include Culinary Arts, Early Childhood and Business /Financial Literacy.

The Career and Technology Education Department is committed to the integration of technology into all of its offerings as there is an emphasis on the importance of these skills and competencies in the current professional landscape.

GRADUATION REQUIREMENTS: Graduation from Brookline High School requires three credits distributed across at least three of these program areas: Career and Technology Education, Community Service, Performing Arts, and Visual Arts.

Students with a strong interest in a particular Career and Technology Education program can opt to join one of four CTE pathways. A BHS CTE pathway is a focused, sequence of courses that provides relevant knowledge and technical skills to prepare for domain-specific study at the college level or employment. Each pathway incorporates elements of applied and experiential learning, as well as information about relevant career paths and emerging industry trends.

I. BUSINESS, FINANCE AND INFORMATION TECHNOLOGY PATHWAY

This pathway offers a range of courses that allows students to explore the business world in a semester length experience or to delve more deeply into a particular skill or content area by electing sequential courses. Whichever is the student's preference, the skills taught will be useful in employment or in a future academic setting. Credit for work experience and internships may be earned through several courses found in the department course offerings.

In addition, BHS is offering an evolving sequence of computing classes that build student capacity in high-demand skills such as computing and computational thinking. Students will learn embedded mathematical concepts as well as develop skills to create technical solutions to authentic problems. We continue to refine and adapt our computer science pathway to address the growing interests of students and the evolving labor market in the technology industry.

II. MEDICAL CAREERS/HUMAN DEVELOPMENT PATHWAY

This pathway provides students with the knowledge, skills, and experiences needed to understand and appreciate the opportunities and careers in the human services and medical fields.

III. RESTAURANT AND CULINARY CAREERS/FOOD PREPARATION PATHWAY

Restaurant and Culinary Career courses offer students the opportunity to explore and develop careers in the nation's largest industry. Practical experiences in the student-operated restaurant such as salad cook, broiler cook, fry cook, sauté cook, baker, server, and maitre d'hotel help give students an overview of the restaurant industry as well as experience in culinary entry level skills.



All course offerings in Food Preparation are designed to help students identify and develop occupational skills as well as fundamental competencies that will be useful in personal and family living. These courses are electives and are open to all students.

IV. ENGINEERING TECHNOLOGY/ INTEGRATED CONSTRUCTION PATHWAY

The Integrated Construction Education program offers a technological trade options that are designed to meet the interests and abilities of all students. Students are encouraged to enroll in classes for a variety of educational and career-oriented purposes including:

- Gaining a better understanding of how the mechanical things we use every day work.
- Expanding your college bound high school schedule to include practical applications in the areas of science, engineering, and mathematics.
- Learning entry level employment competencies.
- Learning technical life skills.

CTE Program Pathways

	Restaurant & Culinary Careers/Food Preparation	
	Culinary	Food Preparation
Courses	Rest & Culinary Career Exploration Rest & Culinary Career I Rest & Culinary Career II Rest & Culinary Career Science & Theory	Intro to Food Prep/Culinary Cooking of Italy & China Vegetarian Cuisine International Baking America Regional Cuisine Foods of Provincial France Advanced Food Prep/Culinary
Student Enterprise	Restaurant 108 School Store	
Certificate possible	Serve Safe Certification	
Articulation Agreement	Pending, Bunker Hill In discussion, Newbury College	

	Medical Careers/Human Development	
	Medical Careers	Early Childhood
Courses	Medical Careers Medical Interpretation & Translation (Span and Portuguese)*	Early Childhood Theory & Observation Early Childhood Curriculum Early Childhood Children's Lit Early Childhood Practicum
Student Enterprise		BEEP Program
Certificate possible		EEC Certificate
Articulation Agreement		Roxbury CC Pending, Pine Manor, Bunker Hill

* These courses are dual CTE/academic department. *Italics= courses not currently offered*

**These courses are dual CTE/Visual Arts Department.



	Technical Pathways	
	Engineering Technology	Integrated Construction Technology
Courses	Engineering the Future I Engineering the Future II Engineering by Design Engineering Innovation & Design – <i>Design : Create : Innovate</i>	Intro to CAD Arch Design & Drafting with CAD Creative Woodworking I Creative Woodworking II Furniture Design & Construction
Student Enterprise		
Certificate possible		
Articulation Agreement		

	Business, Finance & Information Technology			
	Business	Computer Science	Digital Media and TV Production**	Journalism*
Courses	Intro to Bus Mgmt World of Money Psychology of Marketing	Exploring Computer Science Website Design AP CS A (Pending) AP CS Principles Robotics I Robotics II SNAP Python	Digital Design Studio I Digital Design Studio II Digital Video Production I Digital Video Production II Documentary Filmmaking TV Production 101 TV Production 102	Journalism I Journalism II
Student Enterprise	● School Store ● Copy Center		Production House	School Newspaper
Certificate possible	Financial Certification (Finance Literary National Stand. (World of Money Class))			
Articulation Agreement	In Discussion, Pine Manor College, Bunker Hill	In Discussion, Bunker Hill		

* These courses are dual CTE/academic department. *Italics= courses not currently offered*

**These courses are dual CTE/Visual Arts Department.



BUSINESS, FINANCE AND INFORMATION TECHNOLOGY PATHWAY COURSES

CE1100 Introduction to Business Management

This course is a comprehensive introduction to the principles of business, including the study of management, introduction to economics, finance, strategy, and business law. Class discussions and activities will cover how to start a business, what makes one business succeed when another fails, and how to understand the core parts of any business model. Students will develop a business plan, test the viability of product ideas, consider case studies of existing business challenges, and learn to create financial statements. The course will include units covering research, marketing, customer service, finance and the role of technology. Students will develop a marketing survey to determine market potential, analyze the results, establish a budget, and research pricing strategies. Students will also have the opportunity to engage in entrepreneurial thinking and action to test the viability of their own business ideas.

Grade: 9-12

Credit: .5

CE1200 The World of Money: Practical Studies in Finance And Investment

This course in Finance and Investment integrates the basic principles of investing and financial literacy, money management and technology. Students will learn the practical aspects of money management in their own lives, e.g., credit, interest rates, savings and checking accounts. In addition, the curriculum will cover an introduction to the stock market, types of investments, the relationship between risk and return, diversification, and the global aspects of economic interdependence in the markets. Student learning about investing will be applied and tested in the class's semester-long investing competition. Weekly simulated participation in the Stock Market, recording of gains and losses, the cause and effect of market fluctuation and classroom discussion based on outside reading will be included in this course.

Grade: 9-12

Credit: .5

CE1300 Business, Finance and Information Technology: The Practicum

This full year class is designed to introduce students to the exciting, ever-changing world of business. Topics covered include economics, entrepreneurship, ownership forms of business, legal issues of in business, management of human resource, production and distribution of goods and services, financial information and accounting. A simulation of developing plans for opening a business is an integral component of the class. This demonstration project is presented to the class by each student and is a major component of the learning experience.

Grade: 10-12

Credit: 1

CE 1400 Psychology of Marketing

This course is a comprehensive introduction to the principles of marketing, including communications, research, technology, and business to business applications. Students will learn the various components of marketing strategy from planning to performance evaluation. The semester-long course will examine the role of the marketing process in successful business operations. The course will include a team-structured field experience in which students will continue to develop their understanding of presented classroom material.

Grade: 9-12

Credit: .5

ID2000 EPIC for Seniors: Experiential, Project-based, Innovative Capstone

Are you ready to take charge of your learning? Are you interested in pursuing your passion, rather than following the traditional path for senior year? In this full year course, you will have the opportunity to independently pursue a topic that you are passionate about in a supported environment. Through reading and research, engagement with experts in the field, experimentation, revision and collaboration, you will develop a project of your own design and immerse yourself in the process of creation. You could choreograph a hip hop ballet, research fractals in nature, launch a business that recycles cell phones for use by developing countries, or build a kayak using traditional, environmentally friendly materials. Your topic will reflect your unique interests, quirks and passions. You will work both within the classroom and beyond it to rigorously answer questions that you yourself develop, and you will present your project--in writing and in presentation form--at the end of the course.

This course will serve as an alternative to the second semester of senior English and the English Senior Paper.

(This yearlong class meets 4x/week (1 block) in the fall semester. In the spring semester, you drop your Senior English class and are released from EPIC three days a week to work on your independent project.)

Grade: 12

Non-Leveled

Credit: 1.5 = (.5 English)/ (1 CTE)



EN4900/CE1500 English for Entrepreneurs

How might students use the reading, writing, speaking and critical thinking skills--the ones that students have been honing for the past 11 years through the study of literature--to work as entrepreneurs and bring about change in the world around them? This full-year course is designed for students who wish to further develop these essential skills and then use them to tackle challenges in their lives, in their school, and in their community. Through the creative problem-solving process of "Design Thinking," students will employ English skills in a whole new way, one that places heavy emphasis on process and revision. Students will spend time analyzing and creating public texts; studying and using the rhetorical techniques that are embedded in interviews, persuasive writing, video, and speeches; deploying a variety of creative brainstorming techniques to tackle problems; and learning to collaborate with each other and community members to get things done. This course will involve multiple projects that will require students to demonstrate their skills of analysis and action. Students will also be reading and writing about challenging texts from the worlds of entrepreneurship, business, social action, psychology, statistics, creativity studies, journalism, and philosophy, including recent texts by Pink, Michalko, de Bono, Gilligan, Bornstein and Davis, Carey, Heath, and others. Each quarter, students should expect to read 300-400 pages and write 2 multi-draft essays. In addition, students will be drafting (and re-drafting) professional action plans, vision statements, project evaluations, "White Papers," argument essays, research analyses and reviews, and case studies. This course is designed to prepare students for the rigors of college-level thinking in both the humanities and the social sciences and to help them make connections between their academic work and the world around them.

Grade: 12

Credit: 1 (English or CTE)

CE9100 BHS School Store & Cafe Laboratory

This laboratory, one of the student based enterprises at Brookline High School, focuses on the operation of a small entrepreneurial business and how it develops and operates. Students are involved in all aspects of operating a small business including: management, merchandising, customer service, bookkeeping, product design, inventory control, product ordering, cash management, marketing and maintenance of the store fixtures and equipment. This cooperative work experience may be taken by students who have completed or who are taking concurrently Introduction to Business Management, World of Money, or Business, Finance and Information Technology. Students who have had practical experience in any aspect of the marketing and merchandising field may sign up for this course with the approval of the instructor. Credits are pro-rated based upon the number of periods the student is enrolled.

Grade: 9-12

Prerequisite: Permission of Instructor and Curriculum Coordinator

Credit: .5

CE4100/MA1500 Exploring Computer Science Engineering

The Exploring Computer Science Engineering course is a project based course taught in a collaborative learning environment. Assignments and instruction are contextualized to be socially relevant and meaningful for diverse students. Students explore, experiment, research, problem solve, create algorithms and create projects to recommend and install hardware and software, create websites using html, css and javascript, write computer programs coding in programming languages such as scratch, app inventor, and small basic, and snap which allow students to program phones, tablets, robots, desktop and laptop computers. Topics include: Human Computer Interaction, Problem Solving, Web Design, Programming, Computing and Data Analysis, and Robotics.

Grade: 9-12

Credit: .5

CE4101/MA1501 Computer Programming: Snap!

This course explores a variety of computational thinking and programming concepts. It introduces the students to SNAP!, a block-based programming language similar to those used in computer animation. Students' experiences in this course will provide them the coding background knowledge they need to move on to pure language based coding. This is a project-based course where students complete a comprehensive project at the end of every unit. Students spend approximately three out of every four class periods building projects and practicing the coding skills they have learned. All necessary technology will be made available to students.

Grades: 9 - 12

Credit: .5



CE4102/MA1502 or Computer Programming: Python

This course explores a variety of computational thinking and programming concepts. It introduces the students to Python, a text-based programming language used in a variety of arenas including the development of apps for smart devices. This is a project-based course where students complete a comprehensive project at the end of every unit. Students spend approximately three out of every four class periods building projects and practicing the coding skills they have learned. All necessary technology will be made available to students.

Prerequisite Introduction to Computer Programming I, Exploring Computer Science Education, or prior experience with Snap! or Scratch

Grades: 10 - 12

Credit: .5

CE4700 Advanced Placement Computer Science/Computer Science Principles

AP Computer Science Principles course is a full year, rigorous, entry level college course that introduces high school students to the foundations of modern computing using a multidisciplinary approach for students to learn and apply underlying principles of computation in performance tasks. The course will introduce students to the creative aspects of programming using javascript, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and impacts of computing. Students will have regular homework in this course.

Prerequisites for the course are: Exploring Computer Science Engineering and a programming language such as Visual Basic and Java programming. This course is for sophomores, juniors and seniors who meet the requirements and approval of the APCSP teacher.

Grade: 11-12

Credit: 1

CE4750 AP Computer Science A

Proposed for 2020/2021

AP Computer Science A is a full-year course that includes a number of individual programming projects, as well one to two team projects. Activities and assignments are based on numerous problem solving exercises, labs, and case studies, which require students to design and implement Java classes. [CR1] The course requires 40-50 hours of hands-on work in a computer lab.[CR6]

In this course, students will: understand and apply the main principles of object-oriented software design and programming: classes and objects, constructors, methods, instance and static variables, inheritance, class hierarchies, and polymorphism; learn to code fluently in Java in a well-structured fashion and in good style; learn to pay attention to code clarity and documentation; learn similarities and differences between Java and Python syntax; learn to select appropriate algorithms and data structures to solve a given problem; discuss ethical and social issues related to the use of computers, and prepare for the AP CS A exam, meeting all of the curricular requirements defined by the College Board.

Level: AP

Prerequisite: Python or AP CS Principles

Credit: 1.0

CE4900 Web Site Design

This course offers an introduction to the exciting field of website design. By first learning HTML coding basics, students are prepared to master common web design tools such as the Adobe Suite, DreamWeaver, Fireworks, Photoshop, etc. Students also learn the basics of JavaScript which permits the addition of many interesting functions to a web page. By learning standard principles of documentation, students ensure that their work can be passed on with confidence to others who might help maintain the web sites they have begun. This enables students in this course to take on projects of an internship nature. The prerequisites listed below may be waived with the permission of instructor and curriculum coordinator if student passes operating system, file management and word processing basics pretest.

Grade: 9-12 Prerequisite: CE4700 or CE4100 or permission of Instructor and Curriculum Coordinator Credit: .5

CE4910 Web Site Management

This second semester course will be a sequel to WEB SITE DESIGN. Students will learn ongoing management of web sites with emphasis on correct forms of documentation for site longevity and security. Students will continue learning about JavaScript applications. Additional instruction in Adobe Suite will include Flash animation for the web, and ColdFusion database driven web site applications. On-site business and/or school related internships encouraged.

Grade: 10-12

Prerequisite: Web Site Design

Credit: .5



CE4500 Autonomous Robotics I

Autonomous Robotics I is a project-based course where students develop computing and mechanical design skills and apply them to design and build autonomous robots that use sensors and actuators to perform simple tasks in response to their environment.

Students also explore ethical and aesthetic questions in robotics and computing as they apply to designing, building, and deploying their robots to solve real-world problems.

Skills developed in Autonomous Robotics I include: block- and text-based computing for embedded and robotics systems, mechanical design, autonomous goal planning & execution, sensor data acquisition & analysis, actuator control, error detection & recovery, etc.. Projects in Autonomous Robotics I include: maze solving, odometry, object identification & categorization, prosthetic & assistive technologies, wearables, kinetic sculpture & lighting, etc..

Students interested in pursuing robotics throughout high school can elect Autonomous Robotics more than once, with skills developed in one semester applied to projects in subsequent semesters.

Level: N

Grade: 9-12

Prerequisite: Exploring Computer Science or Snap or Permission of Teacher and Coordinator

Credit: .5

CE4510 Autonomous Robotics II

Autonomous Robotics II is a project-based course where students build upon computing and mechanical design skills developed in *Autonomous Robotics I* and apply them to design and build autonomous robots that use sensors and actuators to perform tasks in response to their environment.

Students also explore ethical and aesthetic questions in robotics and computing as they apply to designing, building, and deploying their robots to solve real-world problems.

In *Autonomous Robotics II* students apply skills developed in previous *Autonomous Robotics* semesters to projects in robotics, including autonomous driving (wayfinding, maze solving, mapping, tailing), prosthetic devices, wearables, legged robots, aerial robots, and Botball®. Students interested in the Botball autonomous robotics challenge will prepare robots for the New England regional competition in May.

Students interested in pursuing robotics throughout high school can elect *Autonomous Robotics* more than once, with skills developed in one semester applied to projects in subsequent semesters.

Level: N

Grade: 9-12

Prerequisite: Autonomous Robotics I

Credit: .5

MEDICAL CAREERS/HUMAN DEVELOPMENT COURSES

CE5200 Early Childhood Theory and Observation

This course was developed in collaboration with the Child Study Center to focus on the process of learning for preschoolers. The course will relate child development to appropriate classroom practice. Students will do weekly guided observations in the Child Study Center with an emphasis on the design of the physical environment; the role of play areas in the preschool curriculum; understanding behavior; and the roles of the early childhood team (teachers, social worker, physical, occupational, speech and language therapists). Goals and strategies to promote growth in cognitive, physical, social and emotional development will be explored.

Grade: 10-12

Credit: .5

CE5600 Early Childhood Curriculum

The course enables students to acquire knowledge and skills necessary for planning inclusive and developmentally appropriate curriculum for young children. The class meetings will include lectures, films, and hands-on workshops focusing on a wide range of early literacy, social studies, art. Students will have weekly observations and participation in a pre-school setting. Theories about Child Development will be applied, children's learning styles, special needs and multiple intelligences will be addressed. *Students who successfully complete this course will be moving towards an EEC, (Early Education and Care) certificate.*

Grade 9-12

Prerequisite: Early Childhood Theory & Observation

Credit: .5



CE 5700 Early Childhood Children's Literature

This course is an introduction to children's literature. It is designed to promote emerging literacy skills, with interesting content and illustrations that are entertaining for young children, ages birth - eight. Literature will be examined in terms of developmentally appropriate practice, and will focus on the study of genres of children's picture books. Students in the class will learn and practice how to effectively read books to children. Students will review the plot, setting, theme, characters, style, point of view, illustrations, age, range and design of many children's books. Author- illustrators and their backgrounds will be explored. The course will address criteria for selecting and interpreting quality books for children with different developmental needs and multicultural backgrounds. The course will examine the many responses to literature. Students in this course will work with BEEP to help children develop an interest in and excitement about books. *Students who successfully complete this course will be moving towards an Early Education and Care certificate.*

Grade 9-12

Credit: .5

CE5402 Psychological Studies in Human Development

Focusing on the psychological aspects of human development, this course provides students with an overview of normal and abnormal human psychological growth. Students will study the basic contributions of psychologists such as Freud, Erikson, Maslow and Piaget to the important concepts of motivation, cognitive development, perception, and personality. As part of their experience in this course students will be expected to interview professionals whose career choices involve the application of psychology in their daily work. Among these professionals are educators, social workers, counselors, psychologists, and psychiatrists. They will also examine the integration of psychology and the field career development theory which explores the connections between interests and aptitudes and the implications of these qualities on career choice.

Grade: 10-12

Credit: 1

CE5300 Human Development Careers: The Practicum

Designed as a course for sophomores, juniors, and seniors, The Practicum requires students to integrate and apply what they have learned in previous introductory human development course work. Internships will be arranged with human service agencies including early childhood centers, elementary schools, senior centers and nursing homes. Student interns will be required to meet regularly with the teacher, to keep a journal, to report what they are learning and to discuss real life situations encountered in the workplace.

Grade: 10-12

Credit: .5

CE5500 Medical Careers

Medical Careers is a multifaceted course taught in collaboration with HMS MEDscience at both BHS and Harvard Medical School. Using healthcare as a learning platform, we immerse students in realistic, dynamic team-based problem solving simulated medical emergencies, motivating students to think critically, problem solve and work in teams to inspire a desire for further education & training in STEM & health career professions. This hands-on experience introduces students to the concepts of human anatomy and physiology and exposes students to the myriad health care careers available in our community. The course curriculum is divided into 7 of the human body system, each of which will be taught in 2-week blocks. The hands-on experiential learning experience occurs at the Harvard Medical School and other Longwood Medical area hospitals using the case study method to reinforce the learning of anatomy and physiology. Weekly visits from professional guest speakers from the varied health care disciplines will provide students with insight into the numerous medical professions. Students will learn to: Critically think, Problem-solve, Work in Teams, Enhance Communication skills and Improve health literacy like health care professionals in the real world.

Grade: 10-12

Credit: .5



CE5550 Course: Medical Interpretation and Translation Spanish

CE5551 Course: Medical Interpretation and Translation Portuguese



The primary goal of the year-long course entitled Medical Interpretation and Translation (MIT) Program is to qualify students as interpreters within the healthcare field. This course is designed for students with advanced to superior proficiency in both English and another language. (The first languages to be introduced to the program will be Spanish, and possibly Portuguese depending on enrollment. In future years we are considering adding other languages that have a high representation at the high school such as Haitian Creole.) The curriculum and instructional strategies will be adapted from materials designed by Cross Cultural Communications, a nationally recognized organization dedicated to training interpreters. Students will develop an understanding of the role of the interpreter as a language bridge between patient and provider. They will become aware of the cultural, linguistic and personal aspects of accurate interpretation. Units of study include the terminology of body systems and illnesses, ethics, local and national laws governing interpreting practice, the culture of medicine, the ethnic cultures of the populations being served, and the culture of being a professional interpreter. These topics will be studied through readings, videos, class discussions and simulated interpreting practice. This program includes listening comprehension and intensive speaking practice in the classroom and in the language laboratory through the use of varied media. Students are expected to respond spontaneously to a wide range of conversational situations. The culminating project will be an internship in a local hospital.. A student can present this certificate to potential employers as documentation of their experience.

Prerequisite: seniors (17 years of age at time of Spring Semester internship), teacher recommendation based on language proficiency

Grade: 12

Credit: 1 in WL or CTE

CE5900 Peer Leadership and Public Health

Drawing from the fields of public health, social work, and psychology, this course explores many of the social, emotional and health issues that impact today's youth, with a focus on gender-based violence prevention, conflict resolution, racial awareness, and substance abuse (alcohol and other drugs). In the fall semester students will explore their own personal identity and the qualities of leadership, and build a positive culture of teamwork in the class. Using the Mentors in Violence Prevention curriculum, students will explore gender-based violence and learn activities to raise awareness about the issue. During the second semester students will research current issues in the media and prepare presentations to educate their peers. Students will also design and implementing public health campaigns to create positive change in the school culture at BHS.

Requirement- Application, found on the Peer Leadership website or in room 149

Full year: Z Block

Credit: 1 credit

CE5901- Peer Leadership and Public Health II

This course is for students who have completed the first year of peer leadership. Students study in more depth current social, emotional and health issues impacting youth, with a focus on substance abuse, mental health, gender-based violence and "teens and screens". Serving as positive role models promoting healthy behaviors, Peer Leaders design and conduct workshops for seventh and eighth graders in health classes and at evening meetings. Workshop topics currently include: 1) Developing healthy relationships and prevent teen dating violence; 2) The Real Scoop about Alcohol and Other Drugs; and 3) Teens and Technology. Peer Leaders serve as key participants in the annual Wellness Summit working with community leaders to craft creative strategies to address pressing student health issues. Throughout the year Peer Leaders are invited to speak at parent meetings and community forums on teen stress, cyber-life, and other health related topics. Through this course students will enhance their leadership skills and gain valuable experience to support their growth as future agents of social change.

Requirement- VP2000, or other leadership training program

Full year: Z Block

Credit: 1 credit

RESTAURANT AND CULINARY CAREERS/FOOD PREPARATION PATHWAY COURSES

CE6100 Restaurant and Culinary Careers Exploratory

Restaurant and Culinary Careers Exploratory is an introductory course focusing on many aspects of the restaurant industry including commercial food preparation, professional table service, service industry attitudes and employment expectations. This course is recommended for the student who is considering or would like to investigate a career in the Food Service Industry. Restaurant and Culinary Careers Exploratory is offered all periods. Students who have less than four periods available for this course may earn partial credit. Credit is pro-rated based upon the number of periods the student is enrolled. This course is available every block including a 7:00 a.m.-AM Block

Grade: 9-12

Periods per week: 1-4

Credit: 1

CE6200 Restaurant and Culinary Careers I

Restaurant and Culinary Careers I places an emphasis on commercial food preparation and service. Students work in the student-operated restaurant learning occupational and service industry functions. This course is designed for the student who is considering a career in the Food Service Industry. This course should be taken for two periods consecutively and/or double block combinations. Students who have less than eight periods available for this course may earn partial credit. Credit is pro-rated based upon the number of periods the student is enrolled. This course is available every block including a 7:00 a.m.-AM Block

Grade: 9-12

Periods per week: 8

Credit: 2

CE6300 Restaurant and Culinary Careers Major

This course is designed for students with serious vocational interest in the Food Service Industry or in Culinary Arts education at the post-secondary level. Emphasis will be placed on developing higher level occupational skills which may be used in the Food Service Industry. This course should be taken for three periods consecutively utilizing double block combinations whenever possible. Students who have less than twelve periods available for this course may earn partial credit. Credits are pro-rated based upon the number of periods the student is enrolled. This course is available every block including a 7:00 a.m.-AM Block

Grade: 10-12

Periods per week: 12

Credit: 3

CE6400 Restaurant and Culinary Science and Theory

Restaurant and Culinary Careers Science and Theory places an emphasis on commercial food preparation and service. This course is designed to help the students implement the competencies to succeed in the college and the professional environment. This course is designed for the student who is considering a career in the Food Service and Hospitality Industry. Students will meet two periods consecutively. This course is available AM and Z Block Only.

Prerequisite: 1 semester in a Restaurant and Culinary Careers program, 1 semester in a Culinary Arts program or 12th grade students planning to attend a culinary art college.

Grade: 10-12

Periods per week: 8

Credits: 2

FP1000 Introduction to Food Preparation/Culinary Arts

This course in food preparation/culinary arts is designed to assist students in identifying and developing fundamental competencies that will be useful in one's personal and family life. Learning experiences will include the study of nutrition, healthful eating (light cuisine) and the preparation of specialty dishes from Italy, China, Mexico and Southeast Asia. Occupational skills used in the Food Service Industry such as restaurant and culinary skills and commercial food preparation are important components of this program. This is a semester course.

Grade: 9-12

Credit: .5



FP 8000 Advanced Food Preparation/Culinary Arts

This advanced course is designed to reinforce the techniques of baking, sautéing, deep-frying/shallow-frying, stir-frying, simmering, braising/stewing and steaming. Lecture, demonstration, and production revolve around creating flavorful and nutritionally balanced food items such as appetizers, entrees, starches, vegetables and grains from regions of North, Central & South America as well as Europe and Asia. In addition, this course will focus on the production of stocks and sauces and the proper use of cooking oils, flavorings and seasonings used in a professional kitchen. Lastly, this course will re-enforce the proper use of kitchen knives, tools, and cooking equipment while following proper safety and sanitation procedures that meet current industry standards.

Prerequisite: Completion of at least two of the following courses: American Regional Cuisine, Foods of France, Foods of Italy & China, International Baking, Vegetarian Cooking

Grades 11-12

Credit: .5

FP2000 The Cooking of Italy and China

This course is a study of the cooking and the food customs of Italy and China. Laboratory experiences will include the preparation of outstanding dishes of each country in addition to the use of native equipment, utensils and ingredients. Materials Fee: \$50 per student

Grade: 9-12

Credit: .5

FP7000 Vegetarian Cuisine

This course covers a wide variety of vegetarian dishes reflecting many different cooking styles, and containing a wide variety of ingredients. There are recipes for light dishes and for hearty ones, some spicy, others subtle. The common trait linking all the recipes in this course is their meatlessness. Yet, this course is by no means exclusive for vegetarians. Meat-eaters can use the dishes presented in this course too, for occasional meatless meals and/or as accompaniments to meat dishes. The objective of this course is to introduce vegetarian dishes and to provide more options for enjoyable eating. Materials Fee: \$50 per student

Grade: 9-12

Credit: .5

FP5000 International Baking

This course focuses on the art of fine baking, featuring world famous specialties such as breads, Baklava, fruit tarts, cheese cakes, Danish pastries, torte and strudels, etc. Materials Fee: \$50 per student

Grade: 9-12

Credit: .5

FP3000 American Regional Cuisine

This course ventures into the many wonders of American Cookery from classical "Nouvelle Cuisine" of California and New York City, the hearty, robust flavors of Middle America, the "Rustic Creole" traditions of Louisiana to the home-style goodness of our own New England. This course will include appetizers, soups, salads, entrees, and desserts of each region. Materials Fee: \$50 per student

Grade: 9-12

Credit: .5

FP4000 Foods of Provincial France

This course is designed to introduce the student to the foods of Provincial France. This challenging course will incorporate various customs, cooking techniques, equipment and ingredients that are associated with the main regions of France. Students will be able to prepare various appetizers, soups, salads, entrees and desserts of the French Provinces. Materials Fee: \$50 per student

Grade: 9-12

Credit: .5



ENGINEERING TECHNOLOGY PATHWAYS COURSES

TE4501 Engineering The Future I

Engineering the Future I is a semester long, **hands-on project based courses** that will introduce students to the skills and knowledge necessary to understand what engineering is and what engineers do. Projects are divided up into individual tasks and will include those that require group planning, research, design, prototype building, testing, evaluation and redesign. Students who take this course at BHS will be exposed to engineering and technology which will help them begin to make informed decisions regarding careers in various fields of engineering.

Grade: 9-11

Credit: .5

TE4502 Engineering the Future II

Engineering the Future II is a semester long, **hands-on project based course** that continues building on the skills and knowledge taught in Engineering the Future I. Projects are divided up into individual tasks and will include those that require group planning, research, design, prototype building, testing, evaluation and redesign. Students who take this course at BHS will be exposed to engineering and technology which will help them begin to make informed decisions regarding careers in various fields of engineering.

Grade: 9-11

Prerequisite: Engineering the Future I

Credit: .5

SC5500/TE5500 Engineering By Design

EBD is a yearlong, project-based course that will expose students to the fundamentals of engineering design and iterative problem solving. Students will develop skills in research, ideation, modeling, project management, and collaboration. Teams of students will collaborate on design challenges. They will learn new skills & increase background knowledge in order to design, prototype, and craft an optimized solution. This course enables students to apply their creative talents as well as their prior science knowledge. Engineering By Design can be taken as part of Engineering Technology Pathway and would be a precursor to Engineering Innovation & Design. Credit can be earned from either the Career and Tech Ed Department or the Science Department.

Grade: 10-12

Periods per week: 4

Prerequisites: Physics I

Credit: 1



SC5600/TE5600 Engineering Innovation & Design – *Design : Create : Innovate*

EID will provide a student-centered, project-based curriculum that challenges students to interpret real-world engineering and design problems using the engineering design lab—a collaborative setting where students will share their various skills and angles of interest to help each other advance and refine ideas. With an aesthetic lens, students will gain a greater understanding of three-dimensional design through the use of the principles of composition and the formal elements of art. In the engineering design lab, students will create physical products using hand tools, power tools, a sewing machine, a Vacuform machine, 3D Printers, a Laser Cutter, a CNC Router, etc. Their final products will integrate both functionality and aesthetics. This course will empower students by allowing them to develop skills in ideation, critique, design process, fabrication, innovation, presentation, iteration, and reflection. Students will focus on prototyping and the creation of real products (2D & 3D), moving beyond theoretical ideas. Diverse skill backgrounds complement the collaborative nature of this course. Engineering Innovation & Design can serve as the capstone course in the Engineering Technology Pathway. Credit can be earned from either the Career and Tech Ed Department or the Science Department.

Periods per week: 6

Grade: 12

Credit: 1

Prerequisites: One of the following sequences:

Engineering By Design; Sculpture I & Sculpture II; Woodworking I & Woodworking II; Sculpture I plus two additional Visual Art courses; Drawing I plus two additional Visual Art courses; AP Physics & Sculpture I /Drawing I; AP Physics & Engineering the Future; Portfolio Reviews (students working outside of school present work and written application to instructor)

Or Three of the following individual courses: Visual Art ; AP Science; World of Money/Business; Computer Programming; Architecture; Engineering The Future



Integrated Construction Technology

The Integrated Construction Education program offers a wide range of technology options that are designed to meet the interests and abilities of all students. Students are encouraged to enroll in classes for a variety of educational and career-oriented purposes including:

- Gaining a better understanding of the mechanical things we use every day.
- Expanding your college bound high school schedule to include practical applications in the areas of science, engineering, and mathematics.
- Learning entry level employment competencies.
- Learning technical life skills.
- Through a series of classroom lectures and hands-on shop experiences, students learn the practical skills of the field as well as the underlying technical theory. Emphasis is placed on maintaining a balance between skills development, craftsmanship, and knowledge of science, mathematics, systems, tools, theories and concepts. All students are expected to learn and conform to business/workplace standards and practices.

TE3200 Introduction to Technical Drawing and CAD (Computer Aided Design)

An introduction to both AutoCAD 2018 and Sketchup, two versatile applications used in the creation of architectural drawings and virtual models in the engineering and architectural design fields. The course will begin with an introduction to fundamental two dimensional computer aided drafting techniques and principles. Using drawing exercises, students will become familiar with the drawing and editing tools of the software. This will be followed by an overview of orthographic projection and multi-view drawing theory. Students will be introduced to architectural drafting techniques and conventional plan reading strategies as they create floor plans, elevations and sections of a building. In addition, three dimensional modeling techniques of Sketchup will be explored and students will ultimately create a virtual 3D model of the residence for their final project.

Grade: 9-12

Credit: .5

TE3300 Architectural Design and Drafting with CAD (Computer Aided Design)

Students apply the CAD drafting skills acquired in the CAD/Technical Drawing class as they are introduced to the Architectural Design process. Through the design of a small residence they will become acquainted with the concept of Sustainable Design, which stresses the responsible and efficient use of natural resources and materials. Students will be expected to complete a research project on either an architect or significant architectural style, that will acquaint them with the creative ways architects from around the world, in different time periods, have solved the challenges of residential design. Their research findings will inform their design choices in the house design project. Floor Plans, Elevations and Sections drafted in AutoCad and 3d models and renderings using Sketchup will be developed resulting in Laser cut, 3D scale models of their designs.

Grade: 10-12

Prerequisite: Technical Drawing I or junior/senior status

Credit: .5

TE1001 Creative Woodworking 1

Creative Woodworking is taught in collaboration with the Art Department. Historical, traditional and contemporary examples of fine woodworking will be presented, studied and discussed. Emphasis is placed on project design and construction. A variety of design, technical, and craftsmanship skills are taught and utilized. Students will also learn the proper techniques of hand and power tool utilization. Students will design and construct their own projects (furniture, toys, containers, household items). Students will document their work in progress in order to augment their art/tech ed. portfolio.

Grade 9-12

Credit: .5

TE1002 Creative Woodworking 2

Creative Woodworking 2 is a continuation of the skills learned in Creative Woodworking 1. Continued emphasis on the safe and effective use of hand and power tools used in the fabrication of both sculptural and functional wooden objects is presented to students through a series of increasingly complex projects of their own choosing and design. An increased level of craftsmanship and attention to detail is expected through the use of a more refined design and engineering process. The use of multi-view and isometric drawings as illustration tools is emphasized as part of that process. Students are exposed to a wide variety of techniques and processes such as laminating, woodturning, carving, bending, wood joinery and finishing. Among the project possibilities are cabinets, furniture, toys, containers, household items, and sculptural objects.

Grade: 9-12

Prerequisite: Creative Woodworking I

Credit: .5

TE1003 Furniture Design and Construction

Furniture Design and Construction is an advanced woodworking class that allows for the investigation of furniture making through the study of historical, traditional and contemporary trends in woodworking and furniture design. Students with a solid foundation in the woodworking processes introduced in Creative Woodworking 1 and 2 will be expected to design and build a piece of furniture that is inspired by a particular technique, style, period or piece of furniture that they have researched and studied. A serious design process, including isometric, orthographic, and perspective drawings as well as scale models will be adhered to before any fabrication begins.

Grade 9-12

Prerequisite: Creative Woodworking I and 2

Credit: .5

TE1500 Construction Engineering/Micro House Design and Construction

This full year course is an in-depth study of construction technology as well as related occupations both business and trade. Students will be introduced to the design principles and construction methods for building a portable micro house residence of approximately 250 square feet. The fall semester will focus on an introduction to Computer Aided Design that will be used to create a set of plans for the building. Both AutoCad and Sketchup software will be used to generate construction drawings and virtual models of the house, which will be fabricated on a trailer. Principles of Sustainable Design and Green Building techniques will be researched and implemented in order to achieve a structure with a minimal carbon footprint. Students are introduced to the following professions and trades: laborer, electrician, plumber, carpenter, plasterer, mason, tile and stone installer, insulation installer, H. V. A. C., paint and finisher, floor finisher, and structural engineer. The Spring semester will be devoted to the actual construction of the residence on a trailer located adjacent to the wood shop in the Unified Arts building parking lot, then marketed and sold to recover building materials cost.

The course will stress the cooperation and successful work competencies and habits necessary to plan, implement and complete a job of this scope. Credits are pro-rated based upon the number of periods the student is enrolled.

Periods per week: 4-8

Grade: 11-12

Credit: 1-2

GRAPHIC ARTS/PRINTING/PUBLISHING PATHWAY COURSES

TE4200/ TE4201/ TE4202 Graphic Arts/Copy Center Laboratory

This cooperative work experience may be taken by students who have completed or who are taking concurrently Graphic Arts or Graphic Design II. Projects will include design, layout, and production of printing/graphics projects from the Brookline Public Schools and the community. All aspects of the industry including business and finance will be represented in this student-operated enterprise. Students who have had practical experience in any aspect of the graphic arts/publishing field, marketing, and merchandising may sign-up for this course with the approval of the instructor. Credits are pro-rated based upon the number of periods the student is enrolled.

Grade: 9-12

Corequisite: Graphic Art Printing /Publishing and/or Graphic Design/Desktop

Publishing or approval of Instructor and Curriculum Coordinator

Credit: .5

ID0100 Journalism I

In this full-year interdisciplinary elective, students in grades 10 through 12 learn the essential skills of print journalism and the steps involved in creating a newspaper. Students receive instruction in reporting, interviewing, writing, editing, and layout, as well as in the history and ethics of journalism. Students enrolled in this course plan, write, and produce the school newspaper, *The Sagamore*. The course seeks a range of students to contribute to the newspaper in a variety of areas: reporting and writing, editing, graphic design, photography, and business. The course is taught by an English teacher.

Grade: 10-12

Prerequisite: Application through instructor

Credit: 1 CTE credit

ID0130 Journalism II

In this full-year interdisciplinary elective, students in grades 10-12 are trained in executive positions such as Editor-in-Chief, Business Manager, and Layout Manager. Journalism II students are responsible for running the production of the school newspaper, *The Sagamore*, and overseeing staff and contributing writers. Students receive advanced instruction in reporting, interviewing, writing, editing, and layout, as well as in the history and ethics of journalism. Journalism II students will help teach the basics to new reporters and will train Journalism I students to be management staff. The final class list will include returning editors and qualified applicants. The course is taught by an English teacher.

Grade: 10-12

Prerequisite: Journalism I, and/or application through instructor

Credit: 1 CTE credit

VA9101/CE9101 Digital Design Studio I

Digital Arts Design Studio students create original compositions within computer programs to striking images. The graphic designs convey a message, evoke a feeling, persuade, or ask the viewer to look beyond what is visible. Students integrate text and imagery into seamless, finished artwork creating book illustrations, company logos, advertising campaigns, visual illusions, and typographic imagery. Utilizing the tools of Adobe Illustrator and Photoshop, the students are challenged to be original, inventive, while meeting the constraints of client oriented work; the challenges mirror the real world expectations for designers/illustrators. Ideas, execution, satisfaction of client requests, competence with tools, critiques, self-reflections, and inventiveness are emphasized.

Grade: 9-12

Credits .5 (CTE or VA)

VA9201/CE9201 Digital Design Studio II

Digital Arts Design Studio II students create original compositions within the computer programs to create graphics that convey a message, evoke a feeling, persuade the viewer, or ask the viewer to look beyond what is visible. Students demonstrate competence and understanding of the dual purposes of the graphic artist through bold, eye catching illustrations, collages, advertisements, visual illusions, and typographic imagery. Students pursue the acquisition of new technical skills, inventiveness and a positive response from the intended audience; the challenges mirror the real world expectations for designers/illustrators. Competent use of software, originality, inventiveness, risk taking and reflection are emphasized.

Grade: 10-12

Prerequisite: Digital Design Studio I

Credit: .5 (CTE or VA)

VA9310/CE9310 Digital Video Production I

Digital Video Production provides students with the skills necessary to produce original videos using state-of-the-art technology. These skills include scriptwriting, storyboarding, basic film techniques and post-production editing. Students will critique and analyze historical and contemporary examples of film and television, including commercials and their own original videos. Students work to create original work that is inventive and within the constraints/demands of clients. Student generated productions are viewed and critiqued by a group of peers to reflect on the response of an audience.

Grade: 9-12

Credit: .5(CTE or VA)

VA9320/CE9320 Digital Video Production II

Students continue to investigation of techniques, story ideas, creating scripts, scenes, music and appeal for an audience while filming, and editing digital videos. Students pursue individual productions as they incorporate new techniques and advance proficiency in creating compelling video. Students will conduct in-depth analyses of selected directors and their films. Class participation in brainstorming, critiques, and final viewing of the videos is used to provide feedback to the videographers.

Grade: 9-12

Prerequisite: Digital Video Production I

Credit: .5 (CTE or VA)

VA9600/CE9600 Documentary Filmmaking

Explore the world and engage in the process of creating compelling and educational documentary films in the new Brookline High School/Brookline Access Television media facility. Students study different types of documentary techniques, subgenres of documentary, and the formal elements of documentary filmmaking. Utilizing the tools available to the filmmaker such as sound, image, special effects and pacing, students create an entertaining film while generating an awareness of world issues for the student and the viewer. Students research and discover meaningful topics for films, create proposals and treatments, find a unique voice, and assemble a film that keeps its viewers engaged. Filmmaking skills are applicable to class projects in other curriculum areas such as history, performing arts, science, and senior papers/projects. Teamwork, competent use of equipment, research methods, good communication skills, and professionalism are emphasized.

Grade: 9-12

Credits .5 (CTE or VA)

VA 9800/CE9800 Television Production 101

Television Production students experience real world television production in BATV studios, engaging in the full range of operations needed to create programs for viewing. Students focus on media production for television working collaboratively and learning the fundamental techniques of operating state - of - the art media production equipment. Emphasis is on teamwork, competent use of equipment, good communication skills, and professionalism. Students completing this course will be eligible to take future courses of Television Production, and Digital Video.

Grade: 9-12

Credits .5 (CTE or VA)

VA9900/CE9900 Television Production 102

Television Production students continue to work in the BATV studios, engaging in the full range of operations needed to create programs for viewing. Students focus on media production for television working collaboratively while learning the fundamental techniques of operating state - of - the art media production equipment. Emphasis is on teamwork, competent use of equipment, good communication skills, and professionalism.

Grade: 9-12

Prerequisite: Television Production 101

Credits .5 (CTE or VA)

VA7450/CE7450 The Brookline Lens: A Photo-Video Production House

In this class, students will learn all aspects of photography and videography including camera composition, editing, and lighting/audio techniques. Additionally, students will work on real projects for real clients in the community. Students will learn business development and management. Brookline Lens is a student-run business that provides clients with photo/video services and students with a authentic, work-based learning experience .

Grade: 10-12

Prerequisites: Photography Foundations, Digital Video 1, or complete an application for approval.



Work Experience Courses

Students who elect one of the courses should understand that the work experience takes place during one's free time or after school; there is no loss of school time. Credits are pro-rated based upon the number of periods the student is enrolled. A maximum of 2 credits can be applied as graduation credits.

CE8100 Pre-Internship Experience

Formerly called Pre-Cooperative Work Experience. This introductory experience is for students who wish to develop job-related competencies that will prepare them for placement in an internship. . This career seminar course experience will allow students to reflect on their individual strengths and personality attributes, as well as their interest in values, and connect them to potential career paths.. Students will complete a personal college and career roadmap, learn how to prepare professional documents (cover letter and resume) and develop effective interview and professional communication skills. The course experience will include industry-specific guest speakers, information interviews, job shadow opportunities, and field-trip experiences that will provide students with career awareness and exploration opportunities. Students are eligible to take the course for .5 credit for a semester-long experience or as .25 credits for guided coursework. Maximum of 2 credits can be applied as graduation credits.

Grade: 9-12

Prerequisite: Signature & Approval of the Career Counselor

Credit: .25-1

CE8200 Cooperative Work Experience

The Cooperative Work Experience offers students the opportunity to earn credit for successful performance on a paid job in the business community. During required conferences with the Career Counselor, students discuss work related issues, job performance, and ongoing career planning. Credits are pro-rated based upon the number of periods the student is enrolled. A maximum of 2 credits can be applied as graduation credits.

Periods per week: 12 hrs/wk on the job

Grade: 10-12

Prerequisite: Signature & Approval of the Career Counselor

Credit: 1

CE8300 Career Education Internship Experience

The Career Education Internship Experience offers students the opportunity to earn credit for successful performance at an unpaid internship. Internships will be arranged with the support of the Career Counselor. Students in the Career Education Internship course will meet with the Career Counselor to review prior career awareness and exploration activities to identify an appropriate internship site. A formal contract will be established between student, on-site supervisor and the Career Counselor which will detail the content, process, and time frame of the internship and learning expectations and responsibilities of the student.

Periods per week: to be arranged

Grade: 10-12

Prerequisite: CE8100 and Signature & Approval of the Career Counselor and CTE Coordinator

Credit: .5 to 1

ENGLISH DEPARTMENT

FRESHMAN PROGRAM

Responding to Literature
Responding to Literature (H)

SOPHOMORE PROGRAM

World Literature
World Literature:(H)
Future World Lit /Future World Lit (H)
Real World Lit/Real World Lit (H)

JUNIOR PROGRAM

American Literature
American Literature (H)
American Studies English/Am Studies English (H)

SENIOR PROGRAM

True Life Stories
Stranger in a Strange Land (H)
British Literature and Beyond (H)
Issues in Contemporary Literature
Craft of Writing
Public Speaking
Fiction and Film
English for Entrepreneurs (EN or CTE credit)
EPIC

OPTION COURSES, 10-12

Journalism I (CTE credit)
Journalism II (H) (CTE credit)

(H) indicates an honors course

All students must take English throughout their four years at Brookline High School, accumulating a total of four full credits (in proper sequence) to graduate. Students should read course descriptions carefully and attend to teacher recommendations to determine which level of difficulty -- standard, honors, or non-leveled-- suits their needs. Honors level courses require more reading than standard level courses, and texts are often more difficult. Teachers in honors level courses also assume more independence on the part of students, whereas teachers in standard level courses often break assignments down in order to give students more structure and support. Sophomore year, students may opt to take a course where the two levels are combined in the same classroom. Senior year, the department offers several non-leveled electives that seek interested students across the academic spectrum. Students at all levels write at least twelve drafted papers a year.

Make-up credit for English courses may be obtained by doubling courses the following year or by completing courses in summer school. Seniors wishing to graduate early must complete two full semesters of Senior **before** leaving school and have the written consent of the English Department Curriculum Coordinator by September 15th of their senior year. Online or correspondence course credit is not granted.

FRESHMAN PROGRAM: The Freshman Program introduces students to the major literary genres and to reading and writing at the high school level. Freshman English offers focused instruction in reading strategies, ample practice in writing and revising, and systematic study of grammar and vocabulary.

SOPHOMORE PROGRAM: Sophomores read traditional and contemporary works from World Literature as they explore identity and culture. Students sharpen their writing and reading skills; they identify and interpret motif, theme, and figurative language in poetry and prose. Sophomore courses include a systematic study of grammar. Future World Lit and Real World Lit offer students more choice at the sophomore level.

JUNIOR PROGRAM: The Junior Program highlights important works in American Literature to explore American culture and point of view. In the spring, students compare two works of literature in the Junior Paper as preparation for their Senior Paper the following year.

SENIOR PROGRAM: A variety of year-long courses gives seniors the opportunity to pursue a particular area of interest in English. All seniors complete a Senior Paper, an English department requirement. The Senior Paper is a multi-step process which requires a minimum of 500 pages of independent reading and culminates in an 8-10 page paper.



FRESHMAN PROGRAM: RESPONDING TO LITERATURE

Central question: How can literature deepen our understanding of human experience and our own lives?

Reading: All freshmen read the following core books: a Shakespeare comedy (*Twelfth Night* or *Much Ado About Nothing*), *A Raisin in the Sun* by Lorraine Hansberry, and either *American Born Chinese* by Gene Luen Yang or *Absolutely True Diary of a Part-Time Indian* by Sherman Alexie. Beyond these core books, individual teachers select from an extensive book list. Literature study emphasizes introduction to the major literary genres (drama, novel, memoir, short story, poetry). Students practice, with explicit guidance, the reading strategies necessary to comprehend a text. Students read closely to discover the kinds of choices authors make, and they practice the shift from concrete observation to interpretation. Students will also have opportunities to choose their own outside reading books.

Writing: The Freshman program moves students into expository writing about literature while also providing opportunities for personal and creative writing. Students learn to revise carefully with particular attention to the well-structured paragraph. Students practice making any kind of writing more convincing through illustration, example, and evidence. They work on maintaining a lively voice while shaping their work to communicate with an audience. Freshmen also study vocabulary and grammar.

Speaking and Listening: Freshmen work on contributing thoughtfully to group discussion and on listening and responding to their classmates. Discussions encourage students to move beyond an immediate response and to consider others' ideas when discussing literature.

EN1020 Responding to Literature

In this rigorous course, students read short stories, novels, autobiographies, poems, and plays, and they learn the important components of each genre. Students will learn to write competently in a variety of modes: creative, analytical, personal. Classes will study 4-5 major works over the course of the year, including such works as *American Born Chinese*, *Twelfth Night*, *Black Boy*, *Lord of the Flies*, *A Raisin in the Sun*, *Malcolm X* (excerpts), *The Absolutely True Diary of a Part-time Indian*, and independent reading. This course is designed to make the reading of challenging books (subject matter, length, syntax, and vocabulary) more comfortable, and to inspire students to find pleasure in reading regularly. Students read up to 25 pages per night and write, over the course of the year, at least twelve drafted papers, organized in steps and supported in the classroom.

Grade: 9

Credit: 1

EN1030 Responding to Literature Honors

This course covers the same content but in more depth and with the addition of some highly challenging texts. Classes will study 7 major works over the course of the year, including either *The Odyssey* or a novel by Charles Dickens (*Great Expectations* or *Tale of Two Cities*). Other course texts may include any of the texts listed above plus *To Kill a Mockingbird*, *When the Emperor was Divine*, *This Boy's Life*, and independent reading. Students who read regularly for pleasure and who are comfortable with challenging books (subject matter, length, syntax, and vocabulary) are typically well prepared for honors work. Students read up to 35 pages per night and write, over the course of the year, at least twelve drafted papers. This course moves briskly and assumes students have the skills to do most reading and writing assignments with a high level of independence.

Grade: 9

Credit: 1

SOPHOMORE PROGRAM – THE ENGLISH TOOLKIT

The sophomore program focuses on developing and sharpening reading and writing skills -- particularly active reading and analytical writing. Our focus is identity, culture, and meaning. How might a literary work help us learn about the larger world and our own place in it? The classes encourage students to think of literature as windows and mirrors.

Reading: Sophomores read the following core texts: *Macbeth* or *Othello*, and *Things Fall Apart* (Achebe). Beyond these core books, students study works such as: *Gilgamesh*, *Persepolis* (Satrapi), *House of the Spirits* (Allende), *The Kite Runner* (Hosseini), *Homegoing* (Gyasi), *All Quiet on the Western Front* (Remarque), *Master Harold and the Boys* (Fugard), *Waiting* (Ha Jin), *Purple Hibiscus* (Adichie), *White Tiger* (Adiga), *Wuthering Heights* (E. Bronte), *World Writers Today*, and *Balzac and The Little Chinese Seamstress* (Sijie).



Reading Skills: Students will identify and master approaches that experienced readers use to comprehend a difficult text. Students will learn these strategies -- for example, how to ask questions about a text, mark up a text (passage or poem), and move from observation to inference and analysis. Students will also pay particular attention to figurative language in poetry and prose.

Writing Skills: Students will write well-developed analytical essays with thesis statements, topic sentences, and unified paragraphs with specific (often textual) evidence to prove logical arguments. In addition, students will write personal essays -- and occasional poems and fiction -- following the maxim "Show, don't tell," using specific detail to illustrate general points. Students will also edit and revise their own work.

EN2020 World Literature: Living the Questions

In this course, students will examine how authors from different cultures and eras approach universal questions. Students will consider how literary works can help answer questions of importance in their own lives, too.

Students will explore these questions while working intensively on one skill set at a time. For example, students may focus on close reading in the first unit or quarter, and then focus on writing an effective essay in the second unit or quarter. This course is a good choice for students who are interested in exploring the philosophical questions raised by literature from around the world, as well as for students interested in working intensively to improve their reading and writing skills. Students read up to 25 pages per night and will write at least twelve drafted papers (both personal and analytical).

Grade: 10

Credit: 1

EN2030 World Literature Honors

In this fast moving course, students will focus on the formal elements of literature: students will explore identity, culture, and meaning by asking how authors reveal to us who we are. Students will examine how authors from different countries and eras approach universal questions such as: How does culture influence our values, attitudes, and behaviors? What are the ramifications of accepting or rejecting our culture? The course includes books of significant length and complexity. Students read up to 35 pages a night and will write at least twelve drafted papers (both personal and analytical).

Grade: 10

Credit: 1

EN2120 Future World Lit/ EN2130 Future World Lit Honors

Foretelling the future, imagining the unimaginable, thinking about the possible and impossible – writers have been doing this for generations. This course is designed for students who are interested in what lies ahead, whether it is a future predicted by a scientist or by the author of *The Hunger Games*. Students will ask themselves: despite its speculative nature, how is this literature "true"? How does it help me understand the world we live in and the role I play in it?

This multi-leveled course is designed for sophomores interested in science fiction, fantasy, and dystopian literature (sometimes called "speculative fiction"). Students in Future World Lit practice the same reading and writing skills and read the same core books as students in World Literature. Additionally, students undertake creative projects (such as fiction writing, visual art, film-making, game design, etc.) inspired by the concerns of speculative fiction. Beyond the core books, students study short and longer fiction by such authors as M.T. Anderson, Margaret Atwood, Octavia Butler, Orson Scott Card, Philip K. Dick, Aldous Huxley, Ursula LeGuin, George Orwell, Ayn Rand, Veronica Roth, George Saunders, J.R.R. Tolkien, Kurt Vonnegut, H.G. Wells. Students will also study nonfiction by authors such as Bill McKibben and Sherry Turkle.

This course can be taken for either standard or honors credit (within the same section).

Grade: 10

Credit: 1



EN2220 Real World Lit/ EN2230 Real World Lit Honors

This course emphasizes reading about, writing about, and discussing topics students find highly relevant in their own lives, in the lives of people around them, and in the real world. Students practice reading skills to learn about other people and places, and they explore topics in their writing that they find worth writing about, including themselves, other people, current events, and real-world topics that matter to them. The course challenges students to improve their discussion and presentation skills in the classroom.

Students will study what makes good personal writing and make several attempts to write their own stories. They will study other people and cultures, reading about different places and telling the stories of others in writing. They also explore current events, world issues, and topics relevant to their own communities as well as more traditional course 10th grade content of grammar, Shakespeare, the MCAS, and analytical writing. A major focus of the course is helping students find and pursue topics they are passionate about and developing skills needed to learn more about these topics. In the fourth quarter, students pursue a Passion Project. In each of the first three quarters, students alternate between studying a book together as a whole class, and then picking out a book to read individually. Books that are typically read together as a class are: *The Joy Luck Club*, *All Souls*, *Things Fall Apart*, *World Writers Short Stories*, *Macbeth*, & *A Doll's House*.

This course can be taken for either standard or honors credit (within the same section).

Grade: 10

Credit: 1

JUNIOR PROGRAM – AMERICAN LITERATURE

The Junior Program considers the factors shaping the American culture and point of view.

Reading: All juniors read *The Great Gatsby*; *Song of Solomon* or *The Blueest Eye*; and one of the following first-person novels: *True Grit*, *Their Eyes Were Watching God*, *The Adventures of Huckleberry Finn*, *Drown*, *As I Lay Dying* or the Junior Short Story Packet. Beyond these core books, individual courses and teachers select from an extensive supplemental book list of fiction, poetry, and non-fiction.

Beyond the core texts, students will study works such as: *The Scarlet Letter*, *Ragged Dick*, *My Antonia*, *The Yellow Wallpaper*, *Being There*, *Death of a Salesman*, *A Streetcar Named Desire*, *The Underground Railroad*, *The Crucible*, *The Invisible Man*, *Fences*, *Into the Wild*, *Walden*, *The Things They Carried*, *The Woman Warrior*, *Outliers*, and *One Flew Over the Cuckoo's Nest*.

Reading and Thinking: What does America say that it stands for? What is the reality of who we are? Discussion in this course centers on the tensions inherent in the "American Dream." The ability to step outside oneself is necessary for perspective and growth. At some crucial point in each of the core books, the main characters must stand outside themselves and evaluate American truths.

Special emphasis is given to close reading of texts in the junior program. Authors have a number of options but consciously choose the genre, the point of view, and even the best verb for their first sentence. Students will analyze the ideas and language in one passage [microcosm], and then consider how that passage relates to the book as a whole [macrocosm]. Students will study how form is suited to content in both poetry and prose.

Writing: Building on the expository skills of sophomore year, juniors formulate and defend their own thesis statements about literature. Although there is opportunity for creative and personal writing, students concentrate on literary analysis: generating thesis statements about literature and developing their ideas into coherent compositions with clear focus, well-developed paragraphs, and sufficient documenting detail. The work on literary analysis culminates in the Junior Paper, a major paper which compares and contrasts two pieces of literature; this exercise helps prepare juniors for the more complicated Senior Paper. As they polish their papers and prepare for the SAT writing component, students review the conventions of Standard Written English.

EN3020 American Literature

Although the American Dream usually refers to material success achieved through hard work, many other dreams have fueled this country. In this course, organized around the dreams and the dreamers, students examine how characters in literature pursue their dreams and how they readjust those dreams when they encounter obstacles. Students may compare the dreams of Willy Loman (Arthur Miller) and Troy Maxson (August Wilson). What would Huck Finn (Twain) say about Jay Gatsby's failed dream (Fitzgerald)? What could Daisy Buchanan learn from Pilate Dead (Toni Morrison)? The course also highlights American intellectual and historical eras and the people who formed them. Students read up to 30 pages per night.

Grade: 11

Credit: 1



EN3030 American Literature Honors

Students must hold opposites in their minds as they explore the paradoxes of American life as revealed in our literature. This course explores some of the tensions inherent in American ideals. The course also highlights intellectual and historical eras and the people who formed them. Students may learn about Transcendentalism through Emerson and Thoreau; the Harlem Renaissance through Langston Hughes and Zora Neale Hurston; or the Westward Movement through Mark Twain and Willa Cather. Students will examine American ideals as they manifested themselves in different historical and philosophical settings. Students read up to 40 pages per night.

Grade: 11

Credit: 1

EN 3120 American Studies English/EN3130 American Studies English Honors

American Studies English is a clustered, interdisciplinary course that meets conjointly with American Studies History. Students must enroll in both courses. The Social Studies and English teachers work together to blend the curriculum and skills from both departments. The course explicitly connects U.S. history to American literature, and engages students by connecting the reading and the writing assignments to the real world. The course addresses two guiding questions: What is the story of America? How did we get here? American Studies will offer both Standard seats and Honors seats, and the course benefits from a wide range of student perspectives. Depending on enrolled level, assignments will vary in difficulty.

Grade: 11

Credit: 1

SENIOR PROGRAM – FULL-YEAR OPTIONS

A variety of year-long courses gives seniors the opportunity to pursue particular areas of interest in English. The English department will do its best to honor seniors' first choices, but due to the challenges of scheduling, students should give serious consideration to their alternate choices. Depending on course enrollments, some courses may not run in a given year.

THE SENIOR PAPER: In the spring of senior year, each student is required to complete a Senior Paper, a culminating reading and writing project related to his or her senior English course. The Senior Paper is a multi-step process which requires a minimum of 500 pages of independent reading and culminates in an 8 to 10-page analytic essay. The Senior Paper is a Brookline High School English Department requirement.

TAKING TWO ENGLISH CLASSES: Seniors may take two English classes on a space-available basis. Juniors who want to sign up for two English courses should see their guidance counselors.

EN4030 Stranger in a Strange Land Honors

"A stranger comes to town" is one of the oldest and most enduring story ideas in literature. The stranger might be returning home or moving to a new country. And he or she might be "strange" for all sorts of reasons: background, values, psychological state, culture, race, planet of origin. What happens when that stranger comes to town? This senior course explores how strangers adapt to new places and new modes of being. It explores how individuals and groups react to the Other. Students will read stories about immigrants, explorers, misfits, scapegoats, prophets, and other outsiders. Students will look at what "stranger" means and who gets to decide. And what does an outsider's "otherness" reveal to and about those they encounter?

Students will examine their own experiences in this light, and will study literature from many different time periods, ancient to modern, and voices from different backgrounds and cultures. The course will include texts by some of the following authors: Shakespeare, Camus, Baldwin, Morrison, Sacks, Hamid, Twain, Silko, Lee, Bradbury, Ng, Mengestu, and Ellison.

Students read up to 40 pages per night, to practice close reading and in-depth analysis of assigned texts, to participate actively in class, and to write creative, personal, and critical papers. Outside reading may also be assigned.

Grade: 12

Credit: 1

EN4220 True Life Stories

Facts are stubborn things, said John Adams, but in this course, students will explore the many challenges of capturing – and perhaps even freeing – the truth. Students will study how writers approach the art of creative-nonfiction by studying biographies and autobiographies, analyzing how media portrays current events, and writing their own personal memoirs. Some books in the course are about inspirational people who give to others, or brave people who confront evil, or persistent people who overcome long odds. The choice of titles depends on the students' interests. Books that students have enjoyed in the past include: *Nickel and Dimed* (about low wage jobs), *The Color of Water* (a mixed race family), *Cockeyed* (blindness), *Girl, Interrupted* (mental hospitals), *She's Not There* (gender identity), *Mountains Beyond Mountains* (medicine), *The Glass Castle* (dysfunctional family), *Long Way Gone* (African child soldier), *Zeitoun* (Hurricane Katrina). Students read up to 30 pages a night.

The course also has a circulating book cart of over 100 memoirs, biographies, and non-fiction books for outside reading. The only requirement for outside books is that students must find books they want to read. Students will also write analytical papers and personal responses based on the readings. The course will include review of basic grammar to help prepare students for the New SAT and ACT tests.

Grade: 12

Credit: 1

EN4430 British Literature and Beyond Honors

From bawdy comic tales, to love stories both happy and doomed, to tragic journeys into adulthood, to scathing critiques of the sexual double standard, class snobbery, and colonialism—the British and post-colonial literary traditions offer rich plots, fascinating characters, and complex themes, all exploring what it means to be human. Works range through history and across continents, including medieval England (The Canterbury Tales) modern India (The God of Small Things), Renaissance Denmark (Hamlet), and the dystopian near future in North America (The Handmaid's Tale), to name a few. Students will read up to 40 pages per night. While critical reading and writing will be the major focus, this course also lends itself well to dramatic and creative projects.

Other possible works: *The Remains of the Day*, Kazuo Ishiguro; *The Importance of Being Earnest*, Oscar Wilde; *Pride and Prejudice*, Jane Austen; *Tess of the D'Urbervilles*, Thomas Hardy; *To the Lighthouse*, Virginia Woolf; *Americanah*, Chimamanda Adichie; *Jane Eyre*, Charlotte Bronte; *Dubliners*, James Joyce; selected lyric poems. This course provides excellent preparation for the Advanced Placement exam in Literature.

Grade: 12

Credit: 1

EN4500 Issues in Contemporary Literature

Contemporary: modern, current, of the present moment. Twenty-first century literature offers a unique way into the challenges, controversies, and possibilities of our times. Some specific topics that classes have delved into include police brutality, reproductive rights, immigration policy, the minimum wage, and divides between liberals and conservatives. Literature gives us the unique opportunity to live another's life—a life that may be similar to or very different from our own, perhaps in surprising ways. In this course, we will read contemporary fiction, memoir and poetry, paired with other sources—feature and documentary films, journalism, and readings from sociology, psychology, and cultural criticism—that can help us see the literature, ourselves, and our world, in a fresh light.

This course is designed for any student who wants to read exciting new works of literature, who is interested in the issues of our times, and who wants to participate seriously in the work of exploring, discussing, and writing about them. Ultimately, Issues in Contemporary Literature is a challenging interdisciplinary course that benefits from a wide range of student interests and perspectives.

The choice of titles depends on student interests and current events, but may include: Adichie, *Americanah*; Atwood, *The Handmaid's Tale*; Bechdel, *Fun Home*; Ehrenreich, *Nickel and Dimed*; Hamid, *The Reluctant Fundamentalist*; Proulx, "Brokeback Mountain"; Rankine, *Citizen*; Thomas, *The Hate U Give*; Woodson, *Another Brooklyn*. We will also read short stories and essays by writers such as Chimamanda Adichie, Hilton Als, Ta-Nehisi Coates, Roxane Gay, Sebastian Junger, Viet Thanh Nguyen, Peggy Orenstein, Andrew Solomon, Cheryl Strayed, Jessica Valenti, J.D. Vance, and David Foster Wallace, plus poetry by contemporary authors. 25-30 pages of reading per night is typical.

Grade: 12

Non-Leveled

Credit: 1



EN4600 Craft of Writing

This course is designed for seniors who have a serious interest in creative writing. Students examine published authors from the perspective of a writer; in each unit, they study the craft of master writers, past and present, as inspiration for their own work. Genres studied will include fiction and poetry, and may include other genres such as playwriting, screenwriting, memoir, performance poetry, and essay. Writers studied may include Ernest Hemingway, Flannery O'Connor, James Baldwin, Raymond Carver, Amy Tan, Julie Orringer, George Saunders, Nicole Yoon, Junot Diaz, Mary Oliver, William Carlos Williams, Claudia Rankine, Sarah Kay, and many others. Students write and rewrite regularly and edit carefully. Students will pay close attention to particular elements of a writer's craft such as: imagery, structure, dialogue, point of view, and character development. Significant class time is devoted to reading and critiquing each other's work. Students should be prepared to read 25-30 pages per night when studying an author's craft. The course welcomes all students who will take seriously their own writing and the writing of others. Craft of Writing classes benefit if students bring with them a wide range of interests and styles.

Grade: 12

Non-Leveled

Credit: 1

EN4700 Public Speaking and Public Writing

The purpose of this course is to help students gain confidence and skills in the art and craft of speaking and writing for a public audience. We will begin the year with familiar forms of speaking to one another: introductions, anecdotes, and personal narratives. This will help students gain confidence in front of their classmates and introduce them to some of the key concepts and terms of rhetoric, such as ethos, pathos, and logos. We will devote time to idea-generating strategies (e.g., brainstorming, research, interviewing, and storyboarding); to organizational and expository techniques; to methods for giving and responding to feedback; and to a wide variety of ways to carry out revisions. As the course progresses, we'll shift to other forms of speaking. Students will work on presenting with visual aids, such as slides and video, and will learn techniques for creating in both media. They will learn about informal logic and rhetoric and study the speeches and arguments of others. And they will learn how to use data and research to support all that they are saying. No previous experience (or confidence with) public speaking necessary! We'll start at the beginning and work on building speaking confidence throughout the year. This course is designed for students who have struggled to express their thoughts in the past and also for students who may be strong writers and are in search of new ways to present their ideas. By focusing on crafting speeches, students will approach the challenges of argument, style, audience, tone, research, and careful analysis through a new lens. Students should expect to draft one piece of writing each week and deliver a speech in class every other week. Additionally, students will read 200-300 pages of contemporary essays and nonfiction prose per quarter that will serve as models, focus of analyses, and inspiration for our own work. Students will also complete a senior paper and a final speech, based on the reading, writing, and speaking they do over the course of the year.

Grade: 12

Non-Leveled

Credit: 1

EN4800 Fiction and Film

In this course students will study the challenges and triumphs of film adaptation, and learn the art of visual storytelling. Students will learn to appreciate the technical and artistic decisions required to translate written work into film. The course will offer a balance of reading, writing, and visual examination of film. Students will study various film genres, classic films and filmmakers, film history, and contemporary film. Students may write and produce their own screenplays. This course will include texts by writers such as Sherman Alexie, Jose Saramago, and William Shakespeare, and films by Stanley Kubrick, Alfred Hitchcock, Spike Lee, Debra Granik, Julie Taymor, and Jordan Peele, among others. Up to 30 pages of reading per class is typical. Students of all reading, writing, and technical abilities are encouraged to enroll. **Please note that several R-rated films are included in the curriculum. Students under 18 will need permission from a parent or guardian in September.**

Grade: 12

Non-Leveled

Credit: 1

EN4900/CE1500 English for Entrepreneurs

How might students use the reading, writing, speaking and critical thinking skills--the ones that students have been honing for the past 11 years through the study of literature--to work as entrepreneurs and bring about change in the world around them? This full-year course is designed for students who wish to further develop these essential skills and then use them to tackle challenges in their lives, in their school, and in their community. Through the creative problem-solving process of "Design Thinking," students will employ English skills in a whole new way, one that places heavy emphasis on process and revision. Students will spend time analyzing and creating public texts; studying and using the rhetorical techniques that are embedded in interviews, persuasive writing, video, and speeches; deploying a variety of creative brainstorming techniques to tackle problems; and learning to collaborate with each other and community members to get things done. This course will involve multiple projects that will require students to demonstrate their skills of analysis and action. Students will also be reading and writing about challenging texts from the worlds of entrepreneurship, business, social action, psychology, statistics, creativity studies, journalism, and philosophy, including recent texts by Pink, Michalko, de Bono, Gilligan, Bornstein and Davis, Carey, Heath, and others. Each quarter, students should expect to read 300-400 pages and write 2 multi-draft essays. In addition, students will be drafting (and re-drafting) professional action plans, vision statements, project evaluations, "White Papers," argument essays, research analyses and reviews, and case studies. This course is designed to prepare students for the rigors of college-level thinking in both the humanities and the social sciences and to help them make connections between their academic work and the world around them.

Grade: 12

Non-Leveled

Credit: 1

ID2000 EPIC for Seniors: Experiential, Project-based, Innovative Capstone

Are you interested in learning how to direct your own studies in meaningful ways? In this full-year course, you will have the opportunity to independently pursue topics that you are passionate about in a supportive environment. Through research, engagement with experts in the field, experimentation, revision and reflection, you will learn how to develop and complete projects of your own design. You might write your own sci-fi novel, build a chess-playing robot, produce your own album, intern as a hockey coach, or write and direct your own play. Throughout the year, we will study various psychological frameworks that will help you better understand the creative process, and your projects will reflect your unique interests, quirks and passions. In the fall, you will have the opportunity to complete smaller independent projects, and in the spring you will spend 10 hours a week on an epic capstone of your own design.

Grade: 12 Non-Leveled Credit: 1.5 = (1 English)/ (0.5 General Elective)

Grade: 12

Non-Leveled

Credit: 1.5 = (.5 English)/ (1 CTE)



OPTION COURSES 9-12

ID0100 Journalism I

In this full-year interdisciplinary elective, students in grades 10 through 12 learn the essential skills of print journalism and the steps involved in creating a newspaper. Students receive instruction in reporting, interviewing, writing, editing, and layout, as well as in the history and ethics of journalism. Students enrolled in this course plan, write, and produce the school newspaper, The Sagamore. The course seeks a range of students to contribute to the newspaper in a variety of areas: reporting and writing, editing, graphic design, photography, and business. The course is taught by an English teacher.

Grade: 10- 12

Non-Leveled

Prerequisite: Application through instructor

Credit: 1

ID0130 Journalism II Honors

In this full-year interdisciplinary elective, students in grades 10-12 are trained in executive positions such as Editor-in-Chief, Business Manager, and Layout Manager. Journalism II students are responsible for running the production of the school newspaper, The Sagamore, and overseeing staff and contributing writers. Students receive advanced instruction in reporting, interviewing, writing, editing, and layout, as well as in the history and ethics of journalism. Journalism II students will help teach the basics to new reporters and will train Journalism I students to be management staff. The final class list will include returning editors and qualified applicants. The course is taught by an English teacher.

Grade: 10- 12

Prerequisite: Journalism I and/or Application through instructor

Credit: 1

ENGLISH LEARNER EDUCATION

Brookline High School has a large and diverse international student population. Whether immigrants or temporary residents, these students are welcome at the high school and are encouraged to participate in all school activities.

The English Learner Education (ELE) Program is designed for those students who are not yet proficient in English. The purpose of the program is to provide intensive English language instruction and an orientation to American culture and high school life. Students enrolled in the ELE program take specific courses designed for English learners as well as additional courses from the general school curriculum and are expected to fulfill school requirements for graduation.

Placement into ELE classes is determined by consultation and assessment. Three levels of coursework emphasize listening, speaking, reading and writing skills in English. ELE coursework carries either World Language or English Department credits which may be applied toward graduation requirements. While enrolled in the ELE Program and taking ELE courses, a student may not register for any other English Department course without permission from the ELE Director or a designee.

ELE – ENTERING LEVEL

This level of ELE is designed for students who have basic proficiency in English. Two complementary courses provide instruction and practice in basic communication skills and literacy. Students must register for both EL1000 AND EL1100 courses in this level.

EL1000 ELE I: Listening and Speaking

Students in this course learn basic vocabulary and grammatical structures, and incorporate them appropriately in social and academic settings. Emphasis is on listening and speaking skills. A variety of materials are used for instruction and practice. (To be taken with EL1100)

Grade: 9-12

Credit: 1 World Language

EL1100 ELE I: Reading and Writing

This course emphasizes basic reading and writing skills through individual and group work. Students read and discuss short selections on topics of American culture, geography, and various literary works in level-appropriate English. Writing activities include guided writing practice that focuses on mechanics, sentence combining, and paragraph structure. (To be taken with EL1000)

Grade: 9-12

Credit: 1 English

ELE – DEVELOPING LEVEL

This level of ELE is designed for students who have intermediate knowledge of English. Students work on listening, reading, writing, and speaking and learn to combine these skills in communicating. There is also a strong focus on the study of American culture. Students must register for both complementary courses at this level.

EL2000 ELE II: Listening and Speaking

The emphasis of this course is on social and academic oral language development. While all skills are practiced, the focus is on listening and speaking. Authentic listening materials, class discussion, lab work, and class presentation provide practice. (To be taken with EL2100).

Grade: 9-12

Credit: 1 World Language

EL2100 ELE II: Reading and Writing

The emphasis of this course is on communication in reading and writing. Students read a variety of genres including short stories, poems, novels, essays, and plays. Frequent writing assignments in the form of journals, compositions, and written exercises are combined with readings from a variety of sources. Oral skills are enhanced through class discussion, presentations, and dramatic performances. (To be taken with EL2000)

Grade: 9-12

Credit: 1 English



ELE – EXPANDING LEVEL

This level of ELE is designed for students who have an advanced level of English but need additional language practice before taking mainstream English department courses. Two complementary courses provide practice in all skills, but emphasize particularly reading and writing. Students must register for both courses at this level.

EL3000 ELE III: Composition

This course is designed to enhance the writing skills of advanced English learners. Classwork and assignments include descriptive, expository, and persuasive essays, research papers, poetry, magazine articles, journal writing, and original short stories and drama. Grammar and composition exercises will support major writing assignments. The course also provides practice in listening, speaking skills, and presentation skills. (To be taken with EL3100)

Grade: 9-12

Credit: 1 World Language

EL3100 ELE III: Literature

This course is designed for advanced EL students who have considerable command of English as speakers, readers, and writers. It aims to prepare them for future participation in the English Department program or freshman college courses. At home, students read nightly from the current literary work the class is studying. In class, the group discusses, works in pairs, or collaborates in small units on related assignments. Vocabulary, reading, writing, and analytical skills are emphasized. (To be taken with EL3000)

Grade: 9-12

Credit: 1 English

COMPLEMENTARY COURSES

ELE Tutorial

EL5000 (full year)

EL5001 (semester one)

EL5002 (semester two)

The ELE Tutorial provides content area support and academic monitoring within a supportive learning community. Tutorial goals are reviewing course content for increased comprehension and strengthening underdeveloped study skills. In collaboration with their Tutorial teacher, students identify specific focus areas for improving academic achievement such as test preparation, reading comprehension, composition development, and organization skills. Class time is divided between 1:1 check-ins with the Tutorial teacher and independent work where the student completes assignments using recommended study strategies. Enrollment is limited to students enrolled in ELE I and II courses. Students in ELE III may be enrolled with permission from the ELE Director or a designee.

Grade: 9-12 ELE I and II

Credit: .5 per semester Elective

EL6000 ELE Academic Support

This course meets three times a week and is designed to support English learners with academic language and provide advanced strategies to succeed in all of their classes. Specialized attention will be given to the continued development of reading, writing, listening, and speaking skills in English. Specifically students will receive individual help with their assignments and projects in all subjects, preparing for tests and quizzes, improving their study skills, understanding content-based terminology and general academic vocabulary, and with English grammar and writing mechanics. With the assistance of the teacher, English learners will hone their vocabulary, grammar, and communication skills effectively for academic purposes. Enrollment is limited to students enrolled in ELE III courses as well as former English learners. All other students must have permission from the ELE Director or designee to enroll in this course.

Grade: 9-12

Credit: .5 Elective



SCIENCE COURSES FOR ENGLISH LEARNERS

The science course for English learners varies by year. One science course is offered each year.

SC6100 Physics for English Learners

This content-based class for English learners is designed to present topics in mechanics, electricity, magnetism, waves, and optics. It is taught using a concept-based approach while simultaneously integrating the student's mathematical background in order to develop a meaningful physics foundation. An interactive laboratory environment will support the program where students will gain hands-on experience with the concepts being studied. Enrollment is limited to students enrolled in ELE I and II courses.

Grade: 9-12 ELE I and II

Credit: I Science

SC6200 Chemistry for English Learners

This content-based class for English learners deals with the structure of matter, its properties, and changes in its properties as a result of chemical reactions. Laboratory work involves first-hand experiences in the use of chemical equipment and materials and the development of manipulative skills in order to conduct chemical investigations using observation and accumulated data to arrive at conclusions. Enrollment is limited to students enrolled in ELE I and II courses.

Grade: 9-12 ELE I and II

Credit: I Science

SC6300 Biology for English Learners

This content-based class for English Learners encompasses the study of the structure of organisms and how they function. This course organizes content around unifying biological principles, and is taught through hands-on activities, laboratories, and inquiry. The course includes a range of perspectives about our living world: it delves into both molecular biology and the interactions of organisms in their environment. Emphasis is on the major concepts of biology: The nature of science, biochemistry, cell biology, heredity, evolution, and ecology. Body systems are integrated throughout the curriculum. Opportunities are provided for students to conduct investigations and make connections between biological concepts and their own life experiences. This course is designed with a strong focus on interactive lectures, note-taking, laboratory exercises and classroom discussions with applications to everyday life experiences. Enrollment is limited to students enrolled in ELE I and II courses.

Grade: 9-12 ELE I and II

Credit 1: Science

SOCIAL STUDIES COURSES FOR ENGLISH LEARNERS

SO1400 United States History Part I for English Learners

Students enrolled in this course focus on skill development as they learn U.S. history from British colonization through the Civil War. The course will emphasize note-taking, organization and study skills, along with basic skills in analysis and writing. Teachers will help students write a paragraph using historical evidence to support all claims, demonstrate fluency in understanding historical vocabulary, and demonstrate fluency in reading leveled texts. In addition to the narrative history of the period, students will learn basic North American geography, the provisions of the U.S. Constitution and the Bill of Rights, and other relevant topics and vocabulary in American history. Enrollment is limited to students enrolled in ELE I courses.

Grade: 9-12 ELE I

Credit: 1 Social Studies

SO1500 United States History Part II for English Learners

This course is designed for advanced English learners, and will provide content instruction in U.S. history from Reconstruction through the present. Students will receive assistance in reading and writing. Classwork will be devised to build skills in note-taking, organization, and critical thinking. Teachers will help students learn to develop thesis statements, assemble evidence, and write logically constructed essays. The course will include practice in the vocabulary necessary to understand the concepts, basic geography, and primary source documents, and other relevant topics in U.S. history. Enrollment is limited to students in the ELE II course. Some ELE II students may qualify for enrollment in a mainstream Social Studies course in place of this course. Students at other ELE levels may be enrolled with permission from the Social Studies Department Chair, the ELE Director, or a designee.

MATHEMATICS

FRESHMAN PROGRAM

Geometry
Geometry Honors
Geometry Advanced

SOPHMORE PROGRAM

Algebra 2
Algebra 2 Honors
Algebra 2 Advanced

JUNIOR PROGRAM

Trigonometry & Analysis
Precalculus Honors
Precalculus Advanced

SENIOR PROGRAM

Foundations of Calculus
Statistics (N)
AP Calculus AB
AP Calculus BC
AP Statistics
Perspectives of a Mathematical Mind (N)

ADDITIONAL PROGRAMS

Interactive Math Program (IMP)
Computer Programming (N)

ADDITIONAL COURSES

Algebra 1
Algebra Topics and Technology
College Algebra Topics
Mathlab

(N) indicates a non-leveled course

The goal of the math department is that students learn effective mathematical practices as well as mathematical concepts. The Standards of Mathematical Practice (perseverance, problem solving, modeling, logical, numerical, and abstract reasoning, precision, and pattern analysis) as described in the 2017 Massachusetts State Frameworks in Mathematics are emphasized. All students must earn three credits in Mathematics in order to graduate. Because of the state requirement that students take four years of math in order to be eligible to attend a Massachusetts state school the majority of BHS students take mathematics in all four years of high school. A maximum of one credit may be earned from the computer programming courses that offer math credit.

The Mathematics Department is also dedicated to support our students of color. The vehicle that the department primarily uses to do so is The AALSP Calculus Project which provides support structures for students of color to take high level math courses, culminating in an AP Calculus course in 12th grade. The Calculus Project consists of three components: The Summer Academy, an after-school tutoring center, and the clustering of students of color in specific math sections.

In general there are three levels of courses. The levels differ primarily in their pace, amount of scaffolding provided by the teacher, the amount of daily homework assigned, and the level of challenge of individual assessments. Both the Honors and Advanced sequence of courses culminate in either AP Calculus or AP Statistics. In addition, students have the option of taking an alternative, Honors Level three-year IMP (Interactive Math Program) sequence of courses.

Students who are uncertain about the mathematics course to select should confer with their teacher or with the curriculum coordinator. Placement in a sequence does not lock a student into that sequence. Conversely, with the teacher's or coordinator's recommendation, students can change levels from year to year.



9th GRADE PROGRAM

The 9th grade courses focus on geometric concepts and spatial awareness. As well, there is significant emphasis placed on the development of such algebra skills as graphing lines, linear and exponential functions, and solving linear and systems of linear equations. In addition, the students continue their investigation of statistical analysis that they began in middle school. Each level in the 9th grade teaches the same units that only differ in depth and complexity.

MA1020 Geometry

An examination of algebraic, geometric, and numeric relationships. Topics include congruent and similar figures, coordinate geometry, transformations, linear regression, linear programming, function analysis, and informal proof. Emphasis is on building understanding of concepts through hands-on investigation, pattern-finding, and cooperative group work.

Grade: 9

Credit: 1

MA1030 Geometry Honor

An examination of algebraic, geometric, and numeric relationships. Topics include congruent and similar figures, coordinate geometry, transformations, linear regression, linear programming, and function analysis. Students will be asked to write formal geometric proofs at times during the year.

Grade: 9

Credit: 1

MA1040 Geometry Advanced

An advanced study of algebraic, geometric and numeric relationships, including congruent and similar figures, coordinate geometry, transformations, linear regression, linear programming, and function analysis. Students will be asked to write formal geometric proofs throughout the year.

Grade: 9

Prerequisite: The recommendation of the eighth grade teacher.

Credit: 1

10th GRADE PROGRAM

The 10th grade program is the bedrock of the high school program. The focus of all of the courses is on the mastery of the foundational algebra skills and practices needed for the study of advanced mathematical concepts. The students continue their study of statistics as well with units on conditional probability and univariable statistics.

MA2020 Algebra 2

This course introduces students to second year algebra concepts. Topics of study include quadratic equations, function operations and analysis, polynomial functions, an introduction to probability concepts and univariable statistics. Time permitting, the course includes the study of exponential functions and equations. Many of these concepts will be further explored in grade 11.

Grade: 10

Prerequisite: Geometry

Credit: 1

MA2030 Algebra 2 Honor

A study of advanced mathematical topics including an algebraic and graphical exploration of quadratic, exponential, polynomial, rational and exponential functions. Additional units include function analysis, probability and statistics.

Grade: 10

Prerequisite: Geometry Honor

Credit: 1

MA2040 Algebra 2 Advanced

A study of advanced mathematical topics including an algebraic and graphical exploration of quadratic, exponential, logarithmic, and polynomial functions as well as units in probability, statistics, sequences, and series.

Grade: 10

Prerequisite: Geometry Advanced

Credit: 1



11th GRADE PROGRAM

The 11th grade program completes the study of the algebraic concepts that were explored in the 10th grade program and continues with the study of mathematical concepts that will prepare students to study either Calculus or Statistics in the 12th grade. In addition, the 11th grade statistics unit centers on the analysis of sampling distributions.

MA3020 Trigonometry and Analysis

This course continues the exploration of many topics introduced in Algebra 2 and then explores concepts from a typical pre-calculus curriculum. Topics of study include sampling distributions, polynomials, functions, radical equations, exponential equations, logarithms and unit circle trigonometry. Equal emphasis is placed on skill development, function analysis, and collaborative problem solving.

Grade: 11

Prerequisite: Algebra 2

Credit: 1

MA3030 Precalculus Honor

A study of exponential and logarithmic functions, conic sections, trigonometry, transformations of functions, probability, statistics, the binomial theorem, sequences, series, and limits.

Grade: 11

Prerequisite: Algebra 2H

Credit: 1

MA3040 Precalculus Advanced

An extensive study of trigonometric functions, polar and parametric equations, vectors, matrices, transformations, probability, statistics, and limits.

Grade: 11

Prerequisite: Algebra 2 Advanced

Credit: 1

12th GRADE PROGRAM

The 12th grade program is the culmination of the four year math sequence. Students choose to either take a Calculus or Statistics course that will prepare them for advanced mathematical study at the college level.

MA4020 Foundations of Calculus

This course provides students with a strong, conceptual understanding of the Calculus as well as the algebraic foundation needed to complete Calculus centered explorations and exercises. Students will experience the development of the concepts of derivatives and integrals, limits, continuity, numerical approximations, and the Fundamental Theorem of Calculus. This course will prepare students to take an Introductory Calculus course at the college level.

Grade: 12

Prerequisite: Trigonometry and Analysis or Precalculus Honor

Credit: 1

MA4120 Statistics

An formal study of how numerical data may be analyzed as an aid in decision-making. Topics that are studied in previous years are reviewed and extended and then the course continues with units on t-distribution, experimental design, and statistical inference including significance tests and confidence intervals using quantitative and categorical data. Students frequently use statistical software and a TI-83 or 84 graphing calculator in class.

This course may be taken concurrently with any calculus course.

Grade: 12

Prerequisite: Trigonometry and Analysis, Precalculus Honor or IMP3 Honor.

Credit: 1

MA4040 AP Calculus AB

All topics in the AB Syllabus of the College Entrance Examination Board are thoroughly covered, including an extensive development of the concepts of derivatives and integrals, limits, continuity, vector functions, numerical approximations, and the Fundamental Theorem of Calculus. Students are expected to take the AP exam in the spring.

Grade: 12

Prerequisite: Precalculus Honor or Precalculus Advanced

Credit: 1



MA4041 AP Calculus BC

All topics in the BC Syllabus of the College Entrance Examination Board are thoroughly covered. These include an extensive development of the concepts of derivatives and integrals, limits, continuity, vector functions, improper integrals, convergence tests for sequences and series, and Taylor series. Students are expected to take the AP exam in the spring.

Grade: 12 Prerequisite: Precalculus Honor with Teacher recommendation or Precalculus Advanced Credit: 1

MA4140 AP Statistics

An introductory study of how numerical data may be analyzed and used as an aid to decision-making. Topics include probability, frequency distributions (including the normal distribution), random variables, sampling techniques, experimental design, binomial experiments, linear regression, coefficient of correlation and statistical inference including significance tests and confidence intervals. Students frequently use statistical software and the TI-83 or 84 graphing calculator in class. Students are expected to take the Advanced Placement Statistics exam in the Spring.

Grade: 12 Prerequisite: Precalculus Honor or Precalculus Advanced Credit: 1

MA4200 Perspectives of a Mathematical Mind

In this course, you will experience math in a way that differs from any other math course you've ever taken. Join us as we explore fractals, non-Euclidean geometries, and Game Theory. Discover how math is applied in the real world to solve problems in fields such as finance, medicine, and environmental issues. Expand your view as we search for math in art and literature. Listen to a guest speaker, embark on a field trip, discuss a current article, and design your own project. The structure will flow between class seminars, cooperative small group activities, and individual investigations. Culminate with a unique opportunity to pursue in depth a math idea that has ignited *your* interest.

This course may be taken concurrently with any precalculus, calculus or statistics course.

Prerequisite: Completed Pre-Calculus Honors or Advanced or completed Trigonometry & Analysis with teacher recommendation Grade: 12 Credit: 1



THE INTERACTIVE MATHEMATICS PROGRAM (IMP)

THE INTERACTIVE MATHEMATICS PROGRAM (IMP) is an innovative, honors level three year sequence of courses created to address the National Council of Teachers of Mathematics' standards integrating algebra, geometry, trigonometry, probability, statistics and discrete mathematics. The curriculum is organized around a central problem or theme in four- to six-week units. Motivated by this focus, students solve a variety of smaller routine and non-routine problems that develop the underlying skills and concepts needed to solve the central problem. Students work in teams as well as individually to strategize, solve problems and present ideas both in writing and orally. Graphing calculators are used regularly. IMP prepares students for tests such as the MCAS, SAT, and ACT. Students should plan to remain in IMP through IMP4.

MA2035 IMP 2 Honor

The year is divided into four units covering topics in quadratic functions, exponential functions, logarithmic functions, slope and derivative, and statistics. 10th grade students who are recommended for Algebra 2 Honors or Advanced may take this course. Students recommended for Algebra 2 may take this course only if approved by 9th grade math teacher.

Grade: 10 Prerequisite: Geometry Honors, Geometry Advanced or teacher recommendation Credit: 1

MA3035 IMP 3 Honor

The year is divided into units examining locus problems, congruence and similarity, coordinate geometry, multi-variable linear programming, matrix algebra, combinations and permutations, the binomial distribution, statistical reasoning, functions and inverses, circular trigonometric functions and the physics of falling objects. Throughout the year, students will use spreadsheets to further explore and explain course content.

Grade: 11 Prerequisite: IMP 2 Honor Credit: 1

MA4035 IMP 4 Honor

The year is divided into four units. Students continue their study of circular trigonometric functions and the physics of falling objects from IMP3 and transition to an extensive study of other function families and operations on functions. The next unit presents key concepts of Calculus including instantaneous rates of change and the Fundamental Theorem of Calculus. Following this unit students will study a unit about geometric transformations and their matrix representations, three-dimensional geometry, and computer programming. If time allows, a statistics unit focusing on the central limit theorem, data sampling, margin of error, polling and confidence intervals will be taught.

Grade: 12

Prerequisite: IMP 3 Honor

Credit: 1

COMPUTER SCIENCE PROGRAM

The following computer science courses can be taken for either math or elective credit. A maximum of one credit from these courses may be used towards the mathematics portion of the graduation requirements.

CE4100/MA1500 Exploring Computer Science Engineering

The Exploring Computer Science Engineering course is a project based course taught in a collaborative learning environment. Assignments and instruction are contextualized to be socially relevant and meaningful for diverse students. Students explore, experiment, research, problem solve, create algorithms and create projects to recommend and install hardware and software, create web sites using html, css and javascript, write computer programs coding in programming languages such as scratch, app inventor, and small basic which allow students to program phones, tablets, robots, desktop and laptop computers. Topics include: Human computer interaction, problem solving, web design, programming, computing and data analysis, and robotics.

Grade: 9-12

Credit: .5

CE4101/MA1501 Computer Programming: Snap!

This course explores a variety of computational thinking and programming concepts. It introduces the students to SNAP!, a block-based programming language similar to Scratch. Students' experiences in this course will provide them the coding background knowledge they need to move on to pure language based coding. Concepts taught are variables, conditionals and Booleans, loops, lists and custom blocks. The course ends with a comprehensive individualized, student driven project that unifies these coding skills. Students should be comfortable with abstract thinking and be prepared to complete labs regularly in a timely fashion. All necessary technology will be made available to students.

Grades: 9 – 12

Prerequisite: A strong foundation in Algebra.

Credit: .5

CE4102/MA1502 or Computer Programming: Python

This course explores a variety of computational thinking and programming concepts using the industry-standard Python programming language. We will briefly review the core concepts of variables, loops, and conditionals before moving on to the meat of the course: data structures (lists, dictionaries), abstraction (functions, classes), and software design. Students will learn to deconstruct complex tasks into simpler stand-alone parts, write generic code to solve those tasks, and synthesize those solutions into an integrated program with rich behavior. The course is heavily lab-based: students will complete 6 unit projects, primarily in class. They will also be responsible for completing readings and pencil-and-paper homework outside of class. Although no prior knowledge of Python is required, students should be comfortable working with variables, conditionals (i.e. "if" statements), and loops in some language (Scratch, Snap, Javascript, Basic, etc.). This knowledge can be acquired from a previous formal course, or through self-study of online tutorials. Computers will be provided to students for in-class use.

Grades: 10 - 12 Prerequisite: CE4101/MA1501 or Permission of Math Department Coordinator

Credit: .5



Additional courses

The following courses are designed to provide students who are behind grade level the opportunity to acquire the mathematical skills required for more advanced mathematical study

MA6100 Mathlab

This course is designed primarily for ELL Students who have significant gaps in their mathematical foundational skills. It includes an examination of topics such as signed numbers, fractions, decimals, and percents as well as data and graphical analysis. Upon successful completion of this course students may either take MA1000 or MA1020.

Grade: 9-12

Credit: 1

MA1000 Algebra 1

An examination of the fundamental concepts of algebra including: the review of operations with rational numbers, solving multi-step linear equations, solving word problems, adding, subtracting and multiplying polynomials, and graphing linear equations. A focus on number sense will be applied to all topics.

Grade: 10-12

Credit: 1

MA3010 Algebra Topics and Technology

The year is divided into units in which students explore function families, exponential growth and decay, quadratics, linear programming, and probability. A significant amount of time is spent in the computer lab where students use a spreadsheet program to continue to investigate the topics they are studying in class.

Grade: 11

Prerequisite: Algebra 1 or Algebra 2

Credit: 1

MA4010 College Algebra Topics

Through an analysis of functions students are prepared for the study of College Algebra or Pre-calculus in college. Topics include operations on integers, rational, and irrational numbers, solving equations, general function properties, graphs of different families of functions (quadratic, radical, absolute value, and exponential), curve fitting, exponential growth and decay, and trigonometry.

Grade: 12

Prerequisite: Algebra Topics and Technology or Algebra 2

Credit: 1

PERFORMING ARTS

The Performing Arts are a profound source of joy and personal enrichment. They foster creativity, collaboration, critical thinking and problem-solving skills that are so necessary for personal, educational and professional growth. The Performing Arts Department at BHS offers courses at all levels of experience in dance, drama, and music for students to develop the mind, body and spirit. Performing Arts courses provide students with opportunities for enjoyment, entertainment and the development of skills. All Performing Arts courses are unlevelled unless noted.

MUSIC

The music program offers multiple levels of courses that provide students with experiences in performing, composing, arranging, and appreciating music. The vocal and instrumental programs offer a wide array of styles from classic to contemporary. Courses offered range from beginning to advanced levels of difficulty in choral, instrumental, and digital music. Classroom facilities include a Choral Room, Band Room, Piano Lab, Computer Music Room, Black Box Theater, White Box rehearsal space, and the Roberts/Dubbs Auditorium.

CHORAL MUSIC

PA1000 Concert Choir

Concert Choir is open to anyone with or without singing experience. Healthy singing technique as well as sight singing and aural (listening) skills are emphasized. This choir provides the opportunity for students to perform in a group of mixed voices that presents the finest examples of choral music from all periods and styles. This choir typically performs three to four evening concerts per year and at school assemblies. Performances for community organizations may also be arranged.

Grade: 9-12

Credit: 1

PA1200 Camerata Honor

Camerata is an advanced choir where students can expand their vocal music repertoire, improve their musicianship, and increase their proficiency in sight singing. Frequent performances are included in the year's schedule of events. Enrollment into the group is by audition. Auditions for Camerata are held in the spring. Students who are new to Brookline may audition in September. All Camerata students must be enrolled in either Concert Choir or A-Cappella Choir for two academic years; this requirement can be met before admittance into the Camerata or concurrently as a member of the Camerata.

Grade: 9-12

Periods per week: 2 Z-Blocks +one evening

Prerequisite: Audition

Credit: 1

PA1500 A-Cappella Choir

A-Cappella Choir is open to anyone with or without singing experience. Healthy singing technique as well as sight singing and aural (listening) skills are emphasized. Students will become familiar with the performance of contemporary a cappella (voices only) music, which is highly popular on college and university campuses. The class repertoire will include popular songs from the 20th Century to today. A-Cappella Choir typically performs three to four evening concerts per year as well as at school assemblies. Performances for community organizations may also be arranged. A-Cappella Choir also combines with the Concert Choir and Camerata at various times throughout the year in performances of other styles of music.

Prerequisite: No prerequisite for students in grades 10-12. Advanced incoming 9th grade students may audition to be in the course.

Credit: 1



INSTRUMENTAL MUSIC

PA2000 Concert Band

Concert Band is a group of woodwind, brass and percussion players that performs classical as well as popular band literature. Members work on their performance skills as section members and as individual players. Time is also spent developing sight-reading skills. The Concert Band performs at BHS assemblies, evening concerts, statewide competitions and community events. Concert Band members also participate in exchange programs with bands from other high schools.

Periods per week: 5 Z Blocks

Grade: 9-12

Prerequisite: Previous school or private instruction on an instrument

Credit: 1

PA2201 Digital Music Production and Composition

This semester-long class is designed for any student who is interested learning to use digital audio software to create and compose music. By examining different genres of popular music students will be able to develop a clearer understanding of the aesthetics of harmony, counterpoint, rhythm, form, and mixing. Each student will be continually creating short pieces of music using the digital audio program Logic X. Basic music knowledge is helpful but not required. Students will create at least major composition by the end of the semester.

Grade: 9-12

Credit: .5

PA2300 Music Collective/Jazz Band

The Music Collective/Jazz Band is a by-audition group that is one of the top ensembles at Brookline High. Students in this ensemble usually have some background and understanding of jazz playing and theory. Repertoire is chosen with an emphasis on developing improvisational techniques as well as improving ensemble collaborative arranging and performing. Members of this class perform at festivals and evening concerts, which can require extra time outside of class. The group also travels every other year during either February or April vacation. Auditions are held in March. All Jazz Band/Music Collective students are also enrolled in Concert Band.

Grade: 9-12

Prerequisite: By Audition & Enrollment in Concert Band

Credit: 1

PA2350 Jazz/Rock Ensemble

This workshop will give students the essential musical elements necessary to play jazz and rock. Students will play, rehearse analyze and perform a variety of rock and jazz songs, developing skills that will help them learn how to improvise over the music. Students will perform regularly during the class with a great deal of time to fine tuning their playing and musical understanding. This course is open to any instrumentalist.

Grade: 9-12

Credit: .5

PA2500 Orchestra

The Orchestra is made up of string instrument players (violin, viola, cello and bass). The Orchestra performs at BHS concerts, festivals, and assemblies. The Orchestra's repertoire includes music from the Baroque through contemporary, classical and romantic, as well as non-European styles including Latin American works. Members will develop their proficiency in performance skills, intonation, dynamics, rhythm, sight-reading, individual and group playing. There are frequent opportunities to feature student soloists, chamber music groups, composers and arrangers. Students who enroll in the Orchestra will have a placement audition in early September for seating.

Prerequisite: Previous school or private instruction on string instrument

Periods Per Week: 5 Z blocks

Grade: 9-12

Credit: 1

PA2600 Advanced Chamber Orchestra

The Advanced Chamber Orchestra is a by-audition group that draws from more advanced musicians in the BHS Orchestra (violin, viola, cello and bass), and BHS Concert Band (woodwinds, brass and percussion). The Advanced Chamber Orchestra pursues higher-level repertoire from Baroque through contemporary, classical and romantic, as well as non-European styles including traditional and modern orchestral compositions from around the globe. Members of Advanced Orchestra fine tune advanced level individual proficiency on their instruments including intonation, dynamics, rhythm, and sight-reading, as well as perfecting their ability to communicate and play as an ensemble. Students have the opportunity to learn to direct and conduct the orchestra and there are frequent opportunities to feature soloists, chamber music groups, original compositions and arrangements. Students in entering 9th through 12th grades will audition in late February for placement in the class. **NOTE: This course will meet during A block.**



Grade: 9-12 Prerequisite: By audition & Enrollment in Orchestra or Concert Band

Credit: 1

PA2700 AP Music Theory

This course is designed to give students an understanding of music theory, sight reading, and aural (listening) skills that is equivalent to a first-year college music course. Students learn techniques for melodic, harmonic, and formal analysis, as well as basic compositional techniques. AP Music Theory is designed for students who plan to pursue music in college as well as for those who desire it for enrichment. Upon completion of this course, students are prepared to take the AP Music Theory exam offered by the College Board. The prerequisite for this course is a basic knowledge and understanding of music notation. Students who wish to learn to read music are encouraged to take Concert Choir (PA1000) or Piano Class (PA 3400) prior to taking AP Music Theory.

Prerequisite: A basic knowledge and understanding of music notation; Member of BHS instrumental ensemble or permission of instructor

Grade: 10-12

Credit: 1

PA2801 Drumming and World Music: Africa, Latin America and the Caribbean

Students with and without prior musical experience will learn drumming styles from a number of countries including Guinea, Ghana, Cuba, Puerto Rico, Brazil and beyond. Students who already play any instrument will also have the opportunity to learn to play these styles on their instrument, and all will learn to play traditional samba drumming from Brazil, Puerto Rican Bomba, and Jamaican Reggae, as well as create original works based on these styles and more. We will learn songs and discuss their significance as we interpret lyrics and their meaning. Students in this class will have the opportunity to perform at the Music Department's Spring Music Festival in May.

Grade: 9-12

Credit: .5

PA2900 Piano Class

Piano Class is an **introductory** level class for anyone with or without previous keyboard experience. This course is an introduction to playing the keyboard and learning basic musicianship skills. Ample individual instruction is provided in playing technique, note reading in both bass and treble clefs, playing chords and harmonizing from a lead sheet, general music and keyboard specific vocabulary, and some music theory. All of these areas are reinforced through a variety of musical selections from a variety of styles from Classical to contemporary.

Grade: 9-12

Credit: .5

DANCE

The dance program offers a curriculum from beginning through advanced levels. The program covers a variety of dance techniques and choreography. All students enrolled in the full year dance classes perform in the annual dance concert, Progressions. Students are also encouraged to participate in the student variety show, ReVisions in January. The classroom facilities include two dance studios. Performing Arts dance classes can be used to fulfill the Health & Fitness requirement, except in 9th grade where all students are required to take and pass WE0900.

PA3000 Beginning Dance

This full year course covers the fundamentals of a variety of dance techniques. The student will be introduced to a variety of dance styles that may include Ballet, Modern, Jazz, Tap, African and Latin. This class will also include exploration of movement through improvisation and creative movement problem solving (basic choreography). The origins and development of different dance forms will be integrated into the class work. Students in this class will perform in the spring dance concert, *Progressions*. Students may reelect this course for credit while preparing for Intermediate Dance.

Grade: 9-12

Credit: 1

PA3001 Beginning Dance I-A

This is a semester-long, condensed version of the Beginning Dance class. Students in this course will focus primarily on the technique aspects of the year-long Beginning Dance class with less time to explore dance routines and choreography. See Beginning Dance Course Description.

Grade: 9-12

Credit: .5



PA3100 Intermediate Dance

This course is a continuation and refinement of the basic skills and the variety of dance styles learned in the Beginning Dance class. An emphasis on performance techniques and a further exploration of diverse dance vocabulary and performance skills will prepare the student for the spring dance concert, *Progressions*. Students may reelect this course for credit while preparing for Advanced Dance.

Grade: 9-12 Prerequisite: Beginning Dance or by placement audition

Credit: 1

PA3101 Intermediate Dance I-A

This is a semester-long, condensed version of the Intermediate Dance class. Students in this course will focus primarily on the technique aspects of the year-long Intermediate Dance class with less time to explore dance routines and choreography. See Intermediate Dance Course Description.

Grade: 9-12 Prerequisite: Beginning Dance or by placement audition

Credit: 1

PA3200 Advanced Modern/Jazz

This course is for the student with strong dance technique and an understanding of the diverse styles in contemporary dance. The course includes work to increase flexibility and strength while developing a broader awareness of the dynamics of movement, spatial relationship and diversity in styles of dance. Students in this class will perform in the spring dance concert, *Progressions*. Students may reelect this course for credit.

Grade: 9-12 Prerequisite: Intermediate Dance or by placement audition

Credit: 1

PA3600 Choreography

Through improvisation and movement exercises, the students in this class will create movement studies that will be used to choreograph solos, small, and large group works for a variety of performance opportunities throughout the school year. This course may also be taken by dance students who are not interested in choreographing, but would like to perform more through the school year. They will work cooperatively with the student choreographers in the class helping to create new works. A variety of sources for exploring new movement possibilities will be used such as text, music, and props. Work completed in this class will be presented in Revisions, The Choreography Class Annual Show, and *Progressions*.

Prerequisite: Completion of two years of BHS Dance classes or by placement audition

Grades: 9-12

Credit: 1

PA3700 African, Latin American and Hip Hop Dance

This semester-long class is designed for students with or without prior experience that enjoy dancing and want to develop into more versatile movers. In this course, students will develop their own personal expression, musicality, and attitude through studying a variety of dance traditions, learning ensemble routines and how to improvise within these styles. Today's modern Hip Hop and Latin American dance styles grow out of a long tradition that begins in Africa and has been developed throughout the Western Hemisphere. We will begin with the energetic dance movements of West Africa, then move into traditional Latin American dances and contemporary salsa styles, and finally we will explore today's modern Hip Hop focusing on choreography and freestyle.

Grades: 9-12

Credit: .5



DRAMA

The drama program offers multiple levels of courses, utilizing improvisation and interpretation as principal dramatic forms for exploration and presentation. In addition, we offer courses in Stagecraft and Production. The courses are designed to give students the opportunity to study Drama in its many forms, to develop and foster an understanding in the individual's capacity for communication and expression, and to encourage a greater understanding of the nature and function of Theater. Classroom facilities include the Roberts/Dubbs Auditorium, the Black Box Theater, the White Box rehearsal room, and Scenery Workshop.

PA4000 Drama I

'Fun and games' is the basis for this course, which encourages students to reconnect with their imagination, creativity and sense of play. Student will play drama games, engage in drama related activities and explore both how to improvise as well as rehearse group scene work. Students will use those skills as a base to explore character development, storytelling and scripted scenes in a community-oriented environment.

Grades: 9-12

Credit: 1

PA4001 Drama I-A

This is a one semester accelerated and condensed Drama I course. Students will be introduced to material in Drama I, but not explore it with the same depth. See description of Drama I.

Grades: 9-12

Credit: .5

PA4100 Drama II

Keep the fun going in Drama II through a more advanced application of the drama skills learned in Drama I. In this course students will focus on the exploration of genre, pop culture, ensemble work and point of view. Students will develop their voice as the take on increased autonomy in their work, a more sophisticated perspective to the material they explore, and through taking bigger artistic risks.

Grade: 10-12 Prerequisite: Drama I or Drama I-A, or by placement audition

Credit: 1

PA4101 Drama II-A

This is a one semester accelerated Drama II course. This class will focus on the ways in which genre and pop culture shapes our understanding of communication in the theatre. Students will be introduced to material in Drama II. See description of Drama II.

Grade: 10-12

Prerequisite: Drama I or Drama I-A

Credit: .5

PA4102 Drama II-B

This is a one semester accelerated Drama II course. This class will focus on ensemble work to perform a fully developed mini production. The exploration and understanding of point of view is a focal point of class work. See description of Drama II.

Grade: 10-12

Prerequisite: Drama I or Drama I-A

Credit: .5

PA4200 The Theatre of Hip-Hop

Hip-Hop is the theatre of our time. Through the exploration of some of hip-hop's greatest lyricists, the class will examine the way hip-hop uses voice, point of view, imagery and word-play to create and tell stories about what is happening in the world today. In this class, students will engage with the work of iconic artists like Chuck D of Public Enemy, KRS ONE, NAS, and MC Lyte as well as newer artists like M.I.A., Childish Gambino, J. Cole, Kendrick Lamar and others to create and inspire scene work that demonstrates how theatre and hip-hop are connected. By the end of the course, students will have created their own pieces inspired by the art form and translate them into theatrical pieces.

Grade: 9-12

Credit: .5

PA4300 Brookline Educational Theatre Company (BETCo)

BETCo is an advanced level drama class that serves the BHS population (and beyond) with original theater that expresses a variety of points of view about social, political and academic issues relevant to our community. The company spends the year exploring ways to creatively express point of view, resulting in performances that are sometimes controversial and always thought-provoking. Additional rehearsal time may be scheduled outside of the regular school day, requiring a flexible time approach from Company members.



Grade: 11-12 Prerequisite: at least 3 semesters of Drama I, I-A, Drama II, II-A or II-B

Credit: 1

PA4400 Backstage: Power Tools and Special Effects

This single semester course is a study, through practical application, of the tools terminology, technology, equipment, devices, and organizational systems of the theatrical stage. In Backstage, students explore the technical aspects of the production process as creative problem solving. Through hands-on application, students work cooperatively with peers and staff to support the technical needs of the BHS Performing Arts Department.

Grade: 9-12

Credit: .5

PA4602 Needs *Improvement*

Needs *Improvement* is an advanced level drama class that serves the BHS population (and beyond) with original improvisational theatre. The troupe trains for a year, including a focus on the skills and knowledge of the two main forms of improvisational theater: short form improvisation and long form improvisation. The troupe will use humor to engage with the world around them, creating scene work inspired by current events and personalities in the news. The class will create main-stage performances to be performed at BHS during the year.

Prerequisite: at least 3 semesters of Drama I, I-A, Drama II, II-A or II-B, and audition

Grade: 11-12

Credit: 1

PA4441 Design For The Stage - *Independent Study Only*

Design for the Stage is a more advanced application of the skills and knowledge of technical theatre, focusing more on the creative aspects of show production. This single semester course focuses on the elements of set, lighting, sound and costume design. Design for the Stage may be elected for credit either during or outside of the regular school day.

Grade: 11-12

Prerequisite: Permission of the instructor

Credit: .5



SCIENCE

The Science Department is committed to serving all Brookline High School students by presenting a well-rounded, sequential and content-rich program in a stimulating and challenging manner. Each course is designed with the purpose of having students learn more about the physical world in which they live. Each course is designed with integral Laboratory Experiences. Skills involving observation, critical thinking, effective verbal and written communication, manipulation of equipment, and applying technology are woven throughout the curricular fabric of the Science Program. The Science Department offers a wide range of courses in the basic disciplines at various levels, such as ELL Physics, ELL Chemistry, ELL Biology, Special Education offerings such as Applied Science I, II, and III, as well as all Advanced Placement Science courses. In addition to this, students may take specialized optional courses from Anatomy & Physiology to Science Seminar-Current Topics, and everything in between as seen below.

The **Physics – Chemistry – Biology – Optional Course** sequence represents the recommended order of courses. These courses build on each other in content, and they progress in the degree of abstraction. However, a different sequence may be appropriate in certain cases. All requests for exceptions to course prerequisites will be subject to approval by the Science Curriculum Coordinator.

Physics Courses

Physics I
Physics I H

Chemistry Courses

Chemistry I
Chemistry I H

Biology Courses

Biology I
Investigative Biology I
Biology I H

Optional Courses

Astronomy (Honors optional)
Anatomy & Physiology (Honors optional)
AP Biology
AP Chemistry
AP Environmental Science
AP Physics – 1&2
AP Physics – C
Biology 2 Honor
Body/Mind Honor
Engineering By Design H
Environmental Science and Society (Honors optional)
Forensic Science (Honors optional)
Genetics (Honors optional)
Marine Biology (Honors optional)

Each full year course carries one credit. Although Brookline High School requires students to pass three credits in Science in order to graduate, many students take four or more Science courses. All courses include a laboratory component and meet for four periods per week, except for some optional courses that meet for more.

SC1020 Physics I

Physics I is a rigorous course designed as a solid foundation in introductory physics. The course fosters a keen interest in science and a desire to inquire about real-world applications of physics. Topics include vibrations/waves, heat, electricity/magnetism, and mechanics. In addition to learning physics content, there is an emphasis on mastering the scientific skills that will provide a strong foundation for science courses in future grades. There are frequent hands-on activities and projects, with opportunities to go in more depth with optional extensions. After building skills in *Physics I*, students may elect to enroll in an honor level chemistry course in the tenth grade, and are prepared for *AP Physics* or for a science major in college.

Grade: 9-12

Credit: 1



SC1030 Physics I Honor

Physics I Honor covers the same content as *Physics I* but in greater depth and with more mathematical applications. This course emphasizes understanding the same concepts with a strong math component that uses both algebra and trigonometry to solve multi-step problems.

Grade: 9-12

Credit: 1

(It is recommended that Geometry H or Geometry/Algebra II Adv. be taken concurrently)

SC4140 Advanced Placement Physics – 1&2

AP Physics 1&2 is a course that provides a systematic introduction to the main principles of physics and emphasizes the development of problem-solving abilities. It includes a broad range of topics in both classical and modern physics, and is intended to provide a foundation for students interested in studying physics as a basis for work in the life sciences, medicine, geology, or as a component in a non-science college program with science requirements. AP Physics B prepares students for the national AP Physics B examination, covering topics in Newtonian mechanics, electricity, magnetism, thermal physics, waves, optics, and atomic and nuclear physics. Students are expected to take this AP Examination. A knowledge of algebra and trigonometry is required.

Grade: 12

Periods per week: 6

Credit: 1

Prerequisites: Physics I w/strong performance, Chemistry I, and Biology I.

(It is recommended that Honor or AP Math be taken concurrently)

SC4141 Advanced Placement Physics - C

AP Physics C is a course that represents the first two semesters of the college sequence that serves as the foundation in physics for students majoring in the physical sciences or engineering. The first half of the year is devoted to classical mechanics. The second half of the year primarily concentrates on classical electricity and magnetism. Methods of calculus are used wherever appropriate in formulating physical principles and in applying them to physical problems. This course prepares students for the national AP Physics C examination which is administered in two parts. One part of the AP Physics C examination covers Newtonian mechanics. The other part covers electricity and magnetism. Students are expected to take both parts of this AP Examination. Separate grades are reported for the two areas.

Grade: 12

Periods per week: 6

Credit: 1

Prerequisites: Physics IH w/strong performance, Chemistry I, and Biology I and Calculus AB or BC must be taken concurrently.

SC6100 Physics for English Learners

This content-based ELL class is designed to present topics in mechanics, electricity, magnetism, waves, and optics. It will be taught using a concept-based approach while simultaneously integrating the student's mathematical background in order to develop a meaningful physics foundation. An interactive laboratory environment will support the program where students will gain hands-on experience with the concepts being studied.

Grade: 9-12

Enrollment is limited to students enrolled in ELE I and II courses.

Credit: 1

CHEMISTRY

SC2020 Chemistry I

Chemistry I deals with the structure of matter, its properties, and changes in its properties as a result of chemical reactions. Emphasis is placed on the physical world involving atomic theory, energy relationships, and chemical reactions. Laboratory work involves first-hand experiences in the use of chemical equipment and materials and the development of manipulative skills in order to conduct chemical investigations using observation and accumulated data to arrive at conclusions.

Grade: 10

Prerequisites: Physics I

Credit: 1

SC2030 Chemistry I Honor

Chemistry I Honor is a rigorous, semi-mathematically oriented treatment of the physical world of matter, emphasizing its interactions with energy and the logical evolution of theories concerning both matter and energy. The course stresses the systematic relationship of the major topics. The laboratory work stresses observation, proper and safe techniques, logical data interpretation, and systematic acquisition of laboratory skills.

Grade: 10

Prerequisite: Physics I or I Honor

Credit: 1

(It is recommended that Honor or Advanced Math be taken concurrently)

SC4240 Advanced Placement Chemistry

AP Chemistry is equivalent to two semesters of a college level inorganic chemistry course. This course stresses quantitative reasoning, a comprehensive laboratory program and covers the basic chemical topics leading to the AP Examination in May. Students are expected to have a strong, self-motivated approach to their studies. The workload is commensurate with college level chemistry. All students are expected to take the AP Examination.

Grade: 12

Periods per week: 6

Credit: 1

Prerequisites: Physics I, Chemistry IH w/strong performance, Biology I.

It is recommended that Honor or Advanced math be taken concurrently.

SC6200 Chemistry for English Learners

This content-based ELL class deals with the structure of matter, its properties, and changes in its properties as a result of chemical reactions. Emphasis is placed on the physical world involving atomic theory, energy relationships, and chemical reactions. Laboratory work involves first-hand experiences in the use of chemical equipment and materials and the development of manipulative skills in order to conduct chemical investigations using observation and accumulated data to arrive at conclusions.

Grade: 9-12

Enrollment is limited to students enrolled in ELE I and II courses.

Credit: 1

BIOLOGY

SC3025/ SC3035 Investigative Biology I

Investigative Biology (formerly known as BSCS Conceptual Biology which is a nationally recognized program developed by the Biological Sciences Curriculum Study) is a first year college preparatory lab course that engages students through a human perspective. This course organizes content around unifying biological principles, and is taught through hands-on activities, laboratories, and inquiry. Emphasis is on the major concepts of biology: Evolution - Homeostasis - Energy, Matter, & Organization - Continuity & Development - Ecology. Opportunities are provided for students to conduct investigations and make connections between biological concepts and their own life experiences. This course is designed with a strong focus on group work, discussion, writing, activities, and projects. During the first two weeks of class, students may elect to take this course for Honor credit with the approval of a parent/guardian, guidance counselor, and previous science teacher. All students will be held to high academic standards. Students studying at the Honor level will be expected to regularly complete additional assignments.

Grade: 11

Prerequisite: Physics I and Chemistry I

Credit: 1



SC3020 Biology I

Biology I is a college preparatory course that encompasses the study of the structure of organisms and how they function. Major topics of this course include the nature of science, biochemistry, cell biology, heredity, evolution, and ecology. Body systems are integrated throughout the curriculum. The course includes a range of perspectives about our living world: it delves into both molecular biology and the interactions of organisms in their environment. This course is designed with a strong focus on interactive lectures, note-taking, laboratory exercises, and classroom discussions with applications to everyday life experiences.

Grade: 11

Prerequisite: Physics I

Credit: 1

SC3030 Biology I Honor

Biology I Honor has a structure and content similar to that of Biology I. However, it is a more rigorous course that goes into greater depth and requires more abstract thinking. This course prepares students for further studies in Biology. Biology I Honor is recommended for students who plan to take the SAT Subject Test in Molecular Biology.

Grade: 11

Prerequisites: Physics I and Chemistry IH or LBC Honor.

Credit: 1

SC4320/ SC4330 Anatomy and Physiology / Anatomy and Physiology Honor

This second year biology program is a survey course which concentrates on mammalian anatomy and physiology. All vertebrate systems are covered on both a gross anatomy level and a microscopic anatomy level. The laboratory curriculum involves histology and organ dissections along with assorted laboratory experiences in physiology. Guest lecturers from the medical field will supplement the curriculum. Honors credit is given with the completion of additional assignments.

Grade: 12

Prerequisites: Physics I, Chemistry I, Biology I

Credit: 1

SC4430 Biomedical Science Honor

This second year honor level course, formerly known as Biology II Honor, is designed for students who wish to continue their study of biology beyond Biology I, and on to selected topics in advanced Biology. Using a laboratory-oriented environment, the program is structured so that the student may pursue in-depth studies of several areas in biology that are currently under much investigation: animal behavior, ecology, infectious diseases and molecular genetics. Labs are designed to provide the students with a substantial amount of instruction at the beginning of the course while gradually increasing its open-ended aspect as the year progresses. By the end of the course, each student will be designing and carrying out his/her own independent experiment. Many assignments are given over a long term and will require extensive and accurate data gathering, enabling the student to write his/her experiment in the form of a scientific paper.

Grade: 12

Prerequisites: Physics I, Chemistry I, Biology I H

Credit: 1

SC4440 Advanced Placement Biology

AP Biology is equivalent to a two-semester college introductory biology course usually taken by biology majors during their first year of college. All of the major concepts of biology are covered in depth, with a significant portion of time devoted to a wide variety of laboratory exercises. It is necessary for students to have a strong first-year biology background, along with a self-motivated and rigorous approach to their studies. The workload is commensurate with college level biology. All students are expected to take the AP Examination.

Grade: 12

Periods per week: 6

Credit: 1

Prerequisites: Chemistry I, Physics I, Biology IH w/strong performance.

SC6300 Biology for English Learners

This content-based ELL class encompasses the study of the structure of organisms and how they function. This course organizes content around unifying biological principles, and is taught through hands-on activities, laboratories, and inquiry. The course includes a range of perspectives about our living world: it delves into both molecular biology and the interactions of organisms in their environment. Emphasis is on the major concepts of biology: The nature of science, biochemistry, cell biology, heredity, evolution, and ecology. Body systems are integrated throughout the curriculum. Opportunities are provided for students to conduct investigations and make connections between biological concepts and their own life experiences. This course is designed with a strong focus on interactive lectures, note-taking, laboratory exercises, and classroom discussions with applications to everyday life experiences.

Grade: 9-12

Enrollment is limited to students enrolled in ELE I and II courses.

Credit: 1



OTHER SCIENCE OPTION CLASSES

SC5020/ SC5030 Astronomy / Astronomy Honor

Astronomy is a full year laboratory science course that examines the natural events that occur in the Universe, Galaxies, and the Solar System. Constellations, the history and future of space flight and exploration, and recent discoveries will be studied. The course will review pertinent science topics from prior science courses, and serve as a capstone for Physics, Chemistry, and even some Biology. Honors credit is given with the completion of additional assignments.

Grade: 12

Prerequisites: Physics I, Chemistry I, Biology I

Credit: 1

SC5130 Body/Mind Honor

This course explores the relationship between mind and body through the findings of current scientific research and practical experience. Among the wide variety of body/mind topics are the connection between stress and disease, the relationship between the brain and behavior, Eastern Medicine, the placebo effect, and emotional intelligence. Students will practice body/mind methods including yoga, meditation, acupressure, and guided imagery. The primary course outcomes reported by students are greater confidence, a healthier life style, an open mind, a sense of community in class, increased body awareness, and the ability to use that awareness to improve physical and mental well-being.

The format for Body/Mind changes throughout the year. The first semester is like most other science courses. Classes take place primarily in a science classroom and include lectures, reading assignments, papers, quizzes and tests. The academic final takes place at midyear. A student must pass the first semester to receive credit for the course. The second semester takes place mostly in the wrestling room where the emphasis shifts to practicing body/mind methods, including several systems of meditation, movement and touch.

Grade: 12

Prerequisites: Physics I, Chemistry I, Biology I H

Credit: 1

SC4520/SC4530 Environmental Science & Society / Environmental Science & Society Honor

The earth is a complex system in which living organisms are dependent on the nonliving environment and each other. This course will cover the science of how ecosystems function and are interconnected globally. In doing so, we will focus extensively on ecology and climate science while recognizing that humans play a major role in the functioning of ecosystems, which has effects on both wildlife communities and human communities. This course will interweave the concepts of human impacts on the environment, environmental policy and activism, and environmental justice with the ecosystem science. Throughout the year students will work collaboratively to carry out experiments, conduct and present research, design and execute peer-education projects, and learn about community and political activism. Individual assessments will include reflective essays and quizzes. A capstone activism project will be completed by each student or small group of students for an environmental issue they care strongly about.

Grade: 12

Prerequisites: Physics I, Chemistry I, Biology I

Credit: 1

SC4540 Advanced Placement Environmental Science

AP Environmental Science is the equivalent of an introductory college course in environmental science, and is designed to prepare students for the Advanced Placement Exam. This course will provide students with scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Students will be able to identify and analyze both natural and human-made environmental problems. They will also be required to evaluate the relative risks associated with these problems, and examine alternative solutions for resolving and/or preventing them. Students taking this course are expected to take the Advanced Placement Exam.

Grade: 12

Periods per week: 6

Credit: 1

Prerequisites: Physics I, Chemistry IH w/strong performance, Biology IH w/strong performance and Senior Honors Math

PROPOSED COURSE FOR 2020-2021

SC4570/SO4570 Climate Science and Social Change (pending funding)

This course will cover the science of climate change, the ongoing and expected future impacts of climate change on ecosystems and human societies, and strategies for mitigating and adapting to climate change. This course will interweave science, environmental policy and activism, and environmental justice. Throughout the year students will work both independently and collaboratively to conduct and present research, design and execute peer-education projects, and learn about community and political activism. Assessments may include but are not limited to presentations, posters or similar displays, reflective essays, and quizzes. The overarching goals of this course are to cultivate science and information literacy, to develop a sustainability mindset, and to develop skills for public advocacy and activism.

This course is by application only. See Dr. Brown (Science) or Mr. Grande (Social Studies) to apply.

Periods per week: 7 in a 10 day cycle

Grade: 12

Pre-/Concurrent requisites: Physics, Chemistry, Biology

Credit: 1.0 SC or SO



SC5500/TE5500 Engineering By Design

EBD is a yearlong, project-based course that will expose students to the fundamentals of engineering design and iterative problem solving. Students will develop skills in research, ideation, modeling, project management, and collaboration. Teams of students will collaborate on design challenges. They will learn new skills & increase background knowledge in order to design, prototype, and craft an optimized solution. This course enables students to apply their creative talents as well as their prior science knowledge. Engineering By Design can be taken as part of Engineering Technology Pathway and would be a precursor to Engineering Innovation & Design. Credit can be earned from either the Career and Tech Ed Department or the Science Department.

Grade: 10-12

Periods per week: 4

Prerequisites: Physics I

Credit: 1



SC5600/TE5600 Engineering Innovation & Design Honors— *Design : Create : Innovate*

EID will provide a student-centered, project-based curriculum that challenges students to interpret real-world engineering and design problems using the engineering design lab—a collaborative setting where students will share their various skills and angles of interest to help each other advance and refine ideas. With an aesthetic lens, students will gain a greater understanding of three-dimensional design through the use of the principles of composition and the formal elements of art. In the engineering design lab, students will create physical products using hand tools, power tools, a sewing machine, a Vacuform machine, 3D Printers, a Laser Cutter, a CNC Router, etc. Their final products will integrate both functionality and aesthetics. This course will empower students by allowing them to develop skills in ideation, critique, design process, fabrication, innovation, presentation, iteration, and reflection. Students will focus on prototyping and the creation of real products (2D & 3D), moving beyond theoretical ideas. Diverse skill backgrounds complement the collaborative nature of this course. Engineering Innovation & Design can serve as the capstone course in the Engineering Technology Pathway. Credit can be earned from either the Career and Tech Ed Department or the Science Department.

Grade: 12

Periods per week: 6

Credit: 1

Prerequisites: One of the following sequences:

Engineering By Design; Sculpture I & Sculpture II; Woodworking I & Woodworking II; Sculpture I plus two additional Visual Art courses; Drawing I plus two additional Visual Art courses; AP Physics & Sculpture I /Drawing I; AP Physics & Engineering the Future; Portfolio Reviews (students working outside of school present work and written application to instructor)

Or Three of the following individual courses: Visual Art ; AP Science; World of Money/Business; Computer Programming; Architecture; Engineering The Future



SC5620/SC5630 Marine Biology / Marine Biology Honor

An introductory course on the marine environment. We will survey the fundamentals of physical and chemical oceanography before diving into the rich biological and ecological diversity of the oceans. Major topics will include plant and animal life and types of communities such as coral reefs, seamounts, and estuaries. Evaluation will be based on lab reports, quizzes and tests, individual and group projects, and participation. The course will culminate in a field trip to the New England Aquarium. Students who elect this course for honors credit will be expected to demonstrate strong academic independence through completion of extra projects.

Grade: 12

Prerequisites: Physics I, Chemistry I, Biology I

Credit: 1

SC5820/SC5830 Forensic Science / Forensic Science Honor

Forensic Science is a student-centered, semester-long course. Basic forensic analyses will be covered using case studies and labs. Topics covered include the study of fibers, DNA profiling, blood and blood spatter analysis, soil analysis, and fingerprinting. Learning happens primarily through collaborative exploratory-activities and lab work. Students who elect this course for honors credit will be expected to demonstrate strong academic independence through completion of extra projects.

Grade: 12

Prerequisites: Physics I, Chemistry I, Biology I

Credit: .5

SC5650 Materials Science

Have you ever wondered how glass is made? Have you ever wondered how kevlar vests are so strong and light? Have you ever wondered how nanotechnology will alter the future of medicine? This course offers a student-centered, hands-on exploration of how the structure of different materials relates to their use in the real world: sports equipment, clothing, vehicles, aerospace, construction, medicine delivery, etc. Students will actively investigate the structure and properties of different materials like metals, ceramics, polymers and plastics, composites and nano-materials through student-led lab activities. Students will examine materials for points of failure - when will it break? Will it be crushed? - and then, improve the material and retest it again. Throughout the course, students will investigate materials science present in their daily lives: how have materials changed the design and function of a tennis racquet over time? What materials are in a cell phone? This class will be taught through a mix of hands-on lab investigations, student-led inquiry, student projects and portfolios, guest speakers from local industry, and field trips.

Periods per week: 7 in a 10 day cycle

Pre-requisites: Chemistry I, Physics I, and enrolled in or completion of Biology I

Grade 11/12

Credit: 1 SC



SC5920/SC5930 Genetics / Genetics Honor

Genetics is a student-centered, semester-long course. Molecular and classical genetics will be covered using lectures, activities, and labs. Topics covered include the DNA structure. Fruit fly genetics, human genetics, and genomics. Students will also learn how the definition of a gene has changed over time. Learning happens primarily through collaborative exploratory-activities and lab work. Students who elect this course for honors credit will be expected to demonstrate strong academic independence through completion of extra projects.

Grade: 12

Prerequisites: Physics I, Chemistry I, Biology I

Credit: .5

SC6100/VA6100 Drawing for Understanding in Field Science

In this cross-disciplinary course, students will build scientific knowledge about their immediate environment through observational drawing and field research. Using the principles of visual design and the scientific investigation, students will communicate their scientific knowledge to others through visually powerful images and forms. From the pre-historic drawings of bison in the caves of Lascaux, France to the anatomical studies of the 14th century Flemish physician, Andreas Vesalius to the incredible journals of Leonardo Da Vinci, people have used drawing to understand the natural world and to communicate that understanding to others.

In this course we will look at the natural world – the flora, fauna, history, and systems at play in real time field experiences. Student will engage in active discovery through observational drawing as the principal technique for recording data. Direct observation and construction of knowledge lies at the heart of what both scientists and artists do. Field trips and talks by visiting artists/scientists will supplement our studies. Students will build knowledge together through observation, drawing, discovery, discussion, and design. This course may be taken for .5 credit in the Visual Arts Department.

Grade: 9-12

Credit: .5 (SC or VA)



SOCIAL STUDIES

The Social Studies program at Brookline High School has two fundamental goals: to prepare young people to live in a democratic society and interdependent world and to enable students to define themselves on the basis of a broad knowledge and deep understanding of human history and society. The program provides all students with a common foundation of knowledge of both world history and United States history, and subsequently, with the opportunity to study areas of special interest. The curriculum teaches them to explore, analyze and seek meaning in history; to understand themselves as both the inheritors and creators of culture; and to facilitate the achievement of social science literacy and the mastery of learning and thinking skills.

To accomplish these goals, the Social Studies Department has designed the following course of study. The freshman, sophomore and junior year courses are required, and the senior year is elective. Most students take Social Studies for four years.

Freshmen are required to take World History I: Identity, Status, and Power

Sophomores are required to study World History II: The Modern Era on one of two levels:

World History II: The Modern Era

World History II: The Modern Era - Honor

Juniors are required to study United States History on one of three levels:

United States History or American Studies

United States History – Honor or American Studies - Honor

United States History - Advanced Placement

English Learners study United States History at the level appropriate to their ELE placement:

United States History I - English Learners, levels I and II

United States History II – English Learners, level III

The Social Studies Department offers the following Options courses.

(See course descriptions for pre-requisites.)

Full Year

One Semester

- | | |
|---------------------------------------|-------------------------------|
| – Global Leadership Academy | – Asian-American Studies (S2) |
| – Legal Studies and Internship | – Philosophy (S1) |
| – Psychology | – Economics (S1) |
| – Racial Awareness Seminar | – Gender in Society (S2) |
| – Seminar in African-American Studies | |
| – Social Justice Leadership Program | |
| – AP Human Geography | |
| – AP American Government | |

THE FRESHMAN REQUIREMENT: WORLD HISTORY I: IDENTITY, STATUS, AND POWER

SO1000: World History I: Identity, Status, and Power

The goal of this course is for all of our students to understand themselves and their place in the world in historical and comparative perspective. Through historical case studies, students will learn how premodern and early modern societies answered these fundamental questions: Who are we, and who am I? How do societies rank people? Who has power and why? How does wealth get produced and distributed? Through inquiry projects focused on these questions about personal identity, social rank, political power, and the meaning and distribution of wealth, students will learn and practice 21st-Century skills in collaboration, communication, and creativity. Through systematic comparisons between pre-modern and modern responses to our course questions, students will learn to answer those questions for themselves, and therefore conceive their own identities in comparative and historical perspective. This course is unlevleed.

Grade: 9

Credit: 1

THE SOPHOMORE REQUIREMENT: WORLD HISTORY II: THE MODERN ERA

Beginning with a review of the Enlightenment, World History II: The Modern Era focuses on the world's history from the Age of the Democratic Revolutions to the post-Cold War era. Students will study the Industrial Revolution as it developed in Europe and in Japan; political and social movements of the 19th century; European and Japanese imperialism and the various forms of accommodation, assimilation and resistance created by African and Asian societies; and the world impact of World War I, World War II, the Cold War and Wars of National Liberation. Examining Asian, African, European and American cultures and histories, students will consider how they contributed to, and were impacted by, world history in the realms of ideas, art, politics and economics. All students will write a research essay in order to fulfill course requirements.

SO2020 World History: The Modern Era

In this course, students will learn the skills necessary to analyze cause and effect, compare multiple perspectives, recognize the role of human agency in history, and discern the impact that economic, social, political, religious and philosophical forces have had on modern civilization. They will learn to analyze works of art from a variety of cultures and historical periods. They will practice outlining and note-taking skills, and write short papers. Students will read scaffolded primary and secondary sources in addition to a grade-level textbook. All students will write a research essay in order to fulfill course requirements.

Grade: 10

Prerequisite: World History: The Pre-Modern Era

Credit: 1

SO2030 World History: The Modern Era Honor

In this course, students will be expected to have achieved proficiency in some of the skills necessary to analyze social, political, and historical problems. Through research and the writing of major essays, they will analyze cause and effect, compare multiple perspectives, recognize the role of human agency in history, and discern the impact that economic, social, political, religious and philosophical forces have had on modern civilization. They will learn to analyze works of art from a variety of cultures and historical periods. The course will teach a variety of advanced skills necessary to evaluate primary and secondary sources, deal with more than one primary source at a time and read many secondary sources beyond the textbook. Teachers will help students write critical and analytical essays, which require analysis on both factual and conceptual levels and a clear thesis by the student. All students will write a research essay in order to fulfill course requirements.

Grade: 10

Prerequisite: World History: The Pre-Modern Era

Credit: 1

SOPHOMORE OPTION CLASS

SO2100 Racial Awareness Seminar

This is a yearlong, co-taught Social Studies elective course that explores the complexities of race within our national, local and high school communities. Students will meet in a seminar-style class designed to foster students' capacity to reflect on and speak effectively about their own identities and to listen carefully and thoughtfully as others reflect on and speak about theirs. The class, therefore, will require students to articulate their own experiences, to learn from their classmates' experiences, and to develop a greater understanding across racial identification lines. Students will engage in experiential learning activities and group discussions and will read and view materials provided by the teachers. Each quarter, students will attend two school or community events that will enhance their racial understanding. They will also be challenged to think of ways to share their new understandings with the greater community.

The course is open to all sophomores. Students must complete an application in February of their freshman year (available in the Social Studies office [room 393] and online) for acceptance the following year. Students will be notified by March 1 of their freshmen year. This class counts toward the graduation requirement of 22 credits, but does not fulfill either the Social Studies or BHS Elective requirement.

Grade: 10

Requirement: Application

Periods per week: 2

Credit: 1



THE JUNIOR REQUIREMENT: UNITED STATES HISTORY or AMERICAN STUDIES HISTORY

United States History surveys the development of the United States from the colonial period to the end of the Cold War era, using both a chronological and thematic approach. Beginning with a review of the colonial period and the American Revolution, students examine the creation of the Constitution, the early years of the republic, the institution of slavery and its effect on the country, the causes and effects of the Civil War and Reconstruction, the Industrial Revolution, the responses to the Industrial Revolution, civil rights, and the development of American foreign policy in the pre and post-World War II eras. By looking at United States history through a variety of lenses -- social, economic, and constitutional -- students will gain an in-depth understanding of the complex ways in which the past influences the present. In studying the aspirations of the many different individuals and peoples who have forged our nation's history, the conflicts they have encountered and the contributions they have made, students will be better prepared to play an informed and active role in a democracy.

American Studies History is a clustered, interdisciplinary course that meets conjointly with American Studies English. Students must enroll in both courses. The Social Studies and English teachers work together to blend the curriculum and skills from both departments. The course explicitly connects U.S. history to American literature, and engages students by connecting the reading and the writing assignments to the real world. The course addresses two guiding questions: What is the story of America? and How did we get here? American Studies will offer both College Prep/Standard seats and Honors seats, as the course benefits from the perspectives of a wide range of students. Depending on enrolled level, assignments will vary in difficulty.

All levels of both United States History and American Studies History aim to prepare students for college. The skills which will be stressed include outlining, preparing written work which shows sequence and the development of independent argument, working with four or five different sources, distinguishing immediate and long-term causes, critically examining primary sources, and recognizing the broader issues involved in a case. All students will learn some of the skills of the historian and spend time in the library. Reading, writing, and discussion form the spine of the course; there are also opportunities for role playing, viewing films, taking field trips, and hearing speakers. All students will complete a research essay in order to fulfill course requirements.

SO3020 United States History

United States History students will further develop the skills necessary to analyze social, political and historical problems. They will practice outlining and note taking skills, and write short papers. Primary sources will be introduced one at a time and moderately difficult secondary sources will be required beyond the textbook. Teachers will help students write essays that require analysis on both factual and conceptual levels and a clear thesis by the student.

Grade: 11

Prerequisite: World History: The Modern Era

Credit: 1



SO3030 United States History: Honor

United States History: Honor students will be expected to have some of the skills necessary to analyze social, political, and historical problems upon entering the course. The course will teach a variety of advanced skills necessary to evaluate primary and secondary sources, deal with more than one primary source at a time and read many secondary sources beyond the textbook. Teachers will help students write essays that require analysis on both factual and conceptual levels and a clear thesis by the student.

Grade: 11

Prerequisite: World History: The Modern Era

Credit: 1

SO3040 United States History: Advanced Placement

United States History: Advanced Placement is given at the level of a freshman college course. Students will read a college textbook and many additional primary and secondary sources. Students complete a significant paper or exam on a weekly basis. The College Entrance Examination Board specifies the syllabus for the course. Students in this course are expected to sit for the Advanced Placement Examination in May. Success in this examination usually makes possible advanced placement, college credit, or both, depending upon the policy of the college which the student attends.

Grade: 11 Prerequisite: World History: The Pre-Modern Era and World History: The Modern Era

Credit: 1

SO 3120 American Studies History

Students in American Studies History will read and interpret a variety of texts and resources that help us understand the broader stories of the United States. These resources will include literature, nonfiction, primary and secondary historical texts, music, art, film, geography, maps, infographics, current news sources, and personal experiences. In the final quarter students will write an American Studies research paper that focuses on a theme of their own choosing and develops their own narrative of that theme using a variety of texts across time periods.

Grade: 11

Prerequisite: World History: The Modern Era

Credit: 1

SO 3130 American Studies History: Honor

Students in American Studies History: Honor will read and interpret a variety of texts and resources that help us understand the broader stories of the United States. These resources will include literature, nonfiction, primary and secondary historical texts, music, art, film, geography, maps, infographics, current news sources, and personal experiences. Students enrolled for honor credit will be expected to read critical commentaries and write analytical essays with relative independence each quarter. All students will write an American Studies research paper that focuses on a theme of their own choosing and develops their own narrative of that theme using a variety of texts across time periods.

Grade: 11

Prerequisite: World History: The Modern Era

Credit: 1

SO1400 United States History Part I for English Learners

Students enrolled in this course focus on skill development as they learn U.S. history from British colonization through the Civil War. The course will emphasize note-taking, organization and study skills, along with basic skills in analysis and writing. Teachers will help students write a paragraph using historical evidence to support all claims, demonstrate fluency in understanding historical vocabulary, and demonstrate fluency in reading leveled texts. In addition to the narrative history of the period, students will learn basic North American geography, the provisions of the U.S. Constitution and the Bill of Rights, and other relevant topics and vocabulary in American history. Enrollment is limited to students enrolled in ELE I and II courses.

Grade: 9-12 ELE III

Credit: 1 Social Studies

SO1500 United States History Part II for English Learners

This course is designed for advanced English learners, and will provide content instruction in US history from Reconstruction through the present. Students will receive assistance in reading and writing. Class work will be devised to build skills in note-taking, organization and critical thinking. Teachers will help students learn to develop thesis statements, assemble evidence, and write logically constructed essays. The course will include practice in the vocabulary necessary to understand the concepts, basic geography, and primary source documents and other relevant topics in US history. Enrollment is limited to students enrolled in the ELE III course. Students at other ELE levels may be enrolled with permission from the International Student Advisor.

Grade: 9-12 ELE III

Credit: 1 Social Studies



SENIOR OPTION CLASSES

Senior Option courses in Social Studies are designed to achieve three goals: to introduce students to academic disciplines in the social sciences and humanities; to cultivate the habits of mind appropriate to newly enfranchised citizens in a democratic society; and to offer students the opportunity to study topics they find personally engaging. We offer both full year and semester options at a variety of levels of academic difficulty. Some courses offer opportunities for community internships and independent research.

SEMESTER COURSES

SO5030 Philosophy Honor

This fall-semester course is designed to make you think. Students confront their assumptions about morality, fairness, responsibility, and even the mind itself. In particular, students encounter the thrilling promise of the European Enlightenment, the stark challenges posed by 20th-century Existentialists, the intellectual foundations of modern capitalism, the philosophical ramifications of the explosion in what we know about the brain, and the intriguing possibilities for happiness offered by The Buddha 2500 years ago. Students will learn to read difficult documents carefully and to craft complex arguments. Some highlights include the works of Kant, Mill, Nietzsche, Sartre, Friedman, Singer, Gilbert and Batchelor.

Grade: 11, 12

Prerequisite: Junior or Senior standing

Credit: .5

SO5720 Seminar in Asian-American Studies

SO5730 Seminar in Asian-American Studies Honor

In this spring-semester class, students will examine the historical, social and political factors that have influenced the lives of Asian Americans from 1850 to the present. Two key questions frame the course: "Who is Asian American?" and "What does it mean to be Asian American?" The course addresses these questions in four sections; the first is a historical analysis of the early immigration period (1850-1924), which looks at reasons for immigration, living and working conditions in America, and negative sentiment towards Asian immigrants. The second unit examines the World War II years and the impact of internment on Japanese Americans as well as other Asian American groups. The third unit covers the post-1965 immigration period, including the refugee migration from Southeast Asia (focusing on Cambodians and the Hmong from Laos). The last unit focuses on contemporary topics of the model minority myth, racial identity, race relations, Anti-Asian violence, gender stereotypes, Asian Americans in the media, LGBTQ identity, Asian Americans in politics, bi-racial Asian Americans, college admissions and affirmative action, and the Tiger Mom controversy. By using a variety of written and media sources, students will attempt to draw meaningful conclusions about the experiences and contributions of Asian Americans in United States history.

Grade: 11, 12

Prerequisite: Junior or Senior standing

Credit: .5

SO5420/ SO5430 Economics/ Economics Honor

This fall-semester course is an introduction to "economic literacy." What is the "economic problem?" What are land, labor, capital and entrepreneurship? How do supply and demand interact? How does the GNP, inflation, recession, and "money supply" impact our daily existence? The course examines various economic systems of the past and the contemporary world. In addition, the students study several economic theories, analyze the "mixed economics" of Europe and Asia and confront the economic dilemmas of international development.

This course is offered at an "N" level, but students may elect to take it for Honors credit, which requires the completion of a significant number of additional assignments. After the first four weeks of class, students may not switch to a different level.

Grade: 11, 12

Prerequisite: Junior or Senior standing

Credit: .5

SO5600 Gender in Society

This spring-semester class will examine the sense that society makes out of sex and sexuality. Contemporary perspectives will be placed in historical context. The course will analyze the various influences of biology and culture on social practice. We will examine scientific texts, popular media, policy debates, and advertising. More than a discussion of these issues, the class will also examine the language used and the manner of its use in the discourse.

Grade: 11, 12

Prerequisite: Junior or Senior standing

Credit: .5



FULL YEAR COURSES

SO4220 Senior Seminar in African-American Studies

SO4230 Senior Seminar in African-American Studies Honor

Students will learn about African-Americans by examining their history, literature, arts and culture. After examining African geography, history, politics and culture, students will learn the historical narrative of African-Americans in United States through novels, essays, biographies, speeches and plays. The course aims to help students identify with African Americans throughout the generations of American History, such as the Colonial Era, the American Revolution, Slavery, the Civil War, Reconstruction, and the struggle for Civil Rights. Students will experience African-Americans not as separate from but as an inclusive part of American thought, actions and events. In addition, the course will draw upon Pan-African connections in art, drama and music to understand the many cultures resulting from the African Diaspora. Course work will conclude with a major research and/or community service project. This course is offered for both "N" level and Honors credit, which requires completion of a significant number of additional assignments. After the first four weeks of class, students may not change to a different level.

Grade: 12

Prerequisite: United States History

Credit: 1

SO4040 AP American Government and Politics

This course engages students in an in-depth study of political science and prepares them to take the American Government and Politics Advanced Placement Exam. Students study the various institutions, groups, beliefs, and ideas that make up the American political tradition. These include the organizations, powers and policy-making process of the Congress, the President and the executive bureaucracy, and the role of the Supreme Court. Constitutional history, the political values and behaviors of Americans, formal and informal institutions of government, and the development and defense of civil rights and liberties are also addressed. Students are expected to take the Advanced Placement American Government Examination in May. Students successfully completing this examination may gain advanced placement and/or college credit depending on the policy of the college to which the student is admitted.

Grade: 12

Prerequisite: United States History

Credit: 1

SO4320/ SO4330 Legal Studies and Internship/Legal Studies and Internship Honor

Students will examine various aspects of the American legal system, including civics, civil rights, Constitutional law, law enforcement, criminal justice, public policy, civil dispute resolution, and contracts. The seminar will emphasize practical aspects of legal topics to provide students with perspectives on real world issues they are likely to encounter later in life. Guest speakers will include professionals from the court system, private law practices, and law enforcement agencies. Students will be required to present papers based on independent research, and they will participate in a variety of field trips and a culminating internship.

This course is offered for both "N" level and Honors credit, which requires completion of a significant number of additional assignments. After the first four weeks of class, students may not change to a different level.

Grade: 12

Prerequisite: United States History

Credit: 1

SO4420/SO4430 Psychology/ Psychology Honor

This full-year course in psychology introduces students to the systematic and scientific study of the human mind. Some of the questions the course addresses are: How do humans and animals learn? What contributions to nature and nurture each make to human development, personality, emotion, and cognition? How do people develop across the life cycle? How do their behaviors, thoughts, and emotions change over time? Do women and men think and feel differently? Why do people get depressed, obsessed, or suffer delusions? What kind of treatments are available to help these individuals? Why do individuals act differently in some groups than in other? And differently still when alone?

This course is offered for both "N" level and Honors credit, which requires completion of a significant number of additional assignments. After the first four weeks of class, students may not change to a different level.

Grade: 12

Prerequisite: United States History

Credit: 1

SO 5040 AP Human Geography

Advanced Placement Human Geography provides students with the opportunity to earn college credit while still in high school. The intellectual goal of the course is to develop critical thinking skills through the application and analysis of the fundamental concepts of geography. Students will learn and test theories about human interaction with the natural environment. They will discern and explain patterns in economic, political, social, and cultural life and their relationship to geography. The course explores issues in population growth and policy, the political organization of territories and regions, agricultural and industrial development, and urbanization and migration.

Grade: 12

Prerequisite: US History

Credit: 1



SO4500 The Brookline High School Program in Social Justice Leadership

The BHS Program in Social Justice Leadership is a year-long experience to train students to become social justice activists. Students meet in small seminar groups one time per week and grapple with social justice issues, work as interns at a local social justice organization for 2-3 months, participate in day long trainings each quarter and host speakers on a number of social justice topics. The program is for students who are passionate about making a difference in the world and are excited to connect with the world beyond BHS.

During the year, students read stories about social justice activists worldwide (including one book each semester), watch film about courageous change-makers, listen to speakers and participate in full-day trainings on racism, activism, and leadership. Students also travel to a prison and take an environmental tour of a low-income neighborhood.

Students begin the year by defining social justice and exploring their own identity: race, class, gender, and what it means to be a social justice advocate. During second quarter, students begin to identify the issue(s) they are passionate about, such as inequality, health, water rights, gay/lesbian/transgender rights, incarceration, access to food and water, or genocide. The third quarter emphasizes learning how to make change in the world and evaluates social change movements. Students end the year crafting their own personal social just mission statement. Throughout, opportunities to join student-led social justice groups (i.e. Literacy Partnership, community garden project) are provided.

The program is open to all juniors and seniors who have at least one afternoon available either in the fall, winter or spring to attend an internship at a Boston-area social justice organization. Students must complete an application in the Spring (available in the social studies office, room 393) for acceptance the following year. Students will earn a Certification in Social Justice for their successful completion of the program.

Grade 10-12

Requirement: Application

Periods per week: 2

Credit: 1



PROPOSED COURSE FOR 2020-2021

SC4570/SO4570 Climate Science and Social Change (pending funding)

This course will cover the science of climate change, the ongoing and expected future impacts of climate change on ecosystems and human societies, and strategies for mitigating and adapting to climate change.

This course will interweave science, environmental policy and activism, and environmental justice. Throughout the year students will work both independently and collaboratively to conduct and present research, design and execute peer-education projects, and learn about community and political activism. Assessments may include but are not limited to presentations, posters or similar displays, reflective essays, and quizzes. The overarching goals of this course are to cultivate science and information literacy, to develop a sustainability mindset, and to develop skills for public advocacy and activism.

This course is by application only. See Dr. Brown (Science) or Mr. Grande (Social Studies) to apply.

Periods per week: 7 in a 10 day cycle

Grade: 12

Pre-/Concurrent requisites: Physics, Chemistry, Biology

Credit: 1.0 SC or SO



SO4600 Global Leadership

This course prepares students to become leaders in an increasingly interconnected and interdependent world. Students will meet four times a week to: 1) Analyze the traits necessary to be a global leader, 2) study the challenges of globalization and the world economy, 3) design a plan to address a specific health threat in low income countries 4) examine the challenges of healthcare systems overall, and 5) undertake various global diplomatic role plays. The course will include an emphasis on projects, skill building, and teamwork. It will also include several guest speakers on topics throughout the year, as well as two field trips to the Global Economic Summit in Foxboro and the United Nations in New York City.

Grade 10-12

Requirement: Application

Credit: 1



SO4800/VA4800 Film as History/History as Film

How are historians and filmmakers engaged in the same process? In this Social Studies/Visual Arts collaborative course, students will explore how history is documented in written form and one of the most powerful ways in which it is created and disseminated - documentary film. Students will engage in developing critical thinking skills as collaborative learners from multiple disciplines, perspectives and understandings. Through the lens of presenting historical information in film, the students will address issues of academic research, writing, media literacy, and perspective using the essential questions that guide this course. Decision-making and ethics will be a central theme of the intersection of the written and filmed presentation of historical events.

Grade: 12

Credits: 1 (Visual Art or Social Studies)



VISUAL ARTS

“Creativity is intelligence having fun.” Albert Einstein

Visual arts students practice creativity every day. Students of every experience level are welcomed and encouraged to develop an intrinsic connection with design thinking challenges. Teachers provide instruction on the techniques necessary to allow all students the opportunity to create their very best work. Through the creative thinking and design process, visual arts students develop personal voice, persistence, problem solving, an appreciation of different points of view, the ability to collaborate, effective communication skills, and the craftsmanship to create increasingly sophisticated works of art.

In Visual Arts Classes, students:

- Cultivate imagination and curiosity
- Ask questions and do research to develop design thinking
- Connect learning to other ideas, experiences, and subjects
- Think flexibly and brainstorm multiple solutions
- Find focus, commit to learning, and create work
- Experiment, improvise, and embrace the unknown
- Think critically, make edits, refine, and develop craft
- Critique, reflect, share learning, and find the next challenge

Every student is encouraged to enroll in several visual arts courses during their high school program to develop their ability to engage in design thinking in order to effectively communicate ideas and understandings visually. Students are encouraged to investigate the wide variety of studio courses offered at BHS. Students can deepen their understanding in a particular area of the visual arts program by progressing the second, third and fourth levels of classes offered. Students, with a developed interest in the visual arts, are encouraged to deepen their understanding and build their experience in one or more of the many Level 2 classes offered. Students who are interested in building a portfolio as part of their college applications will want to enroll in Advanced Drawing and Painting or an equivalent Level 3 and 4 classes in any other of the studio concentration areas. In senior year, advanced students, with significant work over time in any media may wish to enroll in AP Studio Art as the capstone to their visual arts experience. The AP Studio Art exam is a portfolio exam that includes Drawing (drawing/painting, printmaking), 2D Design (photography, computer arts, comics, design, drawing, painting, printmaking, collage) and 3D Design (ceramics, sculpture, metals, wearable art) options. The portfolio exams are evaluated by The College Board and may result in college credit for the work completed during this class.

GRADUATION REQUIREMENTS

Graduation from Brookline High School requires three credits within the electives programs, Career and Technology Education, Performing Arts, and Visual Arts. Courses can be distributed across the three departments or met through the Electives Pathways Option to study more intensively in one discipline.

If a student is interested in a greater number of visual arts courses within the schedule, students may choose an Elective Pathway Alternative. This pathway allows students to re-direct some graduation credit requirements distributed in other areas towards work in the visual arts. Please check with the guidance counselor for more information.



LEVEL ONE: FOUNDATIONAL COURSES

VA8301 3D Animation

Students work with 3D software to create animations, short 3D films, from original characters and storylines that are developed into detailed, multi-level worlds. Students give life to characters and sketches created from observation, memory and imagination. Students develop individual ideas and then through in-process group critiques and viewings give and receive peer feedback on a viewer's experience and understanding of the artist's intentions. Students examine real world examples of 3D animation, both historical animations and the current trends in the industry.

Grade: 9-12

Credit: .5

VA8101 Animation I

Animation students, beginning with storyboards, ideas, original sketches, and frame development, become competent with the computer tools used to communicate their stories in a 2D animation. Students create detailed, multi-level stories, exploring the wide-ranging possibilities of the software that create interesting, entertaining and well-crafted animations. Students bring life to the two-dimensional sketches created during brainstorming. Students share work with peers to experience the responses of an audience of peers.

Grade: 9-12

Credit: .5

VA0101 Art Studio

Art Studio students create both 2D and 3D pieces developing personal voice through the choices made during the creative process. Art studio is an exploratory class that challenges the student to work with a variety of media and approaches to expressing ideas. Creative and flexible thinking is encouraged, as the students increase craftsmanship with mixed media. Students use imagination, hone observation skills, listen to their intuition, give and receive peer feedback to develop thoughtfully designed and executed artwork

Grade: 9-12

Credit: .5

VA5001 Ceramics: Foundations

Ceramics students learn the basic principles of using clay as a medium to create both functional and sculptural objects. Students explore the basic techniques, creating pinch pots, coil based pots, slab building and wheel throwing. With careful observation of the way clay reacts to gravity, heat, air, water, and touch, students gain the necessary understandings of structural integrity unique to this material. The clay class is taught with an emphasis on developing strong craftsmanship through keen observation of the processes, the development of individual ideas, and creativity. Written self-reflections and active participation in group reflection and critique are required components of this course. This course has a lab fee of forty dollars. Financial assistance is available.

Grade: 9-12

Credit: .5

VA 9400 Comic Books 101

Comic Books 101 is a level one drawing class. The production of comic books is a wonderful, unique form of storytelling that combines multiple framed words and pictures. Subject matter can be serious, humorous, autobiographical, or completely fantastic. Students explore the stages of comic book production using both traditional and computer assisted methods. Initially, students work with ink, paper, and transition to digital forms of comic book production. Work includes hand drawn thumbnails, model sheets, dummy pages, and analysis of the fundamental elements of sequential art. Students invent original characters and scripts that have personal relevance and engage in critiques and discussions to discover optimum visual solutions

Grade: 9-12

Credit: .5

VA9101/CE9101 Digital Design Studio I

Digital Design I students use computer programs create original compositions from memory, observation and imagination. Students integrate text and imagery creating book illustrations, company logos, advertising, optical illusions, and typographic imagery Using the tools of the computer programs, students create original work that conveys a message, evokes a feeling, persuades, or asks the viewer to look beyond what is visible. Adobe Illustrator and Photoshop, are the primary programs. Digital design work also challenges students to be original and inventive while meeting the constraints of client oriented work to elevate the challenges to the real world expectations.

Grade: 9-12

Credit: .5



VA9310/CE9310 Digital Video Production I

Students explore the tools and programs available to create videos start to finish, with careful attention to the communication of original ideas and intentions, and well as the response of viewers. From script writing, storyboarding, basic film techniques, to presentations, critiquing, post-production editing and refining of the stories, students use this art form to communicate understandings, refine technical skills, and develop personal voice. Students critique and analyze of historical and contemporary examples of film and television, including commercials and their own original videos. Student generated productions are viewed and critiqued by a group of peers to reflect on the response of an audience

Grade: 9-12

Credit: .5 (VA or CTE)

VA1001 Drawing Foundations

Students develop drawing skills by training the eye, brain, and hand to work in concert. Students use keen observation to develop mental focus and find a connection to understand what they are observing. Students work from observation, memory and imagination, as they experience a variety of methods for creating strong compositions. Students make use of any number of drawing instruments including graphite pencils, pen and ink, inked brushes, color pencils, crayons, charcoals, chalk, pastels, markers to explore a range of subjects - objects, spaces, and people. Students with limited experience will develop confidence in their abilities and students with broader experience will expand their skills through continued practice.

Grade: 9-12

Credit: .5

VA6100/SC6100 Drawing for Understanding in Field Science

Direct observation and construction of knowledge lies at the heart of what both scientists and artists do. In this cross-disciplinary foundational drawing class, students build and demonstrate scientific knowledge about the natural world through observational drawing and field research. Blending the principles of visual design and the scientific investigation, students communicate their scientific knowledge to others through visually powerful images. Field trips and talks by visiting artists/scientists will supplement our studies. Students will build knowledge together through observation, drawing, discovery, discussion, and design.

This course may be taken for .5 credit in the Visual Arts Department or the Science Department SC6100

Grade: 9-12

Credit: .5 (VA or CTE)



VA9600/CE9600 Documentary Filmmaking

Students create personal stories on film, studying first, different types of documentary techniques, sub-genres of documentary, and practicing the formal elements of documentary filmmaking. Teamwork, competent use of equipment, research methods, good communication skills, and professionalism are emphasized. Students research and discover meaningful topics for films, create proposals and treatments, find a unique voice, and assemble a film that keeps its viewers engaged. Utilizing the tools available to the filmmaker such as sound, image, special effects and pacing, students create an entertaining film while generating an awareness of world issues for the student and the viewer

Grade: 9-12

Credit: .5 (VA or CTE)

VA6001 Metals: Foundations

Students develop competency working with metal as the primary material to express individual ideas through cutting, bending, joining, and piercing metals. 3D design challenges for creating sculptural objects and jewelry are coupled with group and individual demonstrations to introduce the safe and appropriate use of the metal studio, tools, and materials. Students use observation skills, follow their intuition, tap into their imagination, and view outside sources to develop thoughtfully designed metal sculptures including jewelry. Creating well-crafted work that reflects an understanding of and respect for the creative process, mirrors the artist's intentions, and resonates with the viewer are paramount objectives of this course. This course has a lab fee of forty dollars. Financial assistance is available.

Grade: 9-12

Credits .5

VA2001 Painting: Foundations

Color has a deep and personal impact for the artist and the viewer. This course is designed to exercise students' ability of think creatively about how they can express their ideas visually through choices in the design and execution of the work. Painting students develop skill in utilizing a variety of wet media including tempera, watercolor, ink, gouache, acrylic paints, and water-soluble oil paint. Students in this class explore representational, abstract, and nonobjective ways of working to express ideas as well as analyze artists and artistic movements that have changed how we think about the nature and purpose of painting. Exploration and experimentation with materials, journal/sketchbook work, group critiques, written self-reflection and exhibition of work are emphasized

Grade: 9-12

Credits .5

VA7001 Photography: Foundations

Photography students experience the full range of possibilities, the black and white process in the darkroom and the inkjet prints of photos enhanced in Adobe Photoshop. The course emphasizes composition, design, point of view, and student voice in the photography. Students are challenged to consider all the elements of the frame; to include only what is necessary to turn a snapshot into a photograph. In the Black and White Lab, students develop film and use darkroom techniques to create photographs. In the Digital Lab, students switch to digital cameras and experience how technology has transformed this art form. Cameras are available for loan if necessary. This course has a lab fee of forty-five dollars. Financial assistance is available

Grade: 9-12

Credits .5

VA4001 Printmaking: Foundations

Exploration, experimentation and intuition are essential components to this printmaking class. Students engage in a variety of printmaking processes: linoleum, drypoint, collagraphs, and stencils to create multiple prints. These prints are just the beginning, as they then become the basis for further exploration through a variety of media. Cut them, fold them, layer them, trade them, paint on them, draw on them, build with them...the possibilities are endless. Students are encouraged to embrace the camaraderie that takes place in the visual arts classrooms to expand their ability to give and receive peer feedback, develop their critical thinking skills and comfortably participate in critiques.

Grade: 9-12

Credits .5

VA3001 Sculptural Objects : Foundations

Students construct 3D objects using many materials such as paper, cardboard, plaster, wire, and wax while practicing both additive and subtractive methods. The emphasis is on developing craftsmanship through keen observation of the process, the development of individual ideas, and innovative solutions to expressive challenges. Students develop personal voice through the development of conceptual thinking habits of mind, attention to principles of composition, and a historical understanding of three-dimensional art. Written self-reflections and active participation in group reflection and critique are required components of this course. This class has a lab fee of twenty dollars. Financial assistance is available.

Grade: 9-12

Credits .5

VA 9800/CE9800 Television Production 101

Television Production students experience real world live television production engaging in the full range of operations needed to create programs for viewing. Students create media productions for television working collaboratively and learning the fundamental techniques of operating state-of-the-art media production equipment. Emphasis is on teamwork, competent use of equipment, good communication skills, and professionalism. Students completing this course will be eligible to take future courses of Television Production, and Digital Video.

Grade: 9-12

Credit: .5 (VA or CTE)

SO4800/VA4800 Film as History/History as Film

How are historians and filmmakers engaged in the same process? In this Social Studies/Visual Arts collaborative course, students will explore how history is documented in written form and one of the most powerful ways in which it is created and disseminated - documentary film. Students will engage in developing critical thinking skills as collaborative learners from multiple disciplines, perspectives and understandings. Through the lens of presenting historical information in film, the students will address issues of academic research, writing, media literacy, and perspective using the essential questions that guide this course. Decision-making and ethics will be a central theme of the intersection of the written and filmed presentation of historical events.

Grade: 12

Credits: 1 (Visual Art or Social Studies)



VA7450/CE7450 The Brookline Lens: A Photo-Video Production House

In this class, students will learn all aspects of photography and videography including camera composition, editing, and lighting/audio techniques. Additionally, students will work on real projects for real clients in the community. Students will learn business development and management. Brookline Lens is a student-run business that provides clients with photo/video services and students with a authentic, work-based learning experience.



Grade: 10-12 Prerequisites: Photography Foundations, Digital Video 1, or complete an application for approval.

LEVEL TWO - CONTINUED STUDY COURSES

VA8201 Animation II

Students continue to create art in motion in short animated films. Students use the knowledge of programs gained in Animation I to develop several short animations, each designed on a particular challenge for animators. Students highlight their personal voice and styles as they create more sophisticated works. Students continue to develop competent use of software, strong compositions, original characters and story ideas. Assignments include the opportunity to continue work created in Animation I, experimentation of new ideas, inventiveness and reflection.

Grade: 9-12 Prerequisite: Animation I Credits .5

VA5101 Ceramics Intensive

Using the knowledge of clay and glaze developed in Ceramics Foundations, students continue to create functional and sculptural objects, improving upon construction techniques, conceptual development, and artistic autonomy through practice. Class assignments develop further understanding of proportion, gesture, formal elements, principles of composition, and observation. Through these challenges, students explore their individual creative voice using clay and engage in a critical analysis of their work. This course has a lab fee of forty dollars. Financial assistance is available.

Grade: 9-12 Prerequisite: Ceramics: Foundations Credits .5

VA1201 Drawing Intensive

Building on experiences in Drawing Foundations, students continue to develop the skills for expressing their ideas, interests, and experience visually through continued practice and complex visual problems. Students tackle a variety of subjects as they work representationally and abstractly to express ideas and engage in critical analysis of works of art.

Assignments challenge students to demonstrate strong composition, modeling of forms, linear perspective and working with the figure. Images convey ideas about the subjects beyond mere appearance, and develop a unique artistic signature. Journal work, group critiques, self-reflections, exhibition of work and competent use of tools are emphasized. All students will participate in-group critiques and have opportunity to exhibit their work in both the UAB and The Art Space gallery.

Grade: 9-12 Prerequisite: Drawing Foundations, Drawing for Understanding in Field Science Credits .5

VA9201/CE9201 Digital Design Studio II

Digital Design II students continue to create original compositions that demonstrate competence and understanding of graphic design principles and the dual purposes of the graphic artist, personal expression and client satisfaction. Assignments resulting in bold, eye-catching illustrations, collages, advertisements, visual illusions, and typographic imagery, mirror the real world expectations for designers/illustrators. Competent use of software, originality, inventiveness, risk taking and reflection are emphasized.

Grade: 10-12 Prerequisite: Digital Design Studio I Credits .5 (VA or CTE)

VA9320/CE9320 Digital Video Production II

Students continue to investigate the techniques, story ideas, creating scripts, scenes, music, filming, and editing digital videos introduced in DV I. Students create individual and group productions that demonstrate advancing proficiency in creating compelling video. Students conduct in-depth analyses of selected directors and their films. Class participation in brainstorming, group projects, critiques, and final viewing of the videos is used to provide feedback to the videographers.

Grade: 9-12 Prerequisite: Digital Video Production I Credits .5 (VA or CTE)

VA6101 Metals Intensive

Metals Intensive students build on the skills acquired in Metals Foundations as they engage in the age-old dilemma of manipulating and shaping metal and related material. Using observational skills, imagination and intuition, students will design and execute small sculptural objects not limited to jewelry. The assignments require students to create work that demonstrates increased independence, a deeper understanding of the material, stronger manipulative skills and the ability to skillfully combine processes. This course has a forty dollar lab fee. Financial assistance is available.

Grade: 9-12

Prerequisite: Metals Foundations

Credits .5

VA2101 Painting Intensive

Building on experiences in Painting Foundations, students continue to develop the skills for expressing their ideas, interests, and experience visually through continued practice and complex visual problems. Students tackle a variety of subjects as they work representationally and abstractly to express ideas and engage in critical analyze of works of art.

Assignments challenge students to demonstrate strong composition, modeling of forms, linear perspective and working with the figure. Images convey ideas about the subjects beyond mere appearance, and develop a unique artistic signature. Journal work, group critics, self-reflections, exhibition of work and competent use of tools are emphasized

All students will participate in-group critiques and have opportunity to exhibit their work in both the UAB and The Art Space gallery

Grade: 9-12

Prerequisite: Painting Foundations

Credits .5

VA7101 Photography Intensive: Darkroom

Photography students refine the skills introduced in Photography Foundations. Students in this class have chosen to work in the darkroom with their own negatives and the enlargers to investigate options for using negatives to reinvent the images. Challenges are designed to engage in artistic thinking, problem solving, and exploring ideas. Students judge work critically and realistically, through peer critiques and reflection. Students will develop numerous bodies of work, exploring particular concepts and themes within photographic genres such as Portraits, Family, Landscape, Architecture, Documentary Film, Still Life and Sports. Cameras are available for loan if necessary. This course has a lab fee of forty-five dollars. Financial assistance is available

Grade: 10-12

Prerequisite: Photography: Foundations

Credit: .5

VA7210 Photography Intensive: Digital

Photography students refine the skills introduced in Photography Foundations. In this class students have chosen to focus in the digital photo labs, to explore the possibilities of good camera work and digital software. Students create complex images; engage in artistic thinking, problem solving, and exploring ideas. Students judge work critically and realistically, reflecting on individual growth as a photographer. Assignments are based on particular concepts or themes such as Portraits, Family, Landscape, Architecture, Documentary Film, Still Life and Sports. Group critiques, self-reflection and exhibitions are avenues for feedback to the photographers. Cameras are available for loan if necessary. This course has a lab fee of forty-five dollars. Financial assistance is available

Grade: 9-12

Prerequisite: Photography: Foundations

Credit: .5

VA4201 Printmaking Intensive

The exploration and experimentation introduced in printmaking foundations continues. Students are now familiar with a variety of printmaking processes: linoleum, drypoint, collagraphs, and stencils and are able to create multiple prints - these prior experiences serve as the jumping off point for further exploration through a variety of media and subjects. The development of a personal point-of-view expressed through the printmaking process is important for moving work forward. Group participation in brainstorming and critique support personal work that demonstrates genuine understanding of the printmaking techniques, focused attention, persistent work habits, individual expression, and self-reflective learning.

Grade: 10-12

Prerequisite: Printmaking: Foundations

Credits .5

VA3101 Sculptural Objects: Intensive

Students continue to construct 3D objects that are increasingly more complex based on the experiences and learning in the level one class. The emphasis is continuous development of craftsmanship, evidence of personal voice and a solid command of the materials. Students are encouraged to explore blending materials, follow ideas, and stretch the possibilities of creating 3D forms. Written self-reflections and active participation in group reflection and critique are required components of this course. This class has a lab fee of twenty dollars. Financial assistance is available.

Grade:10-12

Prerequisite:: Sculptural Objects I: Foundations

Credits .5



VA9900 Television Production 102

Television Production 102 continue to create live television productions engaging in the full range of operations needed to create programs for viewing. As students become more competent with the workings of a television programming that is live, they examine “classic productions” to further understand “best Practices”. Students create media productions for television working collaboratively and learning the fundamental techniques of operating state - of - the art media production equipment. Emphasis is on teamwork, competent use of equipment, good communication skills, and professionalism.

Grade: 9-12

Prerequisite: Television Production 101

Credits .5 (VA or CTE)

LEVEL THREE - ADVANCED COURSES

VA9300 2D Portfolio Preparation

Advanced drawing and painting students engage in focused investigations of personal ideas and questions. Students are challenged to be skillful, intuitive, imaginative, and critical thinkers as they create bodies of work to build breadth in their portfolios. Students focus on developing sophisticated visual solutions to traditional design problems. Students consider the qualities inherent in compelling visual expressions, in order to create sophisticated abstract and representational compositions. Students investigate how artists generate ideas and determine the appropriate approach to solving challenges. Through brainstorming exercises, each student artist makes critical choices regarding subject, media, style, and execution. Students develop a portfolio suitable for college and scholarship applications as well as serving as the foundation for an AP level portfolio for students that continue their artistic studies and undertake the AP Studio Art Exam.

Prerequisite: Drawing Intensive, Painting Intensive, Printmaking Intensive or department approved equivalent

Grade: 11-12

Credit: 1

VA5200 Ceramics Advanced

Students in Ceramics Advanced, build a personalized body of work utilizing a variety of resources and techniques including observation, imagination, formal elements, and principles of composition. Each student makes critical choices regarding subject matter, intention, and execution. Students are expected to produce a sophisticated body of work that exhibits clarity, focus, and commitment. Students will work in a mixed level grouping and engage in critiques, class discussions and exhibit work regularly. This class has a lab fee of forty dollars. Financial assistance is available.

Prerequisite: Ceramics Foundations and Ceramics Intensive.

Grades 10-12

Credits: May be taken for a half year .5 or full year credit 1.0

VA7300 Photography Advanced

Advanced Photography students focus on creating sophisticated, compelling images that illustrate their growing command of the tools and materials available to the photographer. Students work utilizing a variety of resources and techniques including observation, imagination, formal elements, and principles of composition. Each student makes critical choices regarding subject matter, intention, and execution. Students construct strong portfolios of images that include landscapes, portraiture, documentary and invented images. Students may work in a mixed level grouping and engage in critiques, class discussions and exhibit work regularly. Cameras are available for loan if necessary. This class has a lab fee of forty-five dollars. Financial assistance is available.

Grade 10-12

Prerequisite: Photography Foundations and Photography Intensive

Credit .5

VA9600 Independent Study

Independent study is granted through a written request made through the Visual Arts Department. Students need to present a written proposal for an independent inquiry, including the reason for the study, regular check in times for critique and feedback, personal deadlines to advance work, ending with a completed body of work, artist's statement and an exhibition. Credit determined by length of contract.

Prerequisite: Previous Visual Arts Course work, the permission of the instructor and curriculum coordinator.

Grade: 11-12

Credit: .5 or 1



LEVEL FOUR COURSES - CAPSTONE COURSES

VA9000 AP Studio Art: Drawing, 2D Design, Photography, 3D Design

AP Portfolio students engage in create a series of pieces that explore a theme, emerging from personal inquiries that challenges them to be skillful, intuitive, imaginative, and critical thinkers. They create a strong portfolio of work for submission to the College Board for the AP Studio Art Exam. The AP artist needs to be able to work independently, to step up and create personal challenges that answer their curiosity, to be a problem solver, and to seek critique for reflection. Students need to develop a theme or concept of personal interest, devising challenges and posing visual problems to be explored creating a body of work with depth and breadth. Emphasis is on developing artistic vision, maintaining high personal expectations, meeting deadlines, and preparing work for public viewing. Weekly journal work, written self-reflection, group critique, and formal artistic statements are required components of this course. All AP students prepare a slide portfolio of work that meets the expectations for the College Board's AP Studio Art Portfolio Exam in one of the three portfolio areas: Drawing, 2D Design, Photography or 3D Design.

Grade: 11-12

Credit: 1

Prerequisite: Advanced Drawing and Painting or three years of work within Ceramics, Sculpture, Jewelry/Metals, Photography, or Graphic Design.



WELLNESS EDUCATION

The Brookline High School Wellness Education Program is designed to provide students with the knowledge and skills necessary to develop behaviors and attitudes to be healthy and physically active for a lifetime. The Wellness Education Program establishes a learning environment where students feel safe, supported, valued, empowered, and appreciated. The program also affords students opportunities to recognize the value of physical activity for health, enjoyment, challenge, self-expression, and social interaction.

In the 9th grade, all students are required to pass one semester of Lifetime Wellness. This course is designed to showcase the correlation between health education and physical fitness. This course meets four times per week for one semester; two days in the classroom and two days in the gymnasium, fitness center, or spin room. In the classroom, using a skills-based approach, health education utilizes accurate, current, and creative lessons to facilitate student learning and skill development. On activity days, students are exposed to a wide variety of inclusive, active, challenging, and enjoyable physical activities. Courses in 10th, 11th, and 12th grades are designed to provide students with a selection of personal fitness and lifetime activities on a semester basis. The teaching and learning process involves teacher guidance, student interaction and engagement, assessment, and opportunities to practice and participate.

The Wellness Education Department consistently challenges students to enhance their confidence and competence, critical thinking, writing, and problem-solving skills. The department depends on valid, credible, and reliable research that showcases the correlation between quality physical education / fitness and academic achievement. Specifically, the department incorporates an objective fitness assessment system, Polar GoFit, and specialized heart rate sensors to support students' understanding of cardiovascular endurance and analysis of their progress. The proven research of SPARK, by Dr. John Ratey, is incorporated into lessons to showcase the positive correlations between exercise and brain function.

After-School Physical Activity Contract is offered to 10th, 11th, and 12th grade students with no room in their schedule (blocks A-G) to take a Wellness Education course for the entire year, and who take instruction off campus in a lifetime activity that is not offered at the BHS. Final grade (P or F) is contingent upon fulfillment of all contract responsibilities.

Sports Team Credit is offered to 10th, 11th, and 12th grade students who choose to fulfill their Wellness Education requirement with a BHS interscholastic sport. One sport equals one semester of Wellness Education credit. Final grade (P or F) is contingent upon completing the season in good standing. See the course descriptions for more complete details.

Brookline High School has a four-year graduation requirement in Wellness Education. Freshmen, sophomores, juniors and seniors are required to take one semester of Wellness Education each year. The goal of the BHS Wellness Education Program is for students to learn and develop the skills, knowledge, and attitudes needed to make decisions and integrate behaviors that result in a healthy and physically active lifestyle.

WE0900 Lifetime Wellness

This course is required for all 9th grade students. Lifetime Wellness incorporates skills-based health education and physical fitness concepts and practices. Skills-based health education provides students with content knowledge and continuous opportunities to practice skills, aligned with the National Standards for Health Education (i.e., health promotion and disease prevention, analyzing influences on health behaviors, access valid information, products and services, decision-making, goal setting, communication, advocacy for personal, family, and community health), to enhance health and avoid or reduce risk behaviors. Instruction in the safe and effective use of equipment in the fitness center (e.g., strength training, cardiovascular conditioning) is introduced along with selected lifetime activities (e.g., yoga, spin classes) and adventure, challenge/problem-solving activities. Students also complete a Common Grade Level Assessment, based on SPARK by Dr. John Ratey, where they learn about the connection between the neuroscience of cardiovascular exercise and brain performance.

Grade: 9 (REQUIRED)

Periods per week: 4

Combined Credit: .5

WE1200 Advanced Wellness

Advanced Wellness examines and integrates mental, emotional, sexual, physical, and social health topics. The course is designed to provide advanced health knowledge, skills, and resources for students in grades 11 and 12. The goal of the course is to empower students to make informed decisions regarding their health and wellbeing while in high school and beyond. Course delivery involves classroom instruction, active learning and engagement, project-based learning, and collaboration with school and community resource experts. The course incorporates fitness units (e.g., yoga, Tai Chi, Cross-Fit, Pilates, personal fitness) based on students' interests and requests.

Grade: 11, 12

Periods per week: 2 (Full year course)

Combined Credit: .5

WE2200 Beginning and Intermediate Swimming

This course is designed for students with an interest in learning to swim. Students in this class will learn to be comfortable in the water and develop new strokes. The course is also designed for students who know how to swim and want to become stronger swimmers. Based on skill level, some students will participate in aqua-aerobic exercise and lap swimming.

Grade: 10, 11, 12

Periods per week: 2

Credit: .25

WE2250 Advanced Swimming and Lifeguard Training

This course is divided into two focus areas: advanced swimming and lifeguard training certification. For students interested in advanced swimming, the course will focus on a personalized swimming fitness program designed to improve swimming technique and endurance. For students interested in the lifeguard training certification, the course, guided by the American Red Cross, will provide the knowledge and skills of water safety and how to quickly and effectively respond to water emergencies to prevent or reduce drowning and injuries. *Students interested in this course must contact Mrs. Gretchen Lima (gretchen_lima@psbma.org) to schedule a pre-course swim test.*

Grade: 10, 11, 12

Prerequisite: Yes

Periods Per Week: 2

Credit: .25

WE1100 Lifetime Activities

This course provides students with opportunities to participate in a variety of lifetime and fitness activities. (e.g., personalized fitness training, spinning, tennis, badminton, adventure/rock climbing).

Grade: 10, 11, 12

Periods per week: 2

Credit: .25

WE2100 Tennis

This course is designed for students who have an interest in developing the fundamental knowledge, skills, strategies, and etiquette of tennis for active participation throughout life.

Grade: 10, 11, 12

Periods per week: 2

Credit: .25

WE2300 Strength Training and Cardiovascular Conditioning

This course is designed for students who have an interest in developing and implementing a personal fitness program. Proper, safe, and effective strength training techniques will be taught utilizing weight machines, free weights, and fitness equipment. Students will also receive instruction in cardiovascular fitness and heart rate monitor technology. Each student will develop a personal fitness profile.

Grade: 10, 11, 12

Periods per week: 2

Credit: .25



WE2400 Rock Climbing/Adventure

This course is designed to give students experience with adventure programs. There will be an emphasis on developing climbing, safety, and belaying skills. Knots, ropes, and rappelling will be taught. Field trips to local sites such as the Boston Rock Gym, MetroRock (Fall), or Hammond Pond (Spring) are designed to help students refine, apply, and practice their skills. Field trips are part of the course requirements.

Grade: 10, 11, 12

Periods per week: 2

Credit: .25

WE2600 *The Revolution* – Improving Brain Performance

This course will explore the connection between exercise and brain performance. Research shows that moderate cardiovascular exercise will enhance mental capacity to manage stress, sharpen thinking, and improve memory. The course is designed to focus on the physical health, emotional health, and academic achievement of each student. The course will emphasize participation in a variety of aerobic activities (e.g., spin classes, ultimate Frisbee, jogging), challenging students to workout within their target heart rate zone to maximize gains in brain functioning. Students will learn about resting heart rate, exercise/target heart rates, heart rate monitors, and interpreting and analyzing heart rate data. The students will understand the connection of cardiovascular fitness to improved mental performance. The core beliefs, in this course, are based on research reported in the book, SPARK, by John J. Ratey, MD as well as other current neuroscience research which reports a direct correlation between cardiovascular exercise and the brain.

Grade: 10, 11, 12

Periods per week: 4 or 5

Credit: .5

WE2800 Achieving Health Through Yoga

Yoga is an ancient form of exercise that focuses on the unification of body, mind, and breath while practicing a variety of physical postures and movement sequences. Students will learn yoga poses, breathing exercises, relaxation and meditation techniques to strengthen, align, and balance the body, focus the mind, and soothe and recharge the nervous system. Discussions and reflective writing will center on body systems, managing stress and feelings, and the impact of one's behavioral choices, as well as education in health, nutrition, and life skills.

Grade: 10, 11, 12

Periods per week: 2

Credit: .25

WE2900 Net Games – Racquets and Paddles

This course is designed for students who have an interest in developing the fundamental knowledge, skills, and strategies of net games (i.e., badminton, tennis, Pickleball). Pickleball is a racquet sport that combines elements of badminton, tennis, and table tennis. Students will reflect on similarities and differences among these sports, including skills, strategies, equipment, courts, rules, and etiquette while developing skills for active participation throughout life.

Grade: 10, 11, 12

Periods per week: 2

Credit: .25

WE2000 After-School Physical Activity Contract

This after-school physical activity contract is for students in 10th, 11th, and 12th grades, who want to substitute an outside lifetime physical activity for the Wellness Education requirement. Students requesting a contract must not have room in their schedule (blocks A-G) to take a Wellness Education course for the entire year. One contract per year is allowed.

- Guidelines and Expectations:
- Requests for the after-school physical activity contract must be made to the Curriculum Coordinator of Wellness Education prior to participation in the activity and prior to the start of the semester.
- Students in the 9th grade may not enroll in this course.
- Programs, in which students choose to participate, must be instructional.
- The activity, for which a contract is written, shall NOT be offered at Brookline High School.
- Time spent in a contract activity must meet the minimum time requirement of 40 hours, spread evenly throughout the semester. Evidence of active physical activity engagement throughout the semester is required. Attendance and progress reports must be submitted at regular intervals. Summary / reflection reports, based on chapters within designated books or research articles and physical activity experiences, shall be submitted to the Curriculum Coordinator of Wellness Education prior to the end of the semester.
- Final grade (P or F) is contingent upon fulfillment of all contract responsibilities.

Grade: 10, 11, 12

Credit: .25



WE (number according to sports team list below)* Sports Team

This option is for students in 10th, 11th, and 12th grades who want to substitute a BHS interscholastic sport for their Wellness Education requirement. One sport is equal to one semester of Wellness Education. One sports team per year (Grades 10-12) is allowed for credit. If for any reason, including getting cut from the sport or experiencing a season ending injury, the student does not complete the sport, s/he must take a Wellness Education course the following semester. Seniors who plan to use a spring sport for credit must have played that sport at the varsity level during the previous year. Students must see their guidance counselor to add their sport to their schedule by the second week of the school year.

Grade: 10, 11, 12

Credit: .25

***Sports Teams Course Numbers**

BOYS		GIRLS		UNISEX	
Fall		Fall		Fall	
Cross Country	WE701B	Cross Country	WE701G	Cheerleading	WE771U
Football	WE711B	Field Hockey	WE721G		
Golf	WE751B	Soccer	WE741G		
Soccer	WE731B	Volleyball	WE761G		
		Swimming	WE781G		
Winter		Winter		Winter	
Basketball	WE892B	Basketball	WE892G	Downhill Skiing	WE812U
Ice Hockey	WE802B	Ice Hockey	WE802G	Cross Country Skiing	WE822U
Winter Track	WE832B	Winter Track	WE832G	Wrestling	WE842U
Swimming	WE852B	Gymnastics	WE872G	Cheerleading	WE871U
				Fencing	WE872U
				Squash	WE882U
Spring		Spring		Spring	
Crew	WE982B	Crew	WE982G	Sailing	WE912U
Baseball	WE992B	Softball	WE992G	Ultimate Disc	WE962U
Lacrosse	WE902B	Lacrosse	WE902G		
Tennis	WE922B	Tennis	WE922G		
Track	WE932B	Track	WE932G		
Rugby	WE942B	Golf	WE952G		
Volleyball	WE962B				

Students must request credit for their sport season PRIOR to participation in the sport season. If a student is cut from the team or experiences a season ending injury, the student must communicate with the school counselor immediately to schedule a Wellness Education course for the following semester.

WORLD LANGUAGE

Brookline High School offers world language courses in Chinese, French, Japanese, Latin, and Spanish. All students studying a modern world language are grouped in a way that develops as fully as possible their communicative competency and familiarizes them with other cultures. The digital language laboratory helps students acquire greater proficiency in listening and speaking. Language lab work is considered a requirement in most of the courses.

At each level, the content of the modern language course is matched to the ability of the student to understand the spoken language, to speak it, to read a text or study a literary work, and to write the language with reasonable accuracy. All courses meet four periods a week with homework and laboratory work. Regular class attendance and participation are essential.

Our programs are designed to accommodate both those who had prior study and those who begin their study at the High School. Students with prior study are placed in classes which continue the development of their level of proficiency. They may study the language through Japanese 4 and French 5, Mandarin 6, Latin 5 and Spanish 5 (if enrollment warrants). To graduate from BHS students need at least 2 years of study in a world language. Many colleges require completion of 3 years of WL prior to admission.

Proficiency Levels:

In the description of our courses we use terms such as Novice (Low, Mid, High), Intermediate (Low, Mid, High), and Advanced (Low, Mid, High) to describe the proficiency levels that students can be expected to reach by the end of courses. They come from ACTFL guidelines. ACTFL stands for American Council on the Teaching of Foreign Languages.

Please keep in mind that learning languages is not strictly linear. As students are asked to communicate with greater complexity they need to juggle and get comfortable with an increasingly larger number of structures (such as tenses, and sentence constructions) as well as remember a wider vocabulary range on a greater number of cultural topics. Therefore to make language stick we emphasize the active use of languages in class rather than just the covering of grammatical points. To use an analogy of learning to drive, we emphasize time spent “driving” over time spent reading “the driving manual”.

Here are links that will describe in great details what students might be expected to be able to do at various proficiency levels (in speaking, listening, reading, and writing).

Novice Levels: https://www.actfl.org/sites/default/files/CanDos/Novice%20Can-Do_Statements.pdf

Intermediate Levels: <https://www.actfl.org/sites/default/files/CanDos/Intermediate%20Can-Do%20Statements.pdf>

Advanced Levels: https://www.actfl.org/sites/default/files/CanDos/Advanced%20Can-Do_Statements.pdf

Advanced Placement: Students in AP courses are expected to take the College Board AP examination. Out of a possible score of 5, a score of 4 on the examination assures freshman college credit or advanced standing at many colleges that participate in the AP program. Any student can take the College Board AP examination.

Medical Interpretation: Medical Interpretation in Spanish (and Portuguese if enrollment warrants) can be taken for World Language or CTE credit. See further information below.



WL0100 Chinese I (Mandarin)

By the end of the year, students are expected to reach a proficiency level of N1 ([Novice Low](#)). This is an introductory course centering on the sound system and the practical use of the language. Reading and writing of Chinese characters will be introduced from the very beginning. Chinese culture is introduced through language experiences, projects, and videos.

Grade: 9-12

Credit: 1

WL0200 Chinese II (Mandarin)

By the end of the year, students are expected to reach a proficiency level of N2 ([Novice Mid](#)). The program will reinforce and expand on the program developed in the first year of language learning. Character writing and accuracy in pronunciation will be emphasized in this course. Students will explore different aspects of Chinese culture through projects such as power point and video-making. The same curriculum will be taught to both Honor and Standard class. Assessments and assignments will be varied.

Grade: 9-12

Prerequisite: Chinese I or equivalent

Credit: 1

WL0230 Chinese II (Mandarin) Honor

By the end of the year, students are expected to reach a proficiency level of N4 ([Novice High](#)). The program will reinforce and expand on the program developed in the first year of language learning. Character writing and accuracy in pronunciation will be emphasized in this course. Students will explore different aspects of Chinese culture through projects such as power point and video-making. The same curriculum will be taught to both Honor and Standard class. Assessments and assignments will be varied.

Grade: 9-12 Prerequisite: Chinese I or equivalent, recommendation of teacher only.

Credit: 1

WL0300 Chinese III (Mandarin)

By the end of the year, students are expected to reach a proficiency level of N3 ([Novice Mid](#)). This course continues to improve the students' proficiency in all aspects of language acquisition. Chinese idioms and classic poems are also introduced through interactive activities.

MANDARIN III will be taught jointly with Mandarin III honor if enrollment is insufficient to justify separate classes.

Grade: 10-12

Prerequisite: Chinese II or equivalent

Credit: 1

WL0330 Chinese III (Mandarin) Honor

By the end of the year, students are expected to reach a proficiency level of I1 ([Intermediate Low](#)). This course continues to reinforce and expand on communication skills in the first two years of language and to improve the students' proficiency in all aspects of language acquisition. Students are involved in a number of realistic situations where they are engaged in conversation, provide and obtain information, express opinions, and interpret written and spoken language. Students work on developing language learning strategies. Chinese idioms and classic poems are also introduced through lectures, research, and projects.

This course will be taught jointly with Chinese III Standard. The same curriculum will be taught to both Honor and Standard class. Assessments and assignments will be varied.

Grade: 10-12 Prerequisite: Chinese II honor or equivalent, recommendation of teacher only

Credit: 1

WL0400 Chinese IV (Mandarin) and WL0430 Chinese IV (Mandarin) Honor

By the end of the Chinese IV, students are expected to reach a proficiency level of I1 ([Intermediate Low](#)).

By the end of Chinese IV Honor, students are expected to reach a proficiency level of I2 ([Intermediate Mid](#)).

Chinese 4 and 4 Honor will continue to improve students' proficiency in all aspects of language acquisition. Students will explore and examine the rise of China in the 21st century and different aspects of its culture (geography and climate, economic growth, environmental issues, ethnic minority culture, food culture, historical sites, etc.). Students will work independently on various projects, such as iMovie, ppt, and making architectural models. This is a joint class and a higher level of independence is expected of all students. The same curriculum will be taught to all students. However, assignments and assessments will be varied.

Grade: 11-12

Credit: 1

Prerequisite for Chinese IV: Chinese III or equivalent; for Chinese IV Honor: recommendation of teacher only

WL0500 Chinese V (Mandarin)

By the end of the year, students are expected to reach a proficiency level of I2 ([Intermediate Mid](#)). This course continues to improve the students' proficiency in all aspects of language acquisition with particular emphasis on reading and listening to authentic materials. Students will continue their study of Chinese idioms and other classics. The class will be taught jointly with 5 Honor and AP level. Assessments will vary. The course will move at a faster pace and a high level of independence is required of all students.

Grade: 11-12 Prerequisite: Chinese IV or equivalent, recommendation of teacher only Credit: 1

WL0530 Chinese V (Mandarin) Honor

By the end of the year, students are expected to reach a proficiency level of I3 ([Intermediate Mid](#)). This course continues to improve the students' proficiency in all aspects of language acquisition with particular emphasis on reading and listening to authentic materials. Students will continue their study of Chinese idioms and other classics. The class will be taught jointly with 5, 5H and AP level. Assessments will vary. The course will move at a faster pace and a high level of independence is required of all students.

Grade: 11-12 Prerequisite: Chinese IV H or equivalent, recommendation of teacher only Credit: 1

WL0540 AP Chinese Language And Culture (Mandarin)

By the end of the year, students are expected to reach a proficiency level of I5 ([Intermediate High](#)). In addition to the Mandarin V Honor curriculum, students will prepare for the AP examination. They are expected to take the College Board Advanced Placement Examination in Chinese Language and Culture, which may qualify them for advanced placement, college credit, or both, depending on the policy of the college to which the student is admitted.

Mandarin 5, 5H, and AP will be taught jointly if enrollment is insufficient to justify separate classes. The course will move at a faster pace and a high level of independence is required of all students.

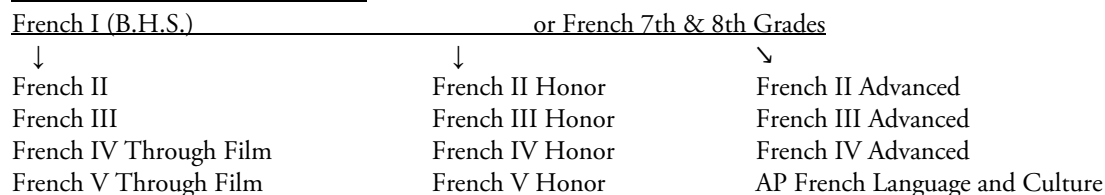
Grade: 11-12 Prerequisite: Chinese IV H, or equivalent if teacher recommendation. Credit: 1

WL0640 Chinese 6 Advanced (Mandarin)

By the end of the year, students are expected to reach a proficiency level of A1 ([Advanced Low](#)). Chinese 6 is an advanced Chinese course devoted primarily to the exploration of social, economic, and cultural topics related to China. After taking this course, students can expect to better communicate about recent changes in today's Chinese society. Students will research these topics using primary sources: newspaper articles, TV broadcasts, podcasts, and films. The main purpose of this course is to further students' understanding of China in the 21st century through primary sources.

Grade: 11-12 Prerequisite: Chinese 5 or AP, or equivalent if teacher recommendation Credit: .50(Fall Semester)

FLOW CHART: FRENCH



WL1100 French I

By the end of the year, students are expected to reach a proficiency level of N3 ([Novice Mid](#)). The primary goal is to get students speaking and understanding French. The course focuses on the practical use of language, and activities are presented in meaningful, realistic contexts. Students are also introduced to the people and cultures of the French speaking world.

Grade: 9-12

Credit: 1

WL1220 French II

By the end of the year, students are expected to reach a proficiency level of N4 ([Novice High](#)). This course reinforces and expands upon the program developed in the first year of language learning. Students engage in conversation and understand and interpret written and spoken language on a variety of topics. The study of French culture and that of the Francophone world are integrated into the curriculum. A variety of materials such as short reading selections, listening samples, films, video clips, and internet research supplement grammar and vocabulary content.

Grade: 9-12

Prerequisite: French 7/8th Grade or French I HS

Credit: 1

WL1230 French II Honor

By the end of the year, students are expected to reach a proficiency level of I2 ([Intermediate Mid](#)). This course further develops the communicative competencies of the students. Classroom activities are based on realistic situations so that students develop their level of proficiency as well as accuracy. The study of French culture and that of the Francophone world are integrated into the curriculum. A variety of materials such as reading selections, listening samples, films, video clips, and internet research supplement grammar and vocabulary content. In this course, students and teachers use French for nearly all communication. French 2 Honor moves at a faster pace than French 2, and expects a higher level of independent learning and accuracy on the student's part.

Grade: 9-12

Prerequisite: French 7/8th Grade or French I HS

Credit: 1

WL1240 French II Advanced

By the end of the year, students are expected to reach a proficiency level of I4 ([Intermediate Mid](#)). A wide variety of classroom activities conducted entirely in French provides opportunities for students to develop both their French proficiency and accuracy. Students greatly expand their knowledge of grammar / verb tenses and vocabulary, using each in real-world situations and conversations. The study of the French and Francophone world cultures is integrated into the curriculum. A variety of internet-based and teacher-created materials are used, along with fiction / non-fiction readings and films. This course moves at a faster pace than French 2H, and expects a higher level of independent learning and accuracy on the student's part.

Grade: 9-12

Prerequisite: French 7/8th Grade or French I HS

Credit: 1

WL1320 French III

By the end of the year, students are expected to reach a proficiency level of I1 ([Intermediate Low](#)). This course continues to reinforce and expand on communication skills learned from the first two years of language learning. Various media and activities are used to work toward the goal of communicative proficiency. Students are involved in a limited number of realistic situations where they engage in conversation, provide and obtain information, express opinions as well as interpret written and spoken language. Students work on developing language learning strategies. Common everyday situations in France highlight the discussion about French culture.

Grade: 10-12

Prerequisite: French II

Credit: 1

WL1330 French III Honor

By the end of the year, students are expected to reach a proficiency level of I3 ([Intermediate Mid](#)). Learning to communicate in French is the major focus of this course. The course continues listening comprehension and intensive speaking practice both in the classroom and in the language laboratory through the use of varied media. Students are expected to respond spontaneously to a wide range of conversational situations as well as to summarize and answer questions based on intermediate level readings. Students greatly expand their knowledge of grammar / verb tenses and vocabulary, using each in real-world situations and conversations. They are also required to write a number of personal and topical essays. Diverse aspects of French culture are discussed in connection with the selected readings.

Grade: 10-12

Prerequisite: French II Honor

Credit: 1

WL1340 French III Advanced

By the end of the year, students are expected to reach a proficiency level of I5 ([Intermediate High](#)). This course emphasizes communicative proficiency; therefore, the students are expected to seize all opportunities in and out of the classroom to practice the language (including language lab work). The students should be devoted to improving skills to a considerable level of fluency. They should also demonstrate curiosity for the cultures represented in the French speaking world. At this level, students expand their prior knowledge of French through literature, composition, and extensive work developing their fluency. This course moves at a faster pace than French III Honor, and expects a higher level of independent learning and accuracy from the student.

Grade: 10-12

Prerequisite: French II Advanced

Credit: 1

WL1420 French IV Through Film WL1520 French V Through Film (Taught Jointly)

By the end of French IV Film, students are expected to reach a proficiency level of I2 ([Intermediate Mid](#)).

This course continues to emphasize and expand the communicative functions developed in the previous years and uses classic and modern cinema from several French-speaking countries as a vehicle for discussion and composition. The course assists the student in becoming more aware of linguistic and cultural similarities and differences found in the Francophone world and the United States. The course is designed to acquaint students with the language and culture in a more relevant and realistic format. The films are used to illustrate the social, intellectual, and historical influence of the Francophone world upon the global society. Communicative skills are reinforced and increased.

(YEAR II): The curriculum continues to be based on a variety of authentic films. This course groups students who have completed either 3 or 4 years of the program. The curriculum is alternated so that the student continuing from the junior year to the senior year does not have a repeat of the same materials.

Grade: 11-12 Prerequisite: For WL1420: French III; For WL1520: French IV Through Film

Credit: 1

WL1430 French IV Honor

By the end of the year, students are expected to reach a proficiency level of I4 ([Intermediate Mid](#)). This course stresses the continued development of the student's ability to communicate with increased proficiency and accuracy in both speaking and writing. Students will be provided with varied opportunities to practice and improve their communicative proficiency through short selections of literature (poetry, short story, drama) and cultural and historical points (painting, etc.) In each case, students will be encouraged to react by making personal connections, summarizing or stating opinions.

Grade: 11-12 Prerequisite: French III Honor Credit: 1

WL1440 French IV Advanced

By the end of the year, students are expected to reach a proficiency level of A1 ([Advanced Low](#)). Students are expected to comprehend, speak, read and write French with a considerable degree of fluency and accuracy. Various genres of literature are studied. Cultural topics are discussed, and students are expected to use French in all interactions. This course moves at a faster pace than French IV Honor, and expects a higher level of independent learning and accuracy from the student.

Grade: 11

Prerequisite: French III Advanced

Credit: 1

WL1520 French V Through Film

By the end of French V Film, students are expected to reach a proficiency level of I3 ([Intermediate Mid](#)).

Taught jointly with Fr. IV Through Film; please see the description for Fr. IV/V Through Film

Grade: 12

Prerequisite: French IV/Through Film

Credit: 1



WL1530 French V Honor Language and Culture

By the end of the year, students are expected to reach a proficiency level of I5 ([Intermediate High](#)). This course is designed for students who wish to pursue a comprehensive program which emphasizes using the language as a tool for reading, discussing, and thinking critically about a variety of cultural topics and literary works. Students are expected to write persuasive essays, respond to email inquiries, engage orally in everyday life conversations, and make formal oral presentations where they compare francophone culture and their own. French V Honor will be taught jointly with AP French if enrollment is insufficient to justify separate classes.

Grade: 12

Prerequisite: French IV Honor

Credit: 1

WL1540 AP French Language and Culture

By the end of the year, students are expected to reach a proficiency level of A2 ([Advanced Mid](#)). This course is designed for students who wish to pursue a comprehensive program which emphasizes using the language as a tool for reading, discussing, and thinking critically about a variety of cultural topics and literary works. Students are expected to write persuasive essays, respond to email inquiries, engage orally in everyday life conversations, and make formal oral presentations where they compare francophone culture and their own. This course expects a higher level of independent learning, depth of analysis, and accuracy from the student than French V Honor. Students are expected to take the College Board Advanced Placement Examination which may qualify them for advanced placement, college credit, or both, depending upon the policy of the college to which the student is admitted.

Grade: 12

Prerequisite: French IV Advanced

Credit: 1

JAPANESE

WL5100 Japanese I

By the end of the year, students are expected to reach a proficiency level of N1 ([Novice Low](#)). This is an introductory course which focuses on the practical use of the language, and activities are presented in meaningful, realistic contexts. Students communicate orally and build vocabulary with regular practice in pairs and as a large group. The reading and writing of Japanese characters (kanji) and syllabary (hiragana and katakana/romaji) are introduced. Japanese culture is presented through language experiences as well as interactive and hands-on activities. Japanese history, food, art, music, religion, traditions, holidays, and festivals are discussed.

Grade: 9-12

Credit: 1

WL5200 Japanese II WL5230 Japanese II Honor

By the end of Japanese II, students are expected to reach a proficiency level of N2 ([Novice Mid](#)).

By the end of Japanese II Honor, students are expected to reach a proficiency level of N4 ([Novice High](#)).

These courses further develop the communicative competencies of the students. Classroom activities are based on real life situations so that students develop their level of proficiency as well as accuracy. The study of the Japanese culture is integrated in the curriculum. A variety of materials such as, films, and internet-based research supplement the text.

The honor class reinforces and expands character writing. This course moves at a faster pace than Japanese II, and expects a higher level of independent learning and accuracy from the student.

Japanese II will be taught jointly with Japanese II Honor if enrollment is insufficient to justify separate classes.

Grade: 10-12

Prerequisite: Japanese I and teacher recommendation for Honor.

Credit: 1

WL 5300 Japanese III WL 5330 Japanese III Honor

By the end of Japanese III, students are expected to reach a proficiency level of N4 ([Novice High](#)).

By the end of Japanese III Honor, students are expected to reach a proficiency level of I1 ([Intermediate Low](#)).

Continues intensive reading and writing through the use of varied media. Learning to communicate in Japanese is the major focus, and lessons stress the functional use of the language in both informal and formal situations. Proficiency and issues of accuracy are assessed. Students are expected to respond spontaneously to a wide range of conversational situations as well as to summarize and answer questions based on a variety of readings. They are also required to read over 220 kanji characters and to write personal and topical short essays. Diverse aspects of culture throughout Japan are discussed in connection with the selected lessons and readings.

The honor class focuses on reading and writing over additional 220 kanji characters. This course moves at a faster pace than Japanese III, and expects a higher level of independent learning and accuracy from the student.

Japanese III and Japanese III Honor will be taught jointly if enrollment is insufficient to justify separate classes.

Grade: 11-12

Prerequisite: Japanese II Honor or teacher recommendation.

Credit: 1



WL5400 Japanese IV

By the end of Japanese IV, students are expected to reach a proficiency level of I1 ([Intermediate Low](#)).

Continues intensive reading and writing through the use of varied media. Students are expected to communicate mostly in Japanese in classroom. Learning to communicate in Japanese is the major focus, and lessons stress the authentic use of the language. Proficiency and issues of accuracy are assessed. Students are expected to respond spontaneously to a wide range of conversational situations as well as to summarize and answer questions based on a variety of authentic materials. They are also required to read additional 110 kanji characters and to write personal and topical essays. Diverse aspects of culture in Japan are discussed in connection with the curriculum.

Grade: 11-12 Prerequisite: Japanese III, recommendation of teacher only.

Credit: 1

WL5430 Japanese IV Honor

By the end of Japanese IV Honor, students are expected to reach a proficiency level of I3 ([Intermediate Mid](#)). This course moves at a faster pace than Japanese 4, and expects a higher level of independent learning and accuracy from the student. Students will be expected not only to identify about 500 kanji words but also to be able to produce at least 300 in a written form. Japanese 4, 4H, and AP Japanese Language and Culture courses will be taught jointly if enrollment is insufficient to justify separate classes.

Grade: 11-12 Prerequisite: Japanese III Honor, or equivalent if teacher recommendation.

Credit: 1

WL5440 AP Japanese Language and Culture

By the end of AP Japanese, students are expected to reach a proficiency level of I4 ([Intermediate Mid](#)).

In addition to the Japanese IV Honor curriculum, students will prepare for the AP examination. They are expected to take the College Board Advanced Placement Examination in Japanese Language and Culture, which may qualify them for advanced placement, college credit, or both, depending on the policy of the college to which the student is admitted. Students will be expected to identify and write additional over 100 kanji for AP Exam. Japanese 4, 4H, and AP Japanese Language and Culture courses will be taught jointly if enrollment is insufficient to justify separate classes.

Grade: 11-12 Prerequisite: Japanese III Honor, or equivalent if teacher recommendation.

Credit: 1

LATIN

WL3100 Latin I

An introductory course without level designation centering on the Latin language and its connections to English and the Romance languages. Students learn to understand written and spoken Latin on a variety of topics, with emphasis on the lost city of Pompeii. A major focus is reading authentic materials in Latin, including simple narratives, inscriptions, mottoes, and adapted stories of ancient Roman life and mythology. Various aspects of Roman culture are studied - gladiators, Roman houses, family life, the city of Pompeii, the eruption of Vesuvius, the Roman afterlife, holidays, dinner parties, and the geography of Italy and the Mediterranean World.

Grade: 9-12

Credit: 1

WL3220 Latin II WL3230 Latin II Honor

In Latin II, students continue to study the fundamentals of the Latin language, and also greatly enhance their ability to use and read the language by adding to their vocabulary and learning more advanced grammar concepts. Specific areas of grammar study include additional verb tenses, various pronouns, participles, and uses of the subjunctive mood. To encounter, practice, and review all of this material, we read engaging stories following the adventures of a traveler as he wanders the multicultural Roman Empire after the destruction of Pompeii. A major focus is reading authentic materials in Latin. Students continue to encounter new aspects of Roman culture, focusing on exploring the difference in Roman life in various parts of the Empire – Britain, Egypt, and Italy. Specific topics include medicine, religion, travel, and the army. Finally, students explore Greek and Roman mythology, delving into the world of gods, goddesses, and fantastic stories. Latin II and IIH are taught jointly if enrollment is insufficient to justify separate classes.

Grade: 10-12

Prerequisite: Latin I

Credit: 1



WL3320 Latin III WL3330 Latin III Honor

Latin III provides students with knowledge of the most advanced grammatical structures of the Latin language, including the last few verb tenses, additional uses of the subjunctive mood, participles, tenses of the infinitive, gerunds and gerundives, and indirect statement. Students read engaging stories following the adventures of a traveler thrust into a world of political intrigue. A major focus is reading authentic materials in Latin. Students also investigate additional customs of Roman life, such as government, politics, law, marriage, and more on entertainment, slavery, and religion. Finally, students learn about the three periods of Roman history – the monarchy, the Republic, and the empire – by examining and working with authentic ancient Roman texts and coins. Latin III and IIIH are taught jointly if enrollment is insufficient to justify separate classes.

Grade: 11-12

Prerequisite: Latin II for III, or II H for III H

Credit: 1

WL3420 Latin IV WL3520 Latin V

LATIN IV & V: This class is also referred to as Latin Publishing. In addition to the above, these courses focus on increasing proficiency and accuracy. Students explore the classical world and create projects based on Latin texts and classical studies. Student projects focus on understanding the Romans through their written messages transmitted through time, and then on an increasing ability to articulate oneself and to understand others in a wide range of contemporary situations.

Grade: 11-12 Prerequisite: Latin III for IV, and AP Latin or Latin IV/ IVH for Latin V Credit: 1

WL3430 Latin IV Honor WL3530 Latin V Honor

LATIN V & V Honor: Offered only on those occasions when a student enters BHS with the equivalent of Latin I from prior study at another school or skips a level. Students of Latin 4H and 5H read select passages of Vergil's Aeneid and Caesar's De Bello Gallico, similar to the AP syllabus. Students read these texts with support and at a pace adjusted to fit the needs of all learners. Emphasis is placed on using the language as a tool for expressing ideas, interpreting literary genres and themes, and thinking more critically. Students have an opportunity to increase both their level of proficiency and accuracy.

Latin 4H and Latin 5H are taught jointly with AP Latin.

Grade: 12 Prerequisite: Latin III for IVH, and IV for VH Credit: 1

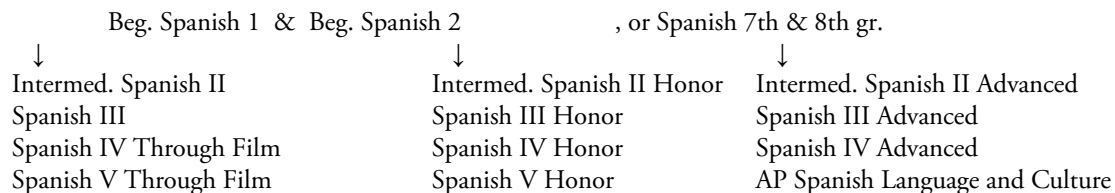
WL3540 AP Latin

Advanced Placement Latin students read select passages of Vergil's Aeneid and Caesar's De Bello Gallico, following the AP syllabus. They also read selections from other authors in authentic texts to prepare for the sight reading section of the AP Vergil exam. Emphasis is placed on using the language as a tool for expressing ideas; interpreting literary genres, themes, and historical settings, and thinking more critically. Students have an opportunity to increase both their level of proficiency and accuracy in Latin and to learn more about the English language from comparisons with linguistic features of Latin. This level is taught at an accelerated pace and expects a high level of commitment and achievement from students. Students are also expected to take the College Board Advanced Placement Examination in Latin. Scores of 3, 4, or 5 on the AP examination may qualify them for advanced placement, college credit, or both, depending upon the policy of the college to which the student is admitted. It may also be combined with other higher-level Latin courses based on enrollment.

Prerequisite: Latin 3H/4H or the permission of the instructor or curriculum coordinator

Credit: 1

FLOW CHART: SPANISH



Additional Option: Medical Interpretation for Spanish Heritage Speakers, or students post AP Spanish.

WL4101 Beginning Spanish 1

By the end of the year, students are expected to reach a proficiency level of N1 ([Novice Low](#)). This course emphasizes communication- the ability to speak about oneself and request information from others. The course focuses on the practical use of Spanish, and activities presented in meaningful and realistic contexts. The student is introduced to the cultures and geography of Spanish-speaking countries.

Grade: 9-12 Prerequisite: None (students with no prior knowledge of a second language). Credit: 1

WL4102 Beginning Spanish 2

By the end of the year, students are expected to reach a proficiency level of N3 ([Novice Mid](#)). This course expands on the ability to speak about oneself and goes beyond the self. The course focuses on the practical use of Spanish, and activities presented in meaningful and realistic contexts. The student is introduced to the cultures and geography of Spanish-speaking countries.

Grade: 9-12 Prerequisite: Beginning Spanish 1 or equivalent Credit: 1

WL4220 Intermediate Spanish II

By the end of the year, students are expected to reach a proficiency level of N4 ([Novice High](#)). This course reviews the communicative competencies of Beginning Spanish 1 and 2 while also presenting new items. Reinforces and expands communicative skills. Listening skills and basic speaking ability are further developed while the student's vocabulary is expanded, and accuracy is increased. Some short reading selections with emphasis on culture are included.

Grade: 9-12 Prerequisite: grade 7/8 Spanish, Beg. Spanish 2 Credit: 1

WL4230 Intermediate Spanish II Honor

By the end of the year, students are expected to reach a proficiency level of I2 ([Intermediate Mid](#)). This course briefly reviews the communicative competencies of Beginning Spanish 1 and 2 while also presenting new items. Emphasis is on the process of communication. Culture and some history are integrated into the curriculum. Short reading assignments are introduced to increase the students' vocabulary, use grammar in meaningful contexts, and improve their reading comprehension. Spanish II Honor primarily focuses on the acquisition of new communicative skills while reinforcing fluency and accuracy. Students develop their ability to elaborate, explain, and sustain conversations.

Grade: 9-12 Prerequisite: Spanish 7/8th Grade, Beg. Spanish 2 Credit: 1

WL4240 Intermediate Spanish II Advanced

By the end of the year, students are expected to reach a proficiency level of I4 ([Intermediate Mid](#)). This course expands and deepens the development of the communicative competencies. Spanish II Advanced is entirely conducted in Spanish to increase the students' level of proficiency and fluency. Culture and some history emphasizing the perspectives and practices of the Hispanic world are integrated into the curriculum. Reading and discussion of authentic materials, as well as short stories and poetry, require students to use Spanish as a tool for thinking and learning. This course moves at a faster pace than Spanish II Honor, and expects a higher level of independent learning and accuracy from the student.

Grade: 9-12 Prerequisite: Spanish 7/8th Grade, Beg. Spanish 2 Credit: 1

WL4320 Spanish III

By the end of the year, students are expected to reach a proficiency level of I1 ([Intermediate Low](#)). This course reviews the communicative competencies practiced in Spanish II. Increases oral and written proficiency in realistic situations, where students will be expected to engage in conversation, provide and obtain information, express opinions, as well as understand and interpret written and spoken language. Examines the perspectives, products and practices of the Hispanic culture. Works on developing language learning strategies.

Grade: 10-12

Prerequisite: Intermediate Spanish II

Credit: 1

WL4330 Spanish III Honor

By the end of the year, students are expected to reach a proficiency level of I3 ([Intermediate Mid](#)). This course continues listening comprehension and intensive speaking practice both in the classroom and in the language laboratory through the use of varied media. Learning to communicate in Spanish is the major focus, and lessons stress the functional use of the language. Students are expected to respond spontaneously to a wide range of conversational situations as well as to summarize and answer questions based on intermediate level reading. They are also required to write a number of personal and topical essays. Diverse aspects of culture throughout the Spanish speaking world are discussed in connection with the selected readings.

Grade: 10-12

Prerequisite: Intermediate Spanish II Honor

Credit: 1

WL4340 Spanish III Advanced

By the end of the year, students are expected to reach a proficiency level of I5 ([Intermediate High](#)). This course presupposes the student's ability to communicate in Spanish with some degree of proficiency. Works of literature are introduced as a point of departure for discussions and written assignments. Communication in Spanish is stressed at all times and the students are expected to use the language as a tool for thinking and learning. This course moves at a faster pace than Spanish III Honor, and expects a high level of independent learning and accuracy from the student.

Grade: 10-12

Prerequisite: Intermediate Spanish II Advanced

Credit: 1

WL4420 Spanish IV Through Film WL4520 Spanish V Through Film (Taught Jointly)

By the end of the year, students are expected to reach a proficiency level of I2 ([Intermediate Mid](#)). This course assists the student in becoming more aware of linguistic and cultural similarities and differences found in the Hispanic world. Based on a number of documentaries and feature films, the curriculum is developed to acquaint students with the language and culture through a social justice lens. This course explores various aspects of identity such as gender, sexuality, ethnicity, nationality, religion, race, and privilege both in ourselves and others. The curriculum is alternated so that a student continuing from the junior year to the senior year does not have a repeat of the same materials.

Grade: 11-12 Prerequisite: for WL4420: Spanish III for WL4520: Spanish IV Through Film

Credit: 1

WL4430

Spanish IV Honor

SPANISH IV HONOR:

By the end of the year, students are expected to reach a proficiency level of I4 ([Intermediate High](#)). This course stresses the continued development of the student's ability to communicate in Spanish at an intermediate level of proficiency. Fluency as well as accuracy are assessed. Poetry, short stories and journalistic pieces are read and discussed, with emphasis on themes as they relate to the student's personal experience. In order that students develop knowledge and appreciation of the diverse cultures of the Spanish speaking world, they are presented with a variety of readings and media materials.

Grade: 11-12

Prerequisite: Spanish III Honor

Credit: 1

WL4440 Spanish IV Advanced

By the end of the year, students are expected to reach a proficiency level of A1 ([Advanced Low](#)). This course works on increasing proficiency, fluency, and accuracy. Students interpret literature and develop their understanding of other authentic materials such as television programs and periodicals. Emphasis is placed on expanding the students' communicative proficiency and communication in Spanish is expected at all times. The course builds the students' skills so that they can express themselves appropriately on a variety of topics, and can understand others in a growing range of situations. This course moves at a faster pace than Spanish IV H, and expects a higher level of independent learning and accuracy from the student.

Grade: 11-12

Prerequisite: Spanish III Advanced

Credit: 1

WL4520 Spanish V Through Film

By the end of the year, students are expected to reach a proficiency level of I3 ([Intermediate Mid](#)).
(Taught jointly with Spanish IV Through Film ;please see the description for Sp. IV/V- Through Film)



WL4530 Spanish V Honor

By the end of the year, students are expected to reach a proficiency level of I5 ([Intermediate High](#)). This course emphasizes using the language as a tool for expressing ideas, interpreting literary genres and themes, and thinking more critically. A number of media sources offer the students the opportunity to increase both their level of proficiency and accuracy.

Grade: 12

Prerequisite: Spanish IV H

Credit: 1

WL4540 AP Spanish Language and Culture

By the end of the year, students are expected to reach a proficiency level of A2 ([Advanced Mid](#)). This course is designed for students who wish to pursue a comprehensive program which emphasizes using the language as a tool for reading, discussing, and thinking critically about a variety of literary and journalistic works. Students are expected to write their reactions to literature as well as their own original poems and stories. Oral presentations dealing with a number of socio-cultural topics are an integral part of the course. This course moves at a faster pace than Spanish V Honor, and expects a high level of independent learning and accuracy from the student. Students are expected to take the College Board Advanced Placement Examination in Language which may qualify them for advanced placement, college credit, or both, depending upon the policy of the college to which the student is admitted.

Grade: 12

Prerequisite: Spanish IV Advanced

Credit: 1

WL4630 Course: Medical Interpretation and Translation Spanish

WL6630 Course: Medical Interpretation and Translation Portuguese

The primary goal of the year-long course entitled Medical Interpretation and Translation (MIT) Program is to qualify students as interpreters within the healthcare field. This course is designed for students with advanced to superior proficiency in both English and another language. (The first languages to be introduced to the program will be Spanish, and possibly Portuguese depending on enrollment. In future years we are considering adding other languages that have a high representation at the high school such as Haitian Creole.) The curriculum and instructional strategies will be adapted from materials designed by Cross Cultural Communications, a nationally recognized organization dedicated to training interpreters. Students will develop an understanding of the role of the interpreter as a language bridge between patient and provider. They will become aware of the cultural, linguistic and personal aspects of accurate interpretation. Units of study include the terminology of body systems and illnesses, ethics, local and national laws governing interpreting practice, the culture of medicine, the ethnic cultures of the populations being served, and the culture of being a professional interpreter. These topics will be studied through readings, DVDs, class discussions and simulated interpreting practice. This program includes listening comprehension and intensive speaking practice in the classroom and in the language laboratory through the use of varied media. Students are expected to respond spontaneously to a wide range of conversational situations. When available the culminating project will be an internship or a shadowing experience in a local hospital. A student can present this certificate to potential employers as documentation of their experience.

Grade:12

Credit: 1 in WL or CTE

Prerequisite: typically seniors (17 years of age at time of Sem2 internship preferred), teacher recommendation based on language proficiency



SPECIAL EDUCATION

The Special Education Department at Brookline High School provides explicit specially designed instruction to students on IEPs. We provide a wide range of high quality programs and services that meet the unique needs of individual students with disabilities. Our department is directed and run by a multidisciplinary team of professionals that collaborate to provide specialized and individualized programming. Unless otherwise noted, all courses are unlevleled. Enrollment in Special Education courses are determined through the IEP TEAM process. Courses, services and programs are continually being reviewed and refined based on current and emerging students' needs.

ACADEMIC SUPPORT

TU2009 Learning Center

This course is designed to provide students with explicit instruction in order to access curriculum, improve academic functioning, and assist the student in developing self-advocacy skills. The acquisition of strategies to develop independent executive functioning skills for academic improvement across curriculum areas is a major focus. A central focus of the Learning Center is to help students become independent learners. IEP goals and objectives are incorporated into the course content and the delivery services in each learning center.

Grade: 9

Credits: 1

TU2010 Learning Center (See description for course TU2009)

Grade: 10

Credits: .5-1

TU2011 Learning Center (See description for course TU2009)

Grade: 11

Credits: .5-1

TU2012 Learning Center (See description for course TU2009)

Grade: 12

Credits: .5-1

TU2309 Language and Academic Home Base (LAHB) Learning Center

Language Academic Home Base (LAHB) offers an intensive, multi-sensory, language-based academic program for students with language-based learning disabilities. Students in LAHB require specialized instruction in reading and writing, along with close case management to facilitate student progress. LAHB provides students with access to the general curriculum with individualized instruction and small group in reading and writing. The LAHB learning center provides explicit instruction in executive functioning, study strategies, and meta-cognitive strategies for academic improvement in order to support students with self advocacy skills and become independent learners.

Grade: 9

Credits: 1

TU2310 Learning Academic Home Base (LAHB) Learning Center (See course TU2309)

Grade: 10

Credits: .5-1

TU2311 Learning Academic Home Base (LAHB) Learning Center (See course TU2309)

Grade: 11

Credits: .5-1

TU2312 Learning Academic Home Base (LAHB) Learning Center (See course TU2309)

Grade: 12

Credits: .5-1



TU2209 Homebase Learning Center

Homebase Learning Center serves students who require social/emotional support throughout the day in order to navigate academic, social and emotional challenges. Homebase provides a continuum of supports to students who may require instruction in social communication, social pragmatics, executive functioning, self-regulation, coping skills, navigating the social world, and managing the multiple academic and personal demands high school students face. This class provides a supportive learning community with close case management to facilitate student progress and support students' transition from 8th to 9th grade. For times when students' social/emotional needs impact their ability to attend and participate in regularly scheduled classes, this learning center is available throughout the day as a home base for students. Students meet with the Homebase clinician for scheduled weekly meetings, as well throughout the day on an as-needed basis. Students should be able to navigate the building independently (or be able to reach that goal after an initial transition period, maybe with para transition support), will participate in MCAS testing, and on a pathway to a high school diploma.

Grade: 9

Credits: 1

TU2200 Supported Learning Center (SLC)

Supported Learning Center serves students who require consistent monitoring and support of social and emotional challenges which impact academic progress. . This class provides a supportive learning community with close case management to facilitate student progress. Students will receive instruction and assistance necessary to successfully manage academic, and social and emotional demands. In addition to regularly scheduled class times, students are provided with a safe space that they may use on an as needed basis when they are having difficulty regulating social/emotional functioning within the larger high school community. (Students may be scheduled for less than 4 periods with credit prorated accordingly.)

Grade: 10-12

Credits: .5-1

TU3000 Pathways Learning Center

Pathways Learning Center serves students with social communication challenges. Students are provided with support around issues that interfere with their learning, relationships, and progress toward their individual goals. The Pathways learning center provides explicit instruction in executive functioning skills, study and meta-cognitive strategies for academic improvement in order to support students with self advocacy and progress towards becoming independent learners. In addition to regularly scheduled class times, students are provided with a home base that they may use on an as needed basis when they are having difficulty navigating social and academic demands during the school day.

Grade: 10-12

Credits: 1

TU4000 Reaching for Independence through Structured Education (RISE Community) Learning Center

Students in the RISE Community program participate in a learning center designed to provide students with instruction in the following skills: study, social, organizational, executive functioning, computer, life, and self-advocacy skills. RISE learning center provides students with the opportunity to preview and review class content, break down long term assignments and work on class projects with support from the RISE Community teacher and RISE Community program paraprofessionals.

Grade: 9-12

TU4009 Reaching for Independence through Structured Education (RISE Community) : Life Skills:

This course is designed to teach life skills, social communication and increase independence. A variety of topics including (but not limited to) safety in the home and community, personal care, activities of daily living, organizing leisure skills, accessing community and transportation. During this class, pre-vocational skills are introduced and practiced. These skills include following directions and demonstrating skills to increase independence in completing tasks.

TU4010 RISE Community Life Skills (please see description for course 4009) Gr. 10

TU4011 RISE Community Life Skills (please descriptions for course 4009) Gr. 11

TU4012 RISE Community Life Skills (please see descriptions for course 4009) Gr. 12

TU4002 Reaching for Independence through Structured Education (RISE Community): Functional Academic Skills

This course utilizes instruction that results in students' acquisition of reading, writing, math and adaptive skills that supports their independence and success in daily activities. By blending traditional academic work with real life tasks, students will make connections to their community and the world around them.

Credits: 1

CORE ACADEMIC CLASSES

EN1050 English I

This full year course for ninth graders integrates reading, writing and oral communication skill development through the study of literature. Instruction is both individualized and highly structured to facilitate the development of reading comprehension, vocabulary, and writing skills. Students learn to use organizers as a means of understanding concepts and organizing their own ideas. Students will read and respond to short stories, novels, essays and poetry, which may include: *Raisin in the Sun*, *American Born Chinese*, and *Absolutely True Diary*.

Grade: 9

Credit: 1

EN1060 Language and Academic Home Base (LAHB) English I

This full year course for ninth graders integrates reading, writing and oral communication skill development through the study of literature. Instruction is both individualized and highly structured for those students with language-based learning disabilities to facilitate the development of reading comprehension, vocabulary, and writing skills. Students learn to use organizers as a means of understanding concepts and organizing their own ideas. Students will read and respond to short stories, novels, essays and poetry.

Grade: 9

Credit: 1

EN2050 English II

This full year course for sophomores integrates development of reading comprehension and essay writing skills through the study of literature. Instruction is both individualized and highly structured to facilitate the development of reading comprehension, vocabulary, and writing skills. Students use organizers as a means of understanding concepts and organizing their own ideas. Students will read and respond to short stories, novels, essays and poetry, which may include: *A Raisin in the Sun*, *The Things they Carried*, *All Souls*; and *Othello*.

Grade: 10

Credit: 1

EN2060 Language and Academic Home Base (LAHB) English II

This full year course for sophomores integrates development of reading comprehension and essay writing skills through the study of literature. Instruction is both individualized and highly structured for those students with language-based learning disabilities to facilitate the development of reading comprehension, vocabulary, and writing skills. Students learn to use organizers as a means of understanding concepts and organizing their own ideas. Students will read and respond to short stories, novels, essays and poetry.

Grade: 10

Credit: 1



EN3050 English III

This full year course for juniors integrates development of reading comprehension and essay writing skills with the study of literature. Instruction is both individualized and highly structured to facilitate the development of reading comprehension, vocabulary, and writing skills. Students use organizers as a means of understanding concepts and organizing their own ideas. Students will read and respond to short stories, novels, essays and poetry, which may include: *The Red Badge of Courage*, *The Curious Incident of the Dog in the Nighttime*, and *The Glass Castle*. Students will read independently as well. Composition work concentrates on writing strong essays that state and support a thesis and utilize evidence from the text effectively.

Grade: 11

Credit: 1

EN4050 English IV

This full year course focus on increasing students' abilities to understand and analyze texts for a variety of causes. Students will be able to analyze themes across genres and present information verbally and in writing. Through classroom discussions, group and individual assignments this course is designed to prepare students to transition to adulthood via college and/or career pathways planning. In addition this course supports students in continuing to remediate areas of need in order to prepare for post-secondary life.

Grade: 12

Credit: 1

MA1050 Geometry I

This math course is designed primarily for freshman that require a systematic approach to math instruction where the pace, volume and/or complexity of instruction is intentionally adjusted to address the individual learning needs of students. The course covers geometry and geometric concepts with a review of basic algebra. Quarterly hands on projects are required. These projects incorporate the math concepts taught in class and also rely on cooperative educational principles.

Grade: 9

Credit: 1

MA2050 Algebra I/Geometry

This math course is designed primarily for sophomores and juniors who require systematic approach to math instruction where the pace, volume and/or complexity of instruction is intentionally adjusted to address the individual learning needs of students. The course covers a combination of algebra review and a continuing exploration of geometry and geometric concepts that relate to real world experience. One project per semester is required. These projects incorporate the math concepts discussed in class and also rely on cooperative educational principles.

Grade: 10

Credit: 1

MA3050 Essential Math for Life I

This full year math course is designed primarily for juniors who require a systematic approach to math instruction where the pace, volume and/or complexity of instruction is intentionally adjusted to address the individual learning needs of students.. This class focuses on using mathematics effectively, efficiently and critically to make informed decisions. It provides students with the mathematical knowledge, skills and understanding to solve problems in real contexts for a range of personal, further learning and community settings. This subject provides the opportunity for students to prepare for post-school career and college pathways.

Grade: 11

Credit: 1

MA4050 Essential Math for Life II

This full year math course is designed primarily for seniors who require systematic approach to math instruction where the pace, volume and/or complexity of instruction is intentionally adjusted to address the individual learning needs of students.. This class is a continuation of MA3050 and broadens the focus on using mathematics effectively, efficiently and critically to make informed decisions. The course provides students with the mathematical knowledge, skills and understanding to solve problems in real contexts for a range of personal, further learning and community settings. This subject provides the opportunity for students to prepare for post-school career and college pathways.

Credit: 1



SC1050 Applied Science I

This course will provide an integrated approach to studying physics and chemistry. It will consist of a hands-on and content-rich program designed to provide students with a meaningful learning experience based on the practical applications of introductory physics and chemistry. This course will meet a total of 4 blocks per week. These blocks will meet within the science lab block format, as well as in a specialized instructional format to pre-teach, reinforce and support the written expectations of the course.

Grade: 9-12

Credit: 1

SC2050 Applied Science II

This course will provide an integrated approach to studying biology. It will consist of a hands-on and content-rich program designed to provide students with a meaningful learning experience based on the practical applications of introductory biology. This course will meet a total of 4 blocks per week. These blocks will meet within the science lab block format, as well as in a specialized instructional format to pre-teach, reinforce and support the written expectations of the course.

Grade: 9-12

Credit: 1

SC3050 Applied Science III

This course will be a continuation of Applied Science II. It will provide an integrated approach to studying biology to support a competency determination with additional opportunities to meet the MCAS competency in Biology. This course will meet a total of 4 blocks per week. These blocks will meet within the science double-lab block format, as well as in a tutorial format to pre-teach, reinforce and support the written expectations of the course.

Grade: 9-12

Credit: 1

SO1050 World History I: Identity, Status and Power

The goal of this course is for all of our students to understand themselves and their place in the world in historical and comparative perspective. Through historical case studies, students will learn how premodern and early modern societies answered these fundamental questions: Who are we, and who am I? How do societies rank people? Who has power and why? How does wealth get produced and distributed? Through inquiry projects focused on these questions about personal identity, social rank, political power, and the meaning and distribution of wealth, students will learn and practice 21st-Century skills in collaboration, communication, and creativity. This course supports students in acquiring historical and social science literacy, writing skills, and essential understandings necessary for a successful high school social studies experience.

Grade: 9

Credit: 1

SO2050 World History II

Students studying World History: The Modern Era will be expected to have some of the skills necessary to analyze social, political and historical problems upon entering the course. Through research and the writing of major essays, students will analyze the cause and effect, compare multiple perspectives, recognize the role of human agency in history, and discern the impact that economic, social, political, religious, and philosophical forces have had on modern civilization. The course will teach a variety of advanced skills necessary to evaluate primary and secondary sources, deal with more than one primary source at a time and read many secondary sources beyond the textbook. Teachers will help students write critical and analytical essays, which require a clear thesis by the student analysis on both factual and conceptual levels.

Grade: 10

Credit: 1

SO3050 United States History

This course is designed to survey major topics in American History. Students are introduced to vocabulary, major figures, and the issues and conflicts that shaped this country's historical development, both socially and politically.

Grade: 11

Credit: 1



CE8801 Gateway I - Career and Postsecondary Readiness

This semester course is designed to explore foundational work readiness and increase students' prevocational, vocational, and college awareness skills. This course will also focus on building students' social-emotional learning, time-management, initiation, perspective taking, collaboration, interpersonal communication skills and work/college presentation. Students may begin internships and jobs within Brookline High School to learn a variety of skills for their career development. Students may be expected to write reflections in journals, develop a skills inventory and work portfolio, along with building college application skills. Students will have an opportunity to job shadow, explore community colleges, technical training programs, or other post graduation job training opportunities. Seminars provide an opportunity to practice interview skills, and develop a resume and cover letter for jobs/college they are interested in pursuing and have the opportunity to interact with guest speakers from a variety of careers and colleges. Trained job coaches may supervise students in all work placements. These steps to college and career readiness will be differentiated to meet individual student needs.

Periods per week: Per IEP

Credit: .5

CE8802 Gateway II - Experiential Learning

This course is designed for students who would like to build additional independent adult skills through community based internships or dual enrollment at a local community college. Students will work with BHS Transition staff to identify a pathway of interest and build the skills necessary to independently pursue these pathways. During internships, a job coach can be available to provide direct feedback on students' individual skills and support students' reflecting on their progress towards their individual college and career goals. Seminar curriculum is aligned with community internships that are linked to competencies of the common core standards. The staff reviews strengths, progress, social/emotional learning and areas for improvement with each student. Students are expected to maintain a log of self-evaluations completed at the end of each internship/job shift. Some of our job placements have included: Boston University dining services, the Co-op Barnes & Noble bookstore, BU Fitness Recreational facilities, the BU School of Education Recycling Program, and the Institute of Contemporary Art. While this course is intended to build on the Employment Seminar I curriculum, this course can be individualized based on student needs.

Periods per week: Per IEP

Credit: .5

CE2411 Connections: Transitions I

This semester course is designed to support students in preparing for future career and college pathways. Through a variety of activities and interest assessment students will clarify their vision for the future, identify individual goals, assess their own strengths and needs and develop self determination skills. Students will have an opportunity to develop and expand independent adult living skills including personal health and wellness, social-emotional coping skills, community access and safety, household management, leisure, time management, functional academics and decision making. Additional goals will focus on self awareness and self exploration (value systems, choice making/self determination skills). Through hands on practice, incidental learning, community engagement and seminar group work, students will acquire and practice these skills. These steps to independent adult living will be differentiated to meet individual student needs.

Periods per week: Per IEP

Credit: .5

CE2412 Connections: Transitions II

This semester course is designed to support students with advanced functional life skills and independent adult living skills. Lessons and activities include time management, functional academics, consumer responsibility, personal finance, obtaining a Mass ID and/or bank card, independent travel, and accessing community resources will be explored during this course. Students will continue to develop self-advocacy skills, personal health and wellness, and social-emotional skills. Through this course students will have increased opportunities in the community to practice these skills and make connections. Students will explore post secondary resources including post secondary education options. Learning will be linked to competencies from the common core standards. While this course is intended to build on Connections: Transition I curriculum, this course can be individualized based on student needs.

Periods per week: Per IEP

Credit: .5

ADAPTED PHYSICAL EDUCATION

HF7001 Adapted Physical Education

Alternative and/or supplemental physical education offering for opportunities to develop gross motor and skills necessary for life long physical activity.

Grade: 9-PG

Periods per week: 3

Credit: .25

HF8702 Adapted Physical Education (See description for course number 7001)

Grade: 9-PG

Periods per week: 3

Credit: .25

READING

SERExx Reading Service

This service provides individual and small group interventions for students with identified reading challenges.. Students receive instruction and guided practice in research-based strategies for improving their comprehension, fluency, and decoding skills, as well as instruction in word analysis strategies to expand vocabulary knowledge.

Grade: 9-12

Periods per week: Per IEP

Credit: 1

SPEECH AND LANGUAGE

CO8000, 8002, 8003 Speech and Language

Individual, small group, and classroom intervention for students with diagnosed language, communication and neurological speech disorders. This service provided by a certified Speech and Language Pathologist offers teaching of language skills and compensatory strategies for oral and written communication and specific speech disorders. Also included is consultation with general education and special education teachers and coordination with the learning centers, and tutorials. Number of meetings depends on the student's Individual Educational Program. Speech and Language Pathologists participate in activities such as classroom observations and collaborative teaching, teacher consults and reviewing student work. Prior to determining/providing services, a speech and language evaluation is completed.

Grade: 9-PG

Periods Per Week: As needed Prerequisite: Per IEP

Credit: .25

CO8100 Social Language

Social language groups offer structured teaching and experiential opportunities in social thinking and communication. Groups are led by a speech-language pathologist in small groups. The main goals of the groups are to improve the social understanding, communication and social reasoning skills of individuals by using discrete skill building activities. Groups are designed based on the needs of individuals and can be geared towards basic or high-level skill building.

Grade: 9-PG

Periods per week: Per IEP

Credit: 1

ExCEL PROGRAM

The ExCEL Program is an on-campus, therapeutic special education program that supports students' academic and social emotional needs through small class sizes, a low student to teacher ratio, and a supportive environment that promotes relationship building and self-advocacy skills.

ExCEL Math

MA2800 Math 1

In a small group setting, this course examines algebraic, geometric, and numeric relationships, including functions, proof, congruence, isometris, similarity, probability, coordinate geometry, linear programming, and quadratics. Emphasis is on building understanding of concepts through hands-on investigation, pattern-finding, and cooperative group work. There is a concentration on building an understanding of mathematical concepts, applying previously learned strategies to solve problems, and increasing comprehension of mathematical texts.

Grade 9

Credit: 1

MA2810 Math 2

In a small group setting, this course provides an introduction to Algebra 2. Topics will include probability and statistics, algebraic expressions, writing equations to solve word problems, inequalities, absolute value, linear equations, systems of equations, polynomials, radicals, and quadratics. This course will continue to build upon strategies from the previous year in understanding mathematical concepts and improving comprehension of mathematical texts.

Grade 10

Credit: 1

MA2900 Math 3

This course continues the previous year's introduction to Algebra 2 topics. In a small group setting, students will study polynomials, functions, irrational numbers, quadratic equations, exponential equations, and logarithms. Students will be expected to improve their ability to appropriately and strategically utilize previously learned skills to solve new problems and will construct viable arguments as to why they chose to solve a problem in a certain way.

Grade 11

Credit: 1

MA2910 Math 4

Through an analysis of functions and coordinate geometry students are prepared for the study of college algebra. In a small group setting, students will study topics, which include families of functions (polynomial, radical, rational, exponential, and logarithmic), curve fitting, sequences and series, and probability. In addition, students will use logic and reasoning to make meaning of graphs and data as well as recall previously learned knowledge in order to strategize and then solve a variety of word problems.

Grade 12

Credit: 1

ExCEL Social Studies

World History: The Pre-Modern Era

The first year of a two-year course of study in world history, World History: The Pre-Modern Era, explores the development of civilization and the enduring beliefs of the world's peoples. The course will help students acquire the historical and social science literacy, writing and research skills, and essential understandings necessary for a successful high school social studies experience. Beginning with the study of India and China, World History: The Pre-Modern Era will focus on the process of civilization building. Students will compare the roles of competing political philosophies in the creation and maintenance of a powerful empire. Traveling across the Islamic and African worlds, they will assess the importance of cultural diffusion. As they study the European Renaissance, Reformation and Enlightenment, students will examine the emergence of the individual in world history. Appraising the significance of colonialism and slavery, they will research the ways in which different cultures have impacted each other and contributed to the development of the modern world. The course will be interdisciplinary, with the social sciences, humanities, and technology integrated into the study of history. Students will be introduced to art history, and they will read portions of some of the great literary works from a variety of the world's cultures. All students will complete a research project in order to fulfill course requirements.

SO2500 World History I: The Pre-Modern Era

Within a small classroom setting, this course will focus on skill development as students engage the course content. Note taking, organization and other study skills will be emphasized along with an important range of thinking skills. Teachers will help students learn to develop thesis statements, assemble evidence, and write coherent paragraphs. While focused mainly on secondary source material, students will be exposed to strategies to interpret and analyze different types of sources, including primary sources from many different cultures.

Grade 9

Credit: 1

World History II: The Modern Era

Beginning with a review of the Enlightenment, World History: The Modern Era, focuses on the world's history from the Age of the Democratic Revolutions to the post-Cold War era. Students will study the Industrial Revolution as it developed in Europe and in Japan; political and social movements of the 19th century; European and Japanese imperialism and the various forms of accommodation, assimilation and resistance created by African and Asian societies; and the world impact of World War I, World War II, the Cold War and Wars of National Liberation. Examining Asian, African, European and American cultures and histories, students will consider how they contributed to, and were impacted by, world history in the realms of ideas, art, politics, and economics. All students will write a research essay in order to fulfill course requirements.

SO2600 World History: The Modern Era

Within a small classroom setting, students will learn the skills necessary to analyze cause and effect, compare multiple perspectives, recognize the role of human agency in history, and discern the impact that economic, social, political, religious and philosophical forces have had on modern civilization. Additional reading strategies will be introduced to work with primary sources and secondary sources beyond the textbook. Teachers will help students learn to develop thesis statements, assemble evidence, and write coherent essays.

Grade 10

Credit: 1

United States History

United States History surveys the development of the United States from the colonial period to the end of the Cold War era, using both a chronological and thematic approach. This course is broken down between two courses, US History I and US History II. US History I, begins with a review of the colonial period and the American Revolution, students examine the creation of the Constitution, the early years of the republic, the institution of slavery and its effect on the country, and the causes and effects of the Civil War. US History II will review the Civil War and then study Reconstruction, the Industrial Revolution, the responses to the Industrial Revolution, civil rights, and the development of American foreign policy in the pre and post-World War II eras. By looking at United States history through a variety of lenses -- social, economic, and constitutional -- students will gain an in-depth understanding of the complex ways in which the past influences the present. In studying the aspirations of the many different individuals and peoples who have forged our nation's history, the conflicts they have encountered and the contributions they have made, students will be better prepared to play an informed and active role in a democracy.

The skills which will be stressed include outlining, preparing written work which shows sequence and the development of independent argument, working with three or four different sources, distinguishing immediate and long-term causes, critically examining primary sources, and recognizing the broader issues involved in a case. All students will learn some of the skills of the historian and spend time in the library.

Reading, writing, and discussion form the spine of the course; there are also opportunities for role playing, viewing films, taking field trips, and hearing speakers. Students will also engage in conversations about current events that are occurring around the United States or impact the United States and its citizens. All students will complete a research essay in order to fulfill course requirements.

SO2700 United States History I

Within a small classroom setting, United States History I students will further develop the skills necessary to analyze social, political and historical problems. They will practice outlining and note taking skills, and write short papers. Additional reading strategies will be reviewed to analyze primary and secondary sources beyond the textbook. Teachers will help students write essays that require a clear thesis and analysis on both factual and conceptual levels.

Grade 10-11

Credit: 1



SO2800 United States History II

Within a small classroom setting, United States History II students will build upon and be provided additional opportunities to further develop the skills used in US History I. There will be a particular emphasis on current events. Students are guided to develop decision-making skills and informed opinions about the world around them.

Grade 11-12

Credit: 1

ExCEL Science

SC2250 Physics

This course is designed to present an examination of the laws and principles of physics, including topics in mechanics, electricity, magnetism, and wave phenomenon. This course is offered based on student enrollment.

Grade 9

Credit: 1

SC1050 Biology 1

This life science course is designed to be the study of the structure of organisms and how they function. It includes cell biology, biochemistry, heredity, classification and evolution, along with the interaction between these organisms and their environment. Laboratory activities are an integral part of the curriculum. This course also focuses on building functional science skills. Reading, language, math, self-advocacy, organizational, behavioral and social objectives written into the IEP are integrated into the curriculum. Students will gain a familiarity with science, make connections amongst all aspects of learning, and develop the skills they can use within their current and future environments.

Grade: 9-12

Credit: 1

SC2050 Biology 2

This course is a continuation of introduction to biology started in Biology 1. Topics are covered again in greater depth, and they include cell biology, biochemistry, heredity, classification and evolution, along with the interaction between these organisms and their environment. Laboratory activities are an integral part of the curriculum. This course also focuses on building functional science skills. Reading, language, math, self-advocacy, organizational, behavioral and social objectives written into the IEP are integrated into the curriculum. Students will gain a familiarity with science, make connections amongst all aspects of learning, and develop the skills they can use within their current and future environments.

Grade: 9-12

Credit: 1

SC2280 Current Topics in Science

This full year course explores and investigates current topics and developments in science. Students will research and conduct experiments related to a variety of topics through the year. Topics of study may include environmental science, climate change, planetary science, health related topics among other things. Students will create presentations, write articles, and participate in discussions related to new scientific information and observations.

Grade: 9-12

Credit: 1

ExCEL English

ENG2100 Excel Freshman English

This full year course for freshmen integrates reading, writing, and oral communication skill development through the study of literature. This course is meant to provide an overview of literature from an analytical angle, making connections to historical context and perspectives. Students will read and analyze literature across the major forms and genres: short stories, novels, poetry, drama, and literary nonfiction. Students will also explore various genres of writing. Each unit will focus on a genre and the related elements of that specific genre. Students will investigate and enhance vocabulary, writing styles, and grammar techniques. Writing instruction prepares students to independently produce strong paragraphs with varied sentence types. Throughout the year, students will read literature across genres and make connections by taking part in guided reading, discussions, debates, writing, and projects.

Grade: 9

Credit: 1



ENG2200 Excel Sophomore English

This full year course for sophomores integrates development of reading comprehension and essay writing skills with the study of literature. This course is meant to provide an understanding of literature from around the world. Each section will allow for a close study of the literary work, as well as consideration of the historical and cultural contexts. Students will come to grasp the relationships between concerns of various peoples and cultures, as well as make connections to our society. Students will investigate and enhance vocabulary, writing styles, and grammar techniques. Composition work concentrates on writing strong analytical essays that support a well-developed thesis statement. Throughout the year, students will explore literature across cultures and make connections by taking part in guided reading, discussions, debates, writing, and projects.

Grade: 10

Credit: 1

ENG2210 Excel Junior English

This full year course for juniors integrates the development of reading comprehension and essay writing skills with the study of literature. This course is meant to provide an understanding of American literature throughout history. Students will explore a variety of nonfiction and fiction, having the opportunity to analyze the relationship between texts and themes. Each section will allow for a close study of the literary work and its themes, as well as consideration of the historical and cultural contexts. Students will investigate and enhance vocabulary, writing styles, and grammar techniques. Composition work concentrates on writing strong essays that support a well-developed thesis statement and incorporate evidence from the text effectively. Students successfully complete a Junior Paper with ongoing structured support. Throughout the year, students will read literature and make connections by taking part in guided reading, discussions, debates, writing, and projects.

Grade: 11

Credit: 1

ENG2300 Excel Senior English

This full year course for seniors teaches writing in response to literature. This course provides an exploration of themes across a variety of literature and time periods. Students will read a variety of literature from various genres, cultures, and time periods, having the opportunity to see how historical and cultural contexts influence theme. Students will identify the relationship of themes across various texts, as well as make connections between various people and cultures. Students will investigate and enhance vocabulary, writing styles, and grammar techniques. Composition work concentrates on writing strong essays that state and support a well-developed thesis while incorporating evidence from the text effectively. Students successfully complete a Senior Paper with ongoing structured support. Throughout the year, students will read literature from various time periods and make connections by taking part in guided reading, discussions, debates, writing, and projects.

Grade: 12

Credit: 1

ExCEL Advisory

AD2010 Advisory

Advisory class will cover a wide range of topics in both small group and larger group settings with multiple teachers. Topics will include but are not limited to: academic behavior, world events, community service projects, transition skills, community building, and school preparedness.

Grade: 9-12

Credit: 1.0

ExCEL Electives

SC2292 Course: Science Seminar

Using basic scientific principles of discovery and experimentation, students will develop an appreciation for the fundamental fields of science and technology through an exploration of current events and everyday life experience. An interdisciplinary approach integrating the fields of physics, chemistry, biology, and engineering will be employed to discuss one seminar topic. Examples include global health and nutrition, artificial intelligence and communication, sustainable environment and policymaking.

Grade: 9-12

Credit .5

VA86EX Exploring Film

This half-year course explores the wide range of films over a variety of genres and time periods. Students will investigate films in the areas of social commentary, character and plot development, themes, and purpose. Students will also examine films in the areas of cinematography, and analyzing film techniques, style, and effects. Students will demonstrate an understanding of content through participation in discussions, as well as reflective writing.

Grades: 9-12

Credits: .5



VA0103 Explorations in Art Studio

Students explore and experience 2D and 3D mediums, transforming and combining materials and processes into images and forms that resonate with the viewer. Art Studio increases craftsmanship, self-expression, and confidence in decision-making. Students observe, listen to their intuition, imagine, and view outside sources to develop thoughtfully conceived and executed artwork. Art studio is ideal for students wanting a broad foundation for future art courses. Brainstorming, execution, competence with tools, critiques, self-reflections, and inventiveness are emphasized.

Grade: 9-12

Credits .5

SC5501 Engineering The Future I

Engineering the Future I is a semester long, hands-on, project based course that will introduce students to the skills and knowledge necessary to understand what engineering is and what engineers do. Projects are divided up into individual tasks and will include those that require group planning, research, design, prototype building, testing, evaluation, and redesign. Students who take this course at BHS will be exposed to the engineering design process and begin to explore opportunities and careers in various fields of engineering.

Grade: 9-11

Credit: .5

ExCEL Health and Fitness

HF2610 Health and Fitness

This course provides students with an opportunity to elect from a select group of lifetime and fitness activities. (e.g. personalized fitness training, tennis, badminton, ultimate Frisbee, boxing for fitness). Students will also participate in health education lessons. This class is co-taught.

Grades: 9-12

Credits: .5

ExCEL Study Skills

TU2220 Tutorial

In a small group setting, students will have an opportunity to review classwork, complete their homework, and study for tests/quizzes while receiving support from a dual certified special education teacher and a content area teacher. Students will prioritize their work based on their individual strength and will use this time in class to focus on their areas of greater need and their IEP goals related to academic behavior, executive functioning, and school preparedness.

Grades: 9-12

Credits: .5

TU2222 Learning Center

In a small group setting, students will have an opportunity to review classwork, complete their homework, and study for tests/quizzes while receiving support from a dual certified special education teacher and a content area teacher. Students will prioritize their work based on their individualized goals and objectives related to academic behavior, executive functioning, and school preparedness.

Grades: 9-12

Credits: 1.0

WINTHROP HOUSE

Winthrop House, a public, therapeutic day school, is a specialized program for students whose mental health disorders have prevented them from making effective progress in a less restrictive setting.

MATH @ Winthrop House

MA5100 Integrated Algebra and Geometry

An introductory examination/review of geometric relationships, including parallel lines, congruent and similar figures, trigonometry of right triangles, circles, area and volume, coordinate geometry, and coordinate transformations. There are also units on probability and statistics.

Credit: 1

MA5200 Algebra 2

An introduction to second-year algebra as well as a continuation of a topical approach to probability and discrete math. Basic algebra, graphing techniques and coordinate geometry, linear equations and inequalities, systems of linear equations and inequalities, polynomials, quadratic equations, and fundamental notions of parabolas are covered.

Credit: 1

MA5600 Intermediate Math

An extension of Math 2 for students who need additional time to master skills. Building on students' individual performances in Math 2, we will revisit and reinforce, as needed, topics covered in the Math 2 curriculum: review of basic algebra, graphing techniques and coordinate geometry, linear equations, systems of linear equations and inequalities, matrices and determinants, quadratic equations, parabolas, and fundamental notions of functions and exponents. This course is offered based on student enrollment.

Level: N

Credit: 1

MA5300 Trigonometry and Analysis

A further study of algebra and functions and their properties. The fundamental notion of functions, inverse functions, powers, roots, radicals, and exponential, logarithmic, polynomial, and rational functions are examined. Additional units cover matrices, quadratic relations, and a study of trigonometry.

Prerequisite: Math 2 (Intermediate Math)

Credit: 1

MA5400-01 Statistics

An introductory study of how numerical data may be analyzed as an aid in decision-making. Topics include data presentation and analysis of one and two variables, normal distribution, t-distribution, sampling methods and experimental design, linear regression, coefficient of correlation and statistical inference including significance tests and confidence intervals. Students frequently use a TI-83 in class.

Grade: 11,12

Credit: 1

SOCIAL STUDIES @ Winthrop House

SO6100 World History: The Pre-Modern Era

Students studying World History will learn the skills necessary to analyze cause and effect, to compare multiple perspectives, to recognize the role of human agency in history, and to discern the impact that economic, social, political, religious and philosophical forces have had on civilizations. They will learn to analyze works of art and literature from a variety of cultures and historical periods. The Pre-Modern Era focuses on the world's history from the Early Chinese period through 1500 C.E. This course is offered based on student enrollment.

Credit: 1

SO6200 World History: The Modern Era

Students studying World History will learn the skills necessary to analyze cause and effect, to compare multiple perspectives, to recognize the role of human agency in history, and to discern the impact that economic, social, political, religious and philosophical forces have had on civilizations. They will learn to analyze works of art and literature from a variety of cultures and historical periods. The Modern Era focuses on the world's history from the time of the Columbian exchange through the Twentieth Century. This course is offered based on student enrollment.

Credit: 1



SO6300 United States History

This course is designed to survey the major topics of American History. Students are introduced to vocabulary, major figures, and the issues and conflicts that shaped this country's historical development both socially and politically. Additionally, U. S. geography and current events are stressed as they relate to the historical perspective. Students are helped to develop decision-making skills and problem solving techniques on an individual and cooperative basis. This course is offered based on student enrollment.

Credit: 1

SO6600 Contemporary History

This course is designed to take an in-depth look at the events of the 20th century in American history. Students are introduced to vocabulary, major figures, and the issues and conflicts that shaped this country's historical development both socially and politically. They will be encouraged to form opinions and express them in both class discussions and in written work. This course is offered based on student enrollment.

Credit: 1

SO6800 Philosophy: The Meaning Of Life

This fall-semester course explores some of the big questions in life: What is happiness? Is it possible to be happy? Does life have a purpose? What does it mean to live well? What if there are no reasonable or definite answers to these questions? Students will read and discuss passages from a variety of philosophers such as, Plato, Descartes, Kant, and Sartre who attempt to answer these questions. In addition to considering what others have said, students will be encouraged to formulate their own answers, and to examine how their background, family, and community have shaped their perspectives. The format of the course is discussion-based, and it is open to all seniors.

Grade: 11, 12

Prerequisite: Junior or Senior standing

Credit: .5

SCIENCE @ Winthrop House

SC7100 Physics

This course is designed to present an examination of the laws and principles of physics, including topics in mechanics, electricity, magnetism, and wave phenomenon. This course is offered based on student enrollment.

Credit: 1

SC7200 Biology

This course encompasses the study of the structure of organisms and how they function. Major topics include the nature of science, biochemistry, heredity, evolution, and ecology. Body systems are integrated throughout the curriculum. The course begins at the molecular level and culminates with the application to everyday life experiences through interactive lectures, laboratory exercises, and class discussions. This course is offered based on student enrollment.

Credit: 1

SC7300 Chemistry

Chemistry deals with the structure of matter, its properties, and changes in properties as a result of chemical reactions. Emphasis is placed on the physical world involving atomic theory, energy relationships, and chemical reactions. Laboratories are exploration based, using everyday materials. Written laboratory reports are a significant part of course requirements. This course is offered based on student enrollment.

Credit: 1

SC7400 Environmental Science:

This full year course is seminar based, fostering scientific literacy, critical analysis of current issues, responsible local and global citizenship. The course provides a way in which students can become aware of the interaction of people and their environment. The curriculum focuses on concepts that are real-life issues. It provides awareness and understanding of practical everyday problems that affect their lives. It also relates important environmental issues to their lives and their community.

Grade: 11, 12

Prerequisite: Junior or Senior Standing

Credit: 1

ENGLISH @ Winthrop House

EN8100 English Workshop

Freshman course. Students explore connections between the literature they read and their own life experiences. Writing instruction focuses on the summary, the narrative, and the personal essay. This course is offered based on student enrollment.

Grade: 9

Credit: 1



EN8200 World Literature

Sophomore course. Students study key works of literature from various world cultures, ancient to modern, using a humanities approach. Writing instruction focuses on the précis, the summary, the essay, and the 2 to 3 page paper. This course is offered based on student enrollment.

Grade: 10

Credit: 1

EN8300 American Literature

Junior course. Students study American literature in historical and cultural context, identifying recurrent themes. Writing instruction focuses on the précis, the summary, the essay, and the 4-5 page paper. This course is offered based on student enrollment.

Grade: 11

Credit: 1

EN8400 Literature Of The Modern Era - A

Mixed grade level course. Selected literature reflects the multiculturalism of our modern era: poetry, short stories, novels, and plays from authors around the world. Reading selections differ from those in Literature of the Modern Era - B. Essays and short papers are required. This course is offered based on student enrollment.

Credit: 1

EN8800 Literature Of The Modern Era - B

Mixed grade level course. Selected literature reflects the multiculturalism of our modern era: poetry, short stories, novels, and plays from authors around the world. Reading selections differ from those in Literature of the Modern Era-A. Essays and short papers are required. This course is offered based on student enrollment.

Credit: 1

EN8500 Senior English

Grade 12 only. A survey course focusing on close reading in multiple genres, review of skills necessary for post-secondary success, and the writing of the senior paper.

Grade: 12

Credit: 1

EN8600 Independent English

This contract-based, independent tutorial allows a student to earn English credit when scheduling or other circumstances prevent enrollment in a regularly scheduled English class. After an initial evaluation to determine his or her level of proficiency, the student and teacher review an appropriate course plan, then create an individualized work schedule and list of required products. The student completes work independently, meeting weekly with the teacher to receive instruction, review work completed, and discuss his or her progress.

Periods per week: 1 + independent work time

Credit: .25- 1

WORLD LANGUAGES @ Winthrop House

WL4400 Beginning Spanish 1

{See WORLD LANGUAGE section of BHS Course Catalog for course description}

This course is offered based on student enrollment.

Credit: 1

WL4500 Beginning Spanish 2

{See WORLD LANGUAGE section of BHS Course Catalog for course description}

This course is offered based on student enrollment.

Credit: 1

HEALTH and FITNESS @ Winthrop House

HF1100 Small Group Physical Education

This course is designed to match instruction to the skills and interests of the students. Students develop skills for lifetime activity including social, cognitive and physical skills, while meeting the category D graduation requirement. Required course for one semester each school year.

Periods per week: 2

Credit: .25



THERAPEUTIC/GUIDANCE COMPONENT @ Winthrop House

TU9000 Tutorial

This class provides academic monitoring and assistance five times per week in a supportive learning environment with a low student/teacher ratio. With their Tutorial teacher, students identify specific focus areas for improving academic performance and develop strategies and ideas to maximize their academic potential.

Class time per week: 120 min

Credit: .25 per semester

TU0310 Freshman Seminar TU0320 Sophomore Seminar

TU0330 Junior Seminar TU0340 Senior Seminar

Seminar Courses involve students in four different sessions: (1) a weekly group run by clinical personnel, (2) a weekly community meeting which promotes group interactions and fosters communication skills, (3) a weekly meeting with staff mentors and (4) a weekly transition workshop. Transition workshops help students learn to negotiate the social, emotional, and academic transitions inherent in adolescence, cope with the individual challenges which brought them to Winthrop House, and develop plans for life beyond high school.

Full year course.

Credit: 1.0

TU0400 Study Skills

This course is designed to allow students to complete homework assignments with the support of Winthrop House Staff. Depending on the needs of individual students, staff will review strategies for academic improvement including organizational and study skills.

Periods per week: 1-4

Credit: .25 - 1

OPTIONS in Core Academic Areas @ Winthrop House

TU0430 Independent Study

The independent study option allows a student to earn academic credit when scheduling or other circumstances prevent enrollment in a Winthrop House or class on the BHS main campus. Only students who have consistently demonstrated the ability to work independently will be approved for this option. Independent Study may take the form of a tutorial monitored by a Winthrop House staff member, or may involve study at an outside source within the community: for example, a class at a post-secondary school, college, or university, or a course run by a community agency or adult education program. Once the student has been approved for Independent Study, a Winthrop House mentor is assigned and a contract is prepared, clearly specifying requirements for earning credit and any outside documentation needed.

Periods per week: independent work

Credit: .25- 1 + contact with mentor

SO6400 Psychology

An introduction to Psychology. Topics covered include: developmental stages of the life cycle, functions of the mind, learning, memory, language, learning disorders, theories of human behavior, psychological disorders, stress and health, and an overview of the major schools of therapy. In addition to a brief introduction to these topics, subjects of particular interest to the class will be covered in greater depth. A one-semester course which may be taken more than once.

Periods per week: 2

Credit: .25

SO6500 World and Society

This course is designed to give students an exposure to the issues and events taking place in the world today. Students will explore contemporary issues from a historical perspective using background material, research, and current periodicals. After exploration of the topic, students will engage in class discussions to present their points of view. A one -semester course, which may be taken more than once.

Periods per week: 2

Credit: .25

SC7500 Animal Behavior

This course explores the way in which animals respond to changes in their environment and how they interact within and between populations. Topics to be covered are learning, communication, paternal behavior, finding a mate, defense against predation, and aggressions.

Level: N

Periods per week: 2

Credit: .25

EN8700 Creative Writing

This course encourages students to experiment with various forms of creative writing as each discovers his or her individual voice and develops a personal writing style. Students enrolled in this course during second semester serve as associate editors of *Dreamless Haven*, the Winthrop House literary journal. A one-semester course which may be taken more than once.

Periods per week: 2

Credit: .25



ELECTIVES: in Career and Tech Ed/Community Service

CE5500 Computer

In this course, which emphasizes visual thinking and learning, students will work toward proficiency in use of the computer for word processing, drawing, painting, database, and spreadsheets. Individualized, one semester course. May be taken more than once. Course offered based on student enrollment.

Periods per week: 2

Credit: .25

CE4301-1 Introduction to Computer Science

This is a self-paced course in which students will learn the basics of JavaScript, and learn the foundations of computer science and basic programming first through Karel the Dog and then through formalized study of structures, graphics, and game creation in the JavaScript language to build their own game. Students with any programming background are welcome, and structure and support will be given at all levels.

Periods per week: 2

Credit: .25

CE9300 Day Care

This program is designed for students who are interested in working with infants, toddlers or preschool aged children in the Brookline Staff Child Care Center for at least two class periods per week. Students arrange weekly contact with a designated WH staff member in support of their experience, as well as periodic meetings with day care staff. This course is offered based on student enrollment.

Periods per week: 2-8

Credit: .25- 2

CE4100 Work Study

This program is designed to help students benefit from work experience. Students receive credit for working at least 12 hours per week. Requirements include periodic conferences with the Work Study Coordinator and regular evaluations by the work site supervisor.

Hours per week: 12 hours.

Credit: .25-1

CE4200 Community Service

This option, designed to offer students opportunities to be of service to the local community, may be offered as service sites become available. Once the student has been approved for Community Service, a Winthrop House mentor is assigned and a contract is prepared, clearly specifying requirements for earning credit and any outside documentation needed.

Hours per week: varies as per contract

Credit: .25-1

ELECTIVES in Visual Arts @ Winthrop House

VA9100 Film Study

This class will study the elements that make up films. Students will view films, discuss and critique films, and write reviews. A one semester course which may be elected more than once. Course offered based on student enrollment.

Credit: .5

VA9200 Art

This course exposes students to techniques in a variety of fine arts areas: painting, drawing, collage, interior decoration, and crafts. A one-semester course which may be elected more than once. Course offered based on student enrollment.

Periods per week: 2

Credit: .25



ACE (ALTERNATIVE CHOICES IN EDUCATION)

What is ACE?

Launched in 2015, ACE is an innovative, competency-based program at Brookline High School for 48 students who choose to be in a smaller educational setting where they can move at their own pace and engage in project-based and experiential learning. ACE provides a rigorous college-preparation pathway in which students are placed in multi-age classes based on their skill levels, can progress at their own pace and graduate with a Brookline High School diploma when they complete their content and skill competencies. Because the students are in small classes, they benefit from personalized instruction and a tight-knit community of staff and students. Students in ACE are expected to frequently reflect on their personal growth in developing habits of success and actively engage in the ACE community through their participation in their advisory and in community building activities.

How does ACE work?

ACE students take all of their core academic subjects including English, Math, History and Science in the program while still taking their electives, world language, and health and fitness classes in mainstream. They take two six-week academic classes at a time, averaging three courses in each content area in a given school year. When it is time to assess the student, ACE teachers offer a choice of performance-based assessments that, as much as possible, allow students real-world application of the skills. If a student does not meet a minimum level of competency, “basic competency,” in a class, they do not fail. Instead, they repeat it when it is offered next or take an on-line version of the course, if available. A limited number of ACE online classes are also available for students who want to move at a quicker pace.

Even though many ACE students would otherwise take an AP class, they choose not to because they are seeking a more innovative and experiential classroom experience. In addition, 11% of the 2018 ACE senior class took advantage of the dual-enrollment program with Roxbury Community College and successfully completed college classes which provided an authentic college experience. Students may also take college classes at Ben Franklin Institute of Technology.

In ACE, students also have the option of pursuing internships during school hours for academic credit. This gives students the chance to work with a mentor at a workplace of interest where they do a comprehensive project that is needed by that internship site.

In addition to their academic experiences, ACE students participate in community building trips and community service projects which allow students to build a supportive, trusting environment. ACE also works closely with families to be an active partner in their child’s success. Parents or guardians are expected to come in three times a year to participate in a student-run exhibition on their child’s academic progress.

Acceptance into the program follows an admissions process that includes the student, their family, guidance counselor and the ACE Coordinator. Prospective students must first meet with the ACE Guidance Counselor to learn about the program and then schedule a time to sit in on classes to see if it is a good fit. They must also write a short essay to describe why they think the program is the right match for them. Finally, they must schedule an intake interview with their family and the ACE Coordinator.

What is Competency-Based Education in ACE?

The primary and the crucial difference between a competency-based system of teaching and assessment and a traditional model, is that students begin a learning pathway based on assessed skill level in each content area, and not on arbitrary courses. After being assessed for their knowledge in each content area, students are placed into two courses at a time that put them at their "learning edge" i.e. challenging, but not overwhelming. Students progress from course to course in each content area, based on their ability to demonstrate mastery in each area, independently and multiple times. Once they meet the assigned benchmarks in each course, they become "competent", and move on to the next course. If they finish a trimester without demonstrating competency in an area, they do not fail. Instead, they repeat that course when it is offered next.

Traditional Model	Competency-Based Model
Students are assigned to a grade (9,10,11, 12) based on their age.	Students are placed in courses based on their demonstrated skill not grade level.
Courses last for 6 months to a year.	Courses are 6 weeks long.
Students are assigned a grade rating (A, B, C, D, F, E) based on cumulative averages.	No one fails. Progression from course to course is based on demonstration of competence.

Other Unique Features of ACE:

Habits of Success: Students are taught and held accountable for tracking their growth in 7 key Habits of Success which include: *Goal Setting, Self-regulation, Collaboration, Self-awareness and Reflection, Perseverance, Curiosity, and Community Mindedness*. These are key skills that schools often assume students will learn on their own. In ACE, we feel they are essential for students to learn while they are in high school to be better prepared for college or other post-graduate plans. They are also critical skills for functioning well in our 21st Century work world.

Advisory: Students are split into small, multi-age advisories which meet twice a week. Advisory is a time for students to have one-on-one academic progress check-ins with their "advisors" (one of the four content teachers), do team-building activities with their peers, and have a "home-base" to talk through any issues of interest and concern from school or in their community.

Student Leadership and Community Building: Student voice is integral to how ACE runs. Students have an opportunity to serve on a student leadership team who facilitates regular community meetings. These meetings are a chance for celebrations/awards ceremonies to hosting outside performers to engaging in discussions on topics of interest. The program also involves students in the planning and carrying out of fun, team-building field trips.

ACE COURSES

It is important that the courses offered in ACE meet the needs of the students in ACE. Each fall, many new students enter ACE to replace those who have graduated. There is no way to anticipate who those students are or what their needs might be. Therefore, it is possible that some new courses not listed here will be created or that listed courses will not be offered.

ACE COURSE OFFERINGS

English:

Humanities Seminar
Genre Reading
Novel Concepts
Creative Writing
Informational Writing
Dramatic Literature
Conflict and Characterization in Literature
Thematic Literary Analysis
Literary Criticism
Personal Narratives
Comparative Writing
Capstone

Math:

Statistics Seminar
Algebra I
Intro. to Algebra 2
Algebra 2A
Algebra 2B
Algebra 2C
Pre-Calculus I
Pre-Calculus II
Pre-Calculus III and Statistics
Calculus A
Calculus B
Calculus C

Dual Enrollment with Roxbury Community College

Must meet prerequisites set by BHS, ACE, and RCC for the particular course of interest
Must have a minimum GPA of 2.5 or higher

Dual Enrollment with Ben Franklin Institute of Technology

Must be an 11 th or 12 th grader who is interested in earning a full year of a 2 year BFIT Associates Degree while in high school. Free tuition, fees and books.
If a student is not sure they want to go to BFIT after BHS, they may still take courses for credit in high school or transferable college credit.

Science:

Cell Biology
Ecosystems
Body Systems
Genetics
Chemical Elements
Population Dynamics
Evolution and Taxonomy
Chemical Reactions
Nutrient Cycles
Advanced Lab in Forensic Science
Nutritional Science

History:

US/World Imperialism
US/World Revolutions
US/World Political Systems
US/World Civil Conflicts
US/World Human Rights
US/World Impact of Slavery
Martin vs. Malcolm X
Social Injustices
Capstone

Post Graduate Planning:

Post Graduate Planning Seminar (PGP)

Career & Internship Exploration:

Career & Internship Exploration Seminar (CIES)
• Stage 1: Interest Exploration
• Stage 2: Informational Interview
• Stage 3: Job Shadow
• Stage 4: Internship Exploration

Internships with Comprehensive Academic Projects

6 Week-36 Week Internship with projects that meet needs of internship and address academic content benchmarks. To be determined by supervising ACE teacher and internship mentor.
Must meet prerequisite of CIES Stage 4: Internship Exploration



ACE ENGLISH

EN0720 Humanities Seminar

Humanities Seminar is an interdisciplinary- introduction course where students new to the ACE program get a chance to acclimate to ACE classrooms and community. Students learn how our government functions, what their rights are and where they came from. Students hone discussion skills through the study of our political system and current events. This course culminates with a project where students choose an issue and design a legislative bill that is presented to a mock Congress.

Grade: 10-12

Credit: .33

EN0820 Comparative Writing

This upper-level writing class draws from two core texts: *The Fire Next Time* by James Baldwin and *The Fire This Time* by Jesmyn Ward. Both texts use personal narratives to explore the experience of being an African American over the past half-century. Through weekly writing assignments, students delve into the similarities and differences between the society in which Baldwin lived and modern society, which the students live in and Ward's book centers on. A few topics of discussion include identity, family/ancestry, social justice, and the importance of writing. Classwork is designed to sharpen students' literary analysis skills, while also encouraging them to articulate who they are as a person in today's world. Culminating assessments include a final Socratic Seminar where all of the readings from the cycle are discussed, as well as a formally written personal narrative that would be worthy of putting in an anthology like Ward's.

Grade: 10-12

Prerequisite: Humanities Seminar

Credit: .33

EN0020 Genre Reading

This introductory reading class is designed to expose students to a variety of reading comprehension strategies in order to prepare them for standardized testing. The class focuses on a different genre every week, including fiction, nonfiction, poetry, plays, and satire by authors such as Orson Scott Card, David Sedaris, Malcolm Gladwell, Lorraine Hansberry, and Maya Angelou. Each week, students are expected to read a selection of texts in that week's genre. First, they examine the texts to identify that genre's characteristics, then they determine appropriate annotation strategies based on the genre and practice the strategies on additional readings. Students are required to answer questions for each genre that test how effective their annotation strategies would be in a timed setting. Finally, students participate in a weekly Socratic Seminar where they are expected to come prepared with their annotated readings from the week to discuss and analyze. The class culminates with a Genre Defense, wherein students are given a variety of readings that they must identify the genre of, defend why it fits in that genre with textual evidence, then annotate the reading accordingly. Students compile their final work into a Genre Guide for future reference.

Grade: 10-12

Prerequisite: Humanities Seminar

Credit: .33

EN0520 Creative Writing

This class is centered around a culminating project of creating a self-published literary magazine. Throughout the class, students experiment with a variety of creative writing exercises and examine published authors from the perspective of a writer. Students will be able to identify and personally explore core literary elements, such as characterization, setting, sensory details, plot structure, and dialogue/narration. Depending on skill level, students could also explore more complex literary elements such as flashbacks, perspective, ambiguity, and extended metaphor. A majority of class time is spent as a writing workshop, wherein students get time to write, share with, and critique each other. As the class progresses, students formulate concepts for a magazine, or "zine", either working independently or in a small publishing group. The final weeks are focused on the zine publishing process, including advertising, creative design, formatting, and production. The last day of class, students distribute their zines to classmates, reading each other's final work, as well as outside literary zine examples from *The Beat* by Boston University Radio, Northeastern University's *Spectrum* and *Wanderlust* zines, BHS's own *Refractions*, and other local independent zines gathered from the Papercut Zine Library in Somerville.

Grade: 10-12

Prerequisite: Humanities Seminar

Credit: .33



EN0620 Informational Writing

In an increasingly technological society, students need to be comfortable navigating and utilizing the vast tools and communities the internet affords us. This class is designed to introduce students to basic research and technology skills, in addition to writing skills, by creating personal blogs focused on student-selected topics. Each week centers on a different informational text structure: description, compare & contrast, cause & effect, and problem & solution. Students begin each week by conducting research about that week's post topic, taking notes and creating citations for their sources along the way. Then, they are given time in class to outline and draft the post, utilizing rubrics to self and peer edit. After gaining teacher-approval that the post's content and grammar is of publishable quality, students are taught how to format their writing on their blog's website, using sites such as WordPress, Wix, and Weebly. These basic skills are the foundation of modern independent businesses as well as journalism, giving students an authentic experience in potential career paths while strengthening outlining, drafting, and editing skills.

Grade: 10-12

Prerequisite: Humanities Seminar

Credit: .33

EN0220 Novel Concepts

In Novel Concepts, students read literature that explores the themes of identity and community, prompting students to contemplate: How do I define myself? To what extent can we choose who we are and what we become? How am I defined by family, friends, race, gender, social class, religion? Students read works such as *Song of Solomon*, *Into The Wild*, *The Lone Ranger and Tonto Fistfight in Heaven*, and others. Not only will students learn how key literary elements manifest in a novel-length text, but they will also reflect on their ability to sustain silent reading, using strategies to become aware of their challenges and ultimately improve their reading skills. Students are given time in class to practice reading strategies, but are expected to continue reading outside of class. The class culminates with an analytical paper and a creative project that draws upon the conclusions of the analysis.

Grade: 10-12

Prerequisite: Humanities Seminar

Credit: .33

EN1820 Dramatic Literature

In this course, students learn how to read between the lines in a play to determine character's motivations, relationships, and connection to the themes. The class begins by reading the play and watching different actors' interpretations of the characters. Students are then taught to analyze a character from the play by directing and performing a monologue spoken by that character. Students could either choose a monologue straight from the play or write their own imagined monologue from the perspective of a character. In collaboration with the drama department, students are coached on monologue delivery and stage presence. Students also make staging and costuming decisions, articulating why they made those decisions using text-based reasoning. Students are expected to perform their monologue for the class, or record it to be played in class. The audience must then give feedback or ask questions about the execution, appropriateness, and subtle symbolism of the performance. By becoming an intricate part of the play itself, students are able to access and retain its core lessons in a more engaging and lasting way.

Grade: 10-12

Prerequisite: Humanities Seminar

Credit: .33

EN0420 Thematic Literary Analysis

This course is designed to expose students to philosophical questions about the morals and direction of modern society, as well as to work intensively to improve students' reading and writing skills. Students begin this course by reading a variety of classic and modern texts centering on science fiction, fantasy, and dystopian literature (sometimes called "speculative fiction"). Authors may include Margaret Atwood, Octavia Butler, Philip K. Dick, George Orwell, Ray Bradbury, Kurt Vonnegut, and H.G. Wells. Students participate in frequent Socratic Seminars about the readings, demonstrating the ability to draw connections between different readings, keep track of theme development, and relate the themes to their own lives and experiences. The final project requires students to write an 6-8 page paper using evidence from the class readings to inform and delineate a potential utopian or dystopian society. In addition to the paper, students must choose a creative project that demonstrates an aspect of their imagined society.

Grade: 10-12

Prerequisite: Humanities Seminar

Credit: .33



EN0320 Conflict and Characterization in Literature

This upper-level reading class focuses on analyzing more complex literary and poetic elements through the lens of hip hop music. The course begins by introducing students to the cultural history of hip hop through readings and documentaries, examining the conflicts and themes that sparked and continue to fuel rap music. Students are then given weekly playlists to listen to and study. By analyzing different rappers' "flow" style, students articulate their varying use of metaphor and simile, rhyme scheme, rhythm, allusions, sound devices like assonance, and more. Students discover patterns in rappers' poetic methods and themes that contribute to their characterization. To demonstrate their understanding of the connection between the conflicts in hip hop and the way the musicians characterize themselves, students create and present their own "alter egos" that require them to decide which conflicts are central to their identities and how they would characterize themselves through their songs' topics/themes and flow style. Students are encouraged to write their own raps that demonstrate the poetic devices studied. This class brings the nebulous task of poetic analysis to a tangible, daily hobby for many students.

Grade: 10-12

Prerequisite: Humanities Seminar

Credit: .33

EN1120 Personal Narratives

What makes me who I am? What kind of future would be fulfilling for me? What are my strengths and struggles? These questions are all at the forefront of high school seniors' minds. This course is designed for graduating students to reflect upon their lives and their futures post-high school through creative nonfiction writing. The final product is an essay that can be used for college applications. Students read personal narrative examples ranging from NPR's *This I Believe* essays to previously graduated BHS students' college essays. Students are also given time to write supplemental essays, resumes, and cover letters. A core tenant of the class is frequent peer feedback sessions and self-reflective practices. This class gives students space to practice the project-management and independence that they will need for college.

Grade: 10-12

Prerequisite: Humanities Seminar

Credit: .33

EN1520 Literary Criticism

In this course, students are given a choice between three different ways to access Shakespeare's *Hamlet*: graphic novel, No Fear Shakespeare, and the original text. Special attention is put on close-reading skills, which requires students to look at the original text regardless of their text choice. The class also watches clips from the BBC production of *Hamlet* and discusses the creative choices of that performance. Students practice analyzing texts through critical lenses such as formalist, reader response, psychoanalytic, gender/feminist, and sociological. Students select a focus lens and participate in frequent discussions where different lenses' perspectives are shared and compared. The class culminates with a written critical analysis of at least one of the soliloquies, in addition to selection from a variety of creative projects that require students to draw upon their critical lens awareness.

Grade: 10-12

Prerequisite: Humanities Seminar

Credit: .33

EN1320 Capstone 2

EN1420 Capstone 3

These are the 2nd and 3rd Capstone courses that all ACE students must complete in order to graduate. In EN1320, students use the extensive research that they completed in their first Capstone class (SO1320) to then outline, draft, and edit a 10-page paper that details their research findings. This paper must take a position on the social justice issue that they chose and write a thorough argument to support their position, citing facts from their research and citing them in a detailed bibliography that follows standard MLA format. Students must submit multiple drafts for teacher and peer feedback to craft a college-level paper. In EN1420, students carry out and document their "legacy" projects such as leading workshops in elementary schools, attending protests against gentrification, volunteering at food banks and soup kitchens, and more. The course then culminates in a public Capstone presentation to their family and peers which includes a powerpoint presentation capturing their major research findings and chronicling their legacy project work.

Grade: 10-12

Prerequisite: Humanities Seminar & Capstone 1

Credit: .33



ACE Mathematics

The ACE Math Course Sequence focuses on the development of competence in algebraic concepts through an exploratory approach that incorporates project-based and student-centered learning. ACE courses are derived from traditional high school math courses: the topics that would be covered in a year-long class are split into three separate modules each of which is worth a third of a credit. Some courses may be taken out of sequence as long as their individual prerequisites are met. Students must demonstrate competence on benchmark skills identified for each course - this competence is the basis of the credit and grade determination.

MA0920 Statistics Seminar

All students entering ACE take a pair of seminar courses which serve to introduce students to competency-based education and the ACE program. The statistics seminar is meant to prepare students to interpret and analyze statistical information in future math and science courses. Topics covered include measures of central tendency, direct and indirect variation, rates, percentages and other foundational measures, as well as probability and distribution.

Grade: 10-12

Credit: .33

MA0420 Algebra 1

An exploration of linear functions focused primarily on algebraic and graphical representations. Students will construct and solve systems of linear equations and linear inequalities and then will explore linear programming and other applications from economics through the central projects in the course.

Grade: 10-12

Prerequisite: Statistics Seminar

Credit: .33

MA0720 Introduction to Algebra 2

An exploration focused on preparing students for future work with elementary functions. Students will develop an analytic framework that enables them to make use of structure when working with transformations, combinations, compositions, and inverses of functions.

Grade: 10-12

Prerequisite: Statistics Seminar

Credit: .33

MA0120 Algebra 2A

An exploration of quadratic functions focused primarily on algebraic and graphical representations. Students will apply algebraic techniques to quadratic expressions to reveal key features of their corresponding graphs. Students will use technology to model phenomena in the real world with quadratic functions through the central projects in the course.

Grade: 10-12

Prerequisite: Statistics Seminar & Introduction to Algebra 2

Credit: .33

MA0220 Algebra 2B

An exploration of exponential and logarithmic functions focused primarily on algebraic and graphical representations. Students will apply algebraic techniques to exponential and logarithmic expressions to reveal key features of their corresponding graphs. Students will develop an understanding of the properties of exponents and logarithms and will explore various financial and scientific mechanisms (compound interest, annuities, radiometric dating, population modeling,... etc.) through the central projects in the course.

Grade: 10-12

Prerequisite: Statistics Seminar & Introduction to Algebra 2

Credit: .33

MA0320 Algebra 2C

An exploration of the algebraic techniques employed in solving radical, quadratic, exponential and logarithmic equations. Students will develop skill systems of equations and inequalities composed from these families of functions.

Grade: 10-12

Prerequisite: Statistics Seminar & Algebra 2A & Algebra 2B

Credit: .33

MA0820 Precalculus A

An exploration of polynomial and rational functions focused primarily on algebraic and graphical representations. Topics include: synthetic division, the remainder theorem, the rational roots theorem, and the fundamental theorem of algebra. Students will examine the use of polynomials in graphics, animation, and design through the central projects of the course.

Grade: 10-12

Prerequisite: Statistics Seminar & Algebra 2C

Credit: .33



MA0520 Precalculus B

An exploration of right-triangle, oblique-triangle, and unit-circle trigonometry. Students will examine the use of triangle-trigonometry in surveying and navigation, and will also apply sinusoidal models to observable phenomena drawn from different fields. Through the central projects in the course, the students will also have the opportunity to develop an understanding of the use of parametric functions.

Grade: 10-12

Prerequisite: Statistics Seminar & PreCalc A

Credit: .33

MA0620 Precalculus C

Students will use technology to model datasets and related quantities drawn from various fields; through critique and examination of these models, students will continue to develop their understanding of the behavior of elementary functions. Students will use regression and linearization techniques to develop a framework for calculus and will explore preliminary calculus concepts including: sequences and series, limits, and rates of change.

Grade: 10-12

Prerequisite: Statistics Seminar & PreCalc A & PreCalc B

Credit: .33

MA1220 Calculus A

An exploration of continuity, limits, and derivatives. Students will develop methods of differentiation for polynomial, radical, and rational functions. Students will examine the derivatives of exponential and trigonometric functions through experimentation with graphical representations using technology.

Grade: 10-12

Prerequisite: Statistics Seminar & PreCalc C

Credit: .33

MA1320 Calculus B

An exploration of integrals. Students will develop methods of integration for polynomial, radical, and rational functions. Students will examine the integrals of exponential and trigonometric functions through experimentation with graphical representations using technology.

Grade: 10-12

Prerequisite: Statistics Seminar & Calc A

Credit: .33

MA1420 Calculus C

An exploration of the applications of derivatives and integrals. Students will also develop additional techniques for differentiation and integration of composite functions. Students who complete Calculus A, B, and C will be prepared for success in college Calculus courses.

Grade: 10-12

Prerequisite: Statistics Seminar & Calc B

Credit: .33

ACE Science

SC0520 Ecosystems

Students will identify biotic and abiotic factors in an ecosystem, and characterize ecosystems into the various biomes represented across the world by researching and presenting a poster on the ecosystems of various locations around the world, taking the class on a "Biome Safari." In the next unit students relate traditional food and culture to the ecosystem that birthed it by drawing connections between producers, consumers, and decomposers in a food web, and explaining how energy is transferred through photosynthesis and respiration. Students will build a model to show this transfer of energy through the trophic levels of an ecosystem, before analyzing a trophic cascade relating to an invasive or extinct species.

Grade: 10-12

Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

SC0720 Population Dynamics

In this course, students will understand how survival of the biotic parts of an ecosystem depends on the abiotic components by explaining the cycling of water in an ecosystem, describing the importance of natural resources for human society and categorizing them as renewable or limited. Students then analyze how humans impact an ecosystem through resource consumption and habitat destruction by doing a case study on an endangered species. Students then use computer modeling to investigate the relationships between population size, carrying capacity, and competition, and then recommend ways to reduce the level of human impact on the environment through a social action oriented sustainability campaign.

Grade: 10-12

Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33



SC1520 Nutrient Cycles

This class focuses on the importance of natural cycles in environmental sustainability, emphasizing the Carbon Cycle as a source of both problems and solutions to climate change. Students first model the Carbon cycle in a research project focusing on forces and sinks of the Carbon cycle, paying special attention to combustion, respiration, and photosynthesis in terms of their products and reactants. Students then investigate how humans may impact climate change and evaluate ways to reduce the level of human impact using a controlled experiment of the student's own design. Students employ greenhouse effect chambers and use computers to perform advanced mathematical analysis of a single aspect of climate change, then write a 5-10 page, college-level lab report following scientific journal format.

Grade: 10-12

Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

SC0120 Cell Biology

This introductory biology course first asks students to define the characteristics of life and use them to evaluate the presence of life in a mock trial. Students then build physical 3D models or write analogies illustrating how the parts of the cell work together to perform life's functions, before classifying cells as prokaryotic, eukaryotic, plant, animal, bacterial, protistic, or viral. The final unit emphasizes the importance of osmosis, diffusion, and the selective permeability mechanisms of the cell membrane in a lab using dialysis tubing and various solutions.

Grade: 10-12

Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

SC0420 Genetics

Students will explain how the subunits of DNA determine its structure and function and model the parts and processes of RNA transcription and translation in a series of quizzes requiring students to build Lego DNA strands. Next students will relate superhero origin stories to explain how mutations in a DNA sequence may occur and classify mutations according to their effect. A unit on the basis of genetic variation debunks race as a genetic construct, and then illustrates how meiosis in sexual reproduction results in genetic variation. Students then research Gregor Mendel's experiments and use punnett squares to predict the possible genotypic and phenotypic ratios resulting from a genetic cross, and compare and contrast complete, incomplete, and codominance, polygenetic traits, and multiple alleles. Finally, students analyze the benefits and risks associated with stem cells, cloning, or genetically modified foods in a research poster project.

Grade: 10-12

Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

SC0220 Body Systems

This biology class first requires students to describe the levels of specialization within multicellular organisms, then identify the structure and function of the major human organ systems. Students then investigate homeostasis using a frog dissection, and write a summary or give a presentation explaining how homeostasis maintains an optimal internal environment for the functioning of body systems. Students will then apply knowledge of the reproductive system to sexual health by developing informational pamphlets for teens. The final project asks students to explain how the respiratory and circulatory systems cooperate to exchange oxygen and carbon dioxide and apply knowledge of the muscular, nervous, and skeletal systems to exercise in an integrated research project on the exercise physiology of a particular athletic activity of the student's choice.

Grade: 10-12

Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

SC0020 Evolution and Taxonomy

Students learn to identify the characteristics and give examples of the major taxonomic kingdoms and describe how life is classified from broader into more specific categories by illustrating a calendar that proportionally shows all of geologic time. Students then apply the current taxonomic system to classify organisms in a scavenger hunt involving a trip to the Harvard Natural History Museum. Students then use a series of game simulations to learn about evolution, and are able to explain how populations adapt to their environment through natural selection and distinguish between and give examples of natural, artificial, and sexual selection. Finally, students describe pre-Darwinian ideas about the origin and unchanging nature of life on earth and explain how Darwin's observations led to the development of the theory of evolution, evaluating evidence for the theory of evolution in a mock trial where they are lawyers defending Charles Darwin in court.

Grade: 10-12

Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

SC1720 Chemical Elements

Students first distinguish between physical and chemical changes of matter in an investigatory lab activity. Students then learn to describe and classify the characteristics of matter by defining and differentiating between elements, compounds and mixtures, and describing the states of matter in terms of energy, particle motion, and physical properties. Students use atomic models to better understand the structure of an atom by describing the development of modern atomic theory, and identifying the major components of the atom and how they interact. Students then analyze trends on the Periodic Table including electron configurations and the placement of families of metals, non-metals, and metalloids by adopting and characterizing an element into a costume or cartoon character. These characters and the properties of the elements they represent are then presented and pitted against each other in role play “battles” versus each other where students develop knowledge of chemical and physical properties into attacks and defenses. Finally, students describe how elements form bonds and compounds, naming chemical formulas and classifying ionic and molecular compounds.

Grade: 10-12

Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

SC0820 Chemical Reactions

In the first unit, students learn how to represent conservation of mass during chemical changes using chemical equations and appropriate calculations. This unit asks them to apply the law of conservation of mass to balance chemical equations, use the concept of moles to convert mass, moles, and number of particles, and calculate the mass of one part of a chemical equation when given the mass of another part. Students will then classify the different types of chemical reactions including endothermic vs. exothermic, single vs. double displacement, synthesis vs. decomposition, and combustion. The final unit is on solutions. Students first describe the concentration of a solution in terms of molarity, and characterize acid vs. base vs. salt solutions, then use the pH scale to characterize acid and base solutions and apply knowledge of acid-base neutralization to perform a titration of an acid of unknown molarity.

Grade: 10-12

Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

SC1420 Nutritional Science

First, students must explain the structures and function of the digestive system. From there, students identify, illustrate, and summarize the function of the major nutrients, and give examples of foods that contain high amounts of particular nutrients. Once this basic biochemistry is understood, students are ready to describe the relative amounts and combination of nutrients that constitute homeostasis in the human body, and test a common food to quantify the relative and absolute amount of a nutrient that it contains. Each student analyzes a different food available at the school and performs a series of four labs to test its sugar, lipid, starch, and protein content, then must synthesize the nutrient data from other students experiments to recommend constituents of a balanced diet in a ten page lab report.

Grade: 10-12

Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

SC1620 Advanced Lab in Forensic Science

Students first understand the scientific basis of criminal investigation by relating the parts of the scientific method to the criminal investigation process, and giving examples of types of evidence that may be analyzed. Students then learn to describe and implement methods of identifying victims and suspects of a crime including applying knowledge of fly larvae development to determine time of death, classifying an unknown fingerprint, matching patterns to determine the identity of a DNA sequence, and analyzing blood spatter to infer location and type of weapon used. The final project requires students to synthesize all that they have learned to construct a plausible scenario and sequence of criminal events based on crime scene evidence, and present how they would solve the case using forensic techniques.

Grade: 10-12

Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

ACE Social Studies

SO1520 US/World Revolutions

In this course students will develop historical thinking skills, with a focus on analyzing and using historical context to make inferences. They will unpack the experiences of both colonists and the British in early America leading up to and including the Revolutionary War. The course will also do a case study of the Haitian Revolution and how it impacted the greater world. By the end of the course students will be able to compare and contrast both revolutions and be able to identify elements of a revolution and pinpoint how the outcomes can be different depending on said context.

Grade: 10-12

Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33



SO0220 US/World Political Systems

This course is designed to both strengthen students' knowledge about the United States government and introduce them to other government structures in the world with case studies of both China and North Korea. Students will analyze the government institutions, political principles and ideologies of each country. They will also examine how each government functions legislatively and how that impacts civil rights and civil liberties. Students will learn how to create arguments for in-class debates about political issues which affect all three countries and be able to reference specific aspects of their respective political systems in the debate.

Grade: 10-12 Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

SO1620 US/World Impact of Slavery

The goal of this course is for students to see the impact of slavery as it exists in the American and Brazilian context. They will research the experience of the life of both the enslaved and their modern day ancestors, and understand how and in what ways institutional racism has persisted throughout the histories of both countries and how it can be traced to the start of slavery.

Grade: 10-12 Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

SO1220 US/World Imperialism

This course is designed to improve the analytical writing skills of students by studying Imperialism through the lens of growing industry. The students will read primary documents to understand the motive and impacts of imperialism and to find and use evidence to argue the validity of either side in a formal essay. The course will take a close look at case studies of imperialism in Cuba and the Philippines to analyze the impact of the Spanish and American intervention.

Grade: 10-12 Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

SO0320 US/World Civil Conflicts

This course is designed to enhance argumentative writing skills through a compare and contrast essay on the the study of the US Civil War and a case study of Rwandan Civil War. Students will learn the causes and outcomes of each respective specific civil war and pick a particular aspect of the wars to compare/contrast with a developed thesis and evidence to create a compelling argument.

Grade: 10-12 Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

SO1120 US/World Human Rights

In this course, students will enhance their research skills by examining how the definitions of human and civil rights have evolved over time in the world and the degree to which international law protects those rights. Students will first look at how the US has historically defined these terms and in what ways our interpretation of those rights have changed over time. Students will also look at the case study of the Holocaust, learning what led up to it and the violation of human rights which took place. Finally, students will choose and research a civil/human rights movement and present the key ideological and strategic elements of that chosen movement.

Grade: 10-12 Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

SO1320 Capstone

All students who graduate from ACE must successfully complete the Capstone series of 3 consecutive six-week classes. The first six-week class, SO1320 is a history course which guides students in choosing a social justice topic that they are concerned about. Students then examine the history of the issue, the modern impact, and potential solutions to the issue. Research could span everything from reading online databases to conducting first-hand interviews with key influencers and activists. By the end of the course, students must have detailed notecards with relevant facts to support their argument. In third six-week class (EN1420), ACE students complete the 3-Class Capstone Cycle in a culminating presentation to their family and peers which includes a powerpoint presentation capturing their major research findings and chronicling their legacy project work.

Grade: 10-12 Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

SO1420 Martin & Malcolm

An interpretation of the lives and thought of Malcolm X and Martin Luther King, Jr. in the context of the civil rights movement. It will focus on the theological, political, cultural, and psycho-social views which informed their religio-moral thought and actions. The course will include films, autobiographies, biographies, collected writings and speeches, as well as interpretations of these two religious and political leaders.

Grade: 10-12 Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33



SO1720 Social Injustice

The study of social justice involves questions of power, discrimination and institutionalized violence, deprivation and oppression. This course surveys major philosophical, theological, sociological, cultural, feminist, environmental and political theories of justice. In addition to these theoretical explorations, the course also focuses on narratives of injustice—how people have responded to liberate themselves and how those in power have endeavored to keep their privileged position. This course exposes students to both historical and contemporary instances of injustice and the various responses people have taken to rectify them, as well as to the practical, organizational aspects of Social Justice work.

Grade: 10-12

Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

ACE Post Graduate Planning

Career and Internship Exploration Seminar (CIES)

Career and Internship Exploration Seminar is a trimester seminar broken down into four stages: 1). Interest Exploration 2). Career Path Informational Interviews 3). Job Shadows 4). Internship. Students may opt to take the seminar for one trimester or more, depending on how many stages of the seminar they hope to complete.

Grade: 10-12

Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

Post Graduate Planning (PGP)

Post Graduate Planning (PGP) is a required semester long, senior level course for ACE students in which they work toward identifying their goals for the fall after their senior year and work toward achieving those goals by creating and executing a post graduate plan. Activities may include, but are not limited to, completing college applications, writing personal essays, researching careers, completing job applications, visiting colleges, completing scholarship applications, participating in financial seminars, researching and applying to apprenticeship programs, and researching GAP year opportunities.

Grade: 10-12

Prerequisite: Humanities Seminar & Statistics Seminar

Credit: .33

SCHOOL WITHIN A SCHOOL

School Within A School is located on the fourth floor of Brookline High School. It has been an alternative, democratic community since 1970 and includes approximately 120 sophomores, juniors, and seniors. Goals for students include taking as much responsibility for their education as possible, sharing decision making in running SWS, and contributing to the building of a community. SWS provides students with opportunities to participate actively in their own education and to develop meaningful relationships with teachers based on mutual respect.

The SWS Town Meeting, the community governmental body, includes all students and the eight SWS staff, each having one vote. SWS Town Meeting meets weekly during F-2 and attendance is mandatory. Town Meeting has dealt with a variety of issues including: admission to SWS, a method for dealing with absences, staffing decisions, grading procedures, social issues, and more. The agenda for Town Meeting is decided by an Agenda Committee made up of a staff member and five students who take turns chairing the meeting. A number of committees carry out decisions made by Town Meeting and plan activities throughout the year.

SWS is distinguished from the main school by its smaller size, democratic structure, emphasis on the relationship between teachers and students, and its course offerings. Students take some of their course load in SWS and some in the main school. Each semester, students must take an SWS English course, another SWS course, and SWS Town Meeting, unless they receive a waiver from the SWS Coordinator. SWS classes are demanding in course content, and in the level of participation and independent work required. Some SWS courses may be taken for standard or honor credit, while the English courses are all taken for honor credit. These English courses are mixed grade levels and draw students from a wide range of ability levels. Students are expected to work collaboratively to help each other achieve their best.

The staff for SWS consists of eight people: a secretary, a social studies teacher, a chemistry teacher, a biology teacher, three English teachers, and a coordinator/dean/counselor,

Entrance to SWS is open to students in grades 10-12 and must have parent, counselor, and dean endorsement. Usually more people want to join SWS than can be accommodated. Beginning in December of the school year preceding the time an interested student wishes to join, the student signs up to visit SWS classes and Town Meeting and talks with current SWS staff and students, in order to determine if SWS is the right place for them. Admission to SWS is based on a lottery, the criteria of which are developed by the SWS Town Meeting. SWS has an affirmative action policy to ensure representation of ethnic, racial, and socio-economic groups align with the mainstream.

SWS policies and practices change according to the decisions of SWS Town Meeting. Please check with the SWS Coordinator in Room 400 to be sure that the information in this catalog is still accurate.

SWS COURSES

It is important that the courses offered in SWS meet the needs of the students in SWS. Each fall, many new students enter SWS to replace those who have graduated. There is no way to anticipate who those students are or what their needs might be. Therefore, it is possible that some new courses not listed here will be created or that listed courses will not be offered.

Any non-SWS student who wants to enroll in an SWS course must receive permission from the teacher and SWS coordinator. Such classes are open on a space available basis and students on the SWS waiting list have priority. SWS English classes are open to SWS students only.

SWS ENGLISH

SWS selects its English classes for each year during the spring before the classes are taught, after all students have been admitted. Students help decide on the courses at a special curriculum meeting. The courses described below are a sample of past and current courses, not necessarily the actual courses for next year. The courses are listed every year in the BHS master schedule.

SW1130 Creative Writing Honor

This course requires a serious commitment to writing, drafting, and improving based on feedback. We will focus on writing short stories in the first quarter while we develop our skills in creating authentic characters, using dialogue, describing setting, and using conflict as a narrative tool.

During the second semester we will focus on various forms of poetry: Slam/spoken word, free verse, haiku, villanelle, and sonnet. As a final project students are asked to significantly revise a piece from the course and make it public either by performing it publicly, sending it out for publication, creating your own literary zine, comic book, or any other ideas students may have.

Grade: 10-12

Credit: .5

SW1030 Contemporary Literature Honor

This course will focus on exploring the tools we use to construct identity. Possible authors are: Morrison, Gardner, Devereaux-Smith, Burgess, Lahiri. We will write expository and creative responses to this literature and write one long piece of creative non-fiction detailing our own identity formation.

Grade: 10-12

Credit: .5

SW1230 Creative Non-Fiction Writing Honor

"It came into him (the writer) life, it went out from him truth." In this course, we will explore various techniques for creating nonfiction works that are vivid, memorable, and persuasive. We will study published essays, poems and arguments as models and inspiration for our own work. We will keep free writing journals and experiment with different genres of nonfiction writing-memoir, character portrait, editorial, satire/social commentary. We will study how to convey what is extraordinary about the ordinary, the common, or the minute aspects of our lives. We might interview people about their job and follow them at work. The class will be run like a workshop; people will share their work and give advice to others.

Grade: 10-12

Credit: .5

SW5030 African Literature Honor

This class is almost a ChooseYourOwnAdventure class. For at least one quarter, you will be finding, reading and reporting back about contemporary African Literature to your classmates. What's out there? What's the next important African Sci-Fi novel? Romance? Graphic Novel? YA book? What great work can you find and share with the rest of us? The first quarter we'll read short stories together from all over Africa, and we'll talk about the Danger of a Single Story. We'll think about the biases we have about "Africa" as a concept and a continent. This is a class for students who like to read and discover. Readings include: Gods and Soldiers (an anthology of Contemporary African Writing) and several independent reading books of your choosing.

Grade: 10-12

Credit: .5

SW3830 Identity in Literature Honor

This course explores the way that we develop our own construction of reality and the factors that shape our current identity. Coursework includes two analytical essays, two creative projects, and a longer personal final paper, along with short written responses to specific readings. We will talk about different aspects of psychology (mainly Constructive Developmental Psych.) and philosophy (mainly Existentialism) as we look at the way that characters construct their world, so that in the end we can take a deeper look into how we have constructed our own world or understanding of self). *Readings include: Developmental Psych. Theory – Robert Kegan Books: Beowulf, Grendel, A Clockwork Orange, Fires in the Mirror, The Bluest Eye. Movies: "I heart Huckabees," "Fires in the Mirror."*

Grade: 10-12

Credit: .5



SW3200 Short Story Honor

When Ernest Hemmingway was challenged to write a complete short story in a mere six words, he wrote: For sale: baby shoes, never worn. Ever since, writers have been interested in how small a window one needs to offer a tragic, meaningful or complete glimpse into the lives of characters. In this class, we will use short, short stories (often under 750 words) to study the choices that authors make when crafting stories. We will examine the many sides of narrative, characters, structure and language and use the integrated approach of close analysis, creative emulations, and thoughtful discussion to study the craft of writing.

Sample Texts: Flash Fiction, Flash Fiction Forward, In Short, and a range of contemporary short stories.

Grade: 10-12

Credit: .5

SW1900 Dark Literature Honor

In this course we will be looking at what scares us. We will examine specifically the darker side of psychology, varying definitions of evil, and the human fascination with the macabre. Literature would include: *Frankenstein*, *Dracula*, *The Stranger*, *Othello*, *Interview with a Vampire*, and Poe short stories. Movies would include an Alfred Hitchcock film, excerpts from “Buffy the Vampire Slayer”, and “The Shining”.

Grade: 10-12

Credit: .5

SW1202 Literature of War Honor

In this course we try to answer the following questions: What is war? What experience have you or someone in your family had with war? What do you believe about a “just war”? What constitutes a “just” war? What rules are applicable to living in a war? What rules are applicable to fighting a war? How conscious are you of the war in Iraq? Has it made an impact on how you think about the world? Is it close to you, real to you, something you think about every day? Often? Never? How might fighting in a war change how you think about yourself, the world? What kind of language do we use to talk about war? What happens to the self in war? Literature will include: *The Time of the Hero*, *All Quiet on the Western Front*, *Slaughter House 5*, *The Things They Carried*, *The Long Way Home*, and *Lone Survivor*.

Grade: 10-12

Credit: .5

SW1002 Feminism in Literature Honor

In this course we will explore gender theory, feminist criticism, and works by women who laid the groundwork for feminism or who consider themselves to be feminists. We will look at how female sex turns into social gender and the factors that have historically constrained or allowed women to have more agency. By reading theory, fairy tales, mythology, fiction, and non-fiction, we will examine the implicit messages they transmit about a woman’s conduct, role, or future. We will also look at how women’s writing has shaped other women’s writing. For example, what was it like for Emily Dickinson to read *Jane Eyre*? By reading from works by Betty Friedan, Gayle Rubin, Judith Butler, Judith Halberstam, Angela Davis, Carol Gilligan, and Virginia Woolf’s *A Room of One’s Own*, in addition to *The Handmaid’s Tale* and *Jane Eyre*, the objective is to gain an understanding of Feminism, Feminist Critical Theory, and key Feminist Texts while working on critical reading and writing skills.

Grade: 10-12

Credit: .5

SW2830 Literature of Love Honor

Love, in all its wonder and complication, has inspired artists from ancient times to the present. But how has this art inspired our cultural and individual thinking about love? In this course, we will explore the changing trends in relationship behavior from Plato’s Greece to the British medieval court to Austen’s sitting rooms and finally to our txt and Facebook modern age. This course is designed to get you thinking about how our modern conceptions of love have been shaped, while it exposes you to a wide range of styles in literature. Literature includes: *Love in the Time of Cholera*, *Much Ado About Nothing*, *Pride and Prejudice*, *Bullfinch’s Mythology*, and critical analysis of several fairy tales. The class will also explore love poetry by: Eliot, Shakespeare, Marlowe, Petrarch, Spenser, Sidney, Donne, Wyatt, The Brownings, Rosetti, Moore, Wordsworth, Longfellow, Dickinson, Sexton, Rich, Teasdale, and Kumin.

Grade: 10-12

Credit: .5

SWS Science

SC2100 SWS Chemistry I Honor

SWS Chemistry deals with the structure of matter, its properties, and changes in properties as a result of chemical reactions. Emphasis is placed on the physical world involving atomic theory, energy relationships, and chemical reactions. Laboratory



work involves first-hand experiences in the use of chemical equipment and materials in the development of manipulative skills in order to conduct chemical investigations using observation and accumulative data to arrive at conclusions. Laboratory work with written reports is a significant part of this course. Students enrolled in the SWS program are given priority in scheduling for this course. Other students will be scheduled for this course if there is room available.

Grade: 10

Prerequisites: Physics I and Intro to Algebra II.

Credit: 1

(It is recommended that Algebra II or Pre-Calculus Honor be taken concurrently)

SC3031 SWS Biology I Honor

SWS Biology I Honor has a structure and content similar to that of Biology I. However, it is a more rigorous course that goes into greater depth and requires more abstract thinking. This course prepares students for further studies in Biology. Biology I Honor is recommended for students who plan to take the SAT Subject Test in Molecular Biology.

Grade: 10-11 Prerequisites: Physics I and Chemistry IH or LBC Honor (may be taken concurrently) Credit: 1

SWS SOCIAL STUDIES

SWS Social Studies students are encouraged to discuss and decide upon class policies as well as curricular offerings. Students who enter SWS Social Studies should bring ideas about how they think classes should be organized and what topics should be examined. They should also be committed to democratic classroom structures and to an appraisal of alternate interpretations and visions of history.

In all classes students are expected to sustain discussions and to learn from each other and not just from the teacher. Discussions focus on historical and philosophical issues and often tend to be open-ended and abstract. The social studies program of SWS includes courses in World History, U. S. History, Philosophy, Contemporary US History and an Education Seminar. Ideally an SWS student should take at least one year of SWS social studies.

SW4020 World History: The Modern Era (1500 to The Present)

This course is a continuation of World History: the Pre-modern Era, which most students have taken in the ninth grade. The SWS course is similar in scope and sequence to the tenth grade course offered in the main school. There will be an emphasis on classroom discussion, sharing of work, reading primary sources, and viewing the art of the cultures we will be studying.

Grade: 10

Credit: 1

SW4030 World History H: The Modern Era (1500 to The Present) Honor

See description of course SW4020. This course meets in conjunction with the non-leveled course (SW4020). Honor students may be expected to read and discuss more difficult material, write more essays and complete more research papers.

Grade: 10

Credit: 1

SW4120 SWS U. S. History

This survey course of United States history is designed to give students a broad understanding of the past of our nation and an exposure to differing viewpoints of historical interpretation. Howard Zinn's *A People's History of the United States* is used in conjunction with a "traditional" textbook. The organization of the course is chronological. The first term covers topics up to the Civil War. The second term deals with the modern world, particularly industrialization.

Grade: 11

Prerequisite: Sophomore Social Studies course

Credit: 1

SW4130 SWS U. S. History Honor

See description for SW4120. Depending on student needs and enrollment, U. S. History Honor may meet in conjunction with the non-leveled section. Honor students may be expected to read and discuss more difficult material, write more essays, and complete more research papers. History achievement test preparation is available to students who desire it.

Grade: 11

Prerequisite: Sophomore Social Studies course

Credit: 1

SW4231 Philosophy: Honor

This course investigates the thought of major philosophers and their relevance to our daily lives. Some of the issues treated include: what is human nature? What are the needs of individuals and society? How do social theories both reflect and shape culture and history. We examine these questions in the writings of Plato, Machiavelli, Rousseau, Marx, Freud, and the existentialists.

Grade: 12

Credit: .5



SW4322 Contemporary U. S. History Honor

This course examines the period from World War II to the present. Through discussions, simulations, speakers, films, videos, and reading and writing experiences, students study the social transformations and critical events of the last five decades: The Cold War, the Arms Race, McCarthyism, JFK, the Civil Rights Movement, the Women's Rights Movement, Vietnam Era, Mass Culture and Counterculture, Watergate, Multinational Corporations, 3rd World Development, the conservative counter-revolution and the U. S. role in the world today.

Grade: 11-12

Credit: .5

SW4332 Contemporary U. S. History Honor

See description for SW4322. This course meets in conjunction with the non-leveled course. See course SW4130 for description of honors level expectations.

Grade: 11-12

Credit: .5

SW4401/SW4402 SWS Topics in Social Studies/ SWS Topics in Social Studies Honor

Through this course, an individual or a small group of students will work with a teacher in areas of special interest.

Grade: 11-12

Periods per week: (Hours and times to be arranged)

Credit: TBD

SW4430 Contemporary World Events Honor

This course cannot really be defined today! It would be entirely dependent on the current events happening across the world. The content of the course would focus on the big events in the news and the causes of those events. In addition to class discussions, debates and analysis of current events, students would choose a particular topic of interest somewhere in the world to study in-depth as an on-going, independent project for the class.

Grade: 12

Credit: .5

SW4321 Senior Capstone in Social Studies Honor

Students will choose any topic of interest within the social sciences to research, explore and create a culminating project to exemplify their learning. Students may also opt to substitute the project with a longer paper to fulfill their Senior Paper requirement.

Grade: 12

Credit: .5



SW43730 SWS Education Seminar Honor

First quarter we will explore large issues in American education, a complex, evolving and dynamic subject. What makes a good teacher? What defines a good school? The first quarter will focus on fundamentals of education, exploring public schools funding, inequality between schools, standards and assessments and other issues. We will read historical materials. Second quarter we will write a paper that identifies and supports what students believe to be the purpose of education. The remainder of the quarter will be spent on two research projects and a model school project. Students will research something of interest to them within

Brookline High School and then observe another school in order to compare and contrast. Finally, students will construct a model school based on their own purpose of education and what they believe to be important.

Grade: 12

Credit: .5

OTHER COURSES

SW5001/SW5002 SWS Enrichment/ SWS Enrichment Honor

This course gives students the opportunity to receive credit for individual projects or seminars in a chosen area. The area of work must be approved by the teacher in charge of enrichment. Seminars may be taught by students as well as by teachers, parents, or members of the community. Most events for enrichment credit occur after school hours. Some examples of past seminars are: Music Making, Fuller Feeling, China Studies, Yoga, and Meditation. Enrichment may be counted for Time and Learning hours.

Level: N/H

Periods per week: (Hours and times to be arranged)

Grade: 11-12 Credit: TBD

SW6000 SWS Town Meeting and Committees

At the heart of SWS is the **Town Meeting** which is a governing body. Students and staff meet together each F2 block to discuss mutual concerns and make policy decisions about the education and administration of SWS. Each F4 or T-block, some SWS students and staff meet in committees for a variety of purposes. **These two meetings are required for all SWS students and staff.** A pass or fail is recorded on report cards for Town Meeting attendance.

All students and staff

Periods per week: 2

Credit: N



THE BHS INNOVATION FUND:

EXPLORATION, INSPIRATION, EXCELLENCE

The Brookline High School (BHS) Innovation Fund fosters a culture of innovation at BHS by supporting the development of new ideas and initiatives that will enable our students to thrive in the 21st Century. The Fund is a community supported, non-profit within BHS that invests in innovative courses and programs that help administrators and faculty continue to deliver excellence in education in an evolving world. After an evaluation period, selected initiatives are integrated into the BHS curriculum and Town of Brookline budget.

Since its inception in 1998, the BHS Innovation Fund has invested over \$6 million to launch and support more than 30 programs at BHS, including: *Engineering Innovation and Design; Racial Awareness Seminar; Drawing for Understanding in Field Science; EPIC (Experiential, Project-based, Innovative Capstone), Brookline Lens, Experiential Physics for 9th Grade, Global Leadership, HUB; and The Mindfulness Initiative*. In addition, BHS programs with school-wide reach that originated in the Fund, such as *Tutorial, Teachers Mentoring Teachers, and The African-American and Latino Scholars Program*, have served as national models for academic innovation.

"It does take a community to re-imagine education. What's going on here with the Innovation Fund is, it's really trusting teachers to lead the way, supporting them, recognizing them, and really sending a message throughout all the schools, with all the teachers, that this is something we admire. It's not that you have to (innovate), but if you want to, we've got your back," said Ted Dintersmith, national innovation expert and author of What School Could Be: Insights and Inspiration from Teachers Across America, at the BHS Innovation Fund's 20th Anniversary community event at Brookline High School in September, 2018.

Courses and programs that have been launched and supported by the BHS Innovation Fund are designated in this catalogue by our logo. Learn more about how the BHS Innovation Fund supports curriculum innovation at Brookline High School by following us on social media, joining our email list, attending our events, or getting involved as a volunteer. Contact us to learn more about the BHS Innovation Fund or visit: www.bhsinnovationfund.org.



NEW INNOVATION FUND COURSES - pending funding

PROPOSED COURSE FOR 2020-2021

SC4570/SO4570 Climate Science and Social Change (pending funding)

This course will cover the science of climate change, the ongoing and expected future impacts of climate change on ecosystems and human societies, and strategies for mitigating and adapting to climate change. This course will interweave science, environmental policy and activism, and environmental justice. Throughout the year students will work both independently and collaboratively to conduct and present research, design and execute peer-education projects, and learn about community and political activism. Assessments may include but are not limited to presentations, posters or similar displays, reflective essays, and quizzes. The overarching goals of this course are to cultivate science and information literacy, to develop a sustainability mindset, and to develop skills for public advocacy and activism.

This course is by application only. See Dr. Brown (Science) or Mr. Grande (Social Studies) to apply.

Periods per week: 7 in a 10 day cycle

Grade: 12

Pre-/Concurrent requisites: Physics, Chemistry, Biology

Credit: 1.0 SC or SO



PROPOSED COURSE FOR 2020-2021

SC5650 Materials Science (pending funding)

Have you ever wondered how glass is made? Have you ever wondered how kevlar vests are so strong and light? Have you ever wondered how nanotechnology will alter the future of medicine? This course offers a student-centered, hands-on exploration of how the structure of different materials relates to their use in the real world: sports equipment, clothing, vehicles, aerospace, construction, medicine delivery, etc. Students will actively investigate the structure and properties of different materials like metals, ceramics, polymers and plastics, composites and nano-materials through student-led lab activities. Students will examine materials for points of failure - when will it break? Will it be crushed? - and then, improve the material and retest it again. Throughout the course, students will investigate materials science present in their daily lives: how have materials changed the design and function of a tennis racquet over time? What materials are in a cell phone? This class will be taught through a mix of hands-on lab investigations, student-led inquiry, student projects and portfolios, guest speakers from local industry, and field trips.

Periods per week: 7 in a 10 day cycle

Grade 11/12

Pre-requisites: Chemistry I, Physics I, and enrolled in or completion of Biology I

Credit: 1 SC

BHS TUTORIAL

TU100X Freshman Tutorial

TU200X Upper Class Tutorial 10- 12

With a twelve to two student/teacher ratio, Brookline High School Tutorial is a one-credit class providing content area support and academic monitoring within a supportive learning community. Tutorial goals are reviewing course content for increased comprehension and strengthening underdeveloped study skills. In collaboration with their Tutorial teachers, students identify specific focus areas for improving academic achievement such as test preparation, reading comprehension, composition development, and organization skills. Class time is divided between individual consultation with a Tutorial teacher and independent practice where the student implements recommended prescriptive strategies.

Grade: 9-12

Pre-requisite: Recommendation from Dean's Team

Credit: 1

Class is graded for 9th grade and P/F for 10-12



AFRICAN-AMERICAN & LATINO SCHOLARS PROGRAM

ID1209 African-American & Latino Scholars Program Seminar Grade 9

ID1210 African-American & Latino Scholars Program Seminar Grade 10

ID1211 African-American & Latino Scholars Program Seminar Grade 11

ID1212 African-American & Latino Scholars Program Seminar Grade 12

The African American and Latino Scholars Program (AALSP) is an enrichment program for self-identifying students of color at Brookline High School. Over four years students participate in Scholars Seminar with a curriculum that explores themes relevant to the experiences of black and brown people in the world, the United States, and in Boston. Additionally, the AALSP Seminars are designed to help Scholars reach the three central objectives of the program: higher student grade point averages, increased pupil enrollment in honors/Advanced Placement classes, and acceptance into the National Honors Society. Scholars take field trips, host speakers, receive college counseling, and participate in community gatherings. Scholars apply for extracurricular programs that broaden their experience and prepare them for life after high school. Scholars are required to take college preparatory classes and maintain their GPA in order to remain eligible.

Grade: 9-12 Prerequisite: Admission into the African-American & Latino Scholars Program

Credit: .5 per semester



METCO

TU1100 METCO Academic Center

The METCO Academic Center is designed to engage and hone students' academic skills in order to help them excel and reach their academic goals. This course offers a range of academic and social supports to enhance the academic growth and development of students. The student to teacher ratio is 7:1 with a focus of fostering relationships with teachers and establishing a clear understanding of their own educational goals and priorities. Further this class is designed to help students become highly motivated and independent learners. In order to fully benefit, students must demonstrate a commitment to their academic and social development.

Grade: 9-12

Credit: .5 credit per semester

COMMUNITY SERVICE

IS8201 Community Service

The Community Service Program instills in our students awareness, understanding, and appreciation of the community, the value of citizenship, and the responsibility of each citizen to help others for the benefit of the community. The program makes opportunities available for service learning both inside and outside the high school. Volunteer experiences within the school community may include being a peer buddy or job coach to a special needs student, tutoring a fellow student one or two hours a week, providing secretarial support, recycling, serving as a peer educator, or tutoring and mentoring an elementary school youngster. Volunteer experiences outside the school community include working as an aide in an extended day program, library, animal shelter, hospital, nursing home, museum, food pantry or shelter, shopping for the elderly, or similar program. Service experiences outside of the school must retain a connection to the larger Brookline-area community. Programs are individually arranged and should be approved by the coordinator ahead of time in order to gain credit. No more than 50 hours of credit will be awarded without the prior approval of the coordinator. Hours of service must be verified by a supervisor in the school or agency and all hours worked must be logged. An approved volunteer program carries from one quarter credit for 50 hours up to one full credit for 200 hours served in one year. Credits are recorded, along with a P (Pass), on the student's transcript. Students can receive up to one credit of Community Service each year on their transcript. However, only one credit will count toward the graduation requirement of three credits from three of the following program areas: Career and Technology Education, Community Service, Performing Arts, and Visual Arts.

Credit: Varies

