

Brockton Public Schools

# Brockton High School Course of Study Guide

2024-2025



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## BROCKTON HIGH SCHOOL MINIMUM GRADUATION REQUIREMENTS

SUBJECT	Required Credits
ENGLISH	24
MATHEMATICS	18
SCIENCE	15
SOCIAL SCIENCE	15
WELLNESS/PE*	6
ELECTIVES	26
<b>TOTAL NUMBER OF CREDITS REQUIRED</b>	<b>104</b>

\* General Law 71.3 states that “Physical education shall be taught as a required subject in all grades for all students in the public schools for the purpose of promoting the physical well-being of such students.”

**CREDITS:** Credits are granted when obtaining a passing grade at the end of a course.

- A course that meets for one period, every day, for a full year equals 6 credits.
- A course that meets for one period, every day, for a semester equals 3 credits.
- A course that meets for a period, every other day, for a semester equals 1.5 credits
- Some courses, such as vocational courses, can meet for more than one period. Credits are granted following the above parameters.

**Massachusetts Comprehensive Assessment System (MCAS):** In addition to meeting all local graduation requirements, the Commonwealth of Massachusetts requires all students to pass English/Language Arts, Math, and Science, Technology/Engineering (STE) MCAS exams to receive a high school diploma. Students take these exams for the first time at the end of their sophomore year. Students who have not passed the MCAS may be assigned to MCAS classes. These classes during the day are mandatory; students will receive a grade and earn credit for these classes.

For the class of 2025, students must earn a score of 472 or higher in English, a score of 486 or higher in Math, and a score of 467 in STE. For the classes of 2026 and beyond, students must earn a score of 486 or higher in English, a score of 486 or higher in Math, and a score of 470 in STE. If a student does not earn the required score in the English or Math exams, school districts are required to develop an **Educational Proficiency Plan (EPP)** to ensure a student's progress toward proficiency.

Requirements of an Educational Proficiency Plan (EPP) will include:

- a review of a student's strengths and areas to improve, based on MCAS results, coursework, grades, and teacher input.
- the courses a student must take and complete in grades 11 and 12;
- assessments that the school will administer to determine and document progress toward proficiency.

For most students, an Educational Proficiency Plan will simply be a continuation of the rigorous course of study they are planning on completing.

**PERFORMANCE APPEALS PROCESS:** MCAS Performance Appeals are available for students who have not passed the tests after three tries, but who have demonstrated through their coursework and grades that they have the knowledge and skills in English and/or mathematics equal to the standards established in the grade 10 MCAS test. MCAS Performance Appeals are also available for students who have not passed the Science, Technology/Engineering MCAS exam after only one attempt.

**To be eligible for an MCAS Performance Appeal,** a student must have:

- attended school 95% of the time both last school year and the current school year,
- taken the MCAS test subject at least 3 times (one time for science),
- participated in MCAS tutoring or other academic help that is available.

If a student has met those criteria, then, the student must have demonstrated through their grades and coursework (in the subject area of the appeal) that they have performed at or above the level of other students who have taken the same series of courses AND passed the MCAS. If the Commissioner of Education grants the appeal, it means that the student meets the state standard in English, mathematics, and/or science and qualifies for a diploma if all local graduation requirements have been met.

### **MINIMUM PROMOTION REQUIREMENTS\***

For a student to be promoted from one grade to the next, the student must earn the following number of credits:

<b>GRADE</b>	<b>Number of Credits Needed for Promotion</b>
10	27
11	49
12	72

**NOTE: Directed Academic periods (study) are not credit-bearing courses. Students should not have more than one Directed Academic period each day.**

### **CRITERIA FOR SELECTION OF CLASS VALEDICTORIAN**

- ☐ The student must have been a student at Brockton High School for the sophomore, junior, and senior years,
- ☐ The student must be ranked number one based on the calculation of the G.P.A. at the END of term THREE of the senior year,
- ☐ Any grade changes will only be counted for the re-computation of the G.P.A. for valedictorian only if they are submitted to the Associate Principal's office no later than ten (10) school days after report cards have been issued,
- ☐ The student must have been enrolled as a full-time student at Brockton High throughout the senior year.

### **CRITERIA FOR SELECTION OF THE SUPERINTENDENT'S AWARD**

- ☐ The student must have been a student at Brockton High School for the sophomore and junior years,
- ☐ The student's rank in class is based on the calculation of the cumulative G.P.A. at the end of the junior year as suggested by the Massachusetts Association of School Superintendents' criteria.

## BROCKTON HIGH SCHOOL ACADEMIC LEVELS

Brockton High School sets high standards and expectations for all students at all levels. Every course is designed to provide students with the knowledge and skills needed for post-secondary education, technical training, and employment.

Course-level placement for students is determined on an individual basis by examining data including assessments, teacher recommendations, grades, and other relevant information. Students must work with their parents and guidance counselors to plan a course of study over four years that will help them reach their highest potential in achieving their goals after high school.

Successful completion of courses taken at the levels described below, in addition to meeting graduation requirements, will enable students to meet the recommended prerequisites for admission to a college or university.

LEVELS	GOAL: The depth to which the content of the course is covered.
<i>Honors (H)</i>	Expert mastery of key concepts with intensive examination of course content.
<i>College Prep Advanced (CPA)</i>	Advanced mastery of key concepts with an extensive examination of course content.
<i>College Prep (CP)</i>	Proficient mastery of key concepts with a comprehensive examination of course content.
<i>Non-level (N)</i>	Proficient mastery of key concepts with a comprehensive examination of course content. No quality points are assigned, and these courses are not factored into the GPA.

Courses at Brockton High School develop literacy skills and teach students to think critically and analytically. All courses are based on rigorous and relevant content that follows the Massachusetts Curriculum Frameworks. Courses prepare students to demonstrate successful performance outcomes including proficiency on the Massachusetts Comprehensive Assessment System (MCAS) and standardized entrance exams such as the SAT, SAT subject tests, and ACT.

Colleges, technical schools, and employers seek students who have completed a rigorous academic program. Students must work independently, take responsibility for their learning, engage in the learning process, demonstrate time-management skills, utilize effective study skills, be inquisitive, practice problem-solving strategies, use technology effectively, accept feedback, and persevere with difficult tasks.

## LEVEL ASSIGNMENT INFORMATION

The criteria for placement at an academic level are based on the student's demonstrated academic ability through their performance. This can be evidenced through test scores, standardized testing information, previous grades and levels, and teacher recommendations.

If a student is considering moving to a higher academic level, he or she must understand the level of commitment required of a level. Decisions will be based on the criteria listed above.

Students requesting to move down a level must exhibit serious gaps in their ability to perform successfully in any given subject. Level changes will be made after consultation with the counselor, teacher, and the appropriate department Coordinator. Generally, students who demonstrate their best effort to try and resolve issues in a class overcome these challenges. Ways to demonstrate effort include seeking extra help, maintaining positive attendance, and completing class assignments and homework. It is important to highlight that attendance is one of the most important factors impacting academic performance.

In semester courses, level changes should be completed by the end of the first term; in full-year courses, level changes should be completed by the end of the first semester. Lateral changes (i.e. students remain at the same level but request a teacher change) are rarely approved; these changes will be made only in extreme circumstances and with the approval of the Academic Associate Principal.

**The school policy dictates that students will not be allowed to drop any classes once the school year begins. If extenuating circumstances exist, please contact the guidance counselor who will work with the department Coordinator and the Academic Associate Principal.**

## **GUIDANCE DEPARTMENT SERVICES**

Brockton High School offers the following counseling support services:

- Guidance Counselors
- Bilingual Guidance Counselors
- Career and Technical Education Guidance Counselor
- Early College Guidance Counselor
- School Adjustment Counselors

### **Guidance Counselors**

All secondary students are assigned a guidance counselor who supports their academic, career, and personal development throughout high school to prepare students to make well-informed decisions and choices. Counselors work with students both individually and in small groups and present classroom workshops.

### **School Adjustment Counselors (SAC)**

School adjustment counselors offer support to students socially and emotionally. Their work may involve both students and families when adjustment challenges affect school performance. The SAC uses casework or group work approaches to problem-solving and often facilitates interventions involving outside agencies.

### **Access to Counseling Services**

Students can see their guidance counselors or a school adjustment counselor during their lunch and study periods, before and after school, or with a pass from a teacher, counselor, or administrator. Referrals from parents, teachers, and administrators are welcome.

Students, parents, and teachers can also access guidance staff through:

- ☐ Telephone or email contacts
- ☐ Guidance organized parent-teacher conferences
- ☐ Teacher and counselor consultations
- ☐ Classroom guidance lessons
- ☐ Psycho-educational and/or support groups



Classroom Guidance lessons, workshops, and groups are aligned with the National School Counseling Standards (ASCA), Massachusetts School Counseling Model (CDE Benchmarks), and the Massachusetts Curriculum Frameworks Common Core Standards.

<b>FRESHMEN</b>	<b>SOPHOMORES</b>
<ul style="list-style-type: none"> <li>September/October: Freshmen Seminar</li> <li>January: Early College Planning and Calculating G.P.A</li> <li>November: Evaluating your Term I Report Card</li> <li>March: Academic Scheduling Lesson</li> <li>Ongoing: Access to MEFA Pathways to explore and document self-discovery activities in college and career exploration.</li> </ul>	<ul style="list-style-type: none"> <li>February: Sophomore Workshop: Strategies for Success</li> <li>November: Evaluating your Term I Report Card</li> <li>March: Academic Scheduling Lesson</li> <li>Ongoing: Access to MEFA Pathways to explore and document self-discovery activities in college and career exploration.</li> </ul>
<b>JUNIORS</b>	<b>SENIORS</b>
<ul style="list-style-type: none"> <li>October: Preparing for the SAT</li> <li>March: Academic Scheduling Lesson</li> <li>April: College/ Career Workshop</li> <li>April: College Fair</li> <li>Ongoing: Access to MEFA Pathways to explore and document self-discovery activities in college and career exploration.</li> </ul>	<ul style="list-style-type: none"> <li>September: Senior College/Career Workshop</li> <li>October: Financing your Education</li> <li>October: Mini College Fair Series</li> <li>November-January: Senior Interviews</li> <li>February: College On-Site Decision Days</li> <li>February: Scholarship Seminar and Writing a Resume</li> <li>Ongoing: Access to MEFA Pathways to explore and document self-discovery activities in college and career exploration.</li> </ul>

## College Readiness Checklist

Grade 9	Grade 10
<ul style="list-style-type: none"> <li><input type="checkbox"/> Take challenging classes in all academic and elective areas.</li> <li><input type="checkbox"/> Do your best in school. Grades count, if a course is difficult, get help from a teacher or ask for a tutor.</li> <li><input type="checkbox"/> Get to know your guidance counselor, and college resources available in school.</li> <li><input type="checkbox"/> Take a career interest inventory.</li> <li><input type="checkbox"/> Identify personal, academic, and career goals.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Take challenging classes in all academic and elective areas.</li> <li><input type="checkbox"/> Talk to adults in a variety of professions to determine what they like and dislike about their jobs, and what kind of education is needed for each kind of job.</li> <li><input type="checkbox"/> Become involved in extracurricular activities (before or after school), field trips, and other activities that interest you or enable you to explore career interests.</li> <li><input type="checkbox"/> Meet with your guidance counselor to discuss colleges and their requirements.</li> <li><input type="checkbox"/> Take advantage of opportunities to visit colleges and talk to students.</li> <li><input type="checkbox"/> Work on your resume.</li> <li><input type="checkbox"/> Revisit your personal, academic, and career goals.</li> </ul>
Grade 11	Grade 12
<ul style="list-style-type: none"> <li><input type="checkbox"/> Take challenging classes in all academic and elective areas.</li> <li><input type="checkbox"/> Meet with your guidance counselor to discuss colleges and their requirements.</li> <li><input type="checkbox"/> Continue involvement in school or community-based extracurricular activities.</li> <li><input type="checkbox"/> Decide which colleges most interest you.</li> <li><input type="checkbox"/> Contact these schools to request information and admission applications. Ask about special admission requirements, financial aid, and deadlines.</li> <li><input type="checkbox"/> Talk to college representatives at college fairs and take advantage of opportunities to visit colleges and talk to students.</li> <li><input type="checkbox"/> Consider asking for recommendations from teachers, counselors, employers, etc.</li> <li><input type="checkbox"/> Register for and take the Scholastic Aptitude Test (SAT I), American College Test (ACT), SAT II Subject Tests, and any other exams required for admission.</li> <li><input type="checkbox"/> Update your resume and apply for a job, job shadow opportunity, or internship</li> <li><input type="checkbox"/> Revisit your personal, academic, and career goals.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Take challenging classes in all academic and elective areas.</li> <li><input type="checkbox"/> Meet with your counselor to discuss plans.</li> <li><input type="checkbox"/> Fill out the FAFSA for Federal Aid. Confirm if you need to complete the CSS Profile.</li> <li><input type="checkbox"/> Contact colleges to request information and applications for admission. Be sure to ask about financial aid, admissions requirements, and deadlines.</li> <li><input type="checkbox"/> If possible, visit the colleges.</li> <li><input type="checkbox"/> Take the Scholastic Aptitude Test (SAT I), (ACT), SAT II Subject Tests, or any other exams required for admission to the colleges to which you are applying.</li> <li><input type="checkbox"/> Prepare your application carefully. Follow the instructions and PAY CLOSE ATTENTION TO DEADLINES! Be sure to ask your counselor and teachers at least two weeks before your application deadlines to submit the necessary documents to colleges (your transcript, letter of recommendation, etc.)</li> <li><input type="checkbox"/> Generate a College and Career Planning Checklist</li> </ul>



<https://www.mefapathway.org>

MEFA Pathways was developed by the Massachusetts Educational Financing Authority (MEFA), in partnership with the Massachusetts Department of Elementary and Secondary Education (DESE) and the Massachusetts Department of Higher Education (DHE).

MEFA Pathways is a secure portal that allows you to research college and career information and create post-high school goals based on your interests, values, and skills. Information can be shared with your guidance counselor and parents/guardians, so they can help you research and track your academic and career goals.

Students Can:

- Track your high school classes
- Build a resume by keeping a running list of your sports, activities, and awards
- Store information about your employment and volunteer history
- Take interest, values, and skills quizzes to help you determine your ideal path
- Discover careers that match your personality and interests
- Create a list of colleges that interest you and will help you reach your career goals
- Learn about college costs and how to make smart paying for college choices
- Search for scholarships based on your goals and interests
- Upload documents to share with counselors or access from anywhere
- Link to free test prep information and resources

Parents Can:

- Track your child's progress in making post-high school plans
- Search for careers or colleges and suggest them to your child
- Research paying for college options and link to free resources

### **How to log into the MEFA Pathways account**

Students can access MEFA Pathways through Clever.

Log into Clever and click on the MEFA Pathways App.

Students should visit their guidance counselor if they need assistance accessing MEFA Pathways.

## BHS COLLEGE AND CAREER READINESS PROGRAM

The College and Career Readiness Program provides students the opportunity to complete online activities to help them fine-tune their college and/or career plans. Students who participate will utilize the web-based **MEFA** Pathway (Massachusetts Educational Financing Authority) program.

The program was developed by MEFA, in partnership with the Massachusetts Department of Elementary and Secondary Education (DESE) and the Massachusetts Department of Higher Education (DHE). MEFA Pathway is a secure portal that allows students to research college and career information and create post-secondary goals based on their interests, values, and skills. Information can be shared with the guidance counselor and parents/guardians so they can help the student research and track their academic and career goals. Once the program is finalized, students may receive credit.

The following is a breakdown of activities that should be completed on **MEFA Pathways** for receipt of credit.

<p><b>9<sup>TH</sup> GRADE TOPICS:</b> <b>COLLEGE AND CAREER READINESS I</b></p> <ol style="list-style-type: none"><li>1. Take the Learning Style Inventory.</li><li>2. Create academic, personal, and career goals.</li><li>3. Complete a skills assessment.</li><li>4. Complete the Interest and Value Assessment.</li><li>5. Explore Careers.</li><li>6. Connect BHS courses to future goals.</li><li>7. Explore the Education Option After High School Toolkit.</li><li>8. Complete the journal prompts that correspond with the activities.</li></ol>	<p><b>10<sup>TH</sup> GRADE TOPICS:</b> <b>COLLEGE AND CAREER READINESS II</b></p> <ol style="list-style-type: none"><li>1. Explore trending careers. Develop your Career Plan in the portal.</li><li>2. Review and update academic, personal, and career goals.</li><li>3. Create an Action Plan of Strategies to achieve your goals.</li><li>4. Update your Digital Portfolio</li><li>5. Update your Course planner with your 9<sup>th</sup> grade courses</li><li>6. Complete the Skills Assessment and Work Values Assessment.</li><li>7. Complete the journal prompts that correspond with the activities.</li></ol>
<p><b>11<sup>TH</sup> GRADE TOPICS:</b> <b>COLLEGE AND CAREER READINESS III</b></p> <ol style="list-style-type: none"><li>1. <u>Exploring Options After High School Toolkit.</u></li><li>2. Review and update academic, personal, and career goals.</li><li>3. Review or re-do the Interest Inventory, Work Values Assessment, and skills assessment.</li><li>4. Update your Digital Portfolio, including the Future Path tab.</li><li>5. Select your college preferences in the Search Colleges Tab.</li><li>6. Create a college/career application timeline to prepare for Senior year.</li><li>7. Update your Course planner with your 10<sup>th</sup> grade courses.</li><li>8. Complete the journal prompts that correspond with the activities</li></ol>	<p><b>12<sup>TH</sup> GRADE TOPICS:</b> <b>COLLEGE AND CAREER READINESS IV</b></p> <ol style="list-style-type: none"><li>1. Review and update academic, personal, and career goals.</li><li>2. Build your college list. Use the Match Me Tool to build your list.</li><li>3. Research the application deadlines on your college list.</li><li>4. Create a Common Application Account, review essay topics, and write a college essay draft.</li><li>5. Use the Resume Builder Tool to create your resume.</li><li>6. Read about how to search for scholarships online. Conduct a scholarship search.</li><li>7. Review sample interview questions and create answers</li><li>8. Complete the journal prompts that correspond with the activities.</li></ol>

## ADVANCED PLACEMENT

The Advanced Placement® (AP®) Program gives you a chance to experience college-level classes in high school and opens the door to earning college credit before you ever set foot on campus. You'll get to dig deeper into subjects you love while building the skills and confidence you need to succeed in college.

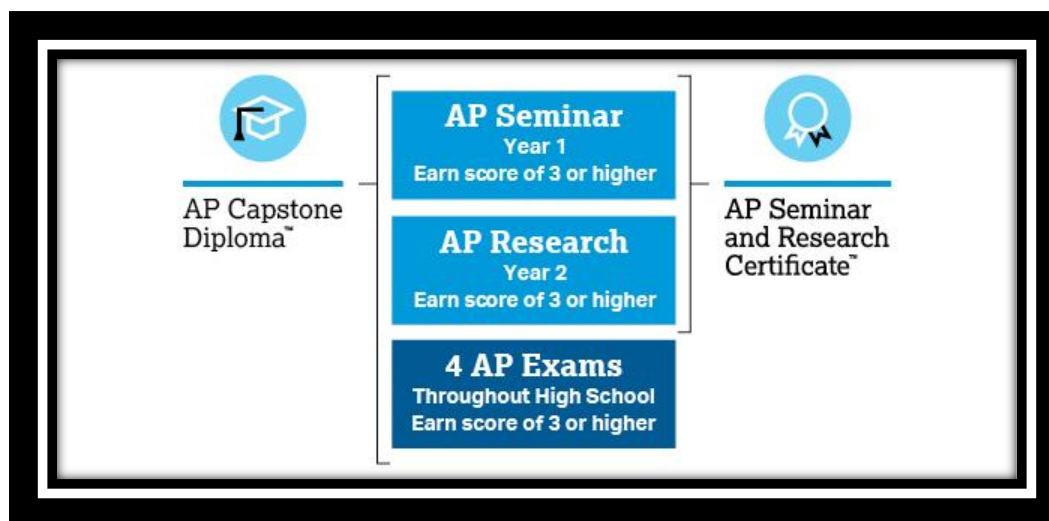
BHS offers AP courses in six different subjects as well as the two AP Capstone courses. Each AP course culminates in an exam in May. If you score a 3 or higher (on a scale of 1–5), you could earn college credit, skip intro-level courses, or both at thousands of U.S. colleges and universities. Earning credit in high school means paying for fewer credits in college. It also opens your schedule, allowing you to take more electives, pursue a second major, or study abroad.

Regardless of your AP Exam score, taking AP courses can have a positive impact on your college applications. Admissions officers know college faculty play a big role in developing AP courses, so they know students who took AP pushed themselves to take challenging, college-level courses. This is something colleges like to see.

### AP Capstone™ Diploma Program

AP Capstone™ is a diploma program from the College Board based on two year-long AP courses: AP Seminar and AP Research. Students have an opportunity to earn either the **AP Capstone Diploma™** or the **AP Seminar and Research Certificate™**.

- **AP Capstone Diploma™**: Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing throughout their four years at BHS.
- **AP Seminar and Research Certificate™**: Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams.



### **AP Capstone Individual Course Descriptions:**

- **AP Seminar** - AP Seminar is an interdisciplinary course where students develop and practice the skills in research, collaboration, and communication that they will need in any academic discipline. Students will investigate topics in a variety of subject areas, write research-based essays, and design and give presentations both individually and as part of a team. Group work and participation is a significant requirement of this course. Grade 10 student may take English 10: AP Seminar, which is a course that combines both Grade 10 ELA and AP Seminar work. Grade 11 and 12 students may take AP Seminar.
- **AP Research** – AP Research builds upon what students learned in AP Seminar to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students will design, plan, and conduct a year-long research-based investigation to address a research question. The course culminates with an end-of-the-course research paper and panel presentation. Prerequisite: This course is open to juniors and seniors only as students must have completed the AP Seminar course first.

### **Brockton High School AP Courses Offered**

\*Course offerings are subject to change due to low enrollment and teacher availability. Please refer to the department pages for specific course descriptions and pre-requisites. AP courses are approved annually by the College Board.

<b>AP DIPLOMA / CAPSTONE</b>
English 10: AP Seminar
AP Seminar (Grades 11-12)
AP Research
<b>ARTS</b>
2-D Art and Design
3-D Art and Design
Drawing
<b>ENGLISH LANGUAGE ARTS</b>
English Language and Composition
English Literature and Composition
<b>CLASSICAL AND MODERN LANGUAGES</b>
Chinese Language and Culture
Spanish Language and Culture
Latin

<b>HISTORY</b>
African American Studies
US History
World History
European History
<b>MATH</b>
Precalculus
Statistics
Calculus AB
Computer Science A
Computer Science Principles
<b>SCIENCES</b>
Biology
Chemistry
Environmental Science
Physics I

## INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAMME (IBDP)

The BHS IBDP is a two-year program that students may apply to be a part of during their junior and senior years. The International Baccalaureate® “aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect” (ibo.org). The IBDP encourages “students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right” (ibo.org).

Students may apply to be a Certificate candidate or Diploma candidate in the BHS IBDP:

- Certificate candidates are enrolled and registered for exams in one or more BHS IBDP courses.
- Diploma candidates are enrolled and registered for a full IB course load as well as the IBDP Core Components (listed below)

To earn the full IB Diploma, a student must take a total of 3 Higher Level (HL) and 3 Standard Level (SL) courses from the options below, with at least one course from each of the subject groups. Students must also complete all three of the required Core Components. To apply to be a Diploma (aka “Full IB”) candidate, students must complete a specific Microsoft Form (see your guidance counselor for a link to the form).

<b>Subject Group: Language and Literature</b>
English A Literature HL
<b>Subject Group: Language Acquisition</b>
French ab initio (little or no experience) SL
Latin HL or SL
Mandarin Chinese HL or SL
Spanish HL or SL
English B ab initio (little or no experience) SL
<b>Subject Group: Individuals and Societies</b>
History of Europe HL
Psychology HL
Environmental Systems and Societies SL

<b>Subject Group: Sciences</b>
Biology HL
Chemistry HL
Sports, Exercise, Health Science SL
Environmental Systems and Societies SL
<b>Subject Group: Mathematics</b>
Applications and Interpretation HL or SL
<b>Subject Group: The Arts</b>
Visual Arts SL
Music SL
<b>Full Diploma</b>
Theory of Knowledge

**Core Components**—required to attain the IB Diploma and limited to IB Diploma candidates.

1. **Theory of Knowledge:** Theory of Knowledge is a two-year course that students complete as part of the Core requirements of the IB Diploma Programme. The course explores knowledge issues and how knowledge is constructed within various areas of knowledge.
2. **Creativity, Activity, Service:** a cumulative 150 hours of student-driven goal-setting, reflection, and personal growth through individual and team-based work. The student must complete roughly 50 hours in approved goals of their design within each of the fields of Creativity, Activity, and Service (these may be designed to fit many of the activities that the student already does). Students must also participate in a CAS group project, created and enacted with a team.
3. **Extended Essay:** a two-year research independent research process and product in the student’s choice of subject and topic. The final product is a research essay of no more than 4,000 words, with supervision totaling from three to five hours.

## PREREQUISITES / CRITERIA FOR BHS AP AND IBDP PROGRAMS

### Specified Criteria for Admission

Specified criteria for admission to each course can be found below. Only those courses listed below have specified criteria.

Please note that many courses require the completion of the associated subject area course in the preceding year (i.e. completion of sophomore English as a pre-requisite for IB English A Literature). Because students apply and input scheduling requests prior to the completion of the school year, an acceptance may be rescinded in the event that a student then does *not* meet a completion requirement (i.e. a student's acceptance into IB English is rescinded because the student did not complete sophomore English due to performance in fourth term).

Please note that there are exam/registration fees for AP and IBDP courses, with the exception of AP Capstone courses and Full IB Diploma courseloads.

### International Baccalaureate Diploma Program (IBDP) Courses with Prerequisites

Note that all IB courses are two-year courses taken in 11<sup>th</sup> and 12<sup>th</sup> grade. Students must complete Year One of an IB course in order to proceed to Year Two.

Course	Pre-requisite / Criteria
English A Literature HL	Completion of Freshman and Sophomore English.
Chinese SL/HL	Completion of Chinese 1, 2, and 3.
Latin SL/HL	Completion of Latin 1, 2, and 3.
Spanish SL/HL	Completion of Spanish 1, 2, and 3.
History of Europe HL	Completion of Freshman and Sophomore Social Science
Psychology HL	Completion of Freshman and Sophomore Social Science
Biology HL	Completion of Freshman and Sophomore Science Courses
Sports, Exercise, Health Science HL	Completion of Freshman and Sophomore Science Courses
Mathematics Applications and Interpretations SL/HL	Completion of Mathematics 2 or 3 at any level.



## Advanced Placement® (AP®) Courses with Prerequisites / Criteria

Course	Prerequisite / Criteria
Art Studio (2-D and 3-D Art and Design; Drawing)	Portfolio review and Department Head Approval
Biology	Completion of Mathematics 2 or 3 at any level <i>and</i> Completion of Freshman and Sophomore Science Courses
Calculus AB	Completion of Precalculus at any level.
Chemistry	Completion of Mathematics 2 or 3 at any level. Completion of Chemistry or Permission of Dept Coordinator
Computer Science Applications	Completion of AP Computer Science Principles
Computer Science Principles	Completion of Freshman Math Course at any level
English Language and Composition	Completion of Freshman and Sophomore English Courses
English Literature and Composition	Completion of Freshman and Sophomore English Courses
Environmental Science	Completion of Freshman and Sophomore Science Courses
European History	Completion of US I and US II <i>or</i> AP US History
Physics I	Completion of Mathematics 2 or 3 at any level <i>and</i> Completion of Freshman and Sophomore Science Courses
Precalculus	Completion of Mathematics 3 at any level.
Research	Completion of AP Seminar. Note: this is the second course in the AP® Capstone Program.
Seminar	For students entering 10 <sup>th</sup> , 11 <sup>th</sup> or 12 <sup>th</sup> grade only. Note: this is the first course in the AP® Capstone Program.
Spanish Language and Culture	Completion through Spanish 4 or placement exam with Coordinator if Heritage speaker
Statistics	Completion of Mathematics 2 or 3 at any level.
US History	Completion of Freshman Social Science Course
World History: Modern	Completion of US I and US II <i>or</i> AP US History

## ADVANCED PLACEMENT® (AP®) AND INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAM (IBDP) COURSE LIST

ART						
COURSE	TITLE	Level	YEAR	TERM	Every (E) or Alt. (A) Days	CREDITS
ARTAP14	AP Art Studio	AP	11,12	Full Year	E	6
ARTIB01	IB Art I	IB	11	Full Year	A	3
ARTIB02	IB Art II	IB	12	Full Year	A	3

BILINGUAL/ESL						
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS	
ELAIB03	IB English Ab Initio I - SL	IB	11	Full Year	6	
ELAIB04	IB English Ab Initio II - SL	IB	12	Full Year	6	

CLASSICAL AND MODERN LANGUAGE					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
CMLIB01	IB Mandarin Chinese SL Year 1	IB	11	Full Year	3
CMLIB02	IB Mandarin Chinese HL Year 1	IB	11	Full Year	6
CMLIB03	IB Mandarin Chinese SL Year 2	IB	12	Full Year	6
CMLIB04	IB Mandarin Chinese HL Year 2	IB	12	Full Year	6
CMLIB11	IB Latin SL Year 1	IB	11	Full Year	3
CMLIB12	IB Latin HL Year 1	IB	11	Full Year	6
CMLIB13	IB Latin SL Year 2	IB	12	Full Year	6
CMLIB14	IB Latin HL Year 2	IB	12	Full Year	6
CMLIB21	IB Spanish SL Year 1	IB	11	Full Year	3
CMLIB22	IB Spanish HL Year 1	IB	11	Full Year	6
CMLIB23	IB Spanish SL Year 2	IB	12	Full Year	6
CMLIB24	IB Spanish HL Year 2	IB	12	Full Year	6
CMLIB31	IB French ab initio Year 1	IB	11	Full Year	3
CMLIB32	IB French ab initio Year 2	IB	12	Full Year	3
CMLIB31	IB French ab initio Year 1	IB	11	Full Year	3
CMLIB32	IB French ab initio Year 2	IB	12	Full Year	3
CMLAP28	AP Mandarin Chinese	AP	12	Full Year	6
CMLAP60	AP Latin	AP	12	Full Year	6

ELA					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
ELAIB03	Theory of Knowledge I	IB	11	Full Year	3
ELAIB04	Theory of Knowledge II	IB	12	Full Year	3
ELAIB02	Senior International Baccalaureate English A Literature - HL	IB	12	Full Year, alt. days	6
ELAAP22	AP Seminar: Year I	AP	11,12	Full Year	6
ELAAP23	AP Research: Year II	AP	11,12	Full Year	6
ELAAP36	Advanced Placement Language and Composition	AP	11,12	Full Year	6
ELAIB01	International Baccalaureate English A Literature -HL	IB	11	Full Year	6
ELAAP24	English 10: AP Seminar	AP	10	Full Year	6
ELAAP25	AP Literature & Composition	AP	11,12	Full Year	6

MATH					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
MATAP32	Advanced Placement Computer Science Principles	AP	10,11,12	Full Year	6
MATAP31	Advanced Placement Computer Science Applications	AP	11,12	Full Year	6
MATAP66	Advanced Placement Calculus AB	AP	12	Full Year	6
MATAP68	Advanced Placement Calculus BC	AP	12	Full Year	6
MATAP90	Advanced Placement Statistics	AP	11,12	Full Year	6
MATAP01	Advanced Placement Precalculus	AP	11,12	Full Year	6
MATIB11	International Baccalaureate Math Year 1 Applications and Interpretations SL	IB	11	Full Year	6
MATIB12	International Baccalaureate Math Applications and Interpretations HL Year 1	IB	11	Full Year	6
MATIB21	International Baccalaureate Math Applications and Interpretations SL Year 2	IB	12	Full Year	3
MATIB22	International Baccalaureate Math Applications and Interpretations HL Year 2	IB	12	Full Year	3

MUSIC						
COURSE	TITLE	Level	YEAR	TERM	Every (E) or Alt. (A) Days	CREDITS
MUSIB01	IB Music SL I	IB	11	Full Year	A	3

SCIENCE					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
SCIIB01	IB Biology I - HL	IB	11	Full Year	3
SCIIB02	IB Biology II - HL	IB	12	Full Year	6
SCIIB04	IB Sp Exercise Health Sci I - SL	IB	11	Full Year, Alt. Days	3
SCIIB03	IB Sp Exercise Health Sci II - SL	IB	12	Full Year	6
SCIIB07	IB Chemistry I - HL	IB	11	Full Year	6
SCIIB08	IB Chemistry II - HL	IB	12	Full Year	6
SCIIB05	IB Envir Sys and Society I - SL	IB	11	Full Year	6
SCIIB06	IB Envir Sys and Society II - SL	IB	12	Full Year	6
SCIAP83	AP Physics 1	AP	12	Full Year	6
SCIAP25	AP Chemistry	AP	12	Full Year	6
SCIAP22	AP Biology	AP	12	Full Year	6
SCIAP40	AP Environmental Science	AP	12	Full Year	6

SOCIAL SCIENCE					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
SOCAP07	AP US History	AP	10	Full Year	6
SOCAP43	AP European History	AP	11,12	Full Year	6
SOCAP93	AP World History	AP	11,12	Full Year	6
SOCIB10	IB World History Year I	IB	11	Full Year (1 of 2)	6
SOCIB11	IB Psychology Year I	IB	11	Full Year (1 of 2)	6
SOCIB20	IB World History Year II	IB	12	Full Year (2 of 2) Alt.	6
SOCIB12	IB Psychology Year II	IB	12	Full Year (2 of 2) Alt. Days	6
SOCAPAA	AP African American Studies	AP	11,12	Full Year	6

## EARLY COLLEGE AND DUAL ENROLLMENT PATHWAYS

**Early College** students are high school students enrolled in college courses and earn a minimum of 12 credits, equivalent to four college courses. Students participating in Early College work towards completing significant prerequisites as a Mass Transfer Pathway and/or students may elect a pathway major in liberal arts/education or business/management.

**Early College** is open to all students regardless of past academic achievement. Students will earn college credit and, at the high school's discretion, may also earn high school credit for courses taken, known as 1:1. Early College may offer more opportunities for students to complete many courses while in high school.

**There are Five Design Principles of Early College, they are:**

1. Equitable Access targeting underrepresented students in higher education
2. Academic Pathways that are well integrated and aligned with college and career
3. Robust Student Support in both academics and advising
4. Connections to Career through workplace and experiential learning experiences
5. High-Quality & Deep Partnerships between high schools and colleges

**Dual Enrollment** students earn nine college credits or less, which is the equivalent of three college courses. Some courses may have pre-requisite stipulations that may be less inclusive for all students interested in taking a college course.

Dual Enrollment students may take a college course with a cohort of high school students and be the only high school student in the class, taking the course with college-age students or post-high school students. In situations where a BPS high school student is the only BPS student taking the college course, students will need to pay for the college course out-of-pocket. Students will earn college credit and, at the high school's discretion, may also earn high school credit for college courses taken.

All students in BHS/BPS start with high school cohorts in Dual Enrollment until students take 12 credits or more and select an Early College pathway. **Students in either Early College or Dual Enrollment will have the added benefit of receiving high school credit and additional quality points that may influence their overall high school GPA.**

**Early College Support Services**

- BPS Partner Teachers
- Early College and Dual Enrollment Director and Guidance Counselor

Some college courses below may require an eligibility prerequisite, such as a Multiple Measure (GPA or grade in a certain class) or ACCUPLACER.

College classes will take place either in person or online.

University of Massachusetts Dartmouth (UMD) Course Offerings					
	Business Pathway - Course Title	Year	Fall or Spring	College Credit	High School Credits
ELC5102UMD	MIS 101: The Business Organization	10,11,12	Fall	3	6
ELC5103UMD	SUS 101: Principles of Sustainability	10,11,12	Fall	3	6
ELC5104UMD	ECO 107: Economics of Pollution	10,11,12	Spring	3	6
ELC5105UMD	MGT 201: Leadership, Teamwork, and Collaboration	10,11,12	Spring	3	6
ELC5106UMD	ENL 101: Critical Writing and Reading I	11 & 12	Fall	3	6
ELC5107UMD	ACT 211: Principles of Accounting	11 & 12	Fall	3	6
ELC5108UMD	PHL 110: Principles of Critical Thinking	11 & 12	Spring	3	6
ELC5101UMD	PSY 101: General Psychology	10,11,12	Spring	3	6
ELC5109UMD	ACT 212: Principles of Accounting II	11 & 12	Spring	3	6
	Education / Liberal Arts Pathway - Course Title	Year	Fall or Spring	College Credit	High School Credits
ELC5111UMD	Edu 207: Perspectives in Education	10,11,12	Fall	3	6
ELC5112UMD	CAS 101: Introduction to the Arts and Sciences	10,11,12	Spring	1	3
ELC5101UMD	PSY 101: General Psychology	10,11,12	Spring	3	6
ELC5113UMD	PHL/WGS 104: Gender, Race, and Sexuality	11 & 12	Fall	3	6
ELC5114UMD	PSY 220 Life Span/Human Development	11 & 12	Spring	3	6
ELC5118UMD	PHL 101: Principles of Critical Thinking	11 & 12	Spring	3	6
ELC5110UMD	SOA 102: Social Problems	11 & 12	Spring	3	6
ELC5122UMD	SPA 202: Spanish Comp & Conversation	11 & 12	Spring	3	6
<i>All University of Dartmouth courses are offered synchronously, online.</i>					

Massasoit Community College (MCC) or Bridgewater State University (BSU) Course Offerings					
Course	Title	Year	Fall or Spring	Credit	High School Credits
ELC5115MCC	College ESL I and Conversation and Pronunciation in ESL	ALL	Fall and Spring	6	6
ELC5116MCC	College ESL II and Reading for ESL Students	ALL	Fall and Spring	6	6
ELC5117MCC	Speech Communication	ALL	Fall and Spring	3	6
ELC5119MCC	English Composition I	10,11,12	Fall and Spring	3	6
ELC5120MCC	English Composition II	10,11,12	Fall and Spring	3	6
ELC5101MCC	General Psychology	10,11,12	Fall and Spring	3	6
ELC5121MCC	Principles of Sociology	10,11,12	Fall and Spring	3	6
ELC5102MCC	Introduction to Criminal Justice	12	Fall and Spring	3	6
ELC5115BSU	College ESL I and Conversation and Pronunciation in ESL	ALL	Fall and Spring	6	6
ELC5116BSU	College ESL II and Reading for ESL Students	ALL	Fall and Spring	6	6
ELC5117BSU	Speech Communication	ALL	Fall and Spring	3	6
ELC5119BSU	English Composition I	10,11,12	Fall and Spring	3	6
ELC5120BSU	English Composition II	10,11,12	Fall and Spring	3	6
ELC5101BSU	General Psychology	10,11,12	Fall and Spring	3	6
ELC5121BSU	Principles of Sociology	10,11,12	Fall and Spring	3	6
ELC5102BSU	Introduction to Criminal Justice	12	Fall and Spring	3	6

## **Course Descriptions**

**College Experience:** This course is designed to orient all BHS students into Early College. Students develop the skills necessary to navigate college-level (online or in-person) courses and prepare to succeed in academic courses.

### **Massasoit Community College Course Descriptions:**

**Speech Communication:** This course covers critical thinking, information literacy, active listening, public speaking apprehension, technology skills, and verbal and nonverbal communication. Students analyze informative and persuasive techniques and research, organize, and deliver a minimum of three formal speeches: two of which must be informative and persuasive speeches.

**College ESL I:** This course is designed for non-native English speakers to develop a command of correct English in the four areas of listening, speaking, reading, and writing, with special attention to reading and writing. Emphasis is placed on grammar, sentence structure, idiomatic expression, reading comprehension, and recognizing and developing correct English patterns in sentences and paragraphs. Prerequisite: Waiver by placement testing results; or departmental approval.

**College ESL II:** This course is a continuation of ENSL 101 College ESL I with emphasis placed on developing a facility to read and discuss standard college English work, the ability to recognize and produce correct patterns in sentences and paragraphs, and the ability to combine paragraphs into correct and coherent compositions. Prerequisite: ENSL 101 College ESL I; waiver by placement testing results; or departmental approval.

**English Composition I:** This course helps students develop and organize extended pieces of writing. Students focus on the correct and appropriate use of language and the organization and development of paragraphs and essays. Research techniques, documentation of sources, and a short research paper are included. Constant reading and frequent writing are required. Prerequisites: ENGL 091 Preparing for College Reading I and ENGL 099 Introductory Writing; waiver by placement testing results; or departmental approval.

**English Composition II:** This course strengthens students' skills as writers and focuses on analysis and argument. Assignments include a critical examination of literature and an essay using research and documentation utilizing the MLA style sheet. Emphasis is on writing as part of the processes of thinking and learning. Prerequisites: ENGL 092 Preparing for College Reading II and ENGL 101 English Composition I; waiver by placement testing results; or departmental approval.

**General Psychology:** This course is an introduction to psychology as the science of human behavior. Major topics include scientific methods, the history of psychology, learning, motivation, emotion, social psychology, and perception. Prerequisites: ENGL 092 Preparing for College Reading II and ENGL 099 Introductory Writing; waiver by placement testing results; or departmental approval. Pre/Co-requisite: MATH 001 Preparation for College Math I or MATH 010 Fundamentals of Mathematics; waiver by placement testing results; or departmental approval.

**Principles of Sociology:** Sociology is the systematic study of human society and social interaction. This course will employ the major theoretical perspectives to examine culture: the process of socialization, and social structure; the problems of stratification, particularly in the areas of social class, race, ethnicity, and gender; social institutions, such as the family and religion; and social change. Prerequisites: ENGL 092 Preparing for College Reading II and ENGL 099 Introductory Writing; waiver by placement testing results; or departmental approval. Pre/Co-requisite: MATH 001 Preparation for College Math I or MATH 010 Fundamentals of Mathematics; waiver by placement testing results; or departmental approval.

**Introduction to Criminal Justice:** The course provides a history, development, and philosophy of criminal justice in a democratic society. It also covers an introduction to agencies in the administration of criminal justice and careers. Prerequisites: ENGL 092, Preparing for College Reading, 099 Introductory Writing, and Math 001. A waiver by placement testing results or department approval.

### **University of Massachusetts Dartmouth: Business Pathway Course Descriptions:**

**MIS 101: The Business Organization:** A technology-based, cross-discipline course for first-year students, the first business core course. It introduces first-year business majors to the world of business and enriches their first-year experience. It provides students with an overview of business, its environment, and its subsystems (e.g., operations, marketing, accounting, finance, and information systems); and enhances their computer and teamworking skills. Through informational and advising experiences students make decisions in areas such as the selection of courses, a major, a career, and the utilization of on-campus student resources.

**SUS 101: Principles of Sustainability:** The goal of Principles of Sustainability is to provide a larger context for topics covered in the course. Topics covered include: what is sustainability? Climate change and environmental challenges, systems analysis, “natural” systems and function, human interactions with natural systems, ethics, and values.

**ECO 107: Economics of Pollution:** Basic economic analysis of pollution control. A growing concern of policymakers is how to achieve both economic growth and a cleaner environment. We will examine issues such as how the EPA sets ambient air quality standards and how we can cost-effectively achieve those standards.

**MGT 201: Leadership, Teamwork, Collaboration:** An interactive skills-building course designed to take a thoughtful look at the key skills necessary for personal and managerial success in organizations. Students will develop interpersonal skills relating to understanding themselves, understanding and working with others, understanding, and working in teams, and leading individuals and groups.

**ENL 101: Critical Writing and Reading I:** An argument-focused course that introduces students to scholarly reading and writing strategies. Students practice widely applicable methods of reading, writing, and revising arguments. Students read college-level arguments from diverse popular, public, and academic genres to develop their academic skills of analyzing single arguments, synthesizing multiple perspectives, and composing informed responses to an ongoing conversation.

**ACT 211: Principles of Accounting I:** Accounting concepts and procedures are studied through the analysis, classification, recording, and summarizing of business transactions. Financial statements are introduced and shown to be a source of essential information for management and others outside of the business. Ethical issues in financial reporting are considered.

**PHL 110: Principles of Critical Thinking:** Introduction to the methods and principles used to distinguish correct from incorrect reasoning. The course aims at imparting skills in identifying fallacies in reasoning and in using elementary formal techniques to analyze natural language arguments. Topics include moral reasoning, scientific reasoning, the nature of meaning, and the various uses of language.

**PSY 101: General Psychology:** A broad survey of principles underlying the systematic study of behavior. Using examples from basic research and applied settings, a variety of perspectives are explored, including findings associated with the physiological, behavioral, cognitive, developmental, and social approaches.

**ACT 212: Principles of Accounting II:** An introduction to managerial accounting emphasizes how managers use accounting data within their organizations for planning, controlling, and making decisions. The course is structured to provide a foundation of cost terms, systems design, cost behavior, procedural techniques for planning and control, performance measurements, and the use of data for making operational decisions. Ethical issues in managerial reporting are considered.

**University of Massachusetts Dartmouth – Education/Liberal Arts Pathway Course Descriptions:**

**EDU 207: Perspectives on Education:** Critical examination of the field of education from multiple perspectives. This course provides a means for students to critically examine what it means to be a teacher beyond knowing their area's content to engage creative, humanistic, philosophical, and aesthetic tenets of teaching. Outside speakers and experiential learning will provide opportunities integral to a broader understanding of the field of education.

**CAS 101: Introduction to the Arts and Sciences:** Introduction to study in the disciplines of the College of Arts and Sciences. This course is designed to increase student success at college. The overall goal of the course is to facilitate a smooth transition to college life by engaging students in a structured curriculum of academic and life skills enhancement while, at the same time, encouraging the development of enduring relationships between students, faculty and advisors, and classmates. To accomplish this goal, the content of the class includes locating and utilizing campus resources, the importance of co-curricular activity on campus, goal setting and time management skills, writing skills, test preparation and taking skills, critical and creative thinking skills, and career and major/minor exploration.

**PSY 101: General Psychology:** A broad survey of principles underlying the systematic study of behavior. Using examples from basic research and applied settings, a variety of perspectives are explored, including findings associated with the physiological, behavioral, cognitive, developmental, and social approaches.



**PHL 104/ WGS 104: Identities: Gender, Race, Sexuality:** A cross-disciplinary course in Women's Studies and Social Philosophy that examines the concepts and intersections of Gender, Race, and Sexuality. The course examines whether these identities exist as natural "facts" or are socially constructed, while also questioning how we are to understand individuals who do not fit - or refuse to fit - into these categories.

**ENL 101: Critical Writing & Reading I:** An argument-focused course that introduces students to scholarly reading and writing strategies. Students practice widely applicable methods of reading, writing, and revising arguments. Students read college-level arguments from diverse popular, public, and academic genres to develop their academic skills of analyzing single arguments, synthesizing multiple perspectives, and composing informed responses to an ongoing conversation.

**PSY 220: Lifespan Human Development:** The nature of normative transitions across the life span. The course fosters an understanding of change from pre-conception through death. A study of the individual from both the developmental and experimental approaches allow for an understanding and appreciation of change across the lifespan. The domains of human development (physical, cognitive/intellectual, and social/emotional) are replicated for infancy/toddlerhood, childhood, adolescence, adulthood, and old age. Topics that may be included are methodology in lifespan research, heredity and environment controversy, intelligence, language, and communication, learning across the lifespan, as well as motor, cognitive, perceptual, personality, and social development.

**PHL 110: Principles of Critical Thinking:** Introduction to the methods and principles used to distinguish correct from incorrect reasoning. The course aims at imparting skills in identifying fallacies in reasoning and in using elementary formal techniques to analyze natural language arguments. Topics include moral reasoning, scientific reasoning, the nature of meaning, and the various uses of language.

**SOA 102: Social Problems:** A survey of various social problems in the contemporary world. Special emphasis is placed on the analysis of social problems in American society.

**SPA 102: Spanish Comp & Conv I:** Varied oral and written activities that develop students' dialogic, narrative, descriptive, and argumentative abilities in Spanish. Inclusion of film clips and expository or journalistic prose from Spain and Latin America.

## ART DEPARTMENT

ART COURSES								
	Foundation/ Proficient/ Advanced	COURSE	TITLE	Level	YEAR	TERM	Meets Every Day (E) or Alternating Days (A)	CREDITS
	F	ART5100	Art Exploration	N	ALL	Semester	A	1.5
	F	ART5101	Drawing and Painting I	N	11,12	Semester	A	1.5
	F	ART1101	Drawing and Painting I	N	9,10	Semester	A	1.5
*	P	ART5301	Drawing and Painting II	H	10,11,12	Semester	A	1.5
*	A	ART5302	Adv Drawing and Painting H	H	10,11,12	Semester	E	3
*	A	ARTAP14	AP Art Studio	AP	11,12	Full Year	E	3
*	A	ART5303	Art Studio	H	11,12	Semester	E	3
*	F	ART5102	Illustration	N	ALL	Semester	A	1.5
*	P	ART5308	Printmaking	H	10,11,12	Semester	A	1.5
	F	ART5106	Ceramics	N	11,12	Semester	A	1.5
	F	ART1106	Ceramics	N	9,10	Semester	A	1.5
*	P	ART5306	Ceramics II	H	10,11,12	Semester	A	1.5
*	P	ART5304	Sculpture	H	10,11,12	Semester	A	1.5
	F	ART5105	Digital Photography	N	11,12	Semester	A	1.5
		ART1105	Digital Photography	N	9,10	Semester	A	1.5
*	P	ART5305	Digital Photography II	H	10,11,12	Semester	A	1.5
	A	ART5107	Digital Art	N	11,12	Semester	A	1.5
	A	ART1107	Digital Art	N	9,10	Semester	A	1.5
*	P	ART5307	Digital Art II	H	10,11,12	Semester	A	1.5
	F	ART5109	Acting	N	11,12	Semester	A	1.5
	F	ART1109	Acting	N	9,10	Semester	A	1.5
*	P	ART5309	Acting II	H	10,11,12	Semester	A	1.5
	P	ART5110	Musical Theatre Performance	N	ALL	Semester	A	1.5
*	F	ART5111	Theatrical Set Design	N	ALL	Semester	A	1.5
	F	ART5112	Technical Theatre	N	ALL	Semester	A	1.5
*	F	ART5113	Musical Theatre Prod Workshop	N	ALL	Semester	A	1.5
*	F	ART5114	Play Production	N	ALL	Semester	A	1.5
	A	ELA5306	History of Theatre	H	11,12	Semester	E	3 (English / History)
	A	ELA5305	Aesthetics of Film	H	11,12	Semester	E	3 (English)
	F	ART5115	Producing TV Programs	N	ALL	Semester	A	1.5

\* Indicates the course may be taken more than once for credit.

○ The course requires prerequisites – see the course guide.

○ The course requires an application and department head approval.

○ The course requires individual student/teacher contracts and department head approval.

	Foundation/ Proficient/ Advanced	COURSE	TITLE	Level	YEAR	TERM	Meets Every Day (E) or Alternating Days (A)	CREDITS
	P	ART5116	TV Multicamera Production	N	ALL	Semester	A	1.5
	A	ART5312	Adv TV and Media Production	H	10,11,12	Semester	E	3
	A	ARTIB01	IB Art I	IB	11	Full Year	A	3
	A	ARTIB02	IB Art II	IB	12	Full Year	A	3
*	A	ARTIS31	Visual Arts Ind Study H	H	11,12	Semester	A	1.5
*	A	ARTIS32	Television Ind Study H	H	11,12	Semester	A	1.5
*	A	ARTIS33	Theatre Arts Ind Study H	H	11,12	Semester	A	1.5

\* Indicates the course may be taken more than once for credit.

- The course requires prerequisites – see the course guide.
- The course requires an application and department head approval.
- The course requires individual student/teacher contracts and department head approval.

**Art Exploration:** In this course, students will be experimenting with and creating with a variety of materials and mediums. Students will explore the elements of art by combining collage and assemblage with more traditional methods of art-making. Students will be challenged to use the skills and techniques taught to create pieces that they are connected to and invested in. This course is open to all students and is a good entry-level class for a student who feels intimidated by more traditional drawing and painting classes.

**Drawing and Painting I:** In this course, students will develop basic drawing and painting skills using a variety of materials. Students will learn about composition, design, sketching, drafting, and color theory. Students will explore methods of realistic drawing, shading, and color mixing. Students will learn how to render 3D objects on a flat 2D surface. Students will demonstrate learned skills creatively through the completion of observational drawings and paintings. Additionally, students will analyze their work critically through verbal and written evaluations.

**Illustration:** In this course, students will be introduced to many styles and techniques associated with the art of illustration, such as colored pencils, pen and ink, and watercolor. Students will learn to enhance their drawing and problem-solving skills. Students will learn the importance of the illustrator in communicating stories, reactions, thoughts, and ideas both real and imaginary. Written and oral work will be assigned in conjunction with projects.

**Drawing and Painting II:** Students will build on the skills learned in Drawing and Painting I and be challenged to achieve a more advanced level of drawing and painting skills. Students will explore multiple mediums, work on a larger scale and develop a more in-depth understanding of the creative process. Students will develop personal interpretations of sources through a reflective process of various written assessments. **Prerequisite:** Drawing and Painting I or Illustration

**Printmaking:** Printmaking is the process of transferring an image from one surface (a printmaking plate or stamp) onto another surface (often paper). Students will be introduced to a variety of reduction and intaglio printmaking techniques including linoleum, collagraph, drypoint, and monoprint methods. Students will create visually dynamic prints taking into account composition, design, and color theory. Students will participate in oral and written critiques throughout the course. **Prerequisite:** Drawing and Painting I, Illustration, or Art Exploration

**Advanced Drawing and Painting:** This course is an extension of Drawing and Painting II. Students will be challenged to achieve a sophisticated level of drawing and painting skills. Students will work through the creative process to develop original ideas and move forward in developing their style. Students will participate in verbal, written, and visual correspondence regularly. **Prerequisite:** Drawing and Painting I and II

**Art Studio:** This studio art course challenges and inspires students to progress and master a sophisticated level of artistic skill. Each student receives personal attention in the development of their work and will show a high level of commitment and initiative that is expected of a serious art student. Students will participate in verbal, written, and visual correspondence regularly. **Prerequisite:** Drawing and Painting I and II

**Advanced Placement Art Studio:** This full-year college-level advanced placement course emphasizes the development of an extensive portfolio of work. Students must demonstrate proficiency and an advanced level in a variety of materials and techniques while still maintaining concentration under a concept/theme. Portfolios are sent to a national panel for judgment and grading on the AP scale. **Prerequisite:** Portfolio review and Director approval

**Photography I:** Students will learn camera functions, composition techniques, and computer technical skills in this introduction to photography. Students will use Adobe Photoshop as a tool to edit, manipulate and create original works of art. In addition to their visual projects, students will participate in oral critiques and written assessments of their work and the creative process. *Students will be required to take photos both inside and outside of class.*

**Photography II:** In this course, students will continue their exploration of photographic techniques. Students will explore DSLR cameras, with an emphasis on composition techniques and creative expression via photographs. Adobe Photoshop's editing capabilities will be explored in greater depth. In addition to their visual projects, students will participate in oral critiques and written assessments of their work and the creative process. *In this advanced course, students are required to take photos outside of class.* **Prerequisite:** Photography I

**Digital Art I:** In this introductory course students will use Adobe Photoshop and Illustrator to create imaginative and original fine art through manipulation, alteration, and digital enhancement. In addition to their visual projects, students will participate in oral critiques and written assessments of their work and the creative process.

**Digital Art II:** In this advanced course students will build on the Adobe skills they learned in Digital Imaging 1 and expand their creative process to integrate studio art skills, like drawing and painting, into computer-based artwork. Experimentation, development of technical skills, and craftsmanship are emphasized. The creative process is emphasized through visual, oral, and written methods. ***Prerequisite:*** Digital Art I

**Ceramics I:** Students will be introduced to the basic methods of working with clay. Various techniques include pinch pot, slab, and coil forming, as well as other techniques. Students will respond to works of art in written and oral critiques, specific ceramic assignments, and analysis of historical art contexts. Students will learn to relate aspects of design principles to both functional and sculptural art forms. Mastery of introductory techniques will transition to working on assignments with increasing levels of complexity based on each student's aesthetic directions. This course may be taken more than once for credit.

**Ceramics II:** In this class, students will build on skills and techniques they focused on in Ceramics 1. Students will continue to investigate historic and contemporary artists and their work. Students will dive into more challenging ceramics processes, creating abstract, functional, and figurative pieces. Students will have the opportunity to work on the pottery wheel, allowing them to shape clay with their hands on a spinning surface! This class is for students who enjoyed and excelled in Ceramics 1 and are looking to create a series of work that represents their identities, ideas, and beliefs on a more advanced level. ***Prerequisite:*** Ceramics I

**Sculpture:** Students will explore the conceptual art world through the study and practice of sculpture and site-specific art. Students will be introduced to historic and contemporary sculpture and will study the history and creation of these famous works. In class, students will work with wire, plaster, recycled materials, clay, as well as objects found in nature. Students will create pieces that communicate ideas around identity, social issues, current events, and abstract thoughts. Class critiques will allow students to speak about their work, as well as give constructive criticism and feedback to their peers. Students will learn the importance of visual literacy and will develop a body of work that demonstrates an understanding of techniques, craft, and language within three-dimensional design and installation. ***Prerequisite:*** Ceramics

**Acting I:** This performance-based course is designed to teach students the fundamentals of stage performance. Students will work on monologues, scenes, and improvisational exercises. Students may take this class several times as each semester new material will be worked on. Students will evaluate their performance and the performances of their classmates through journal writing, open response, and oral discussion. Research projects on theatre history and written reviews of theatrical performances may be included as part of the class.

**Acting II:** This course is an extension of Acting I. Students will expand their knowledge of acting techniques, and the role of the actor in interpreting literature for performances, as well as explore theatrical conventions. This course requires reading, researching, analyzing, and evaluating various types of literature. Group and solo performances in class will be mandatory during the year. Both scripted assignments and improvisational assignments will be the primary focus of the performance. A dominant objective of the course is to continue to develop the self-discipline and self-confidence of the student along with his/her cultural awareness in the realm of the performing arts. ***Pre-requisite:*** Acting I

**Musical Theatre Performance Seminar:** This performance-based class is designed for students interested in the performing arts, specifically musical theatre. In this course, students will explore various styles and periods of musical theatre from the 1800s-present day. Students will expand their knowledge and become versatile in all aspects of the art. *Students will be expected to develop skills in both spoken dialogue and song, culminating in a performance.*

**Aesthetics of Film:** This course introduces students to film analysis and teaches them to become critics and helps them gain tools to properly analyze a film both in written and oral form. Students taking film will be exposed to several classic films and films that stand out in their general.

**History of Theatre:** This course explores the history and evolution of Western Theatre through script reading, script analysis, and production analysis. Different types and styles of theatrical literature will be analyzed in the context of the social, political, and economic conditions of the period and modern times.

**Theatrical Set Design:** In this course, students will be introduced to the artistic, theoretical, historical, and mechanical elements of the set design process. Through research-based projects and script analysis, students will gain an understanding and appreciation of theatre scenic design as an art form. Oral and written critiques will augment the hands-on approach.

**Technical Theatre:** This course introduces students to the behind-the-scenes elements of theatrical production. Students will explore technical elements such as lighting, audio, and costuming.

**Play Production:** Students selecting this workshop will be engaged in the production aspects of the December Play. Individual and group projects will be assigned with an emphasis on stage terminology, play analysis, scenic construction, lighting, props creation, and stage maintenance. Students will also participate in written and oral critiques. Research and writing assignments are given at appropriate intervals. This course may be taken more than once for credit.

**Musical Theatre Production Workshop:** Students selecting this workshop will be engaged in the production aspects of the Spring Musical. Individual and group projects will be assigned with an emphasis on stage terminology, musical play analysis, scenic construction, lighting, props creation, and stage maintenance. Students will also participate in written and oral critiques. Research and writing assignments are given at appropriate intervals. This course may be taken more than once for credit.

**Theatre Arts:** This independent study course is for advanced or difficult-to-schedule students who are serious theatre students (hand-scheduled). Reading and writing assignments will be given on an individual basis. Prerequisite: Teacher Referral and department head approval are needed. This is an individual contract between teacher and student.

**Producing Television Programs:** Students will learn to operate television equipment, edit a video, write scripts, and produce TV programs in this introduction to the basics of television. Students will participate in producing programs to be aired on Brockton's educational cable channel.

**Television Multicamera Production:** In this course, students will create a multi-camera video production from conception to execution. Students will work together as a production team to create and execute a “Live” show. Students will perform in multiple roles within a Production team. (Producer, Director, Technical, Director, Audio Tech, Camera Operator, On-Camera Talent, Stage Manager, Teleprompter Operator, Graphics Operator.) *Prerequisite:* Producing Television Programs

**Advanced Television and Media Production:** students will expand upon skills from previous television classes to write, direct and produce BHS television shows such as “School Scene”, “Boxer High- lights” and other special projects to air on Brockton’s education channel 98. Students will gain experience in studio production and portable production techniques. Students will work independently as well as in groups to write scripts, develop interviewing skills, and edit videos in Final Cut Pro and iMovie. This course may be taken more than once. *Prerequisite:* Television Multicamera Production

**Independent Study in Educational Television Service:** This course allows students who have demonstrated ability and interest in the Television Studio to work one period a day for 3 credits. A student may work the first, second, or both semesters and must receive approval from the department head to enroll. *Prerequisite:* Producing Television Programs and Television Multicamera Productions. **Teacher recommendation and Director approval are required for enrollment.**

**IB Art I / IB Art II:** This Studio-based course emphasizes both the creative process and the final artistic product in 2-dimensional and 3-dimensional art forms. As students develop their craft they will conduct a thoughtful inquiry into their thinking and art-making processes recording this learning in written and visual formats. Students are introduced to the historical, social, and analytical components of the art-making process as they research the history and practice of various art forms across cultures. They will learn how to connect their research to their work, creating art that expresses personal meaning within a cultural context. In addition to learning how to appreciate and evaluate their work and that of others, students will be encouraged to broaden their scope and explore their work, with an emphasis on the communication of ideas through exhibitions and presentations.

**Visual Arts I:** This independent study course is for advanced or difficult-to-schedule students who are serious art students (hand-scheduled). Reading and writing assignments will be given on an individual basis. **Teacher recommendation and Director approval are required for enrollment. This is an individual contract between teacher and student.**

## BILINGUAL / ESL SERVICES DEPARTMENT

ENGLISH AS A SECOND LANGUAGE					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
BIL5201	ESL I Content -CP	CPA	All	Full Year	6
BIL5202	ESL I Literature - CP	CPA	All	Full Year	6
BIL5201CT	ESL I Content Co-Taught -CP	CPA	All	Full Year	6
BIL5201	ESL II Content -CPA	CPA	All	Full Year	6
BIL5202	ESL II Literature -CPA	CPA	All	Full Year	6
BIL5203	ESL III Content -CPA	CPA	All	Full Year	6
BIL5204	ESL III Literature -CPA	CPA	All	Full Year	3
BIL5204CT	ESL III Literature Co-Taught -CPA	CPA	All	Full Year	6
BIL1205	ESL IV Literature -CPA	CPA	9,10	Full Year	6
BIL5205	ESL IV Literature -CPA	CPA	11,12	Full Year	6
BIL5205CT	ESL IV Literature Co-Taught -CPA	CPA	All	Full Year	6
BIL5203	ESL Topics Reading Writing	CPA	All	Semester	3
BIL5204	ESL Topics Listening Speaking	CPA	All	Semester	3
ELAIB03	IB English Ab Initio I - SL	IB	11	Full Year	6
ELAIB04	IB English Ab Initio II - SL	IB	12	Full Year	6

**ESL I Content:** The course is designed for students with little or no English language proficiency. All four domains of second language acquisition (listening, speaking, reading, and writing) are emphasized through content-based instruction and the teaching of learning strategies.

**ESL I Literature:** This course is designed for students with little or no English language proficiency. All four domains of second language acquisition (listening, speaking, reading, and writing) are emphasized through theme-based literature instruction.

**ESL II Content:** This course is designed for students at WIDA Level 2, providing a comprehensive approach to advancing language proficiency and academic success. This course focuses on strengthening all language domains: listening, speaking, reading, and writing through content-based instruction.

**ESL II Literature:** This course is designed for students at WIDA Level 2, providing a comprehensive approach to advancing language proficiency and academic success. This course focuses on strengthening all language domains: listening, speaking, reading, and writing through theme-based literature.

**ESL III Content:** The course is designed for multilingual learners at WIDA Level 3 "Developing Level". This course offers an immersive journey through various English genres to enhance language proficiency and foster critical thinking skills. Students will delve into diverse literary forms, including fiction, non-fiction, poetry, and academic texts, to expand their language repertoire and deepen their understanding of English usage.



**ESL III Literature:** The course is designed for multilingual learners at WIDA Level 3 “Developing Level”. This course offers an immersive journey through various English genres to enhance language proficiency and foster critical thinking skills. Students will delve into diverse literary forms, including fiction, non-fiction, poetry, and academic texts, to expand their language repertoire and deepen their understanding of English usage.

**ESL IV Literature:** This course is designed for students with an Expanding English Proficiency Level. It stresses the more difficult academic language skills in reading and composition through literature-based instruction using authentic texts.

**ESL IV Literature:** This course is designed for students with an Expanding English Proficiency Level. It stresses the more advanced academic language skills in reading and composition through literature-based instruction using authentic texts. This course is designed for juniors and seniors.

**ESL Topics – Reading & Writing:** These topics specifically target essential reading and writing skills for multilingual learners. They focus on various strategies to enhance comprehension and interpretation of texts more effectively. These strategies include skimming, scanning, predicting, summarizing, and making inferences. Students will also engage in reading activities to improve their language proficiency, and vocabulary knowledge. Reading materials can range from simple texts, such as short stories and newspaper articles, to more complex academic texts and literature. Through Writing, students will be expressing ideas, opinions, and information in written discourse. In addition, students will develop their writing skills through structured exercises, creative assignments, and academic tasks aimed at improving grammar, vocabulary, organization, and coherence. Peer review and self-editing will be some of the strategies used throughout this course to help multilingual learners identify and correct errors in their writing.

**ESL Topics – Listening & Speaking:** These topics aim to develop multilingual learners' proficiency in listening and speaking by emphasizing comprehension, communication, fluency, and confidence in using spoken English. Through podcasts, TED talks, news broadcasts and other audio materials, students will be exposed to different accents, speech patterns, and topics. In addition, students will develop the ability to better understand spoken instructions, academic lectures, job interviews, and everyday conversations. Through Oral Communication Skills, students will be provided opportunities to engage in structured conversations, debates, discussions and presentations on various topics.

**International Baccalaureate English B ab initio Years 1 and 2:** In this two-year course, the focus will be on the development of English language proficiency and cultural awareness. This is a language acquisition course specifically for students with little or no experience with the English language. In this course, interactive, productive, and receptive skills are developed through the contextualized study of language, text, and themes. Prerequisite: Approval of Bilingual Department Head.

MATHEMATICS					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
MAT1200CV	Math I -CPA	CPA	9	Full Year	6
MAT1200HT	Math I -CPA	CPA	9	Full Year	6
MAT1200SP	Math I -CPA	CPA	9	Full Year	6
MAT1200SEI	Math I -CPA	CPA	9	Full Year	6
MAT2200CV	Math II -CPA	CPA	10	Full Year	6
MAT2200HT	Math II -CPA	CPA	10	Full Year	6
MAT2200SP	Math II -CPA	CPA	10	Full Year	6
MAT2200SEI	Math II -CPA	CPA	10	Full Year	6
MAT3200CV	Math III-CPA	CPA	10	Full Year	6
MAT3200HT	Math III-CPA	CPA	10	Full Year	6
MAT3200SP	Math III-CPA	CPA	10	Full Year	6
MAT3200SEI	Math III-CPA	CPA	10	Full Year	6
MAT5101SEI	Math I Topics	CP	All	Semester 1	3
MAT5102SEI	Math II Topics	CP	All	Semester 2	3

**Mathematics I:** The study of Mathematics I includes topics listed in the Massachusetts Curriculum Framework for Mathematics. The unit design follows the Model Integrated Mathematics I Pathway. Course content includes topics in Number and Quantity, Algebra (expressions and equations), Functions (interpreting and building functions), Geometry (congruence), and Statistics and Probability (interpreting data). Additionally, students will develop proficiency in the language of Mathematics.

**Mathematics II:** This study of Mathematics II includes topics listed in the Massachusetts Curriculum Frameworks for Mathematics. The unit design follows the Model Integrated Mathematics II Pathway. Course content includes topics in Number and Quantity (real and complex numbers), Algebra (polynomials and rational expressions), Functions (interpreting and building), Geometry (congruence, similarity, trigonometry), and Statistics and Probability (conditional probability).

**Mathematics III:** This study of Mathematics III includes topics listed in the Massachusetts Curriculum Frameworks for Mathematics. The unit design follows the Model Integrated Mathematics 3 pathway. Unit titles include Functions and Polynomials, Sequences and Series, Statistical Inference, Trigonometry, Analyzing Trigonometric Functions, Complex Numbers and Polynomials, Polynomial and Rational Functions, Exponential, and Logarithmic Functions, and Optimization and Geometric Modeling.

**Math Topics:** These courses review topics in number sense, operations, patterns, relations, algebra, geometry, measurement, data analysis, statistics, and probability. This course is appropriate for students who need additional support in essential skills for MCAS preparation. Students must register for both parts I and II.

SCIENCE					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
SCI1100CV	Introduction to Biology - CP	CP	9	Full Year	6
SCI1100HT	Introduction to Biology - CP	CP	9	Full Year	6
SCI1100SP	Introduction to Biology - CP	CP	9	Full Year	6
SCI1100SEI	Introduction to Biology - CP	CP	9	Full Year	6
SCI2100CV	Biology - CP	CP	10	Full Year	6
SCI2100HT	Biology - CP	CP	10	Full Year	6
SCI2100SP	Biology - CP	CP	10	Full Year	6
SCI2100SEI	Biology - CPA	CPA	10	Full Year	6
SCI5101SEI	Biology Topics	CP	11,12	Semester	3
SCI5205SEI	Chemistry - CPA	CPA	11,12	Full Year	6
SCI5105SEI	Chemistry - CP	CP	11,12	Full Year	6
SCI5106SEI	Human Anatomy and Physiology	CPA	11,12	Semester	3

**Introduction to Biotechnology:** This is the first course in the four-year non-vocational biotechnology pathway. Here students explore the molecular basis of life. Fundamental concepts in biology are learned from an engineering perspective (genetic engineering, synthetic biology, and biomimicry). Students learn not just about biological processes, but how to explore ways to engineer solutions to problems facing humanity. Students generate and analyze data through key laboratory activities which make those concepts transparent, quantifiable, and understandable.

**Biology:** This course focuses on biochemistry, cell structure, and function, photosynthesis, cellular respiration, reproduction, genetics, and human body systems. Students will participate in laboratory experiments, multimedia, hands-on learning activities, and projects. Students will take the Biology MCAs at the end of this course. Additionally, students will develop proficiency in the language of science.

**Biology Topics:** This semester course is aimed at students who need to retake the Biology MCAS. The course will focus on topics that are most common on the Biology MCAS examination and include cell structure, and function, genetics, evolution, human body systems, and ecology. In addition to participating in laboratory experiments, multimedia, hands-on learning activities, and projects, students will also practice past MCAS questions and take MCAS practice examinations. Preference will be given to senior then junior students needing to take this class.

**Chemistry:** This course presents properties of matter, atomic structure, chemical bonding, stoichiometry, solutions, chemical equilibrium, acid/base reactions, nuclear chemistry, and an introduction to organic chemistry. Students are required to develop and present a science fair project. Prerequisites: Students in honors chemistry should have a grade of C minus or better in Honors Biology or teacher recommendation. Geometry/Math II should be taken concurrently.

**Human Anatomy and Physiology:** This course investigates the structure, function, and interdependence of human body systems. Topics covered include the basic organization of the body and major body systems, along with the impact of diseases on certain systems. The course is designed for juniors and seniors who have taken biology and wish to further their study of biology.

SOCIAL SCIENCE					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
SOC1200SEI	US History I CPA	CPA	9	Full year	6
SOC1100SEI	US History I CP	CP	9	Full year	6
SOC1100CV	US History I CP	CP	9	Full year	6
SOC1100HT	US History I CP	CP	9	Full year	6
SOC1100SP	US History I CP	CP	9	Full year	6
SOC2200SEI	US History II CPA	CPA	10	Full year	6
SOC2100SEI	US History II CP	CP	10	Full year	6
SOC2100CV	US History II CP	CP	10	Full year	6
SOC2100HT	US History II CP	CP	10	Full year	6
SOC2100SP	US History II CP	CP	10	Full year	6
SOC5200SEI	World History CPA	CPA	11,12	Full year	6
SOC5100SEI	World History CP	CP	11,12	Full Year	6

**United States History I:** This full year required course for all freshmen examines how conflict and compromise impacted the founding and development of the U.S. between 1754-1877 in the Colonial Era, the Revolutionary Era, the Early Republic, Westward Expansion, the Civil War and Reconstruction. Special attention is given to the definition of who is a citizen and how that definition changes over time.

**United States History II:** The required course for all sophomores, except those taking AP US, explores events, movements, and ideas from 1877 to the present. Beginning with the cause and consequences of the Industrialization of America, students explore reasons for and responses to the move from rural to urban spaces and to the open West. Students study the transition to a manufacturing economy and the movement of people within and outside of the U.S. Students continue with their exploration of the definition of citizenship begun in the U.S. 1 course and examine the many conflicts and compromises within a diverse social and ethnic population. As students explore the Cold War and Modern Challenges students focus on the roles played by the United States in the modern world and their own place as citizen within that context.

**NOTE:** All Students are required to complete a Civic Action Project.

**Modern World History:** The required semester course for juniors, except those taking AP or IB courses, uses a case-study approach to explore the social, political, and economic roots of the modern world. Beginning with the impact of the first world war, students will trace the development of the state, the emergence of leadership, the consolidation of power, the challenges to that power, the treatment of women/minorities and religious groups as well as the impact of domestic and foreign policies on the state. The course concludes with students utilizing the case study format to research a state which is of interest to them.

COMPUTER LITERACY					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
BIL1106	ESL Through 21st Century Computer Applications	N	9	Semester	1.5
BIL5106	ESL Through 21st Century Computer Applications	N	10,11,12	Semester	3
BIL5107	ESL Through Computer Applications 2	N	All	Semester	3

**ESL through 21ST Century Computer Applications:** This course introduces students to Microsoft ® (MS) Office using automated technologies. Students will learn to format business and personal documents and will receive an introduction to the various Microsoft Office applications (Word, Excel, Publisher, PowerPoint, Office 365).

**ESL through 21ST Century Computer Applications:** This course introduces students to Microsoft ® (MS) Office using automated technologies. Students will learn to format business and personal documents and will receive an introduction to the various Microsoft Office applications (Word, Excel, Publisher, PowerPoint, Office 365).

**ESL through Computer Applications 2:** This course furthers develops the skills introduced in 8893A and 8893B.

## CLASSICAL AND MODERN LANGUAGE DEPARTMENT

The Brockton High School Classical and Modern Languages Program incorporates the five strands of the National World-Readiness Standards for Learning Languages and the revised Massachusetts Foreign Languages Curriculum Frameworks: Communication, Cultures, Comparisons, Connections, and Communities and in conjunction with the Common Core State Standards. **All modern language courses will be conducted primarily in the target language utilizing the three modes of communication: interpersonal, interpretive, and presentational.**

Classical and Modern Language classes are designed for non-native speakers of the language. Heritage language speakers may enroll in the first year of a **different** language class from their native language. Those students wishing to pursue studies in their native language must take a placement exam with the Department Coordinator. Heritage Spanish speakers may elect Spanish 1 Heritage Honors by application to the Department Coordinator. Students who are bilingual in English plus Haitian Creole/French, Cape Verdean Creole/Portuguese, and/or Spanish may apply to the Medical Interpretation and Translation Program. Students may also take a placement test through the Department Coordinator to determine the level. All questions should be referred to the Coordinator.

To remain in Honors, a student must maintain a B– or better average, CPA, students must maintain a C– or better average, and all other students will be placed in the CP level. If a student receives an F for a final course grade, he/she may repeat the course only if space allows but ***may NOT take the same course more than twice.***

MANDARIN CHINESE					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
CML5106	Mandarin Chinese I Part II	N	All	Semester	3
CML5101	Mandarin Chinese I CP	CP	9,10,11	Full Year	6
CML5201	Mandarin Chinese I CPA	CPA	9,10,11	Full Year	6
CML5301	Mandarin Chinese I H	H	9,10,11	Full Year	6
CML5102	Mandarin Chinese II CP	CP	All	Semester	3
CML5202	Mandarin Chinese II CPA	CPA	All	Semester	3
CML5302	Mandarin Chinese II H	H	All	Semester	3
CML5203	Mandarin Chinese III CPA	CPA	All	Semester	3
CML5303	Mandarin Chinese III H	H	All	Semester	3
CML5204	Mandarin Chinese IV CPA	CPA	10,11,12	Semester	3
CML5304	Mandarin Chinese IV H	H	10,11,12	Semester	3
CML5205	Mandarin Chinese V CPA	CPA	10,11,12	Semester	3
CML5305	Mandarin Chinese V H	H	10,11,12	Semester	3
CMLAP28	AP Mandarin Chinese	AP	12	Full Year	6
CMLIB01	IB Mandarin Chinese SL Year 1	IB	11	Full Year	3
CMLIB02	IB Mandarin Chinese HL Year 1	IB	11	Full Year	6
CMLIB03	IB Mandarin Chinese SL Year 2	IB	12	Full Year	6
CMLIB04	IB Mandarin Chinese HL Year 2	IB	12	Full Year	6

**Mandarin Chinese I:** Students who study Mandarin Chinese I will learn to communicate in Chinese through practice and presentation in all four skill areas: reading, writing, listening, and speaking. Course content is presented thematically, and students will learn the basics of Mandarin. At least 90% of the class will be conducted in Mandarin.

**Mandarin Chinese II:** Students will continue to learn to communicate in Chinese through practice and presentation. Students will listen to, read, comprehend, write, and speak Chinese with increasing accuracy and fluency. Course content is presented thematically, and students will learn how to order food, arrange transportation, shop for clothes, prepare for a party, discuss sports and weather, and find public places. This class will be conducted in Mandarin.

**Mandarin Chinese III:** Students who study Mandarin Chinese III will continue to learn to communicate in Chinese through practice and presentation in all four skill areas: reading, writing, listening, and speaking. Students will listen to, read, comprehend, write, and speak Chinese with increasing accuracy and fluency. Course content is presented thematically, and students will learn how to discuss moving, performances, and city development. This class will be conducted in Mandarin.

**Mandarin Chinese IV:** Students who study Mandarin Chinese IV will continue to learn to communicate in Chinese through practice and presentation in all four skill areas: reading, writing, listening, and speaking. Students will listen to, read, comprehend, write, and speak Chinese with increasing accuracy and fluency. Course content is presented thematically, and students will learn about banking systems, travel, movies, and beauty products. This class will be conducted in Mandarin.

**Mandarin Chinese V:** Students who study Mandarin Chinese V will continue to learn to communicate in Chinese through practice and presentation in all four skill areas: reading, writing, listening, and speaking. Students will listen to, read, comprehend, write, and speak Chinese with increasing accuracy and fluency. Course content is presented thematically, and students will learn about identity, home, and social relationships and experiences. This class will be conducted in Mandarin.

**AP Chinese Language and Culture:** The goal of the Advanced Placement Chinese class, as set forth by the College Board, is for students to achieve a high level of proficiency in the four language skills established by the ACTFL Proficiency and the World-Readiness Standards for Learning Languages. Upon completing the course, students are expected to be able to speak, listen, and read and write characters with a high level of proficiency. Students will be required to take the Chinese Language and Culture Advanced Placement Exam in May. **Prerequisite:** A B+ or better in Chinese IV or V Honors classes or an A- or better in Chinese IV or V College Preparatory Advanced level language classes. Teacher recommendation, application, and Coordinator approval. This class will be conducted in Mandarin.

**IB Mandarin Chinese I: (IB Year 1 Language B—SL/HL):** In the first year of this two-year course, students will study a variety of topics to develop their Mandarin Chinese language skills and cultural awareness. Students will work to become proficient communicators of Chinese and will be encouraged to expand their views of the world and its people. **Prerequisite:** Successful completion of Year 3 or above Mandarin language classes, application, and Coordinator approval. This class will be conducted in Mandarin.

**IB Mandarin Chinese II:** (IB Year 2 Language B SL/HL): In the second year of this two-year course, students will continue their studies of the Chinese-speaking world and their development of language skills. Also, they will develop a sense of self-awareness and the skills to become lifelong learners and contributing members of our ever-changing world. ***Prerequisites:*** Completion of IB Mandarin Chinese I

LATIN					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
CML5111	Latin I CP	CP	9,10,11	Full Year	6
CML5211	Latin I CPA	CPA	9,10,11	Full Year	6
CML5311	Latin I H	H	9,10,11	Full Year	6
CML5112	Latin II CP	CP	All	Semester	3
CML5212	Latin II CPA	CPA	All	Semester	3
CML5312	Latin II H	H	All	Semester	3
CML5213	Latin III CPA	CPA	All	Semester	3
CML5313	Latin III H	H	All	Semester	3
CML5214	Latin IV CPA	CPA	10,11,12	Semester	3
CML5314	Latin IV H	H	10,11,12	Semester	3
CML5215	Latin V CPA	CPA	10,11,12	Semester	3
CML5315	Latin V H	H	10,11,12	Semester	3
CMLIB11	IB Latin SL Year 1	IB	11	Full Year	3
CMLIB12	IB Latin HL Year 1	IB	11	Full Year	6
CMLIB13	IB Latin SL Year 2	IB	12	Full Year	6
CMLIB14	IB Latin Year 2	IB	12	Full Year	6

**Latin I:** Students who study Latin I will learn to communicate in Latin through practice and presentation in all four skill areas: reading, writing, listening, and speaking. These activities will be modified from traditional language studies to fit into a classical classroom. Students will study from the Lingua Latina series.

**Latin II:** Students who study Latin II will learn to communicate in Latin through practice and presentation in all four skill areas: reading, writing, listening and speaking. These activities will be modified from traditional language studies to fit into a classical classroom. Students will study from the Lingua Latina series.

**Latin III:** Students who study Latin III will learn to communicate in Latin through practice and presentation in all four skill areas: reading, writing, listening, and speaking. These activities will be modified from traditional language studies to fit into a classical classroom. Students will study from the Lingua Latina series.

**Latin IV:** Students who study Latin IV will learn to communicate in Latin through practice and presentation in all four skill areas: reading, writing, listening, and speaking. These activities will be modified from traditional language studies to fit into a classical classroom. Students will learn about the Greek Heroes Perseus and Hercules.

**Latin V:** Students will continue to develop reading, writing, and translating skills in Latin through the Wheelock series. The course includes extensive new vocabulary and a review of advanced grammatical structures.



**Latin Literature:** This course includes selected readings from a variety of authors both ancient and contemporary. Students will explore a variety of themes including love, friendship, betrayal, etc. Consider modern Latin novellas in the context of ancient themes. Students will continue to refine their translation and literary analysis skills. Students will have extensive practice in sight reading Latin texts and in writing analytical essays and reflections about the literature.

**Prerequisite:** Completion of Latin V. This class will be scheduled as an independent study.

**IB Latin I:** (IB Year 1 – Language B – Standard Level/High Level): The goal of IB Latin is for students to gain an understanding and appreciation of the language, literature, and culture of the classical age and its impact on modern cultures and languages through the reading and analysis of both epic literature and love poetry. In their Junior year, students are expected to examine, comprehend, interpret, and translate the writings of Ovid, specifically *Metamorphoses* and *Amores*. This course will prepare students for the second full year in which students will participate in the external assessment given by the International Baccalaureate Diploma Programme. **Prerequisite:** Successful completion of Latin II or above language classes, teacher recommendation, application, and Coordinator approval.

**IB Latin II:** (IB Year 2 – Language B – Standard Level/High Level): The goal of IB Latin is for students who have completed IB Latin-Junior Year to gain an understanding and appreciation of the language, literature, and culture of the classical age and its impact on modern cultures and languages through the reading and analysis of both epic literature and love poetry. In the senior year, students are expected to examine, comprehend, interpret, and translate the writings of Vergil, Catullus, and Horace. Students will be required to sit for the IB Latin B Standard Level examination in May. **Prerequisites:** Successful completion of IB Latin I.

SPANISH					
COURSE	TITLE		YEAR	TERM	CREDITS
CML5120	Spanish I Topics	CP	All	Semester	3
CML5121	Spanish I CP	CP	All	Full Year	6
CML5221	Spanish I CPA	CPA	All	Full Year	6
CML5321	Spanish I H	H	All	Full Year	6
CML5122	Spanish II CP	CP	All	Semester	3
CML5222	Spanish II CPA	CPA	All	Semester	3
CML5322	Spanish II H	H	All	Semester	3
CML5223	Spanish III CPA	CPA	All	Semester	3
CML5323	Spanish III H	H	All	Semester	3
CML5224	Spanish IV CPA	CPA	10,11,12	Semester	3
CML5324	Spanish IV H	H	10,11,12	Semester	3
CML5225	Spanish V CPA	CPA	10,11,12	Semester	3
CML5325	Spanish V H	H	10,11,12	Semester	3
CMLAP87	AP Spanish	AP	10,11,12	Full Year	6
CMLIB21	IB Spanish SL Year 1	IB	11	Full Year	3
CMLIB22	IB Spanish HL Year 1	IB	11	Full Year	6
CMLIB23	IB Spanish SL Year 2	IB	12	Full Year	6
CMLIB24	IB Spanish HL Year 2	IB	12	Full Year	6
CML5306	Spanish Heritage I	H	All	Semester	3
CML5307	Spanish Heritage II	H	All	Semester	3
CML5308	Spanish Cinema	H	10,11,12	Semester	3
CML5309	Spanish Through Music & Dance	H	10,11,12	Semester	3

**Spanish I Topics:** This class is for students who have passed two terms of Spanish I, but failed the course overall. Students who study Spanish I will learn to communicate in Spanish through practice and presentation in all four skill areas: reading, writing, listening and speaking. The curriculum is the same as Spanish I, but a review for students to re-learn in a shorter time frame.

**Spanish I:** Students who study Spanish I will learn to communicate in Spanish through practice and presentation in all four skill areas: reading, writing, listening, and speaking. Course content is presented thematically with cultural aspects woven throughout. Students will learn about school, family, food, celebrations, activities, travel and weather, health and wellness, residences, and shopping. At least 90% of the class will be conducted in Spanish.

**Spanish II:** Students who study Spanish II will learn to communicate in Spanish through practice and presentation in all four skill areas: reading, writing, listening, and speaking. Course content is presented thematically with cultural aspects woven throughout. Students will learn about daily routines, the community, travel and transportation, professions, and job training. This class will be conducted in Spanish.

**Spanish III:** Students who study Spanish III will learn to communicate in Spanish through practice and presentation in all four skill areas: reading, writing, listening, and speaking. Course content is presented thematically with cultural aspects woven throughout. Students will learn about childhood, medicine, natural disasters, and people who have changed the world. This class will be conducted in Spanish.

**Spanish IV:** Students who study Spanish IV will communicate in Spanish through practice and presentation in all four skill areas: reading, writing, listening, and speaking. Course content is presented in the form of short stories, with grammar and culture presented naturally in the stories. The class will be conducted in Spanish.

**Spanish V:** Students will be able to choose 5 of the 6 AP Spanish themes to learn about in the course. Extensive new vocabulary and advanced grammatical structures will be presented and reviewed. The class will be conducted in Spanish.

**Advanced Placement Spanish:** The goal of the Advanced Placement Spanish class, as set forth by the College Board, is for students to achieve a high level of proficiency in the four language skills established by the ACTFL Proficiency Guidelines and the National Standards for Foreign Language Learning. Upon completing the course, students are expected to be able to comprehend formal and informal Spanish and to speak, read and write with a high level of proficiency. Students will be required to take the Spanish Language Advanced Placement Exam in May. **Prerequisite:** B+ or better in Spanish IV or V Honors, or an A- or better in Spanish IV or V College Preparatory Advanced level language classes, teacher recommendation, application, and Coordinator approval. The class will be conducted in Spanish.

**IB Spanish I:** (IB Year One – Language B – Standard Level/High Level): In the first year of this two-year course, students will study a variety of topics to develop their Spanish-language skills and cultural awareness. They will also develop their speaking skills through oral presentations, both informal and formal. Students will work to become proficient communicators of Spanish and will be encouraged to expand their views of the world and its people. **Prerequisites:** Successful completion of Spanish 3, teacher recommendation, and Coordinator approval. The class will be conducted in Spanish.

**IB Spanish II:** (IB Year Two – Language B – Standard Level/High Level): In the second year of this two-year course, students will continue their studies of the Spanish-speaking world and their development of language skills. Students will develop a sense of self-awareness and the skills to become lifelong learners and contributing members of our ever-changing world. Students will be required to sit for the IB Spanish B Standard Level examination in May. **Prerequisites:** Completion of IB Spanish I

**Spanish Heritage I and II Honors:** These courses are for native Spanish speakers or Two-Way Students. Students who study Spanish I Heritage will learn to communicate effectively in Spanish through practice and presentation in all four skill areas: reading, writing, listening, and speaking. This high-level, intensive course is designed to develop and refine linguistic and cultural skills while formally advancing students' knowledge of extended vocabulary, mechanics of the language, and grammatical structures. Authentic materials will be used. The goal of the heritage language learners' sequence is to provide students the opportunity to become fully bilingual and biliterate in our global environment and eventually advance to the IB, AP, or Medical Interpretation courses offered at BHS. **Admission to this course is by proficiency exam with the Classical and Modern Language Department Coordinator. Students must pass Spanish Heritage I in order to continue to Spanish Heritage II.**

**Spanish Cinema:** In this elective course, students will view Spanish and Latin American cinema, considering these cultural productions in conjunction with current events and social issues. Students will analyze the cinematic and technical style of the films, write reviews, and debate and discuss the social issues presented. All films are in Spanish and have been pre-selected and pre-screened by the Department Coordinator. This high-level, intensive course is designed to further develop and refine linguistic and cultural skills and knowledge.

**Prerequisites:** Completion of Spanish 4 with a B or better. The class will be conducted in Spanish.

**Spanish Through Music and Dance:** In this elective course, students will communicate effectively in Spanish. Course content will be thematic, and students will learn about the music, instruments, and dance steps for the flamenco, tango, merengue, bachata, salsa, cumbia, Spanish pop, and reggaetón. **Prerequisites:** Completion of Spanish 3 with a B or better. The class will be conducted in Spanish.

MEDICAL INTERPRETATION AND FRENCH					
COURSE	TITLE		YEAR	TERM	CREDITS
CML3301	French/Haitian Medical Interpretation I	H	11	Semester	3
CML3302	Portuguese/Cape Verdean Medical Interpretation I	H	11	Semester	3
CML3303	Spanish Medical Interpretation I	H	11	Semester	3
CML4301	French/Haitian Medical Interpretation II	H	12	Full Year	6
CML4302	Portuguese/Cape Verdean Medical Interpretation II	H	12	Full Year	6
CML4303	Spanish Medical Interpretation II	H	12	Full Year	6
CML4304	8-10 Hour Medical Interpretation Internship	H	12		1.5
CMLIB31	IB French ab initio Year 1	IB	11	Full Year	3
CMLIB32	IB French ab initio Year 2	IB	12	Full Year	3

### Medical Interpretation and Translation I

**French/Haitian Creole, Portuguese/Cape Verdean Creole, Spanish:** The goal of this course is to prepare bilingual high school students for interpreting in the workforce. Students will develop an understanding of interpreting standards of practice, concepts, and protocols, consistently improve interpreting skills, and learn to self-assess linguistic and cultural knowledge and limitations. Units of study include 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. **NOTE:** Students will begin the study of Medical Interpretation and Translation in semester two of their junior year and will continue for a full year of senior year. Application for Coordinator Approval. **\*Internship participation is strongly recommended for the second part of this course. This course is by application only.**

## **Medical Interpretation and Translation II**

**French/Haitian Creole, Portuguese/Cape Verdean Creole, Spanish:** This course is a continuation of Medical Interpretation and Translation I. Students will continue to develop an understanding of interpreting standards of practice, concepts, and protocols, consistently improve interpreting skills, and learn to self-assess linguistic and cultural knowledge and limitations.

**Prerequisite:** Medical Interpretation and Translation I with teacher recommendation and Coordinator approval. **\*Internship participation is strongly recommended for this course.**

**Medical Interpretation Internship:** Placement at a local medical facility is available for an eight-to-ten-hour job shadow/internship for one-half credit to be completed in conjunction with Medical Interpretation II.

**IB French *ab initio* Years 1 and 2:** (IB – Language B – Standard Level): In this two-year course, the focus will be on the development of language proficiency and cultural awareness. This is a language acquisition course *for students with little or no experience with the French language*. In this course, interactive, productive, and receptive skills are developed through the contextualized study of language, text, and themes. **Prerequisites:** IB application and Coordinator approval.

## CAREER AND TECHNICAL EDUCATION DEPARTMENT (CTE)

The following charts are designed to assist parents and students in selecting courses that align with specific careers. Students do not need ALL THE COURSES as the charts represent suggested courses.

Students are encouraged to take dual enrollment courses while in high school to further advance their education and/or their career exploration. Between junior and senior years dual enrollment courses can help students earn up to 12 college credits in addition to high school credits. These opportunities are offered at various colleges, including our local community college. In some instances, courses are offered on-site at BHS. Ask your counselor.

### BUSINESS AND CONSUMER EDUCATION

BUSINESS AND CONSUMER EDUCATION					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
CTE5101	Introduction to Business	N	ALL	Semester	1.5
CTE5102	Principles of Finance	N	10,11,12	Semester	1.5
CTE5303	Finance Analytics	H	11,12	Semester	3
CTE5104	Principles of Marketing	N	10,11,12	Semester	3
CTE5305	Marketing Analytics	H	11, 12	Semester	3
CTE5106	Automated Accounting I	N	11, 12	Semester	3
CTE5307	Automated Accounting II	H	11, 12	Semester	3
CTE5108	Business and Personal Law	N	10,11,12	Semester	3
CTE5309	Principles of Management	H	11, 12	Semester	3
CTE5310	Business Management: Capstone	H	11,12	Semester	3

Career Interest	Marketing	Finance	Accounting	Management Business Administration
Recommended Courses	Intro to Business Principles of Marketing Marketing Analytics Business/Personal Law DECA	Intro to Business Principles of Finance Financial Analytics Business/Personal Law DECA Banking Training Banking Internship	Intro to Business Automated Accounting I Automated Accounting II (**) Business/Personal Law	Intro to Business Principles of Management Business Management (Capstone) Business/Personal Law
Useful courses	21 <sup>st</sup> -Century Computer Applications	21 <sup>st</sup> -Century Computer Applications Automated Accounting	21 <sup>st</sup> -Century Computer Applications	21 <sup>st</sup> -Century Computer Applications

(\*\*) Interested Students can pursue a Tax Preparer Certification through Massasoit Community College

**Introduction to Business:** This course provides opportunities to learn and experience a variety of topics in the field of business. Students are exposed to various economies, their roles in our economy, entrepreneurship, marketing, management, etc. Course activities involve students in writing, investigating, problem-solving, demonstrating, and creating. **NOTE: This course must be taken before taking any other Business Courses.**

**Principles of Finance:** Students will be introduced to a variety of personal finance topics including career exploration, budgeting, banking and investing, credit, taxes, and insurance. In addition to independent and collaborative assignments, students will be required to participate in real-world simulations, regular class discussions, and journal reflections. Class participation is an important element of this course and will be reflected in students' grades. This course has been aligned with the Massachusetts Curriculum Frameworks for Mathematics, The National Business Education Standards, and the BHS Literacy Goals. **Prerequisite:** C or better in Introduction to Business.

**Finance Analytics:** This course provides opportunities to learn and experience a variety of topics in the finance area. Students are exposed to various economies, their roles in our economy, investments, etc. Course activities involve students in writing, investigating, problem-solving, demonstrating, and creating. **Prerequisite:** B or better in Principles of Finance, Auto Accounting I and/or II.

**Principles of Marketing:** This course provides opportunities to learn and experience a variety of topics in marketing. Students are exposed to The 4Ps of Marketing- price, product, place, and promotion. Course activities involve students collaborating in teams, creating content/presentations, and making connections. Students will also utilize an online learning environment, provided through the Schoology platform. **Prerequisite:** C or better in Introduction to Business.

**Marketing Analytics:** This course provides opportunities to learn and experience a variety of topics in marketing. Students are exposed to The 4Ps of Marketing- price, product, place, and promotion. Course activities involve students collaborating in teams, creating content/presentations, and making connections. This course will require students to implement strategies learned through the semester-long project. **Prerequisite:** B or better in Principles of Marketing.

**Automated Accounting I:** This course teaches students the basic accounting practices and procedures for operating a small service business. Concepts taught will include journalizing and posting transactions, preparation of financial statements, petty cash, and payroll. In addition, students will learn about ethics and social responsibility related to business management. **Prerequisite:** C or better in Introduction to Business.

**Automated Accounting II:** In Accounting 2, students begin to learn how merchandise businesses differ from service businesses when doing accounting. A major concept students will learn in the course is inventory management and the systems companies use. Business ethics as it relates to theft, reporting inventory, and tracking inventory are all covered in this course. Accounting 2 builds on the foundation of Accounting I. **Prerequisite:** B or better in Automated Accounting I or teacher recommendation.

**Business and Personal Law:** Business and Personal Law will provide an understanding of our Constitution, judicial system, and the laws affecting the business world and the consumer. The course stresses ethical decision-making, the importance of one's legal duties, obligations, and liabilities, as well as desirable personal traits such as respect for the law, tolerance, and a sense of obligations of citizenship. This course has been aligned following the NCTM Standards, NBEA Computation Standards, and the Massachusetts Curriculum Framework Standards.

**Principles of Management:** Students will learn the difference between People Management in Business Administration and Human Resources Management. Students will identify their strengths as well as those aspects that require significant personal development and growth for a potential manager position in the future. Students will gain a deeper understanding of this role by developing critical and reflective skills. ***Prerequisite:*** C or better in Introduction to Business.

**Business Management: Capstone:** Students will learn about Systems Theory as it applies to the concept of Operation Systems in Business Administration. Students will learn the impact that decision-making has at every step of the production chain. Students will become familiar with the various components of a chain supply. They will learn various strategies from control charts to business applications and digital tools to illustrate operations. ***Prerequisite:*** C or better in Principles of Management.

## COMMUNICATION DESIGN

COMMUNICATION DESIGN					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
CTE5110	Graphic Design Experience	N	9,10,11	Semester	1.5
CTE5111	Web Design I	N	10, 11	Semester	1.5
CTE5112	Web Design II	N	10, 11	Semester	1.5
CTE4113	Web Design III: Capstone	N	12	Semester	3
CTE5114	Digital Publishing I	N	10, 11	Semester	1.5
CTE5115	Digital Publishing II	N	11, 12	Semester	1.5
CTE4116	Digital Publishing III	N	12	Full Year	6

Career Interest	WEB DESIGN	WEB DEVELOPMENT	DIGITAL MEDIA PUBLISHING
<b>Recommended courses</b>	Graphic Design Experience Web Design I Web Design II Web Design III: Capstone	Graphic Design Experience Web Design I Web Design II Web Design III: Capstone	Graphic Design Experience Digital Publishing I Digital Publishing II Digital Publishing III (YEARBOOK)
<b>Useful courses</b>	21 <sup>st</sup> -Century Computer Applications Digital Imaging	21 <sup>st</sup> -Century Computer Applications Digital Imaging	21 <sup>st</sup> -Century Computer Applications Graphic Design Experience Digital Photography Digital Imaging



**Graphic Design Experience:** This course is designed to provide students with an introduction to design basics and gain an understanding of design elements, design principles, and the design process. Students will also gain a basic knowledge of design software, like Adobe Photoshop, Adobe Illustrator, and other graphics tools. Students will be challenged to create mock advertisements for magazines, packaging, books, and other graphics projects. Students will also learn to cooperate in a team setting.

**Web Design I:** This course will focus on the front-end aesthetic and usability of Web Design. Students will be introduced to design (UI) User Interface. UI brings together concepts from interaction design and information architecture. Students will learn how to develop a website brand from both visual (artistic) and messaging perspectives (content). Students expand their knowledge of programs Adobe Photoshop, Illustrator, and more. ***Prerequisite:*** C or Better in Graphic Design Experience or Digital Imaging.

**Web Design II:** Students will move from the front and UI to the backend (coding) development of a site. Students will continue developing their skills in the construction of a website brand from both visual (artistic) and messaging perspectives (content). Students will be introduced to the basic HTML and CSS languages, as well as basic tools to design a website. The following web design software and authoring tools will be covered: Adobe Photoshop, Illustrator, and Dreamweaver. Students should enroll in Code Lab for additional practice. Front-end tools covered: Adobe Photoshop and Dreamweaver. ***Prerequisite:*** B or better in Web Design I

**Web Design III: Capstone:** In this project-based seminar students will develop skills learned in Web Design and/or Web Development. With the support and guidance of their instructors, students will work in production teams to design and develop a website from concept to creation. This is an intense course that may require that students also enroll in Code Lab to further develop their digital language skills. Participants will learn first-hand the various roles and responsibilities in a production team. The goal is to generate a final capstone and explore specific careers in web design and web development. ***Prerequisite:*** B or better in Web Design II; Students must complete a program application.

**Digital Publishing I:** This course is designed to teach Desktop Publishing through Adobe Illustrator, and Adobe InDesign. Students will learn about typesetting to produce published documents such as brochures, newspapers, business cards, flyers, magazines, catalogs, newsletters, and web page content. ***Prerequisite:*** C or Better in Graphic Design Experience

**Digital Publishing II:** This is the second out of two courses designed to teach Desktop Publishing through Adobe Illustrator, and Adobe InDesign. Students will learn about typesetting to produce published documents such as brochures, newspapers, business cards, flyers, magazines, catalogs, newsletters, and web page content. ***Prerequisite:*** B or better in Digital Publishing I

**Digital Publishing III: Capstone:** Throughout this full-year capstone course, students who passed a minimum of two courses in the Media Communications Pathway with a B or better will have the opportunity to work on school and community-based projects. Students will use the software and assume several roles and responsibilities to produce various projects. ***Prerequisite:*** B or better in Digital Publishing II. Students must complete a Digital Publishing III application.

## AUTOMATION (CAD/CAM), COMPUTER SCIENCE, AND INFORMATION TECHNOLOGY

AUTOMATION					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
CTE5120	Auto CAD (Computer Aided Design)	N	10,11,12	Semester	3
CTE5121	3-D Modeling I	N	11, 12	Semester	3
CTE5122	3-D Modeling II	N	11, 12	Semester	3
CTE5123	Architectural Design and BIM	N	11, 12	Semester	3

COMPUTER SCIENCE					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
CTE2331	Computer Science Essentials	H	10	Full Year	6
CTE3332	Computer Science Principles	H	11	Full Year	6
CTE4333	Cybersecurity	H	12	Full Year	6

Career Interest	INFORMATION TECHNOLOGY CISCO Networking Academy	COMPUTER SCIENCE	COMPUTER-AIDED DESIGN (CAD)	COMPUTER-AIDED MANUFACTURING (CAM) MACWIC
Recommended courses	CISCO Academy I-IV Software A+ Hardware A+ Cyber Security	Project Lead The Way Computer Science Essentials Cybersecurity	Auto CAD 3-D Modeling I 3-D Modeling II Architectural Design and BIM	Engineering and Manufacturing Engineering Drawing (Blueprint Reading) Auto CAD
Useful courses	21 <sup>st</sup> -Century Computer Applications Electronics	21 <sup>st</sup> -Century Computer Applications	21 <sup>st</sup> Century Computer Applications	21 <sup>st</sup> -Century Computer Applications Engineering and Manufacturing

**Auto CAD:** AutoCAD or Automated Computer-Aided Design is the gateway course for students who would like to pursue engineering in the future. AutoCAD introduces students to computer drawing skills that will be the basis for their understanding of more complex 3-D modeling programs. This course focuses on the concept of visualization- commonly called Engineering Graphics. **Prerequisite:** Interest in CAD and 3-D Modeling

**3-D Modeling I:** In this course, students will explore 3-D modeling software and learn the essential skills needed to design multi-part consumer products. Typical projects will include toys, jewelry designs, timepieces, and car designs. This course will allow students to generate digital portfolios by using image rendering, animations, and 3-D PDF files. 3-D printing will be also introduced. **Prerequisite:** C or Better in Auto CAD

**3-D Modeling II:** Students will focus on designing multi-parts-mechanical devices and research-based design. Advanced functions, such as 3-D sketching, freeform sculpting, and derived parts, will be studied. Students will also be introduced to virtual material testing (loads, pressure, moment, and eco-materials), and 3-D printing, including troubleshooting, will be studied in more detail at this level. **Prerequisite:** C or Better in 3-D Modeling I

**Architectural Design and BIM:** This is an introductory course that explores the principles, processes, and practices of architectural design. Through a combination of lectures, discussions, readings, and hands-on design projects, students will develop foundational knowledge and skills in architectural design, including spatial awareness, design principles, construction systems, and building materials. Emphasizing creativity, critical thinking, and problem-solving, this course will guide students through the iterative process of conceptualizing, developing, and communicating architectural designs. Topics covered include site analysis, programming, schematic design, design development, and presentation techniques. Students will explore various architectural styles, historical precedents, and contemporary trends, while considering social, cultural, environmental, and ethical dimensions of architectural practice. By the end of the course, students will have gained a deeper understanding of the role of architecture in shaping the built environment and will have produced a portfolio of architectural design projects demonstrating their skills and creativity.

**Cybersecurity:** This is the final course in the Computer Science Pathway. Students in Cybersecurity apply their knowledge of coding and computational thinking to seek out vulnerabilities in data storage systems and online commerce sites. Students then design solutions to increase safety and protection. Whether seeking a career in the growing field of cybersecurity or learning to defend their own personal data, students will establish an ethical code of conduct while proactively defending data in today's complex cyber world.

**Computer Science Principles:** Using Python® as a primary tool, students explore and become inspired by career paths that utilize computing, discover tools that foster creativity, and collaboration, and use what they have learned to tackle challenges such as application development and simulations.

**Computer Science Essentials:** In Computer Science Essentials, students begin by using visual, block-based programming to build their computational thinking skills. Then, students start coding with text-based programming languages such as Python, create apps, and develop websites just like professional developers. Students continue to work with classmates like a team of developers, participating in a “scrum” to develop an app, computing device, or text-based code that solves a problem they or their community are facing.

## ENGINEERING TECHNOLOGIES PATHWAY

ENGINEERING TECHNOLOGIES					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
CTE5141	Introduction to Engineering Design	N	9, 10	Full Year	6
CTE5142	Computer Integrated Manufacturing	N	9, 10	Full Year	6
CTE5143	Civil Engineering and Architecture	N	9,10,11	Full Year	6
CTE5144	Engineering and Manufacturing (MACWIC)	N	All	Semester	3
CTE5145	Engineering Blueprint Reading (MACWIC)	N	10,11,12	Semester	3
CTE5146	Auto Care and Maintenance	N	11, 12	Semester, Alt Days	1.5

Career Interest	Project Lead the Way	Architecture and Civil Engineering	Aviation
Recommended courses	Introduction to Engineering Design Computer Integrated Manufacturing Civil Engineering and Architecture	AutoCAD 3-D Modeling I 3-D Modeling II	Launching into Aviation Exploring Aviation and Aerospace Introduction to Flight Aircraft Systems and Performance The Flying Environment Flight Planning
Useful courses	21 <sup>st</sup> -Century Computer Applications AutoCAD 3-D Modeling I 3-D Modeling II	21 <sup>st</sup> -Century Computer Applications AutoCAD 3-D Modeling I 3-D Modeling II	21 <sup>st</sup> -Century Computer Applications AutoCAD 3-D Modeling I 3-D Modeling II

**Introduction to Engineering Design:** Students will learn in-depth about the engineering design process, applying math, science, and engineering standards. They will work both, individually and in teams designing solutions for a variety of problems using 3D modeling software and documenting their work daily in a notebook.

**Computer Integrated Manufacturing:** Students discover and explore manufacturing processes, product design, robotics, and automation, and then they apply what they have learned to design solutions for real-world manufacturing problems.

**Civil Engineering and Architecture:** Students learn important aspects of building and site design and development, and then they apply what they know to design a commercial building.

**Engineering and Manufacturing (MACWIC):** This course serves as an introduction to the principles, methodologies, and technologies employed in engineering and manufacturing processes. It provides students with a comprehensive understanding of the fundamental concepts that underpin modern manufacturing practices, including design, production, quality control, and optimization.

**Engineering Blueprint Reading (MACWIC):** This course is designed to provide students with the foundational knowledge and skills necessary to read, interpret, and analyze engineering blueprints and technical drawings. Understanding engineering blueprints is essential for professionals across various disciplines, including mechanical engineering, civil engineering, architecture, and construction

**Automobile Care and Maintenance:** This course will provide students with a basic understanding of how an automobile operates, how to select and purchase a quality automobile, how to care for it, and how to research and purchase quality repairs. Instruction will include safety, proper use of automotive tools and equipment, and so-called ‘Do-it-Yourself’ repairs. Auto Care and Maintenance students may participate in demonstrations on live vehicles and must provide themselves with a pair of instructor-approved shoes with leather uppers and oil-resistant soles before working on any vehicles.

## OFFICE TECHNOLOGIES

OFFICE TECHNOLOGIES					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
CTE1151	21st Century Computer Applications	N	9	Semester	1.5
CTE1152	MOS Word	N	11, 12	Semester	3
CTE1153	MOS Excel	N	11, 12	Semester	3

Career Interest	Computer Applications	MS Word	MS Excel
Recommended courses	21 Century Computer Applications MS Word*** MS Excel***	MS Word ***	MS Excel ***
Useful courses		21 <sup>st</sup> -Century Computer Applications	21 <sup>st</sup> -Century Computer Applications Intro to Business Auto Accounting 1

\*\*\*Students interested in obtaining certifications as Microsoft Office Specialist (MOS) in either application (Word or Excel) must register independently for the certification test (there is an associated fee for each test) and must have transportation arranged for the day of the test to and from the test location.

**21st Century Computer Applications:** This course introduces students to keyboarding and Microsoft® (MS) Office using automated technologies. Students will reinforce keyboarding skills using correct finger positioning to gain speed and accuracy. Following successful completion of the touch-type method; students will learn how to format business and personal documents preparing them for professional life. Additionally, students will receive an introduction to the various MS Office applications [Word, Excel, Publisher, PowerPoint, Access, and Office 365]. Students will gain an understanding of Acceptable Use Policies via a Digital Literacy overview. This course has been aligned to NCTM standards, NBEA computation standards, and the Massachusetts Technology Literacy Standards.

**Microsoft Office Specialist (MOS) Word:** This course will introduce all aspects of Word included in the Microsoft Specialist exam. For the Word 2016 exam students must be able to create and manage documents, format texts, paragraphs, and sections, create tables and lists, create and manage references, and insert and format graphic elements. **Prerequisite:** C or better in 21<sup>st</sup> Century Computer Applications.

**Microsoft Office Specialist (MOS) Excel:** This course is designed for students interested in the business field to enhance their skills and prepare them for careers that require Microsoft Excel knowledge. This course offers a broad overview of all spreadsheet applications and the creation of charts and graphs that represent data collection. Formulas and data organization will be covered as well. Excel is used worldwide by all business organizations, therefore students interested in business should pursue this course. **Prerequisite:** C or better in 21<sup>st</sup> Century Computer Applications

## HEALTHCARE PATHWAYS

HEALTHCARE PATHWAYS					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
CTE1161	Introduction to Healthcare	N	9	Semester	1.5
CTE2362	Health Assisting I	H	10	Full Year	6
CTE3362	Health Assisting II	H	11	Full Year	6
CTE4362	Health Assisting III: Nurse Assistant Training	H	12	Full Year, Alt Days	6
CTE5365	Health Assistant Externship	H	11, 12	Semester	1.5
SCI1301	Intro to Biotechnology H	H	9	Full Year	6
SCI1201	Intro to Biotechnology CPA	CPA	9	Full Year	6
SCI2301	Biotechnology II - H	H	10	Full Year	6
SCI2201	Biotechnology II - CPA	CPA	10	Full Year	6
CTE3163	Medical Office Management I and II		11	Full Year	6
CTE5160	Dual Enrollment Opportunity				

**Introduction to Healthcare:** This course provides an introductory overview of the nursing profession, its historical evolution, core principles, and essential skills. Students will explore the foundational concepts of nursing practice, including health promotion, disease prevention, patient-centered care, and the role of nurses within interdisciplinary healthcare teams. Through a combination of theoretical knowledge and practical applications, students will develop a solid foundation for further studies and professional practice in nursing.

**Health Assisting I:** An introductory course that will help students understand the skills, attitudes, and behaviors needed in health assisting and related professions. In health and medical assisting professions, students must have a good understanding of clinical terms, human physiology, pathological diseases, procedures, and protocols.

**Health Assisting II:** This course explores health assisting and its related tasks as it walks students through the study of body systems and their common diseases and disorders. The students will gain an understanding of the specific health-assisting skills associated with these conditions. **Prerequisite:** C+ or better in 766 Health Assisting I.

**Health Assisting III: Nurse Assistant Training:** Students will explore diseases and disorders that are connected with select body systems with an emphasis on the specialized nursing assistant. Students will learn procedures and skills to pass the **Home Health Aide** test with **CPR & First Aid** and enable them to become eligible to take the CNA test. Prepares students to test for the Massachusetts Department of Public Health Certification exam for Nursing Assistants and gain a Certified Nursing Assistant (CNA) Certificate.

To become eligible for the **CNA practicum** students must achieve a 100% level of care rating in each of the nursing competencies by demonstrating approved methods of patient care and delivery procedures, passing the course requirements with no less than an 80% (B-) for a final grade, and have a recent tuberculosis test with negative results. This practicum will be offered off-site during non-school hours. This course is registered by the Department of Public Health and must comply with regulations including limiting enrollment to ten students per instructor. Seniors will be given priority status. Students will be selected by the highest grade point

average earned in course 767 in case of a tie. Students who take this course commit to clinical training (practicum).

Expenses related to acquiring the CNA Certification such as clinical apparel, examination fee, tuberculosis test, and any additional practicum fees (i.e., transportation) are the responsibility of the student.

**Prerequisite:** B (80%) or better in 767 Health Assisting II. Application and Instructor approval is required. Given the intense nature of this training and its related clinical practicum, students cannot have an F in department and must have good attendance.

**\*\*This course can be used to satisfy health graduation requirements.**

**Health Assistant Externship:** The goal of this course is to provide an opportunity for Junior/Senior students who have completed courses 767 and 768 to become teaching assistants in either 766 or 767. Assistants will serve as an extension of the classroom teacher. The extern will be responsible for the preparation and demonstration of procedures. Students will also provide feedback and support to students for individual student-procedure demonstrations under the supervision of the teacher. **Prerequisite:** To have completed **767** and/or **768** and instructor approval.

**Innovation Pathways: Healthcare Biotech I:** This introduction to the world of biotechnology is the first course in the Innovation Pathways: Healthcare track. Students will be introduced to the four major fields of biotechnology: forensics, energy, health, and agriculture. Students will learn using modern laboratory techniques and debate from diverse positions. Students will complete career exploration activities that relate to various careers in the Healthcare industry. Students are required to develop and present a 9<sup>th</sup> Grade Science Expo project. **NOTE:** Students must complete an application to be eligible to participate in the program.

**Innovation Pathways: Healthcare Biotech II:** The Second course in the Innovation Pathways: Healthcare program focusing on the biotechnological applications of biochemistry, cell structure, and function, photosynthesis, cellular respiration, reproduction, evolution, genetics, and the human body systems. Students will gain a better understanding of themselves and the basic life processes by participating in laboratory experiments, multimedia, hands-on learning activities, and projects. Students will take the Biology MCAS at the end of this course. Students are required to develop and present a science fair project. Students will complete career exploration activities that relate to various careers in the Healthcare industry. By the end of the course, they will have chosen a specific career to explore for their Junior and Senior years. **Prerequisite:** Innovation Pathways: Healthcare Biotech I

**Dual Enrollment Opportunity:** The Innovation Career Pathway Advanced Coursework Program is designed to provide high school students with an enriched academic curriculum that prepares them for success in college and beyond. This program offers a rigorous yet supportive learning environment, empowering students to excel academically, develop critical thinking skills, and explore their interests and career aspirations.

## HOSPITALITY AND RESTAURANT FOOD PRODUCTION

HOSPITALITY AND RESTAURANT FOOD PRODUCTION					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
CTE5170	Food and Nutrition Lab		9, 10	Semester	1.5
CTE2370	Culinary I	H	10	Full Year	6
CTE3370	Culinary II	H	11	Full Year	6
CTE3371	Culinary Related	H	11	Full Year	6

**Food & Nutrition Lab:** Introduces students to basic skills in food handling and preparation while applying nutrition education concepts. Students will learn fundamental cooking principles for maintaining a healthy lifestyle. While preparing a variety of food products, students apply their knowledge of mathematics, science, health, and language arts. **NOTE:** This course is a pre-requisite to be considered for Restaurant and Food Production Training. Interested students **MUST** take this course between freshman and sophomore years.

**Culinary I:** In this culinary arts course, students will have the opportunity to learn the basic principles that relate to the following: history of the restaurant industry, culinary nomenclature, equipment orientation, kitchen operations, food safety and sanitation, basic knife skills and a cooking technique overview. An introduction to stock and soup cookery and introductory baking will also be covered.

**Culinary II:** This year-long course covers basic food service skills in a commercial kitchen environment. The course stresses the use of standardized recipes and procedures. Students are introduced to basic ingredients, stocks, soups, mother sauces, protein fabrication, cooking methods and breakfast items. The course includes daily end product assessment. The program emphasizes sanitary food handling practices and professional work habits.

**Culinary Arts 11<sup>th</sup> Grade Related:** This year-long course will provide the 11th grade students opportunities to advance their knowledge and skills in the Culinary Arts program as a manager. Students will continue to refine their skills as related to all areas of the shop while transitioning into management roles. A major portion of the coursework will include the National Restaurant Associations' ServSafe Food Handler Manager program. Students will receive an introduction to cost controls, menu design and descriptions, sustainability, nutrition, creating theme dinners, presentation, management theories, and restaurant marketing. A major portion of this class will be the junior year Culinary Arts portfolio.



## VOCATIONAL EDUCATION

VOCATIONAL EDUCATION					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
CTE1100	Exploratory Program	N	9	Semester	1.5
CTE1101	Exploratory for Innovation Pathways	N	9	Semester	1.5
CTE2381	Automotive Technology I	H	10	Full Year	6
CTE3381	Automotive Technology II	H	11	2 x SEM	6
CTE4381	Automotive Technology III	H	12	2 x SEM	9
CTE3380	Automotive Related	H	11	Full Year	6
CTE5182	Introduction to Construction	N	All	Semester	1.5
CTE2383	Carpentry I	H	10	Full Year	6
CTE3383	Carpentry II	H	11	2 x SEM	6
CTE4383	Carpentry III	H	12	2 x SEM	12
CTE3384	Carpentry Related	H	11	Full Year	6
CTE2385	Graphic Communications I	H	10	Full Year	6
CTE3385	Graphic Communications II	H	11	Full Year	6
CTE4385	Graphic Communications III	H	12	Full Year	12
CTE3386	Graphics Related	H	11	Full Year	6

Major	Graphic Communications	Construction Technology	Automotive Technology
Required courses	Freshman Exploratory Graphic Communications I Graphic Communications II Graphic Communications III	Freshman Exploratory Construction Technology I Construction Technology II Construction Technology III	Freshman Exploratory Automotive Technology I Automotive Technology II Automotive Technology III
Highly Recommended courses	21 <sup>st</sup> -Century Computer Applications Intro to Business Principles Finance Principles of Marketing Drawing and Painting Illustration Digital Imaging Digital Photography Web Design Digital Publishing	21 <sup>st</sup> -Century Computer Applications Intro to Business Principles of Finance Principles of Marketing Auto CAD	21 <sup>st</sup> -Century Computer Applications Intro to Business Principles Finance Principles of Marketing

The Vocational Program is designed to prepare students for profitable employment or further education through a four-year program of vocational training, plus related and academic activities aligned with the student's vocational objectives. Any student in 9<sup>th</sup>, 10<sup>th</sup>, or 11<sup>th</sup> grade is eligible to apply for fall admission or admission during the school year subject to the availability of openings to the Vocational programs. Transfer students will be evaluated using the selection criteria contained in the Admission Policy.

Training in all selected areas will consist of structured time schedules each day during the second, third, and fourth year of the program for in-depth vocational training. Each area is planned to teach the fundamental skills required for a specific area and its related fields of work, which will provide the students with skills necessary for job entry. As in all vocational programs the majority of the school day will be involved in shop practice, while the remainder of the school day will comprise related subject areas and academic subjects.

**Freshman Vocational Exploratory:** Freshmen who participate in the Exploratory Program will receive instruction in the four majors offered in our vocational program: Automotive, Carpentry, Culinary and Graphics. Students will be exposed to four rotations where they will experience increased duties and project difficulty as the rotation progresses. Career exploration activities will help students learn more about their interests, personalities, skills/values, and how these relate to potential careers. Students can make an informed decision about continuing in the Career and Technical program and receive training for sophomore, junior, and senior years.

**Innovation Career Pathways Exploratory:** Freshmen who participate in the Innovation Career Pathway Exploratory Program will receive instruction in the four majors offered in our program: Engineering, Business, Computer Science, and Health Assisting. Students will be exposed to four rotations where they will experience increased duties and project difficulty as the rotation progresses. Career exploration activities will help students learn more about their interests, personalities, skills/values, and how these relate to potential careers. Students can make an informed decision about continuing in the Career and Technical program and receive training for sophomore, junior, and senior years.

**Automotive Technology I:** Sophomores will be introduced to automotive repair technology. They will be exposed to five different areas of instruction including engine mechanical, suspension, brakes, electrical, and engine performance. ***Prerequisite:*** Successful completion of Exploratory. Students must complete an application.

**Automotive Technology II:** Juniors will receive additional instruction in automotive repair technology including engine mechanics, suspension, brakes, electrical, and engine performance. ***Prerequisite:*** Successful completion of Automotive Technology I.

**Automotive Technology III:** Seniors will receive in-depth instruction in automotive repair technology with hands-on experience. Students will apply the knowledge acquired in the five different areas of instruction including engine mechanical, suspension, brakes, electrical, and engine performance. Upon completion of this course, students can seek entry-level employment, however, we recommend students pursue an Automotive Technology Certificate, Associate, or Bachelor Program. Articulation agreements with post-secondary institutions to allow credit for successful completion of all courses in this program with a passing grade of B or better. ***Prerequisite:*** Successful completion of Automotive Technology II.

**Auto Technology Related:** This course is an introduction to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, fasteners, professional responsibilities, and automotive maintenance. Emphasis is on Automobile construction, major components, basic systems and their repair and maintenance. The objective of this course is to prepare students for entry-level employment and certification. Emphasis is on Automobile construction, major components, basic systems and their repair and maintenance. Students will also be introduced to elements of professionalism, technology, and entrepreneurship in the content area.

**Intro to Construction:** Introduction to Construction is a course that provides students with a comprehensive overview of the construction industry, its processes, methods, materials, and technologies. Through a combination of lectures, hands-on activities, site visits, and guest speakers from the industry, students will explore the lifecycle of a construction project from conception to completion. Topics covered include construction management principles, project planning and scheduling, building codes and regulations, safety standards, and sustainable construction practices. Emphasizing experiential learning and practical application, this course will engage students in activities such as blueprint reading, construction site simulations, and basic construction techniques. By the end of the course, students will have gained a fundamental understanding of the construction industry and will be equipped with the knowledge and skills to pursue further study or entry-level positions in construction-related fields.

**Carpentry I:** Sophomores who participate in the Construction Technology I program will have completed the exploratory program as freshmen and will have gained an awareness of the many careers associated with the construction industry. This vast industry incorporates many dynamic career opportunities with options for college degrees as well as careers with many avenues for advancement. Students will learn about our collaboration with the carpenter's union and the credit earned toward their apprenticeship program. Sophomores will be introduced to the shop environment and learn the proper safety procedures for various equipment and procedures. This will include the application of hand skills and project-based learning. Finally, students will gain exposure to the emerging study of building sciences. ***Prerequisite:*** Successful completion of Exploratory. Students must complete an application.

**Carpentry II:** Juniors who participate in the Construction Technology II program will have completed the construction Technology I program as a sophomore. This program will build on the fundamental skills established in the previous level. As a Junior, students will be fully immersed in the building sciences that are shaping and driving the changes in the construction industry. Students will complete scale and full-size models of various building components that are designed to teach the techniques required in today's building market and meet the most recent code regulations. Following a set of specifications, students will complete hands-on projects and fortify the procedures and safety protocols established as sophomores. Juniors will be allowed to earn their OSHA 10 certification and participate in activities to experience various careers surrounding the construction industry. ***Prerequisite:*** Successful completion of Construction Technology I.

**Carpentry III:** Seniors who participate in the Construction Technology III program will have completed the Construction Technology II program as a Junior. Students will continue the study and application of cutting-edge building systems and science surrounding the residential construction industry. Various methods of negotiating the control layers involved in a building will be explored and practiced on different components of a house structure. Time will be spent developing the skills required and expected by potential employers, including the carpenters' union. Students will also explore the potential of a college degree program in the construction field. Seniors will further be tasked with the successful completion of a project based on a culmination of the skills learned, practiced, and applied in all previous programs. ***Prerequisite:*** Successful completion of Construction Technology II.

**Carpentry Theory:** This course provides an understanding of most aspects of carpentry that are important for developing practical skills. Learn revolves around working with wood in landscaping, building construction, furniture making, fencing or any other application. The purpose of the course is to provide a balanced and broad understanding of woodwork through the exploration of a range of applications. Students will also be introduced to elements of professionalism, technology, and entrepreneurship in the content area.

**Graphic Communications I:** Sophomores will be introduced to employable skills in the graphics/publishing field. Students will learn computer skills on iMacs. Desktop publishing programs will be taught to develop technical proficiency and quality standards. Students' first portfolio piece will be to create a poster. Various printing processes and related equipment and finishing techniques will be explored. Professionalism, customer relations, and SHOP SAFETY will be stressed. ***Prerequisite:*** Successful completion of Exploratory. Students must complete an application.

**Graphic Communications II:** Juniors will continue with more extensive study of skills in the graphics/publishing field. Students will continue to fine-tune their computer skills on iMacs. Industry-standard applications will be taught to develop technical proficiency and meet the parameters of requirements. The importance of principles and elements of design, typography, and hierarchy of information in the design process will be explored and implemented. Students will build portfolio pieces through various projects, as well as investigate continuing education and career paths. Various printing processes and finishing techniques will be taught. Professionalism, customer relations, and SHOP SAFETY will be stressed. ***Prerequisite:*** Successful completion of Graphic Design/Printing I

**Graphic Communications III:** Seniors who have completed Graphic Design II will continue to develop into skilled craftsmen in Graphic Design III. Students will continue to refine their profession using iMacs and OS, working with industry-standard graphic design software Adobe Creative Suite and additional resources. The importance of principles and elements of design, typography, and the science of color theory in the design process will be explored and implemented. Students will continue to build upon their portfolio through various projects, as well as investigate continuing education and career paths. Students will enhance their skills with various printing processes and finishing techniques. Professionalism, customer relations, and SHOP SAFETY will be stressed. ***Prerequisite:*** Successful completion of Graphic Design/Printing II

**Graphic Communications Theory:** This course combines design principles and software, typography, digital illustration, digital imaging, page layout, and prepress techniques with a focus on design processes from the point of visualization to production. Students will be responsible for the design and production of projects, including several components across multiple media forms. Individual and collaborative work is expected including branding and packaging as well as creating prototypes for interactive media. Students will also be introduced to elements of professionalism, technology, and entrepreneurship in the content area.

## VCE ADVANCED OPPORTUNITIES

**VCE Independent Study:** Students who have completed (B or better) at least two or more courses in a career pathway and desire to further advance their knowledge can request permission to conduct an Independent Study. The student must identify a teacher willing to mentor and together complete an Independent Study Agreement stipulating the following: Course Objectives, Methods of Study, Methods of Evaluation, Resources, Frequency, and place of meetings, and the signatures of the student, the parent/guardian, and the teacher. Students must be self-motivated, demonstrate responsibility, and can work independently. **Prerequisite:** Completed Independent Study Proposal Form (signed by the student, parent, and teacher). Interview and approval by the Department Chair are required.

**VCE Work Experience:** Juniors and seniors in VCE programs, who have completed at least two courses in a given career concentration or pathway can obtain 3 credits for work experience provided:

1. Secures a position (paid or unpaid) related to career concentration.
2. Completes 100 hours of work experience.
3. Attends workshops/seminars in Resume/Cover Letter Building, Job interview Dos and Don'ts, and Important Legal Topics for Teen Workers.
4. Updates Career and Academic Plan.
5. The employer will certify the student's employment status and is working with a school-designated work experience coordinator to evaluate the Massachusetts Work-Based Learning Plan.

NOTE: Work experience credits will be granted only once throughout the student's high school career.

## ENGLISH DEPARTMENT

The English program at Brockton High School develops and extends student mastery in the literacy areas of reading, writing, speaking, and reasoning. We have built our program based on the Guiding Principles for English Language Arts and Literacy Programs as outlined in the *Massachusetts Curriculum Framework for English Language Arts and Literacy*.

ENGLISH CORE COURSES					
COURSE	TITLE	Level	Grade	TERM	CREDITS
ELA1301	English I - H	H	9	Full Year	6
ELA1201	English I - CPA	CPA	9	Full Year	6
ELA1201CT	English I - CPA Co-Taught	CPA	9	Full Year	6
ELA1101	English I - CP	CP	9	Full Year	6
ELA1101CT	English I - CP Co-Taught	CP	9	Full Year	6
ELA2301	English II - H	H	10	Full Year	6
ELA2201	English II - CPA	CPA	10	Full Year	6
ELA2201CT	English II - CPA Co-Taught	CPA	10	Full Year	6
ELA2101	English II - CP	CP	10	Full Year	6
ELA2101CT	English II - CP Co-Taught	CP	10	Full Year	6
ELA3301	English III - H	H	11	Full Year	6
ELA3201	English III - CPA	CPA	11	Full Year	6
ELA3201CT	English III - CPA Co-Taught	CPA	11	Full Year	6
ELA3101	English III - CP	CP	11	Full Year	6
ELA3101	English III - CP Co-Taught	CP	11	Full Year	6
ELA4301	English IV - H	H	12	Full Year	6
ELA4201	English IV - CPA	CPA	12	Full Year	6
ELA4201CT	English IV - CPA Co-Taught	CPA	12	Full Year	6
ELAAP36	AP Language & Composition	AP	11 & 12	Full Year	6
ELAAP25	AP Literature & Composition	AP	11,12	Full Year	6
ELAAP22	AP Seminar: Year I	AP	11,12	Full Year	6
ELAAP23	AP Research: Year II	AP	11,12	Full Year	6
ELAAP24	English 10: AP Seminar	AP	10	Full Year	6
ELAIB01	International Baccalaureate English A Literature -HL	IB	11	Full Year	6
ELAIB02	Senior International Baccalaureate English A Literature -HL		12	Full Year, alt. days	3
ELECTIVE COURSES					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
ELA5300	Creative Writing	H	All	Semester	3
ELA5304	Public Speaking	H	10,11,12	Semester	3
ELA5305	Aesthetics of Film	H	11,12	Semester	3
ELA5306	History of Theater	H	11,12	Semester	3
ELA5301	Journalism I	H	11,12	Semester	3
ELA5302	Journalism II	H	11,12	Semester	3
ELA5303	Journalism III	H	12	Semester	3
ELA5307	Poetry	H	11,12	Semester	3

**English I:** In *English I*, students will explore the themes of identity and perseverance as they read and analyze various literary texts, like *The Poet X* and *Romeo and Juliet*. Class discussions will provide opportunities for students to engage in thoughtful conversations, fostering higher-order thinking skills as they critically examine the complexities of these themes. In addition to literary exploration, the course will place a strong emphasis on fostering essential writing skills through diverse writing experiences. Common writing assessments, in line with state standards, will include tasks that evaluate students' ability to analyze and interpret texts, construct well-supported arguments, and demonstrate proficiency in various writing tasks.

*9<sup>th</sup>-grade students can also select Creative Writing as an elective.*

**English II:** In *English II*, students will delve into themes of justice and oppression through the study and analysis of diverse literary works, including *Night* and *Macbeth*. Building upon the foundation laid in *English I*, class discussions will be a key component, challenging students to apply higher-order thinking skills. This course places continued emphasis on cultivating essential writing skills, and students will engage in a variety of writing experiences aimed at honing their ability to analyze and interpret texts, construct well-supported arguments, and demonstrate increased proficiency across varied writing genres. Common writing assessments, in line with state standards, will provide checkpoints for teachers and students in preparation for the spring administration of the ELA MCAS exam.

*10<sup>th</sup>-grade students can also select the following English Electives: Creative Writing or Public Speaking*

**English III:** In *English III*, students will confront the themes of advocacy, voice, and social justice through works of fiction and literary nonfiction. Class discussions will serve as a platform for students to articulate and defend their perspectives, promoting higher-order thinking skills as they grapple with complex issues. The writing component of *English III* is designed to refine students' ability to construct well-supported arguments and to articulate more sophisticated interpretations than in previous years. Students will analyze the rhetorical strategies used by varied speakers and use those speakers as models to implement strategies of their own. Common writing assessments will continue to be integrated as the course aims to foster not only literary appreciation but also the advanced writing skills necessary for success in academic and professional pursuits.

*11<sup>th</sup>-grade students can also select the following English Electives: Creative Writing, Public Speaking, Journalism, Poetry, Aesthetics of Film, or History of Theater*

**English IV:** In *English IV*, students will embark on a literary journey that includes the further exploration of complex works including a Shakespearean drama and other works like August Wilson's *Fences*. Class discussions will play a pivotal role, providing students with a platform to engage in nuanced conversations and debates, fostering higher-order thinking skills as they delve into the rich themes presented in these works, including concepts related to citizenship and morality. Continuing with the writing program, seniors will engage in a variety of advanced writing experiences that go beyond mere analysis, requiring them to read critically, synthesize ideas, and construct compelling arguments. Additionally, students will engage in self-reflection and expression through the study of personal narrative essays and learn effective strategies for professional writing.

*12<sup>th</sup>-grade students can also select the following English Electives: Creative Writing, Public Speaking, Journalism, Poetry, Aesthetics of Film, or History of Theater*

**Advanced Placement Language and Composition:** Students will engage in careful reading and critical analysis of authors' use of language in their work. Students examine different rhetorical devices through various writing modes and media. The class will feature activities to analyze the author's diction, structure, style, and context to determine the purpose and impact of these choices on the writing. **An application is required for this course.**

Written assessments are an integral part of the AP English Language and Composition course which includes narrative, expository, analytical, and argumentative essays. Accepted students must complete a summer assignment and take the Advanced Placement Exam in the spring. *Students entering 11<sup>th</sup> grade or 12<sup>th</sup> grade can apply for AP English Language and Composition.*

**Advanced Placement English Literature and Composition:** Students will engage in careful reading and critical analysis of literature. The course will include works of literary merit from various genres and periods. Students will closely analyze a work's structure, style, and themes as well as other literary devices. **An application is required for this course.**

Written assessments, an integral part AP Literature and Composition course, will include expository, analytical, and argumentative essays. Students will learn how to express knowledge of literary works clearly and persuasively in writing. Accepted students must complete a summer assignment and take the Advanced Placement Exam in the spring. *Students entering 11<sup>th</sup> grade or 12<sup>th</sup> grade can apply for AP Literature and Composition.*

**Advanced Placement Seminar: Year 1:** AP Seminar is an interdisciplinary course where students develop and practice the skills in research, collaboration, and communication that they will need in any academic discipline. Students will investigate topics in a variety of subject areas, write research-based essays, and design and give presentations both individually and as part of a team. ***\*Application required.***

**Advanced Placement Research: Year 2:** AP Research builds upon what students learned in AP Seminar to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students will design, plan, and conduct a year-long research-based investigation to address a research question. The course culminates with an end-of-the-course research paper and panel presentation. ***Recommended Prerequisites:*** Students must have completed the AP Seminar course.

**English 10: AP Seminar:** An English course taught in the AP Seminar style that helps students build foundational writing, collaboration, research, and presentation skills.. Students will investigate topics in a variety of subject areas, write research-based essays, and design and give presentations both individually and as part of a team. ***\*Application required. This course is only for students in grade 10.***

**International Baccalaureate English A Literature:** Students will develop an understanding of literature as art, open to a reader's interpretation and criticism. Students will complete a variety of written and oral assessments including externally assessed papers and internally assessed (externally moderated) oral presentations. This is the first two semesters of a four-semester higher-level IB course that will culminate in four major assessments. **An application is required for this course. Only students entering 11<sup>th</sup> grade can apply. Students in Junior IB English A Literature-HL will automatically be enrolled in Senior IB English A Literature – HL as this is a two-year commitment.**



**International Baccalaureate English A Literature IB:** This course is open only to students who complete (Junior) IB English A Literature IB105. This course will culminate in the IB Language A1 exams in the spring. The course's focus is three-fold: to develop students' appreciation of literature as art; to develop students' critical thinking and communication skills in both oral and written forms, and to instill in each student an understanding and appreciation of internationalism. Students will complete a variety of written and oral assessments which include, but are not limited to, externally assessed papers and internally assessed (externally moderated) oral presentations.

## ENGLISH ELECTIVES

In addition to the required courses, students can choose an elective course to supplement their studies. Please note you can only take a specific English elective once.

**Creative Writing:** Students will develop and improve their technique and individual style in several forms of prose. The emphasis of the course is on writing; however, students may study different texts as models to obtain an appreciation of form and craft.

**Public Speaking:** In this course, students will develop communication skills that can be used in a variety of speaking situations. Topics will include research and organization, writing for verbal delivery, stylistic choices, visual and presentation skills, analysis and critique, and development of self-confidence.

**Aesthetics of Film:** This course introduces students to film analysis and teaches them to become critics and helps them gain tools to properly analyze a film both in written and oral form. Students taking film will be exposed to several classic films and films that stand out in general. Students will receive credits in English for this course.

**History of Theatre:** This course explores the history and evolution of Western Theatre through script reading, script analysis, and production analysis. Different types and styles of theatrical literature will be analyzed in the context of social, political, and economic conditions of the period as well as modern times. Students will receive credits in English for this course.

**Journalism I:** Students will explore the various forms of journalism, including print, broadcast, and online media. The course will cover the basics of news writing, feature writing, interviewing techniques, and investigative reporting. Emphasis will be placed on developing strong research skills, effective communication, and ethical decision-making in journalism. Students will have the opportunity to produce their own news articles, features, and multimedia content, allowing them to apply the skills learned in class.

**Journalism II:** Students will further explore the various forms of journalism, focusing on more advanced concepts such as layout, graphic communications, and production/distribution. Students will have the opportunity to apply these skills to the school newspaper while engaged in self-directed journalistic pursuits. *Prerequisite:* Journalism I

**Journalism III:** This course allows students who have demonstrated ability and interest in Journalism I and II to pursue an independent study or internship in the field of journalism. A student may work the first, second, or both semesters and must receive approval from the department head to enroll. *Prerequisite:* Journalism II

**Poetry:** Students will develop and improve their technique and individual style in poetry. The emphasis of the course is on reading and analyzing sample works from living poets to understand form, craft, and performance. Students will write essays to analyze poetry and write original pieces.

## HEALTH AND WELLNESS

COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
HEA1100	Health Exploratory	N	9	Term	0.75
HEA5101	Stress Management	N	11,12	Semester	1.5
HEA5102	Healthy Living	N	11,12	Semester	1.5
HEA5103	Health Advocacy	N	11,12	Semester	1.5
HEA5104	Peer Mediation	N	10,11,12	Semester	1.5

**Health Exploratory:** This course is a requirement for all freshmen and provides students with the opportunity to expand their knowledge and performance skills in both current health topics and personal fitness and wellness. Each student will assess their current fitness levels using state-of-the-art technology and equipment and set personal goals for self-improvement. The study and practice of fitness assessment, character education, cooperative games, and trust-building activities will help students develop the skills, knowledge, and attitudes necessary for a successful introduction to high school. Students will learn and develop strategies that will enable them to take control of their wellness and develop sound decision-making skills about relevant health topics facing young adults. **Students must be scheduled into both courses.**

**Stress Management:** Adolescence is considered a very stressful time, in this course students will develop the skills to recognize signs of stress and develop “coping and self-care strategies” which will help with the daily demands and pressures of everyday life. Students will explore self-care, practice yoga, mindfulness exercises, and breathing techniques to control tension. This course will focus on various aspects of self-care and classroom applications to bring the mind and body into balance.

**Healthy Living:** The Healthy Living course is designed to help students make informed and responsible decisions on setting healthy goals, managing emotions, drug use, building relationships, making better consumer choices and more. In this health and wellness course, students will analyze the impact of making healthy decisions, and the strategies they can implement to maintain good health and increase quality of life. Students will gain knowledge in all areas of health and practice preventative health skills, through accessing reliable health information and resources, students will also develop advocacy skills that will impact their wellness into adulthood.

**Health Advocacy:** This course offers students the opportunity to analyze current health issues relevant to today’s youth and make responsible, informed, and capable decisions about topics that affect the well-being of themselves and others. Students will explore positive and negative health behaviors that impact short and long-term wellness while investigating reliable health resources to address these health issues. The Health Advocacy course encourages students to recognize that they have the power to choose healthy behaviors to reduce risks and improve overall health and wellness.

**Peer Mediation:** Students who have completed Peer Mediation training and have participated in the program for at least one year prior will be recommended for this course. Students will serve as mediators, participate in classroom presentations and organize and implement school-wide activities that focus on anti-violent themes. Students will be expected to model and mentor mediation techniques with other mediators. Students must be self-motivated, demonstrate responsibility, and be able to work independently. ***Prerequisite:*** Interview and approval by Peer Mediation Advisors is required

## JUNIOR RESERVE OFFICER TRAINING CORPS (JROTC)

JROTC is a character and leadership development program. Its mission is to “motivate young people to become better citizens”. A student who participates in the JROTC program is not obligated to serve in any of the Armed Services.

The JROTC curriculum addresses national academic standards including the Common Core State Standards (CCSS), which offers coursework on leadership, civics, geography/global awareness, health/wellness, language arts, life skills, and U.S. history. The curriculum is based on the principles of performance-based, learner-centered education and promotes the development of core abilities: the capacity for life-long learning, communication, responsibility for actions and choices, good citizenship, respectful treatment of others, and critical thinking and critical thinking techniques.

JROTC classes meet on alternating days over a semester. Courses are taken in sequential order, beginning with LET 1A and moving through the end to LET 4B. Prerequisites for the course are as follows: 1) students must be physically and medically eligible to participate in BHS Physical Education classes, and 2) students must maintain a grade of C- or higher.

COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
JRO5101	Leadership Education and Training (LET)IA	N	9,10,11	Semester	1.5
JRO5102	Leadership Education and Training (LET)IB	N	9,10,11	Semester	1.5
JRO5103	Leadership Education and Training (LET)IIA	N	10,11,12	Semester	1.5
JRO5104	Leadership Education and Training (LET)IIB	N	10,11,12	Semester	1.5
JRO5105	Leadership Education and Training (LET)IIIA	N	11,12	Semester	1.5
JRO5106	Leadership Education and Training (LET)IIIB	N	11,12	Semester	1.5
JRO4107	Leadership Education and Training (LET)IVA	N	12	Semester	1.5
JRO4108	Leadership Education and Training (LET)IVB	N	12	Semester	1.5

**Leadership Education and Training (LET) IA:** LET IA, The Emerging Leader, is designed to help develop strong leaders and model citizens. Specific areas of study include JROTC foundations, personal growth and behaviors, team building, decision-making, health and fitness, and service learning.

**Leadership Education and Training (LET) IB:** LET IB, The Emerging Leader continues areas of study covered in LET IA.

**Leadership Education and Training (LET) IIA:** LET IIA, The Developing Leader, continues to build on LET 1 knowledge and skills, while introducing new content that will help you develop as a leader in the program, your school, and your community. Specific areas of study include leadership, personal growth, and behaviors, team building, first aid, decision-making, health and fitness, service-learning, and citizenship and government. Students fill junior-level leadership positions in the Corps of Cadets.

**Leadership Education and Training (LET) IIB:** LET IIB, The Developing Leader, continues areas of study covered in LET IIA.

**Leadership Education and Training (LET) IIIA:** LET IIIA, The Supervising Leader, continues to build upon LET I and LET II knowledge and skills, while introducing new content that will help you develop your supervisory skills and abilities. Specific areas of study include leadership, personal growth, and behaviors, team building, decision-making, health and fitness, service-learning, and citizenship and government. Students fill mid-level leadership positions in the Corps of Cadets.

**Leadership Education and Training (LET) IIIB:** LET IIIB, The Supervising Leader, continues areas of study covered in LET IIIA.

**Leadership Education and Training (LET) IVA:** LET IV, The Managing Leader, continues to build upon the LET I, LET II, and LET III knowledge and skills while introducing new content that will help you continue to lead others in your battalion. Specific areas of study include leadership, personal growth and behaviors, team building, service-learning, and citizenship and government. Students fill top-level leadership positions in the Corps of Cadets.

**Leadership Education and Training (LET) IVB:** LET IVB, The Managing Leader, continues areas of study covered in LET IVA.

## MATHEMATICS DEPARTMENT

MATH COURSES					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
MAT1300	Mathematics I H	H	9	Full Year	6
MAT1100	Mathematics I CP	CP	9	Full Year	6
MAT1100CT	Mathematics I CP Co-Taught	CP	9	Full Year	6
MAT1200	Mathematics I CPA	CPA	9	Full Year	6
MAT1200CT	Mathematics I CPA Co-Taught	CPA	9	Full Year	6
MAT2300	Mathematics II H	H	9, 10	Full Year	6
MAT2100	Mathematics II CP	CP	10	Full Year	6
MAT2100CT	Mathematics II CP Co-Taught	CP	10	Full Year	6
MAT2200	Mathematics II CPA	CPA	10	Full Year	6
MAT2200CT	Mathematics II CPA Co-Taught	CPA	10	Full Year	6
MAT2201	Mathematics III CPA	CPA	10	Full Year	6
MAT2301	Mathematics III H	H	10	Full Year	6
MAT3301	Mathematics III H	H	11	Full Year	6
MAT3100	Mathematics III CP	CP	11	Full Year	6
MAT3100CT	Mathematics III CP Co-Taught	CP	11	Full Year	6
MAT3200	Mathematics III CPA	CPA	11	Full Year	6
MAT3200CT	Mathematics III CPA Co-Taught	CPA	11	Full Year	6
MAT4100	Trigonometry - CP	CP	12	Semester	3
MAT5300	Pre-Calculus - H	H	11,12	Full Year	6
MAT5200	Pre-Calculus - CPA	CPA	11,12	Full Year	6
MAT4300	Calculus - H	H	12	Semester	3
MAT4200	Calculus - CPA	CPA	12	Semester	3
MAT5201	Math Topics	CPA	11,12	Semester	3
MATAP32	Advanced Placement Computer Science Principles	AP	10,11,12	Full Year	6
MATAP31	Advanced Placement Computer Science Applications	AP	11,12	Full Year	6
MATAP66	Advanced Placement Calculus AB	AP	12	Full Year	6
MATAP90	Advanced Placement Statistics	AP	11,12	Full Year	6
MATAPXX	Advanced Placement Precalculus	AP	11,12	Full Year	6
MATIB11	International Baccalaureate Math Applications and Interpretations SL Year 1	IB	11	Full Year	6
MATIB12	International Baccalaureate Math Applications and Interpretations HL Year 1	IB	11	Full Year	6
MATIB21	International Baccalaureate Math Applications and Interpretations SL Year 2	IB	12	Full Year	3
MATIB22	International Baccalaureate Math Applications and Interpretations HL Year 2	IB	12	Full Year	3
MAT5100	Math Seminar - Logic	CPA	11,12	Semester	3

**Mathematics I:** The study of Mathematics I includes topics listed in the Massachusetts Curriculum Framework for Mathematics. The unit design follows the Model Integrated Mathematics I Pathway. Course content includes topics in Number and Quantity, Algebra (expressions and equations), Functions (interpreting and building functions), Geometry (congruence), and Statistics and Probability (interpreting data). At the college preparatory level of this course, more time will be dedicated to reviewing prerequisite skills to make the units of study more accessible for students. In the honors class, these topics will be covered in greater depth.

**Mathematics II:** This study of Mathematics II includes topics listed in the Massachusetts Curriculum Frameworks for Mathematics. The unit design follows the Model Integrated Mathematics II Pathway. Course content includes topics in Number and Quantity (real and complex numbers), Algebra (polynomials and rational expressions), Functions (interpreting and building), Geometry (congruence, similarity, trigonometry), and Statistics and Probability (conditional probability). In the college preparatory level of this course, more time will be dedicated to reviewing pre-requisite skills from Mathematics I and earlier to make the units of study more accessible for students. In the honors class, these topics will be covered in greater depth.

**Mathematics III:** This study of Mathematics III includes topics listed in the Massachusetts Curriculum Frameworks for Mathematics. The unit design follows the Model Integrated Mathematics III Pathway. Course content includes topics in Number and Quantity (complex number systems), Algebra (polynomials and rational expressions), Functions (interpreting, building, linear, quadratic, exponential, trigonometric), Geometry (trigonometry, 2/3 dimensional figures), Statistics and Probability (inferences). In the college preparatory level of this course, more time will be dedicated to reviewing pre-requisite skills from Mathematics I, Mathematics II, and earlier to make the units of study more accessible for students. In the honors class, these topics will be covered in greater depth.

**Trigonometry:** This is the follow-up course for students who have completed Algebra II CP and wish to continue in mathematics. The objectives will cover all aspects of trigonometry including trigonometric functions, graphing trigonometric functions, trigonometric identities, and equations. This is a thorough course in trigonometry that will allow students to continue in pre-calculus or college algebra.

**Pre-Calculus:** This course provides background skills in analytic methods, analytic geometry, trigonometry, the system of complex numbers, vector analysis, counting techniques, and elementary theory of probability. Topics focus on functions, trigonometry, complex numbers, conic sections, sequences, and series. This is a demanding course that prepares students for a four-year college, with a focus on mathematics and science, as well as other major fields of study.

**Calculus:** This introductory course in calculus is for students with a good aptitude for Mathematics and above-average achievement. It is planned to meet the needs of the student planning to continue the study of mathematics, physics, or engineering at a four-year college. The course covers the basics of differential and integral calculus and topics from analytic geometry.



**Math Topics:** These courses review topics in number sense, operations, patterns, relations, algebra, geometry, measurement, data analysis, statistics, and probability. This course is appropriate for students who need additional support in essential skills for MCAS preparation. Students must register for both parts I and II.

**Advanced Placement Computer Science Principles:** This college-level course is for students with a deep understanding of the algebraic process and problem-solving skills, who want to explore the world of computing. No prior computer skills are required. The course, “Introduces students to the central ideas of computer science, instilling the ideas and practices of computational thinking and inviting students to understand how computing changes the world.” The course is built around 7 big ideas: creativity, abstraction, data and information, algorithms, programming, the internet, and global impact. Upon completion of the course, students will participate in the AP Computer Science Principles examination.

**Advanced Placement Computer Science Applications:** AP Computer Science A is a course that addresses computer-based problem-solving through the Java programming language. This course is similar to introductory college-level computer science courses for computer science majors. Students who complete this course will develop skills in problem-solving, implementing common computer algorithms, using data structures, developing new algorithms and data structures, writing solutions in an object-oriented paradigm, utilizing the Java programming language, reading and comprehending computer programs, understanding the design process used to develop programs, and understanding the ethical issues with computer use. Upon completion of this course, students will participate in the AP Computer Science A examination.

**Prerequisite:** Successful completion of AP Computer Science Principles.

**Advanced Placement Calculus (AB):** A college-level course for students with a high aptitude for Mathematics and above-average achievement. It is planned to meet the needs of the student planning to continue the study of mathematics, physics, or engineering at a four-year college. The course covers the fundamentals of differential and integral calculus and topics from analytic geometry. Successful completion enables the student to take the Advanced Placement exam for college credit. Prerequisite: Excellent grades in previous math courses and teacher recommendations are required for enrollment. The completion of a summer assignment is also mandatory for admission.

**Advanced Placement Calculus (BC):** A college-level course for students with a high aptitude for Mathematics and exceptional achievement. It is planned to meet the needs of the student planning to continue the study of mathematics, physics, or engineering at a four-year college. The course covers all topics in Advanced Placement Calculus and others such as parametric, polar, vector functions, and series. Successful completion enables the student to take the Advanced Placement exam for college credit. Prerequisite: Exceptional grades in previous math courses and teacher recommendations are required for enrollment. The completion of a summer assignment is also mandatory for admission.

**Advanced Placement Statistics:** a college-level course for students with a high aptitude for mathematical analysis and above-average achievement. It is planned to meet the needs of students who plan on continuing their studies in the fields of mathematics, psychology, or business. The course covers four basic principles exploring data, sampling, experimentation, anticipating patterns, and statistical inference. This is a writing-intensive course. Students will be able to take the advanced placement exam for college credit at the end of the course.

**Prerequisite:** Completion of Mathematics III.

**Advanced Placement Precalculus:** In this course, students explore everyday situations using mathematical tools and lenses. Students build a deep mastery of modeling and functions, examining scenarios through multiple representations. Topics include Polynomial and Rational Functions, Exponential and Logarithmic Functions, and Trigonometric and Polar Functions. AP Precalculus prepares students for other higher-level mathematics and science courses, with content and skills common to college precalculus courses that are the foundation for careers in mathematics, science, health science, social science, and data science. Upon completion of this course, students will participate in the Advanced Placement precalculus exam. **Prerequisite:** Completion of Mathematics III.

**International Baccalaureate Math Applications and Interpretations SL – Year 1:** This course includes topics in Trigonometry and Pre-Calculus. It also extends topics studied in Geometry and Algebra II. Specific topics include sequences and series, several types of functions, and coordinate geometry. The main objectives are developing problem-solving skills as well as furthering mathematical knowledge to foster success in college.

**International Baccalaureate Math Applications and Interpretations HL – Year 1:** This course includes topics in Trigonometry and Pre-Calculus. It also extends topics studied in Geometry and Algebra II. Specific topics include sequences and series, several types of functions, and coordinate geometry. The main objectives are developing problem-solving skills as well as furthering mathematical knowledge to foster success in college.

**International Baccalaureate Math Applications and Interpretations SL – Year 2:** This is a continuation of the junior year course in which topics such as vector analysis, matrices, probability, and differential and integral calculus are studied. Students are again the focus of the learning environment and are encouraged to actively participate in their learning. International Baccalaureate requirements such as external assessments and portfolio work are completed in this year of the program.

**International Baccalaureate Math Applications and Interpretations HL – Year 2:** This is a continuation of the junior year course in which topics such as vector analysis, matrices, probability, and differential and integral calculus are studied. Students are again the focus of the learning environment and are encouraged to actively participate in their learning. International Baccalaureate requirements such as external assessments and portfolio work are completed in this year of the program.

## **MATH ELECTIVE**

**Math Seminar – Logic:** Logic is the formal study of what counts as appropriate reasoning. Most of us have some natural abilities at recognizing good reasoning from bad reasoning, but we are also aware that sometimes these intuitions are quite fallible – especially depending on the topic reasoned about! Logic began with the observation that there were patterns as to what counted as good arguments and what counted as bad ones – patterns of reasoning that reliably took us from some set of claims known to be true (“premises”) to other claims that are true (“conclusions”). When premises are advanced to support a conclusion, we call it an “argument” and thus, since logic studies the relations of inference between premises and conclusions, logic also helps us put together good arguments. Students will demonstrate a mastery of logic through the creation of truth tables, exploration of conditional and biconditional statements, use of deductive reasoning through logic puzzles and word problems, and the creation of logical arguments in a formal debate setting. The course is designed for students in grades 11 or 12.

## MUSIC DEPARTMENT

Courses reflect the Massachusetts Arts Curriculum Framework and the Standards of the Massachusetts Music Educators Association.

MUSIC COURSES						
COURSE	TITLE	LEVEL	YEAR	TERM	Meets Every Day (E) or Alternating Days (A)	CREDITS
MUS5300	Repertory Chorus	H	ALL	Full Year	E	6
MUS5301	Concert Choir	H	10,11,12	Full Year	E	6
MUS5302	Concert Band	H	ALL	Full Year	E	6
MUS5303	Advanced Concert Band	H	10,11,12	Full Year	E	6
MUS5304	Music Theory I	H	10,11,12	Semester	A	1.5
MUS5305	Music Theory II	H	10,11,12	Semester	A	1.5
MUS5306	Piano I	H	ALL	Semester	A	1.5
MUS5307	Piano II	H	10,11,12	Semester	A	1.5
MUS5308	Learn to Jam	H	ALL	Semester	A	1.5
MUS5309	American Pop Music History	H	ALL	Semester	A	1.5
MUS5310	Music in Media	H	ALL	Semester	A	1.5
MUS5311	Jazz Improvisation I	H	ALL	Semester	A	1.5
MUS5101	Speak with Power, Sing with Soul	H	ALL	Semester	A	1.5
MUSIB01	IB Music SL I	IB	11	Full Year	A	3

**Repertory Chorus:** This performing ensemble is open to all students who have completed the requirements of the Middle School Vocal Program. The Repertory Chorus is for singers who have a Soprano or Alto range. Students with a Tenor or Bass range should audition for Concert Choir. All freshmen must be recommended by their middle school choral teacher. The high school choral director must recommend all students for continuation or entry into the Repertory Chorus. The course covers knowledge of choral concepts, vocal production, sight-reading, performance experience, three-part singing, and choral technique. **Required performances include a Holiday Concert, Spring Concert, and Pops Concert.**

**Concert Choir:** This performing ensemble is open to all students that have completed the Repertory Chorus Program and students in the Concert Choir. Freshman Tenor and Bass must be recommended by their middle school choral director. The High School choral director must recommend all students for continuation in or entry to Concert Choir. This course continues the study of choral concepts, four-to-five part-singing, musical performances from major musical periods, a higher standard of literature, and advanced sight-reading. **Required performances include the Holiday Concert, Spring Concert, and Pops Concert.**

**Concert Band:** This performing ensemble is open to all students who have completed the requirements of the Middle School Instrumental Program. Students entering Concert Band as a freshman must be recommended by their middle school instrumental teacher. The high school band director must recommend all students for continuation or entry into the Concert Band. The course covers tonal production, phrasing, articulation, performance concepts, and band literature. Students are required to have their instruments unless they are using school-owned instruments. **Required performances include the Holiday Concert, Spring Concert, and Pops Concert.**

**Advanced Concert Band:** This advanced performing ensemble is open to all students who have completed the Concert Band Program and students in the Advanced Concert Band. The high school band director must recommend all students for continuation or entry into the Advanced Concert Band. This program strives to attain a quality of learning for all students with a higher level of proficiency in our instrumental program. This course continues the study of instrumental techniques and concepts while studying music at a higher level. **Required performances include the Holiday Concert, Spring Concert, and Pops Concert.**

**Music Theory I:** In this course, students will develop an understanding of the fundamentals of music theory and how to apply their knowledge to analyze and compose written music. This course covers the rudiments of music, music terminology, scales and keys, intervals, chords, progressions, transpositions, harmonization, musical form, and composition. **No prerequisite is required.**

**Music Theory II:** In this course, students will continue their studies in the fundamentals of music theory. Students will continue to study sight reading, melodic and harmonic dictation, harmony, the elements of melody and rhythm, composition, part writing, and other various components of music theory. **Prerequisite:** Music Theory I

**Piano I:** In this course, students will develop their skills in piano proficiency through the study of the piano repertoire. Students will learn and apply basic techniques and fundamentals while developing their ability to read and analyze music notation. **No prerequisite is required.**

**Piano II:** In this advanced piano course students will continue to study piano repertoire, improve piano techniques, and improvisation, and further study chords and scales. Students will use their knowledge to analyze and perform music at increasingly difficult levels. **Prerequisite:** Piano I or at least one year of piano lessons.

**Learn to Jam:** In this course, students will develop musicianship skills by learning how to read and perform music in a low-stress environment. Students will develop their arrangements of popular music through drumming while learning how to play simple melodic and chordal structures on various instruments. No prior experience in music is necessary for enrollment in this course and there is no concert requirement.

**American Pop Music History:** Students will study and analyze the rich history of American popular music by listening to and evaluating various popular music. Students will discuss popular music, industry trends, the music business, and the development of the music industry. **No prerequisite is required.**

**Music in Media:** In this course, students will develop skills in critical listening and the role music plays in commercials, film, television, and other forms of entertainment. Students will also analyze and discuss current pop music and industry trends. **No prerequisite is required.**

**Jazz Improvisation I:** This course is designed to develop skills in the jazz style through study and performance. While primarily a performance class, music theory, and history will be incorporated into this course of study as supplemental materials. Through this course, students will learn ensemble and performance skills to enhance their participation in a jazz style.

**Speak with Power, Sing with Soul:** This performance-based course is designed for students to develop their individual singing and speaking skills through spoken word and song. The course will explore the fundamentals of group and solo singing, as well as effective public speaking through theory and practice. In this course, students will study the anatomy of the human voice and develop healthy vocal techniques, enabling them to analyze and create musical and spoken performances. Students will evaluate their performance and the performances of their peers through written responses and oral discussions. **No prerequisite required.**

**International Baccalaureate Music:** This course fosters students' musicianship and shapes their musical identities as researchers, creators, and performers. The course defines musicianship as comprising three, intrinsically connected aspects: knowledge and understanding of diverse musical material, engagement with the musical roles of researchers, creators and performers, and competencies and skill in the musical roles of researchers, creators, and performers. The course encourages the acquisition of knowledge and understanding of diverse musical material, and the development of musical competencies and related musical skills in the roles of researchers, creators, and performers through the practical processes of exploring, experimenting, and presenting.

## PHYSICAL EDUCATION

PHYSICAL EDUCATION COURSES					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
PED1100	Physical Education Exploratory	N	9	Term	0.75
PED1100SEI	Physical Education Exploratory	N	9	S	1.5
PED5101	Project Boxer	N	11,12	S	1.5
PED5100	Physical Education	N	10,11,12	S	1.5
PED5102	Strength and Conditioning	N	10,11,12	S	1.5
PED5103	Aerobic Water Fit First Aid	N	10,11,12	S	1.5

**Physical Education Exploratory:** This course is a requirement for all freshmen and provides students with the opportunity to expand their knowledge and performance skills in both current health topics and personal fitness. Each student will assess their current fitness levels using state-of-the-art technology and equipment and set personal goals for self-improvement. The study and practice of fitness assessment, character education, cooperative games, and trust-building activities will help students develop the skills, knowledge, and attitudes necessary for a successful introduction to high school. Students will learn and develop strategies that will enable them to take control of their wellness and develop sound decision-making skills about relevant health topics facing young adults. **Students must be scheduled into both courses. The SEI section is for our Multilingual Learners.**

**Project Boxer:** Cooperative and collaborative skills are an essential part of a student's education. This class helps students learn how to work with others more through character-building, skill-building, and social skills activities in the gym and in the community. Cooperative activities help students learn how individual efforts unite to help the team accomplish goals. Perseverance is key in teamwork, and students learn that failure is an important foundational step, as it allows them to review, reflect, reorganize strategies, and redirect their efforts toward a successful outcome.

**Physical Education:** Physical Education emphasizes health-related fitness and develops the skills and habits for a lifetime of activity. These courses provide students with opportunities to achieve and maintain a health-enhancing level of physical fitness and increase their knowledge of fitness concepts. Students receive instruction in rules, skills, and strategies associated with the different sports as well as learning experiences involving physical conditioning activities and life-long physical activities. The program includes skill development and the application of rules and strategies of complex difficulty in the following different movement forms: health-related fitness activities (cardiorespiratory endurance, muscular strength, and endurance, flexibility, and body composition), aerobic exercise, team sports, individual and dual sports, and recreational games. The program promotes the spirit of cooperation, leadership, fair play, and friendly competition. Ongoing assessment includes both written and performance-based skill evaluations.

**Strength and Conditioning 019:** This class is designed for students who are interested in shaping up and feeling great while improving their heart, lungs, and circulatory system. By experimenting with a variety of aerobic and anaerobic activities, students will be able to monitor their heart rates, assess cardio and strength progress, and learn the language and benefits of cardiovascular and muscular fitness. Strength training is important to overall health. Students will apply the concepts of muscle development to tone their bodies and improve their strength. By the end of this program, students will feel confident in their knowledge of anatomy and their ability to work out in any fitness facility.

**Aerobic Water Fitness/First Aid-CPR 034:** Students will learn to perform the six primary swimming strokes using hydrodynamic principles to improve their abilities. Students will apply the principles of cardiovascular endurance, muscular strength, and flexibility. By experimenting with a variety of aerobic activities in and outside the pool, students will be able to monitor their heart rates, assess their cardio progress, and learn the language and benefits of cardiovascular fitness. Students will be able to perform life-saving water skills as well as basic rescue techniques. Basic First Aid and CPR skills will be included in this course. Upon successful completion, students will qualify for an American Red Cross Certification course that will be offered multiple times after school throughout the year.



## SCIENCE DEPARTMENT

SCIENCE COURSES					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
SCI1301	Intro to Biotechnology - H	H	9	Full Year	6
SCI1201	Intro to Biotechnology - CPA	CPA	9	Full Year	6
SCI5300	Biology - H	H	9,10	Full Year	6
SCI1304	Freshman Physics - H	H	9	Full Year	6
SCI5200	Biology - CPA	CPA	9,10	Full Year	6
SCI5100	Biology - CP	CP	9,10	Full Year	6
SCI2301	Biotechnology II - H	H	10	Full Year	6
SCI2201	Biotechnology II - CPA	CPA	10	Full Year	6
SCI2202	Biology in Society - CPA	CPA	10	Full Year	6
SCI5305	Chemistry - H	H	10, 11, 12	Full Year	6
SCI5301	Biotechnology III Chemistry - H	H	11, 12	Full Year	6
SCI5201	Biotechnology III Chemistry - CPA	CPA	11, 12	Full Year	6
SCI3202	Chemistry in Society - CPA	CPA	11	Full Year	6
SCI5304	Physics - H	H	11, 12	Full Year	6
SCI5303	Environmental Earth Sci - H	H	10,11,12	Full Year	6
SCI5203	Environmental Earth Sci - CPA	CPA	11,12	Full Year	6
SCI5302	Biology II - CPA	CPA	10,11,12	Semester	3
SCI5306	Anatomy and Physiology - H	H	11,12	Semester	3
SCI5206	Anatomy and Physiology - CPA	CPA	11,12	Semester	3
SCI5307	Human Physiology - H	H	11,12	Semester	3
SCI5207	Human Physiology - CPA	CPA	11,12	Semester	3
SCI5209	Horticulture - CPA	CPA	11,12	Semester	3
SCI5210	Urban Landscape and Design - CPA	CPA	11,12	Semester	3
SCI5308	Astronomy - H	H	11,12	Semester	3
SCI5208	Astronomy - CPA	CPA	11,12	Semester	3
SCI5309	Earth and Space Science - CPA	CPA	11,12	Semester	3
SCI5204	Physics - CPA	CPA	11,12	Full Year	6
SCI5205	Chemistry - CPA	CPA	11,12	Full Year	6
SCIIB01	IB Biology I - HL	IB	11	Full Year	3
SCIIB02	IB Biology II - HL	IB	12	Full Year	6
SCIIB03	IB Sp Exercise Health Sci I - HL	IB	11	Full Year, Alt. Days	3
SCIIB04	IB Sp Exercise Health Sci II - HL	IB	12	Full Year	6
SCIIB07	IB Chemistry I - HL	IB	11	Full Year	6
SCIIB08	IB Chemistry II - HL	IB	12	Full Year	6
SCIIB05	IB Envir Sys and Society I - SL	IB	11	Full Year	6
SCIIB06	IB Envir Sys and Society II - SL	IB	12	Full Year	6
SCI4301	Biotechnology IV - Honors	H	12	Full Year	6
SCI4201	Biotechnology IV - CPA	CPA	12	Full Year	6
SCIAP83	AP Physics 1	AP	12	Full Year	6
SCIAP25	AP Chemistry	AP	12	Full Year	6
SCIAP22	AP Biology	AP	12	Full Year	6
SCIAP40	AP Environmental Science	AP	12	Full Year	6

## Science Pathways

The chart below is designed to assist parents and students in selecting one or more courses that align with science interest areas. Please note that it is not necessary to take ALL THE COURSES listed under a specific pathway, however, the course sequences are simply recommended progressions. Students are free to move between levels as they develop academic skills and are encouraged to challenge themselves by taking more advanced classes.

Please see the VCE Department for Technology and Engineering Pathways.

	Grade 9	Grade 10	Grade 11	Grade 12
Advanced Core Sciences (H)	Biology <b>MCAS</b>  Freshman Honors Physics <b>MCAS</b>	Chemistry	Physics or IB Biology I IB IB Sports, Exercise and Health Science I IB IB Chemistry I IB Environmental Systems in Societies I	IB Biology II—IB IB Sports, Exercise and Health Science II IB IB Chemistry II IB Environmental Systems in Societies II AP Physics 1 AP Biology AP Chemistry AP Environmental Sci.
Biotechnology (H, CPA)	Intro to Biotech	Biotech II <b>Biology MCAS</b>	Biotech III/ Chemistry	Biotech IV
Health Care Innovation Pathway (H, CPA)	Intro to Biotech	Biotech II <b>Biology MCAS</b>	IPHC Pathway Course (see VCE offerings)	IPHC Pathway Course (see VCE offerings)
General Core Sciences (CPA, CP)	Biology <b>MCAS</b>	Biology <b>MCAS</b>	Chemistry or Electives	Physics Or Electives
Science in Society (CPA, CP) (Phasing Out)		Biology in Society <b>MCAS</b>	Chemistry in Society	

**Introduction to Biotechnology:** This is the first course in the four-year non-vocational biotechnology pathway. Here students explore the molecular basis of life. Fundamental concepts in biology are learned from an engineering perspective (genetic engineering, synthetic biology, and biomimicry). Students learn not just about biological processes, but how to explore ways to engineer solutions to problems facing humanity. Students generate and analyze data through key laboratory activities which make those concepts transparent, quantifiable and understandable.

**Biology:** This course will focus on biochemistry, cell structure, and function, photosynthesis, cellular respiration, reproduction, genetics, and human body systems. The course will also cover evolution, the characteristics of life, ecology, and population dynamics. Students will gain a better understanding of themselves and basic life processes by participating in laboratory experiments, multimedia, hands-on learning activities, and projects. Students will take the Biology MCAS at the end of this course.

**Freshmen Physics:** This honors course provides problem-based investigations of thermodynamics, mechanics, motion, optics, and electricity (Prerequisite: Grade 8 Full Honors Academy or Honors Academy Math).

**Biotechnology II:** This is the second course in the four-year non-vocational biotechnology pathway. Students study evolution and how it has created the enormous biological diversity found on Earth. These key concepts in biology are presented through a series of projects. Students work to develop core microbiology and molecular biology laboratory skills and techniques. They analyze their DNA to generate and analyze bioinformatics data. Students use this data to explore issues regarding personal genetics and ethics. As students grapple with these deeply personal issues, they improve their scientific literacy and global citizenship. Students will take the Biology MCAS at the end of this course. The prerequisite: Biotechnology I

**Biology in Society:** This is the second course in the “Science in Society” pathway. This course will focus on plant and animal biology relevant to food production in society. We will explore the complexities of real-world agricultural challenges and explore and analyze traditional, modern, and alternative solutions. We will learn about how and why some solutions create new problems and how to avoid that both as individuals and as a society. Students will investigate how factors, events, and situations interact. The course will also focus on the intersection between science, politics, and media. At the end of the course, students will take the Biology MCAS. Prerequisite: Ecology in Society.

**Chemistry:** The honors course presents properties of matter, atomic structure, chemical bonding, stoichiometry, solutions, chemical equilibrium, acid/base reactions, nuclear chemistry, and an introduction to organic chemistry. Students are required to develop and present a science fair project. Prerequisites: Students in honors chemistry should have a grade of C minus or better in Honors Biology or teacher recommendation. Geometry/Math II should be taken concurrently. Students in CPA course explore the properties of matter, atomic structure and bonding, periodicity, and chemical reactions. The prerequisite Biology.

**Biotechnology III/Chemistry:** This course, the third in the biotechnology program will focus on the biotechnological applications of matter, atomic structure, bonding, periodicity, and chemical reactions. Prerequisite: Biotechnology II

**Chemistry in Society:** This is the third course in the “Science in Society” pathway and will focus on medicinals used in society. We will explore the complexities of real-world biomedical challenges and explore and analyze traditional, modern, and alternative solutions. We will learn about how and why some solutions create new problems and how to avoid that both as individuals and as a society. The course’s main goal will be to help students investigate how factors, events, and situations interact. The course will also focus on the intersection between science, politics, and media Prerequisite: Biology in Society.

**Physics:** The honors course provides problem-based investigations of thermodynamics, mechanics, motion, optics, and electricity. Pre-requisite: Algebra II/Math III Recommendation: Honors Math. The CPA Course provides problem-based investigations of measurement, motion, mechanics, optics, and electricity. Prerequisite: Algebra II should be taken either before or in the same semester as CPA Physics.

**Environmental Earth Science:** This honors course explores links between the Earth and all the organisms that inhabit this planet. The course will emphasize the origin of the Earth and its crust, plate tectonics, evolution, ecology, meteorology, the distribution of life on Earth, energy use, and conservation. Using laboratory experiments, multimedia, hands-on learning activities, and projects, students will make connections between the biosphere, its biomes, and the living and nonliving parts of the environment. Students will gain a better understanding of the world around them through an emphasis on scientific inquiry skills and application.

**Biology II:** This semester course (formerly known as Bio Review) is aimed at students who need to retake the Biology MCAS. The course will focus on topics that are most common on the Biology MCAS examination and include cell structure, and function, genetics, evolution, human body systems, and ecology. In addition to participating in laboratory experiments, multimedia, hands-on learning activities, and projects, students will also practice past MCAS questions and take MCAS practice examinations. Preference will be given to senior then junior students needing to take this class.

**Anatomy and Physiology:** This full-year course provides a comprehensive overview of the structure and function of human body systems and how each system depends on the others. Students will dissect various specimens to explore the true nature of body systems and organs. Principles of biology, chemistry, and physics are interwoven throughout. The course is recommended for students interested in pursuing healthcare or biological fields of study in college. Prerequisite: Grade of C or better in both Biology and Chemistry.

**Human Physiology:** This introductory course provides a basic overview of the structure and function of human body systems and how each system depends on the others. Students will dissect various specimens to explore the true nature of body systems and organs. Principles of biology, chemistry, and physics are often applied. The course is recommended for students interested in understanding their anatomy and physiology.

**Horticulture:** This elective focuses on the differences between plant and animal cells, an in-depth description of photosynthesis and respiration, and the study of plants commonly associated with human activity. Production of plants in the greenhouse, gardens, and hydroponics systems will emphasize current horticultural practices.

**Urban Landscape and Design:** This elective will focus on landscape design in an urban setting. This class is composed of two segments. The first segment will focus on landscape design, planning, and budgeting. The second segment will be the creation of gardens for both aesthetic and harvesting purposes. The emphasis of this class will be on minimizing our impact on the environment and finding "green solutions". This class will feature a working garden where methodologies learned in the class will be applied in the field.

**Astronomy:** This elective emphasizes the fundamentals of astronomy including cosmology, the solar system, the universe, and emerging discoveries in the field. Activities include student research, group projects, and presentations in the planetarium.

**Earth and Space Science:** This elective focuses on concepts in geology, meteorology, oceanography, and astronomy, emphasizing the interactions of the Earth's spheres and human activities. Students analyze data to learn about direct and indirect evidence used in evaluating competing theories about the origin of stars and planets. Students will study the current state of our earth through laboratory experiments, multimedia, hands-on learning activities, and projects while emphasizing scientific inquiry skills and the application of other core sciences.

**International Baccalaureate HL Biology I:** This course outlined by the International Baccalaureate Organization for HL Biology features a strong emphasis on individual and/or team research involving real-world biology-related projects. Students are expected to advance to HL IB Biology II in their senior year. Prerequisite: Completion of freshman and sophomore science courses.

**International Baccalaureate HL Biology II:** This is the second year of the IB HL Biology course, designed by the International Baccalaureate Organization. Students are required to complete a written lab for Internal Assessment and to take the IB HL Biology exams at the end of the course. Prerequisite: International Baccalaureate HL Biology I

**International Baccalaureate SL Sports, Exercise and Health Science I:** This course, designed by the International Baccalaureate Organization allows students to explore the concepts, theories, models, and techniques that underpin each subject area and through these develop their understanding of the scientific method. Students are expected to advance to IB SL Sports, Exercise, Health Science II in their senior year. Prerequisite: Completion of freshman and sophomore science courses.

**International Baccalaureate SL Sports, Exercise, and Health Science II:** This is the second year of the IB SL Sports, Exercise, Health science course, designed by the International Baccalaureate Organization. Students are required to complete a written lab for Internal Assessment and to take the IB SL SEHS exams at the end of the course. Prerequisite: International Baccalaureate Sports, Exercise and Health Science I

**International Baccalaureate HL Chemistry I:** This course, designed by the International Baccalaureate Organization, allows students to explore the concepts, theories, models, and techniques that underpin the science of chemistry. Students are expected to advance to IB HL Chemistry II in their senior year. Prerequisite: Completion of freshman and sophomore science courses.

**International Baccalaureate HL Chemistry II:** This is the second year of the IB HL Chemistry course, designed by the International Baccalaureate Organization. Students are required to complete a written lab for Internal Assessment and to take the IB HL Chemistry exams at the end of the course. Prerequisite: International Baccalaureate HL Chemistry I.

**International Baccalaureate SL Environmental Systems and Societies I:** This course, designed by the International Baccalaureate Organization, is a complex and contemporary course that engages students in the challenges of 21st century environmental issues. Students develop a scientific approach through explorations of environmental systems. They also acquire understandings and methods from various subjects whilst studying sustainability issues within social, cultural, economic, political, and ethical contexts. Prerequisite: Completion of freshman and sophomore science courses.

**International Baccalaureate SL Environmental Systems and Societies II:** This is the second year of the IB SL Environmental Systems and Societies course, designed by the International Baccalaureate Organization. Students are required to complete a written lab for Internal Assessment and to take the IB SL Environmental Systems and Societies exams at the end of the course. Prerequisite: International Baccalaureate SL Environmental Systems and Societies I.

**Biotechnology IV:** The final course in the biotechnology program focuses on the applications and engineering principles of biotechnology. This course will build upon the concepts and skills learned in previous biotechnology courses and allow students to design, develop and run experiments that are similar to those in today's biotechnology labs. Over the past several years students have participated in the Tiny Earth Network identifying previously uncharacterized antibiotics from soil bacteria. Students are required to present their research as part of a scientific poster session at the end of the year. Prerequisite: Biotechnology III and approval of the department head.

**AP Physics 1:** This course is outlined by the Advanced Placement Program of the College Board. Students who complete the course are required to take the AP Physics Exam. In this algebra-based course, students will investigate topics such as Newtonian mechanics (including rotational dynamics and angular momentum), work, energy, power, mechanical waves, and sound. Students will also be introduced to electric circuits. Students are required to develop and present a science fair project. Prerequisite: A grade of B or better in Honors Physics, Chemistry, and Algebra II/Math III.

**AP Chemistry:** This course is outlined by the Advanced Placement Program of the College Board. Students who complete the course are required to take the AP Chemistry Exam. This course is equivalent to college-level introductory Chemistry and is a laboratory course. Students are required to develop and present a science fair project. Prerequisite: A grade of B or better in Honors Chemistry or a grade of A- or better in CPA Chemistry and a grade of B or better in Algebra II/Math III.

**AP Biology:** This course is outlined by the Advanced Placement Program of the College Board. Students who complete the course are required to take the AP Biology Exam. Students are required to develop and present a science fair project. Prerequisite: A grade of B or better in Honors Biology, Chemistry, and Physics.

**AP Environmental Science:** This course is outlined by the Advanced Placement Program of the College Board. Students who complete the course are required to take the AP Environmental Science Exam. This course will provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Students are required to develop and present a science fair project. Prerequisite: A grade of B or better in Honors Biology, Chemistry, and Physics.

## SOCIAL SCIENCE DEPARTMENT

The foundation of the Social Science curriculum at Brockton High School is based on the 2018 Massachusetts History and Social Science Frameworks, with a specific focus on Guiding Principle #2: *“an effective history and social science education incorporates diverse perspectives and acknowledges that perception of events is affected by race, ethnicity, culture, religion, education, gender, disability, and personal experiences.”* Embedded within all courses are the practice standards for history which will prepare our students with the knowledge and skills necessary to participate as contributing citizens in our democratic society.

SOCIAL SCIENCE CORE COURSES					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
SOC1300	US History I- H	H	9	Full Year	6
SOC1200	US History I-CPA	CPA	9	Full Year	6
SOC1100	US History I CP	CP	9	Full Year	6
SOC2300	US History II- H	H	10	Full Year	6
SOC2200	US History II-CPA	CPA	10	Full Year	6
SOC2100	US History II-CP	CP	10	Full Year	6
SOCAP07	AP US History	AP	10	Full Year	6
SOC3300	Modern World History-H	H	11	Semester	3
SOC3200	Modern World History-CPA	CPA	11	Semester	3
SOC3100	Modern World History-CP	CP	11	Semester	3
SOCAP43	AP European History	AP	11,12	Full Year	6
SOCAP93	AP World History	AP	11,12	Full Year	6
SOCIB10	IB World History Year I	IB	11	Full Year (1 of 2)	6
SOCIB11	IB Psychology Year I	IB	11	Full Year (1 of 2)	6
SOCIB20	IB World History Year II	IB	12	Full Year (2 of 2) Alt.	6
SOCIB12	IB Psychology Year II	IB	12	Full Year (2 of 2) Alt. Days	6
SOCAPAA	AP African American Studies	AP	11,12	Full Year	6
SOCIAL SCIENCE ELECTIVES					
COURSE	TITLE	LEVEL	YEAR	TERM	CREDITS
SOC5301	History of Brockton - H	H	10,11,12	Semester	3
SOC5201	History of Brockton - CPA	CPA	10,11,12	Semester	3
SOC5302	Art History -H	H	10,11,12	Semester	3
SOC5202	Art History -CPA	CPA	10,11,12	Semester	3
SOC5303	Genocide and Human Behav H	H	10,11,12	Semester	3
SOC5203	Genocide and Human Behav CPA	CPA	10,11,12	Semester	3
SOC5304	Foreign Policy and Terrorism H	H	11,12	Semester	3
SOC5204	Foreign Policy and Terrorism CPA	CPA	11,12	Semester	3
SOC5305	History of US Immigration H	H	11,12	Semester	3
SOC5205	History of US Immigration CPA	CPA	11,12	Semester	3
SOC5306	African American History-H	H	12	Semester	3
SOC5307	Psychology-H	H	12	Semester	3
SOC5308	Economics-H	H	12	Semester	3

In addition to the required courses, students can choose an elective course to supplement their Social Science studies.

**United States History I:** The full year required course for all freshmen, examines how conflict and compromise impacted the founding and development of the U.S. between 1754-1877 in the Colonial Era, the Revolutionary Era, the Early Republic, Westward Expansion, the Civil War and Reconstruction. Special attention is given to the definition of who is a citizen and how that definition changes over time.

**United States History II:** The required course for all sophomores, except those taking AP US, explores events, movements and ideas from 1877 to the present. Beginning with the cause and consequences of the Industrialization of America, students explore reasons for and responses to the move from rural to urban spaces and to the open West. Students study the transition to a manufacturing economy and the movement of people within and outside of the U.S. Students continue with their exploration of the definition of citizenship begun in the U.S. 1 course and examine the many conflicts and compromises within a diverse social and ethnic population. As students explore the Cold War and Modern Challenges students focus on the roles played by the United States in the modern world and their own place as citizen within that context. NOTE: Students are required to complete a civic action project.

**Advanced Placement United States History:** This college-level course follows the National College Board Curriculum and is structured around the investigation of nine chronological periods from 1400 to the present-day history of the United States. NOTE: Students must take the National AP U.S. History exam and complete a civic action project as a requirement for completion of the course of study. *\*Application required.*

**Modern World History:** The required semester course for juniors, except those taking AP or IB courses, uses a case-study approach to explore the social, political, and economic roots of the modern world. Beginning with the impact of the first world war, students will trace the development of the state, the emergence of leadership, the consolidation of power, the challenges to that power, the treatment of women/minorities and religious groups as well as the impact of domestic and foreign policies on the state. The course concludes with students utilizing the case study format to research a state which is of interest to them.

**Advanced Placement European History:** This college-level course follows the National College Board Curriculum and examines the history of western civilization from 1450 to the present. Students investigate nine chronological periods spanning from the Renaissance to the 20<sup>th</sup>-century global conflict. NOTE: Students must take the national AP exam at the end of the course. *\*Application required.*

**Advanced Placement World History (216):** This college-level course follows the National College Board Curriculum and is structured around the investigation of five course themes and 19 key concepts in six different chronological periods, from approximately 8000 B.C.E. to the present. Students must take the national AP exam at the end of the course. *\*Application required.*



**IB World History Year I:** In the first year of this two-year course, students use historical evidence to critically evaluate, analyze, and comprehend the major social, political, and economic challenges facing world nations from the 19<sup>th</sup> century to the present. Other topics of study include the move to global war, the rise and rule of 20<sup>th</sup>-century authoritarian states, and the causes and effects of 20<sup>th</sup>-century wars. Note this is year 1 of the two-year course.

*\*Application required.*

**IB Psychology Year I:** In the first year of this two-year course, students will be introduced to different approaches to understanding behavior through the biological, cognitive, and sociocultural approaches. Students will study and critically evaluate the knowledge, concepts, theories, and research that have developed understanding in these fields. The four options in the course focus on areas of applied psychology: abnormal psychology, developmental psychology, health psychology, and the psychology of relationships. NOTE: This is year one of the two-year course. *\*Application required. This is a 2-year course.*

**IB World History Year II:** The second year of this two-year course is designed to help students use historical evidence to critically evaluate, analyze, and comprehend the major social, political, and economic challenges facing European nations from the 19<sup>th</sup> century to the present. Other topics of study include the move to global war, the rise and rule of 20<sup>th</sup>-century authoritarian states, and the causes and effects of 20<sup>th</sup>-century wars. **NOTE: This course is restricted to current IB History students.**

**IB Psychology Year II: (IB260):** The second year of this two-year course is designed to help students deepen their understanding of the different approaches to behavior: the biological, cognitive, and sociocultural approaches. Students will apply the knowledge, concepts, theories, and research that have developed their understanding of these fields in the year 1 course and through authentic research and the design of a research project, deepen their knowledge of abnormal psychology, developmental psychology, health psychology, and the psychology of relationships. **NOTE: This course is restricted to current IB History students.**

**Advanced Placement African American Studies Course:** African American Studies is an exciting, interdisciplinary course that draws from a variety of fields—history, literature, the arts, geography, science, and law—to explore the vital contributions and experiences of African Americans. In AP African American Studies, students explore key topics that extend from early African kingdoms to the ongoing challenges and achievements of the contemporary moment. Given the interdisciplinary character of African American Studies, students in the course will develop skills across multiple fields.

## **SOCIAL SCIENCE ELECTIVES**

**History of Brockton:** This is a one-semester elective course which focuses on the founding of the city of Brockton, from its beginnings as the North Parish of Bridgewater (1649) to its transformation into the City of Champions (2000). Students will examine the cultural and demographic history of the city, including the contributions of African Americans, women, and immigrants. Highlights include Brockton's role in the Underground Railroad, Civil War, the Grover Disaster, and the Strand Theatre Fire.

**Art History:** Through art, this one-semester course will examine power structures, politics, and culture from Prehistoric art to major art movements of today. Historical analysis skills will be used to critically evaluate visual arts from canonical pieces, such as the Mona Lisa, to contemporary political cartoons and graffiti.

**Genocide and Human Behavior:** This one-semester course is designed to increase students' historical understanding of the Holocaust and other notable genocides in the 20th century including Rwanda and Armenia. As students explore the complexities of history and genocide, they will reflect on the choices citizens make regarding the issues they confront today and consider how they can make a difference by becoming thoughtful, responsible citizens.

**Foreign Policy and the Roots of Terrorism:** This one semester course is designed to increase students' knowledge of U.S. foreign policy specifically concerning the rise of terrorism in the second half of the 20th century and culminating with the 9/11 attacks that led to a substantial shift in focus on international terrorism. This course will also examine the origins of the War on Terror, U.S. foreign policy in the Middle East, the rise of ISIS, and the changing nature of warfare in the 21st century.

**The History of Immigration to the United States through Film:** This one-semester course is designed to provide a comprehensive understanding of immigration and its impact. Immigration is a phenomenon that touches upon every aspect of American society from economic growth to neighborhood institutions to national culture. This seminar will provide an overview of immigration policies and laws and their impact on people and families. Using digital media and film, students will come to understand the experience of immigrants to the United States at various periods on history.

**African American History:** This is a one-semester **senior** elective designed to provide students with a comprehensive understanding of the history of African Americans. Students will explore questions relating to the experiences of people of African descent, the contributions of African Americans in the development of the nation, and the evolution of African American culture.

**Psychology:** This is a semester **senior** elective designed to examine the behavioral science concerned with the description, prediction, and control of the behavior and mental processes of the individual.

**Economics:** This is a one-semester **senior** elective designed to provide students with an understanding of the American economic system to help them participate in the business world as workers, consumers, and investors.