

Brockton Public Schools

Brockton High School Course of Study Guide

2021-2022



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BROCKTON HIGH SCHOOL MINIMUM GRADUATION REQUIREMENTS

SUBJECT	CLASS 2021	CLASS 2022, 2023, 2024, 2025
ENGLISH	21	24
MATHEMATICS	15	18
SCIENCE	12	15
SOCIAL SCIENCE	15	15
WELLNESS/PE*	6	6
ELECTIVES	26	26
TOTAL NUMBER OF CREDITS REQUIRED	95	104

* 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 six 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): As well as meeting all local graduation requirements, the Commonwealth of Massachusetts requires all students to pass English/Language Arts, Math, and Science, Technology/Engineering MCAS exams to receive a high school diploma. Students take these exams for the first time at the end of the sophomore year.

To assist students in preparing for these exams, Brockton High offers many MCAS preparation programs. Tutoring is available in the ACCESS Center (Azure) during the day and after school. 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 Classes of 2021 -2023, students must earn a score of 472 or higher in English, a score of 486 or higher in Math, and a score of 220 in STE. If a student does not earn those scores, 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 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*

***Please note starting with the Class of 2022, promotion requirements have changed.**

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

GRADE	Class of 2021	Class of 2022, 2023, 2024
10	21	27
11	43	49
12	66	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 Dean'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-leveled (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 is based on 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 and space availability.

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 department head. 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 completion of class assignments and homework.

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. student remains at the same level but requests a teacher change) are rarely approved; these changes will be made only in extreme circumstances and with the approval of the Dean.

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 Head and the Dean.

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, each of which 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.

Take some time to look through the AP courses we offer. See if any interest you. By taking these courses, you can find out what college work is like while you have the support of teachers you trust in an environment you know.

New AP Exam Registration Process

Starting with the 2019-20 school year, you'll be asked in the fall to register for AP Exams. The exams will still take place in May. If your AP course doesn't start until after the fall exam ordering deadline, you can register later in the year. For help registering, talk to your AP teacher, counselor, or your school's AP coordinator.

Brockton High School AP Courses Offered

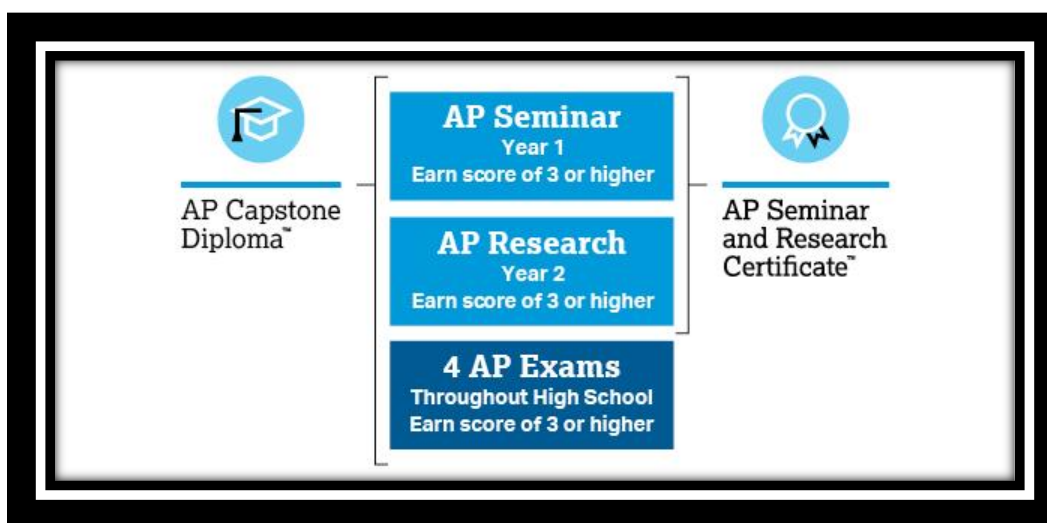
*Course offerings are subject to change due to low enrollment and teacher availability. Please refer to the department pages for specific course descriptions and pre-requisites. AP courses are approved annually by the College Board. The process involves a review of the course syllabus each year along with a review of textbooks, resources, and materials that will be used by the classroom teacher.

<ul style="list-style-type: none">• 2-D Art and Design• 3-D Art and Design• Biology• Calculus AB• Calculus BC• Chemistry• Chinese Language and Culture• Computer Science A• Computer Science Principles	<ul style="list-style-type: none">• Drawing• English Language and Composition• English Literature and Composition• Environmental Science• European History• Latin	<ul style="list-style-type: none">• Physics C: Electricity and Magnetism• Physics C: Mechanics• Spanish Language and Culture• Statistics• US History• World History: Modern
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AP Capstone™ Diploma Program

AP CAPSTONE™ IS A DIPLOMA PROGRAM FROM THE COLLEGE BOARD BASED ON TWO YEARLONG 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.



Individual Course Descriptions:

- **Year 1: 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. Open to Sophomores starting in September 2021.
- **Year 2: 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. Recommended Prerequisites: Students must have successfully completed the AP Seminar course. Opening in September 2022.

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. Courses consist of both internally and externally graded assessments.

Students may apply to be Certificate candidates or Diploma candidates 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 a full IB course load as well as the IBDP Core Components

To earn the full IB Diploma, a student must take a total of 3 Higher Level and 3 Standard Level courses from the Groups below (chosen from the school's course offerings), with at least one course from each of groups 1-5. Students must also complete the required Core Components.

Group 1: Language and Literature

Group 2: Language Acquisition

Group 3: Individuals and Societies

Group 4: The Sciences

Group 5: Mathematics

Group 6: The Arts

Core Components—required to attain the IB Diploma

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 (the arts, ethics, human sciences, natural sciences, history, etc.) through various ways of knowing (memory, emotion, sense perception, reason, etc.).
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. This is a required component to earn the IB Diploma and is limited to students enrolled in the IB Diploma track.
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. This is a required component to earn the IB Diploma and is limited to students enrolled in the IB Diploma track.

GUIDANCE DEPARTMENT SERVICES

Department Head of Guidance: Catherine Leger

The school offers the following support services:

- ☐ Guidance counselors
- ☐ Bilingual guidance counselors
- ☐ Occupational Education counselor
- ☐ Adjustment counselors

Guidance Counselors~

All secondary students are assigned a guidance counselor who works to prepare them to face decisions that will affect their futures. These decisions may involve personal issues, high school, college, military, or career choices. Counselors work with students both individually and in small groups, and they often conduct larger classroom sessions or workshops. Some services are provided to all students while other academic, personal and social services are determined by need.

School Adjustment Counselors ~ (SAC)

School adjustment counselors deal with a student's behavior or social problems. S/he works with students and their families when behavioral or adjustment problems are causing difficulties at home and /or affecting 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.

Student, parents, and teacher 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

Developmental Guidance Calendar Group Counseling Sessions

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.

FRESHMEN	SOPHOMORES
<ul style="list-style-type: none"> September/October: Freshmen Seminar November: Early College Planning February: MEFA Pathway/College and Career Planning: Interest Inventory/Intro to Career Plan. 	<ul style="list-style-type: none"> January: Sophomore Workshop: Strategies for Success May: <i>MEFA Pathway</i> /College and Career Planning: Resume & Update of Career Plan
JUNIORS	SENIORS
<ul style="list-style-type: none"> October: Preparing for the SAT December: Understanding the PSAT scores March: College Admissions Seminar (MEFA) April: College/ Career Workshop April: College Fair 	<ul style="list-style-type: none"> September: Senior College/Career Workshop November: Financing your Education (MEFA) November-January: The Common Application November: College Admission Counselor Panel November/December: Obtaining a FAFSA ID November/December: College Experience Panel December: Alumni Panel January: Financial Aid Seminar (STONEHILL) January: FAFSA DAY (MASSASOIT) January to March: FAFSA completion February: College On-Site Decision Day February: Scholarship Seminar April: Understanding my Award Letter (MEFA)

Special Topics and Targeted Lessons Grades 9-12: October through May

<ul style="list-style-type: none"> Anger Management/Conflict Resolution Assertiveness/Self-Esteem for Girls Newcomers' Program Mini-Career Fair Series S.M.A.R.T. Goals S.T.E.M. Career and College Fair Organizational Skills 	<ul style="list-style-type: none"> Success at BHS Motivational Group for Boys Substance Abuse Mini College Fair Series Small-Group Course Planning Sessions Freshmen in Transition Group Calculating my GPA
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BROCKTON HIGH SCHOOL EDUCATIONAL PLAN									
GRADUATION REQUIREMENTS	Subject	GRADE ____ -	CREDITS EARNED	GRADE ____ -	CREDITS EARNED	GRADE ____ -	CREDITS EARNED	GRADE ____ -	CREDITS EARNED
REQUIRED SUBJECTS (TO OBTAIN A DIPLOMA AT BHS)	ENGLISH								
	MATH								
	SOCIAL SCIENCE								
	SCIENCE								
	HEALTH/ PE								
OPTIONAL (FOR COLLEGE BOUND STUDENTS)	FOREIGN LANGUAGE								
ELECTIVES	Electives allow you to explore your career interests. Dare to take something different. You may be surprised.								
Post- Secondary Goal	College, Military, Trade, Technical School, Work, etc.								
Extracurricular Activities	In and out of school activities. Seek community service activities.								

College Readiness Checklist

Grade 9	Grade 10
<ul style="list-style-type: none"> <input type="checkbox"/> Take challenging classes in all academic and elective areas. <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. <input type="checkbox"/> Get to know your guidance counselor, and college resources available in school. <input type="checkbox"/> Take an interest inventory. <input type="checkbox"/> Identify personal, academic and career goals. 	<ul style="list-style-type: none"> <input type="checkbox"/> Take challenging classes in all academic and elective areas. <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. <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. <input type="checkbox"/> Meet with your guidance counselor to discuss colleges and their requirements. <input type="checkbox"/> Take advantage of opportunities to visit colleges and talk to students. <input type="checkbox"/> Work on your resume. <input type="checkbox"/> Revisit your personal, academic and career goals.
Grade 11	Grade 12
<ul style="list-style-type: none"> <input type="checkbox"/> Take challenging classes in all academic and elective areas. <input type="checkbox"/> Meet with your guidance counselor to discuss colleges and their requirements. <input type="checkbox"/> Continue involvement in school or community-based extracurricular activities. <input type="checkbox"/> Decide which colleges most interest you. <input type="checkbox"/> Contact these schools to request information and admission applications. Ask about special admission requirements, financial aid, and deadlines. <input type="checkbox"/> Talk to college representatives at college fairs and take advantage of opportunities to visit colleges and talk to students. <input type="checkbox"/> Consider people to ask for recommendations from teachers, counselors, employers, etc. <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. <input type="checkbox"/> Update your resume and apply for a job, job shadow opportunity or internship <input type="checkbox"/> Revisit your personal, academic and career goals. 	<ul style="list-style-type: none"> <input type="checkbox"/> Take challenging classes in all academic and elective areas. <input type="checkbox"/> Meet with your counselor to discuss plans. <input type="checkbox"/> Fill out the FAFSA for Federal Aid. Confirm if you need to complete the CSS Profile. <input type="checkbox"/> Contact colleges to request information and applications for admission. Be sure to ask about financial aid, admissions requirements, and deadlines. <input type="checkbox"/> If possible, visit the colleges. <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. <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.) <input type="checkbox"/> Generate a College and Career Planning Checklist

Your Plan for The Future Student/Parent Info Sheet

www.yourplanforthefuture.org



Your Plan for The Future 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).

Your Plan for The Future 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 Your Plan for the Future account

Go to www.yourplanforthefuture.org

Username: (the email you originally logged in with)

Password: First Letter of the First Name (capitalized)

First Letter of last name (lower case)

ID Number

EXAMPLE: Name Mike Bates Username: 123456@bpsma.org ID#: Mb123456

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. Students can also practice for standardized tests (MCAS, PSAT, SAT, and Accuplacer). Once the program is finalized, students may receive credit.

To supplement this work, students also participate in the online **College Interactive** program, a web-based app that allows students to create a profile based on their college preferences and majors. They can receive timely information from colleges and universities, watch virtual videos, and learn about financial aid.

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

<p>9TH GRADE TOPICS: COLLEGE AND CAREER READINESS I</p> <ol style="list-style-type: none"> 1. Register for MEFA Pathway 2. Watch introductory video 3. Create Profile (all sections) 4. Find your Learning Style 5. Take an Interest Inventory 6. Find your Personality Type 7. Discover Careers that match your Personality. 8. Generate Goals and strategies (Personal-Academic- Career) 9. Register for College Interactive 	<p>10TH GRADE TOPICS: COLLEGE AND CAREER READINESS II</p> <ol style="list-style-type: none"> 1. Update your Profile 2. Take a Skills Inventory 3. In Discover Careers: Explore Careers that march your skills. 4. Search Post-Secondary Educational-Training options (Learn about the test requirements- Practice MCAS/ PSAT) 5. Evaluate last year's Goals and Strategies. Generate New Goals and Strategies. (Personal, Academic, Career) 6. Visit College Interactive
<p>11TH GRADE TOPICS: COLLEGE AND CAREER READINESS III</p> <ol style="list-style-type: none"> 1. Update your Profile. Save/Print your resumé. 2. Take the Values Inventory 3. Discover Careers: Explore Careers that match your Values (use interests and skills filters) 4. Search Post-Secondary Educational-Training options and learn about testing requirements (Practice for PSA-SAT- Accuplacer) 5. Review last year's Goals and Strategies. Create new Goals and Strategies (Personal, Academic, Career) 6. Search Colleges (Match Me) 7. Visit College Interactive 	<p>12TH GRADE TOPICS: COLLEGE AND CAREER READINESS IV</p> <ol style="list-style-type: none"> 1. Update your Profile. Save/Print Résumé. 2. Explore Careers using all your filters (Interest, Skills, and Values- you may want to re-take the inventories) 3. Select two potential Careers and Compare profiles. 4. Select Post-Secondary Educational/training/apprenticeship options and compare profiles. 5. Update <i>College Search/College List/College Compare (Match Me)</i> 6. Work on "Estimating" Financial Tools 7. Work on Scholarship Search

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	YEAR	TERM	CREDITS
121	Freshman English - Honors	Freshman	Full Year	6
147	Freshman English – College Prep Advanced	Freshman	Full Year	6
187	Freshman English – College Prep	Freshman	Full Year	6
151/156	Freshman English – Special Education Co-Taught (CPA/CP)	Freshman	Full Year	6
115	Sophomore English – Honors	Sophomore	Full Year	6
125	Sophomore English – College Prep Advanced	Sophomore	Full Year	6
175	Sophomore English – College Prep	Sophomore	Full Year	6
152/176	Sophomore English – Special Education Co-Taught (CPA/CP)	Sophomore	Full Year	6
1110	Language and Composition - Honors	Junior	Full Year	6
1111	Language and Composition – College Prep Advanced	Junior	Full Year	6
1112	Language and Composition – College Prep	Junior	Full Year	6
1103/1104	Language and Composition – Special Education Co-Taught (CPA/CP)	Junior	Full Year	6
109	Advanced Placement Language and Composition	Junior	Full Year	6
1B105	International Baccalaureate English (Language A1) -HL	Junior	Full Year	6
100	World Literature – Honors	Senior	Full Year	6
113	World Literature – College Prep Advanced	Senior	Full Year	6
116/117	World Literature – Special Education Co-Taught (CPA/CP)	Senior	Full Year	6
105	Advanced Placement English Literature and Composition	Senior	Full Year	6
IB106	Senior International Baccalaureate English (Language A1) -HL	Senior	Full Year, alternate days	6

ELECTIVE COURSES				
COURSE	TITLE	YEAR	TERM	CREDITS
1123	Creative Writing	All	Semester	3
1100	The American Musical	Sophomore, Junior, Senior	Semester	3
1124	Public Speaking	Sophomore, Junior, Senior	Semester	3
956	Aesthetics of Film	Junior, Senior	Semester	3
920	History of Theater	Junior, Senior	Semester	3
1116	Journalism	Junior, Senior	Semester	3
1136	Poetry	Junior, Senior	Semester	3

FRESHMAN COURSES

Freshman English (121, 147, 187, 151,156): Students will focus on becoming skillful readers and writers through the close analysis of literature. Students will use the language of literary elements to generate responses to texts through discussion, projects, presentations, and written assessments. Assessments measure growth in reading and writing.

Also: Creative Writing 1123

SOPHOMORE COURSES

Sophomore English (115, 125, 175, 152, 176) Students will build upon the skills established during their first year. Students must demonstrate skill using literary elements and devices in the analysis of literature while also developing authentic writing skills to produce writing for a variety of audiences.

Also: Creative Writing 1123, The American Musical 1100, Public Speaking 1124

JUNIOR COURSES

Language and Composition (1110, 1111, 1112, 1103, 1104): Students will become skillful readers of prose written in a variety of rhetorical contexts and become skillful writers who compose for different tasks, purposes, and audiences. Students will study models to understand and emulate how writers use their craft. The final course assessment is a research project in which students will identify and synthesize sources to demonstrate knowledge of a topic under investigation. Through discussion, projects, presentations, and written assessments, students will show growth in analytical reading and writing.

Advanced Placement Language and Composition 109*: Students will engage in the careful reading and critical analysis of authors' use of language in their work. Students examine different rhetorical devices through various writing modes and media. Students will analyze the authors' diction, structure, style, and context to determine the purpose and impact of these choices on the writing. 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. ***Application required.**

International Baccalaureate English (Language A1) IB105* - HL: 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. These assessments include 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 five major assessments. ***Application required.**

Also: Creative Writing 1123, The American Musical 1100, Public Speaking 1124, Journalism 1116, Poetry 1136, Aesthetics of Film 956, History of Theater 920

SENIOR COURSES

World Literature (100 & 113): Students will read literature representing various cultures, genres, styles, periods, and aesthetic theories. Using a variety of critical lenses and analytic techniques, students will evaluate the principles, values, and choices that authors present. Through discussion, projects, presentations, and written assessments students will demonstrate mastery of skills in analytical reading and writing.

Advanced Placement English Literature and Composition 109*: Students will engage in the 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.

Written assessments, an integral part of the 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. ***Application required.**

Senior IB Language A1 (English) IB 106 – HL: This course will culminate in the IB Language A1 exams in the spring. The course's focus is three-fold: to develop student's appreciation of literature as art; to develop student's 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.

Prerequisite: Successful completion of Junior IB Language A1 (English) IB105.

Also: Creative Writing 1123, The American Musical 1100, Public Speaking 1124, Journalism 1116, Poetry 1136, Aesthetics of Film 956, History of Theater 920

ENGLISH ELECTIVES

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

Creative Writing 1123: Students will develop and improve their technique and individual style in several forms of prose. The emphasis of the courses is on writing; however, students may study different texts as models to obtain an appreciation of form and craft.

Aesthetics of Film 956: 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. Students will receive credits in English for this course.

The American Musical 1100: An introduction to the history and development of the musical from its origins to the present. Students will explore and analyze distinctive musical and dramatic features of specific works. The analysis will include various topics such as the social context, themes, and literary development of multiple works.

History of Theatre 920: 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.

Public Speaking 1124: 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.

Journalism 1116: The course introduces students to the concepts of newsworthiness and press responsibility; develop students' skills in writing and editing stories, headlines, and captions. The course emphasizes writing style and technique as well as production values and organization.

Poetry 1136: Students will develop and improve their technique and individual style in poetry. The emphasis of the course is on writing; however, students may study sample works from writers to obtain an appreciation of form and craft.

MATHEMATICS DEPARTMENT

COURSE	TITLE	YEAR	TERM	CREDITS
410	Algebra I / Mathematics I College Prep	Freshman	Full Year	6
411	Algebra I / Mathematics I – Special Education Co-Taught College Prep	Freshman	Full Year	6
412	Algebra I / Mathematics I College Prep Advanced	Freshman	Full Year	6
426	Geometry / Mathematics II Honors	Freshman	Full Year	6
423	Geometry / Mathematics II College Prep	Sophomore	Full Year	6
4423	Geometry / Mathematics II College Prep	Junior	Full Year	6
424	Geometry / Mathematics II Special Education Co-Taught College Prep	Sophomore	Full Year	6
425	Geometry / Mathematics II College Prep Advanced	Sophomore	Full Year	6
4425	Geometry / Mathematics II College Prep Advanced	Junior	Full Year	6
415	Algebra II / Mathematics III College Prep Advanced	Sophomore	Full Year	6
413	Algebra II / Mathematics III Honors	Sophomore	Full Year	6
4413	Algebra II / Mathematics III Honors	Junior	Full Year	6
405	Algebra II / Mathematics III College Prep	Junior	Full Year	6
405 SP	Algebra II / Mathematics III Special Education Co-Taught College Prep	Junior	Full Year	6
421	Algebra II / Mathematics III College Prep Advanced	Junior	Full Year	6
486	Trigonometry - CP	Senior	Semester	3
408	Pre-Calculus - Honors	Senior	Semester	3
409	Pre-Calculus – Honors	Junior	Full Year	6
429	Pre-Calculus – CPA	Junior	Full Year	6
431	Pre-Calculus – CPA	Senior	Semester	3
417	Calculus – Honors	Senior	Semester	3
427	Calculus – CPA	Senior	Semester	3
473	Math Review	Senior	Semester 1	3
474	Math Review	Senior	Semester 2	3
477	Math Review	Junior	Semester 1	3
478	Math Review	Junior	Semester 2	3
418	Algebra Topics	Junior-Senior	Semester	3
422	Geometry Topics	Junior- Senior	Semester	3

404	AP Computer Science Principles	Sophomore, Junior, Senior	Full Year	6
4404	AP Computer Science Applications	Junior, Senior	Full Year	6
400	AP Calculus AB	Senior	Full Year	6
456	AP Calculus BC	Senior	Full Year	6
401	AP Statistics	Junior, Senior	Full Year	6
IB410	IB Math Year 1	Junior	Full Year	6
IB 409	IB Math Year 2	Senior	Full Year	3
4501	Math Seminar – Logic	Junior, Senior	Semester	3
4504	Math Seminar – Statistics	Junior, Senior	Semester	3

FRESHMAN COURSES

Algebra I / Mathematics I (410, 411, 412): The study of Algebra I/ Mathematics I includes topics listed in the Massachusetts Curriculum Framework for Mathematics. The unit design follows the Model Integrated Mathematics 1 pathway. Unit titles include Expressions and Equations, Graphs, Lines, Exponents and Functions, Statistics and Fitting Lines, Introduction to Geometry, and Congruence and Transformations. In the college preparatory level of this course (410, 411) more time will be dedicated to reviewing prerequisite skills to make the units of study more accessible for students.

Geometry / Mathematics II Honors 426: This study of Geometry / Mathematics II includes topics listed in the Massachusetts Curriculum Frameworks for Mathematics. The unit design follows the Model Integrated Mathematics 2 pathway. Unit titles include Congruence and Proof, Similarity, Circles, Using Similarity, Analytic Geometry, Real Numbers, Polynomials, Quadratics and Complex Numbers, Functions, and Applications of Probability. In the honors classrooms, these topics will be covered in greater depth. Some additional topics that may be explored include The Complex Plane; Complex Numbers, Geometry, and Algebra; Matrices; Trigonometric Functions, Graphs of Trigonometric Functions, and Conics.

SOPHOMORE COURSES

Geometry / Mathematics II (423, 424, 425): This study of Geometry / Mathematics II includes topics listed in the Massachusetts Curriculum Frameworks for Mathematics. The unit design follows the Model Integrated Mathematics 2 pathway. Unit titles include Congruence and Proof, Similarity, Circles, Using Similarity, Analytic Geometry, Real Numbers, Polynomials, Quadratics and Complex Numbers, Functions, and Applications of Probability. In the college preparatory level of this course (423, 424) 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. students will show growth in analytical reading and writing.

Algebra II / Mathematics III (415, 413): This study of Algebra II / 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.

In the honors class, these topics will be covered in greater depth. Some additional topics that may be explored include The Complex Plane; Complex Numbers, Geometry, and Algebra; Matrices; Trigonometric Functions, Graphs of Trigonometric Functions, and Conics.

AP Computer Science Principles 404: a college-level course 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. Successful completion of the course enables students to participate in the advanced placement examination.

AP Computer Science Applications 4404: 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, implement 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.

JUNIOR COURSES

Juniors who have not passed MCAS enroll in Math Review-Algebra #477 and #478

Algebra II / Mathematics III (405, 405SP): This study of Algebra II / 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, Complex Numbers and Polynomials, Polynomial and Rational Functions, Exponential and Logarithmic Functions, and Optimization and Geometric Modeling. 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.

Algebra II / Mathematics III College Prep Advanced 421: This study of Algebra II / 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. In the honors class, these topics will be covered in greater depth. Some additional topics that may be explored include The Complex Plane; Complex Numbers, Geometry, and Algebra; Matrices; Trigonometric Functions, Graphs of Trigonometric Functions, and Conics.

Algebra II / Mathematics III (4413): This study of Algebra II / 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. In the honors class, these topics will be covered in greater depth. Some additional topics that may be explored include The Complex Plane; Complex Numbers, Geometry, and Algebra; Matrices; Trigonometric Functions, Graphs of Trigonometric Functions, and Conics.

Pre-Calculus (409, 429): The objectives are to provide 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. Full-year pre-calculus courses will cover topics in greater depth and will teach units that prepare students for AP Calculus and AP Statistics.

Math Review (477 & 478): 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. Juniors will register for 477 first semester and 478 second semester.

Algebra Topics 418: This semester class is designed for students who have passed the MCAS, want to take more math courses, and have not passed Mathematics I. This course is appropriate for students who have completed Geometry but have never passed a formal Algebra course. The course will focus on five major types of equations and their solutions along with selected topics in Number Sense.

Geometry Topics 422: semester course designed for students who have passed the MCAS and Mathematics I course and have not passed a Mathematics II course. This course will focus on plane and solid geometric figures, similarity and proportion, measurement of area and volume, and coordinate geometry.

AP Computer Science Principles 404: Advanced Placement Computer Science Principles is a college-level course 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. Successful completion of the course enables students to participate in the advanced placement examination. Prerequisite: Excellent grades and completion of Algebra II/ Mathematics III at the honors level.

AP Computer Science Applications 4404: 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, implement 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.

IB Math SL – Year 1 IB410: 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.

SENIOR COURSES

Seniors who have not passed MCAS must enroll in Math Review 473 and 474

Trigonometry 486: 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 (408, 431): The objectives are to provide 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 (417, 427): introductory course in calculus 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 Review (473 & 474): designed for upperclassmen who need to 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 should register for both parts I and II. Seniors will register for 473 first semester and 474 second semester.

Algebra Topics 418: This semester class is designed for students who have passed the MCAS, want to take more math courses, and have not passed Mathematics I. This course is appropriate for students who have completed Geometry but have never passed a formal Algebra course. The course will focus on five major types of equations and their solutions along with selected topics in Number Sense.

Geometry Topics 422: semester course designed for students who have passed the MCAS and Mathematics I course and have not passed a Mathematics II course. This course will focus on plane and solid geometric figures, similarity and proportion, measurement of area and volume, and coordinate geometry.

AP Computer Science Principles 404: Advanced Placement Computer Science Principles is a college-level course 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. Successful completion of the course enables students to participate in the advanced placement examination. Prerequisite: Excellent grades and completion of Algebra II/ Mathematics III at the honors level.

AP Computer Science Applications 4404: 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, implement 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) 400: a college-level course for students with a high aptitude for Mathematics and an 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) 456: a college-level course for students with a high aptitude for Mathematics and an 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 and 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 401: a college-level course for students with a high aptitude for mathematical analysis and an above-average achievement. It is planned to meet the needs of students who plan on continuing studies in the fields of mathematics, psychology, or business. The course covers four basic principles of exploring data, sampling, and 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: Excellent grades, completion of Mathematics III at the Honors Level, as well as teacher recommendations and completion of the summer assignment.

IB Math SL– Year 2 IB409: 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 SEMINARS

Math Seminar courses are math electives that allow students to explore topics in mathematics that are not in the current curriculum or to look at mathematics that is in the standard curriculum in a different way. The elective courses do not impact GPA. Any student interested in exploring mathematics can take any of our math seminar offerings.

Math Seminar – Logic 4501: 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.

Math Seminar – Statistics 4504: Students will collect, analyze, and draw conclusions from data. This course draws connections between all aspects of the statistical process, including design, analysis, and conclusions. Additionally, using the vocabulary of statistics this course will teach students how to communicate statistical methods, results, and interpretations. Students will learn how to use graphing calculators and read computer output to enhance the development of statistical understanding. The course is designed for students in grades 11 or 12.

SCIENCE DEPARTMENT

COURSE	TITLE	YEAR	TERM	CREDITS
508H	Introduction to Biotechnology Honors	Freshman	Full Year	6
508	Introduction to Biotechnology CPA	Freshman	Full Year	6
508ST	Introduction to Biotechnology STEM - Honors	Freshman	Full Year	6
507ST	Introduction to Biotechnology STEM - CPA	Freshman	Full Year	6
508IPH	Introduction to Biotechnology Innovation Pathway Health Care - Honors	Freshman	Full Year	6
508IP	Introduction to Biotechnology Innovation Pathway Health Care - CPA	Freshman	Full Year	6
518	Biology - Honors	Freshman	Full Year	6
561	Ecology In Society - CP	Freshman	Full Year	6
554	Environmental Earth Science - CPA	Freshman	Full Year	6
555A	Environmental Earth Science A- CP	Freshman	Semester	3
555B	Environmental Earth Science B- CP	Freshman	Semester	3
542	Biology – CPA	Sophomore	Full Year	6
590	Biology – CP	Sophomore	Full Year	6
521H	Biotechnology II - Honors	Sophomore	Full Year	6
521	Biotechnology II - CPA	Sophomore	Full Year	6
521STH	Biotechnology II STEM - Honors	Sophomore	Full Year	6
521ST	Biotechnology II STEM - CPA	Sophomore	Full Year	6
521IPH	Biotechnology II Innovation Pathway Health Care - Honors	Sophomore	Full Year	6
521IP	Biotechnology II Innovation Pathway Health Care - CPA	Sophomore	Full Year	6
562	Biology in Society - CP	Sophomore	Full Year	6
566	Sustainable Urban Environment II - CP	Sophomore	Full Year	6
514	Chemistry - Honors	Sophomore	Full Year	6
522H	Biotechnology III Chemistry - Honors	Junior	Semester	6
522	Biotechnology III - CPA	Junior	Semester	3
563	Chemistry in Society	Junior	Semester	3
564	Physics in Society	Senior	Semester	3
504	Physics - Honors	Junior	Full Year	6
518CP	Applied Biology - CP	Junior	Full Year	6
598	BioReview I - CP	Jr, Sr	Semester	3
599	BioReview II - CP	Jr, Sr	Semester	3
5524	Anatomy and Physiology - H	Jr, Sr	Semester	6
5525	Anatomy and Physiology - CPA	Jr, Sr	Semester	6
524	Human Physiology - Honors	Jr, Sr	Semester	3
525	Human Physiology - CPA	Jr, Sr	Semester	3
520	Horticulture - CP	Jr, Sr	Semester	3
540	Oceanography - CPA	Jr, Sr	Semester	3
541	Oceanography - Honors	Jr, Sr	Semester	3

543	Ornithology - CPA	Jr, Sr	Semester	3
544	Ornithology - CP	Jr, Sr	Semester	3
502	Bioethics – CPA	Jr, Sr	Semester	3
557	Bioethics - CP	Jr, Sr	Semester	3
506	Urban Landscape and Design - CP	Jr, Sr	Semester	3
511	Urban Landscape and Design - CPA	Jr, Sr	Semester	3
567	Scientific Communication - Honors	Jr, Sr	Semester	3
568	Scientific Communication - CPA	Jr, Sr	Semester	3
569	Scientific Communication - CP	Jr, Sr	Semester	3
588	Topics in Applied Science - CP	Jr, Sr	Semester	3
531	Astronomy - Honors	Jr, Sr	Semester	3
532	Astronomy - CPA	Jr, Sr	Semester	3
536	Ecology - Honors	Jr, Sr	Semester	3
535	Ecology - CPA	Jr, Sr	Semester	3
547	Earth and Space Science - CPA	Jr, Sr	Semester	3
595	Earth and Space Science - CP	Jr, Sr	Semester	3
533	Physics - CPA	Jr, Sr	Semester	3
503	Physics - CP	Jr, Sr	Semester	3
534	Chemistry - CPA	Jr, Sr	Semester	3
509	Chemistry - CP	Jr, Sr	Semester	3
IB507	IB Biology I - HL	Junior	Full Year	3
IB508	IB Biology II - HL	Senior	Full Year	6
IB575	IB Sports, Exercise and Health Science I - HL	Junior	Full Year	3
IB576	IB Sports, Exercise and Health Science II - HL	Senior	Full Year	6
5527	Biotechnology IV - Honors	Senior	Full Year	6
527	Biotechnology IV - CPA	Senior	Full Year	6
5529	Advanced Laboratory Research - Honors	Senior	Full Year	6
5501	AP Physics 1	Senior	Full Year	6
501	AP Physics C	Senior	Full Year	6
505	AP Chemistry	Senior	Full Year	6
507	AP Biology	Senior	Full Year	6
553	AP Environmental Science	Senior	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 Science (H)	Biology 518 Biology MCAS 9 th Grade Science Expo	Chemistry 514 SAT II recommended Science Fair	Physics 504 or IB Biology I IB507 IB Sports, Exercise and Health Science I IB575 Science Fair	IB Biology II—IB 508 IB Sports, Exercise and Health Science II IB576 AP Physics 1—5501 AP Physics C—501 AP Biology—507 AP Chemistry—505 AP Environmental Sci.—553 Science Fair
Biotechnology (H, CPA)	Intro to Biotech 508H or 508 9 th SynBio Expo	Biotech II 521H or 521 Biology MCAS Science Fair	Biotech III/ Chemistry 522H or 522 Science Fair	Biotech IV 5527 or 527 Science Fair
STEM (CPA)	Intro to Biotech 507ST 9 th SynBio Expo	Biotech II 521ST Biology MCAS Science Fair	Biotech III/ Chemistry 522 and/or STEM Elective Science Fair	Biotech IV 527 and/or STEM Elective Science Fair
Health Care Innovation Pathway (H, CPA)	Intro to Biotech 508IPH or 508IP 9 th SynBio Expo	Biotech II 521IPH or 521IP Biology MCAS Science Fair	IPHC Pathway Course (see VCE offerings) Science Fair	IPHC Pathway Course (see VCE offerings) Science Fair
General Science (CPA/CP)	Environmental Earth Science 554 or 555A and B 9 th Grade Science Expo	Biology 542 or 590 Biology MCAS Science Fair	Chemistry 534 or 509	Physics 533 or 503 or Science Elective Science Fair
Science in Society (CP)	Ecology in Society 561 9 th Grade Science Expo	Biology in Society 562 Biology MCAS Science Fair	Chemistry in Society 563 Science Fair	Physics in Society 564 Science Fair
Sustainability (CP)	Pathway ending No new enrollments	Sustainable Urban Environment II 566 Biology MCAS Science Fair	Horticulture 520 or Chemistry 509	Urban Landscape and Design 511 or 506 or Science Elective

FRESHMAN COURSES

Biology 518: Course for students who have a strong foundation in Earth Science and Physical Science by the end of grade eight. In addition to the focus on biochemistry, cell structure and function, photosynthesis, cellular respiration, reproduction, genetics, and the human body systems, this course includes topics and principles that prepare students for the SAT II Biology Examination. Students are required to develop and present a 9th Grade Science Expo project. Students will take the Biology MCAS at the end of this course. Prerequisite: Teacher recommendation and a grade of B- or better in 8th-grade Advanced Science or an A- or better in 8th grade Honors Science.

Introduction to Biotechnology (508H, 508, 508ST, 507ST, 508IPH, 508IP): 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 process, 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. Students are required to develop and present a 9th Grade Science Expo project. Prerequisite: CPA - none. STEM or IPHC versions require student application and teacher recommendation from middle school.

Environmental Earth Science (554, 555A & 555B): This 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, and 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. Students are required to develop and present a 9th grade Science Expo project. Students who enroll in the CP sections are expected to take both 555A and 555B.

Ecology in Society 561: This is the first course in the “Science in Society” pathway and will focus on the energy and resources used in society. We will explore the complexities of real-world ecological 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 explore the intersection between science, politics, and media. Students are required to develop and present a science fair project and 9th Grade Science Expo.

SOPHOMORE COURSES

Biology (518, 542, 590): This course will focus on biochemistry, cell structure and function, photosynthesis, cellular respiration, reproduction, genetics, and human body systems. 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. Prerequisite for Honors level: Teacher recommendation from 9th-grade science teacher and approval from the department head.

Biotechnology II (521STH, 521ST, 521IPH, 521IP, 521H, 521): 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. Students are required to develop and present a science fair project. Prerequisite: Biotechnology I

Chemistry 514: 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.

Sustainable Urban Environment II 566: Second course in the Sustainability Pathway will build on the lessons of sustainability in a continuation of Sustainable Urban Environment I. We will explore and analyze concepts in the earth, physical and life sciences. The greenhouse, courtyard and garden plots will be the environments in which students use hands-on approaches to learn about hydroponics, alternative energy, environmental issues and solutions such as endangered species, interdependence, and food production. Students are required to develop and present a science fair project. Prerequisite: Sustainable Urban Environment I

Biology in Society 562: 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. Students are required to develop and present a science fair project. At the end of the course, students will take the Biology MCAS. Prerequisite: Ecology in Society.

JUNIOR AND SENIOR COURSES

Biotechnology III/Chemistry (522H, 522): This course, the third in the biotechnology program will focus on the biotechnological applications of matter, atomic structure and bonding, periodicity and chemical reactions. An emphasis on Forensic Science will guide students through these topics. Prerequisite: Biotechnology II

Physics 504: This course provides problem-based investigations of thermodynamics, mechanics, motion, optics, and electricity. Students are required to develop and present a science fair project. Pre-requisite: Algebra II/Math III Recommendation: Honors Math

Applied Biology 518CP: This post-MCAS course will focus on the application of life science principles in society. Students will apply their learning about genetics, evolution, and ecology through research and project-based learning to understand how these concepts impact students' lives, the local community, and the greater world. This course is intended for students who have passed the MCAS but failed their Biology course. Prerequisite: Guidance counselor recommendation and department head approval.

Anatomy and Physiology (5525, 5524): 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 (525, 524): 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 520: 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.

Oceanography (540, 541) This elective focuses on the world's oceans and processes that underlie their physical, chemical, biological and geological features.

Ornithology (543, 544) This elective introduces students to the study of birds. Throughout this course, students will examine the behavior, evolution, identification, anatomy, ecological importance and cultural significance of birds. This course has an emphasis on fieldwork and independent research and study.

Bioethics (502, 557): This elective focuses on the ethical implications of biotechnology. Students will engage with the concepts of how to understand and develop ethical arguments, the progression of bioethics through history, today's technology and future issues. Issues such as genetic testing and engineering, cloning, equality, and others will be addressed.

Scientific Communication (567, 568, 569): This elective explores different forms of scientific communication including lab reports, scientific posters, PowerPoint presentations, press releases, and news articles. Each unit (each form of communication) would be structured in this order: complete a lab experiment, write about it, look at an exemplar, revise. The focus on writing and speaking skills will help any student be better prepared for college and/or career.

Urban Landscape and Design (506, 511): 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 about 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.

Chemistry in Society 563: 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. Students are required to develop and present a science fair project. Prerequisite: Biology in Society.

Physics in Society 564: This is the final course in the "Science in Society" pathway and will focus on the electronic, information, and communication systems used in society. We will explore the complexities of real-world 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 explore the intersection between science, politics, and media. Students are required to develop and present a science fair project as well as a social action project. Prerequisite: Chemistry in Society.

Topics in Applied Science 588: Students will have an opportunity to explore the real science behind the headlines in this elective. The popular press often presents conflicting opinions including the danger of epidemics, the threat of global warming or forensic evidence in a court case. Students will read the popular press coverage and identify scientific journal articles that support various positions. Students will also conduct experiments to determine the validity of evidence and gain a deeper understanding of the connection between the scientific process and the resulting data and conclusions that lead to the statements seen in the press. Upon completion of this course, students will be able to apply learned strategies to evaluate evidence and make decisions based on valid scientific evidence rather than popular opinions.

Astronomy (532, 531): This elective emphasizes the fundamentals of astronomy including cosmology, the solar system, universe and emerging discoveries in the field. Activities include student research, group projects, and presentations in the planetarium.

Ecology (535, 536): This elective focuses on the interrelationships between organisms and their habitats. Human influences on ecological dynamics are emphasized. Activities include individual and collaborative research, laboratory exercises and fieldwork.

Earth and Space Science (547, 595): This elective focuses on concepts in geology, meteorology, oceanography, and astronomy with an emphasis on the interactions of the Earth's various 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.

Physics (533, 503): This 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.

Chemistry (534, 509): Students in these courses explore the properties of matter, atomic structure and bonding, periodicity and chemical reactions.

International Baccalaureate Biology I – HL IB507: 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 IB Biology II in their senior year. Students are required to develop and present a science fair project.

International Baccalaureate Biology II – HL IB508: This course outlined by the curriculum established by the International Baccalaureate Organization for HL Biology. Students are required to complete written labs for Internal Assessment and to take the IB HL Biology exams at the end of the course. Students are required to develop and present a science fair project.

International Baccalaureate Sports, Exercise and Health Science I – HL IB575: 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 Biology II in their senior year. Students are required to develop and present a science fair project.

International Baccalaureate Sports, Exercise and Health Science II – HL IB576: This course, designed by the International Baccalaureate Organization for HL SEHS. Students are required to complete written labs for Internal Assessment and to take the IB HL SEHS exams at the end of the course. Students are required to develop and present a science fair project.

Biotechnology IV (5527, 527): The final course in the biotechnology program focuses on the applications and engineering principals 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.

Advanced Laboratory Research 5529: This course will focus on the applications and engineering principals of biotechnology. This course will build upon the concepts and skills learned in the BHS/MLSC Apprenticeship Challenge and allow students to design, develop and run experiments that are similar to those in today's biotechnology labs. Students are required to develop and present a science fair project. Prerequisite: MLSC Apprenticeship Challenge graduate or previous internship experience in an academic or commercial life sciences laboratory and approval of the department head.

AP Physics 1 5501: This course 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 Physics C 501: This course outlined by the Advanced Placement Program of the College Board. Students who complete the course are required to take the AP Physics Exam. This course will help students learn critical thinking skills through topics in mechanics, electricity, and magnetism. Introductory calculus will be learned and used in this course. 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 Calculus is recommended.

AP Chemistry 505: This course 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 507: This course 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 553: This course 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 Brockton High School Social Science Department has incorporated the Core Concept of the Massachusetts History and Social Science Curriculum Framework as its foundation:

The goal of a history and social science curriculum is to enable students, by systemic study, to acquire the knowledge, skill, and judgment to continue to learn for themselves; to participate intelligently, justly, and responsibly in civic life, and in deliberation about local, national, and international issues; and to avail themselves of historical and cultural resources - historic sites, museums, parks, libraries, multimedia information sources - wherever they may live or travel.

The Brockton High School Social Science Department strives to prepare our students to live in a democratic society in an interdependent world with the knowledge and skills necessary to become rational, humane, and contributing citizens in our world.

SOCIAL SCIENCE CORE COURSES				
COURSE NO.	TITLE	YEAR	TERM	CREDITS
206FR	US History I- Honors	9	Full Year	6
206FRST/C	US History I-Stem Honors/CPA	9	Full Year	6
229FR	US History I-CPA	9	Full Year	6
252FR	US History I CP	9	Full Year	6
202SO	US History II- Honors	10	Full Year	6
202SOST/C	US History II-Stem Honors/CPA	10	Full Year	6
225SO	US History II-CPA	10	Full Year	6
283SO	US History II-CP	10	Full Year	6
212	AP US History	10/11	Full Year	6
213JR	Modern World History-Honors	11	Semester	3
220JR	Modern World History-CPA	11	Semester	3
202	US History II- Honors	11	Full Year	6
225	US History II- CPA	11	Full Year	6
283	US History II- CP	11	Full Year	6
2202	US History II- Honors	11/12	Semester	3
2225	US History II- CPA	11/12	Semester	3
2283	US History II- CP	11/12	Semester	3
205	AP European History	11/12	Full Year	6
216	AP World History	11/12	Full Year	6
IB2250	IB History Year I	11	Full Year (1 of 2)	6
IB259	IB Psychology Year I	11	Full Year (1 of 2)	6
IB2253	IB II: History of Europe	12	Full Year (2 of 2) Alt.	6
IB260	IB II: Psychology	12	Full Year (2 of 2) Alt.	6

SOCIAL SCIENCE ELECTIVES				
COURSE	TITLE	YEAR	TERM	CREDITS
242	History of Brockton	9	Semester	3
265	Genocide and Human Behavior	11/12	Semester	3
237	Art History	11/12	Semester	3
2230	Foreign Policy and the Roots of Terrorism	11/12	Semester	3
241	American Government and Civics	11/12	Semester	3
215	African American History-Honors	12	Semester	3
248	African American History-CPA	12	Semester	3
245	Psychology-Honors	12	Semester	3
255	Psychology-CPA	12	Semester	3
218	Economics-Honors	12	Semester	3
243	Economics- CPA	12	Semester	3
211	Ancient American Civilizations-Honors	12	Semester	3
231	Ancient American Civilizations- CPA	12	Semester	3

FRESHMAN COURSES

United States History I (206FR, 206FRST/C, 229FR, 252FR): The required course for all freshman, examines the establishment of the nation and its struggles including the American Revolution, the development of the government, issues surrounding slavery, and events leading up to and including the Civil War and Reconstruction. Students then examine industrialization, immigration, Progressivism, and World War I in a global context.

History of Brockton (242): An elective course for freshman that focuses on events from 1649-2000 in the city of Brockton. Topics include the settlement of Brockton, the emergence of the Industrial Revolution, and the birth of the Shoe Industry. Students will examine the cultural and demographic history of the city, including the contributions of African Americans, women and immigrants to the city. Highlights include Brockton's role in the Underground Railroad, Civil War, the Grover Disaster, and the Strand Theatre Fire.

SOPHOMORE COURSES

United States History II (202SO, 202SOST, 225SO, 283SO): The required course for all sophomores, examines the history of the United States during the 20th and 21st centuries. Students will learn about the economic history of the Great Depression, New Deal, World War II, and the Cold War and examine domestic and global policies and politics in the 21st century. **Students will be required to complete a civic action project as a requirement of the course.**

Advanced Placement United States History (212): This is a college-level course, which follows the National College Board Curriculum and examines the history of the United States from its beginnings to the present. **Students will be required to complete a civic action project as a requirement of the course.** Students must take the national AP exam at the end of the course. **Application required.* **NOTE: Due to the Social Science course content of the International Baccalaureate Program (IB), enrollment in AP US History is a prerequisite for grade 10 students considering IB History their junior year.**

JUNIOR COURSES

Modern World History (213JR, 220JR): This one semester course will use 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 upon each state, 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.

United States History II (202, 225, 283): United States History II, the required course for all juniors, examines the history of the United States from the Reconstruction to the present, including many outstanding achievements as well as the nation's major challenges. Participation in National History Day is a required component of this course for all students.

United States History II (2202, 2225, 2283): United States History II, is a course for students who are repeating United States History II junior year. This is a semester course which will examine the history of the United States from the Reconstruction to the present, including many outstanding achievements as well as the nation's major challenges.

Advanced Placement United States History (212): This is a college-level course, which follows the National College Board Curriculum and examines the history of the United States from its beginnings to the present. Students must take the national AP exam at the end of the course. **Students will be required to complete a civic action project as a requirement of the course. *Application required. NOTE: Due to the Social Science course content of the International Baccalaureate Program (IB), enrollment in AP US History is a prerequisite for grade 10 students considering IB History their junior year.**

Advanced Placement European History (205): This college-level course follows the National College Board Curriculum and examines the history of western civilization from 1450 to the present. 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 History Year I: (IB2250): In the first year of this two-year course, students will use historical evidence to critically evaluate, analyze, and comprehend the major social, political, and economic challenges facing world nations from the 19th century to the present. Other topics of study include the move to the global war, the rise and rule of 20th-century authoritarian states, and the causes and effects of 20th-century wars. ****Application required.***

NOTE: *Advanced Placement United States History is a prerequisite for IB History. This will enable students to fulfill their United States History requirement. This course is restricted to students within the IB program. This is a 2-year course.*

IB Psychology Year I: (IB259): In the first year of this two-year course, students will be introduced to three different approaches to understanding behavior: the biological, cognitive and sociocultural approaches. Students study and critically evaluate the knowledge, concepts, theories, and research that have developed the understanding in these fields. The contribution and the interaction of the three approaches are understood through the four options in the course, focusing on areas of applied psychology: abnormal psychology, developmental psychology, health psychology, and the psychology of relationships. The options provide an opportunity to take what is learned from the study of the approaches to psychology and apply it to specific lines of inquiry.

Foreign Policy and the Roots of Terrorism (2230): This course is designed to increase students' knowledge of U.S. foreign policy in relation to the rise of terrorism in the second half of the 20th century, culminating with the 9/11 attacks that led to a substantial shift in focus on international terrorism. Students will learn about the different motivating factors, including religious, social, economic, undertaken in response to U.S. foreign policy in the Middle East. This course will also examine the origins of 9/11, the War on Terror, cultural, religious, and political circumstances of those who engage in violence against the West and its allies. As well as, the U.S. foreign policy in the Middle East, the rise of ISIS and the changing nature of warfare in the 21st century.

Art History (237): Students will look at who is creating art and the audience to examine power structures, politics, and culture from Prehistoric art to major art movements of today. Historical analysis skills will be used to critically evaluate a variety of visual arts from canonical pieces, such as the Mona Lisa, to contemporary political cartoons and graffiti.

American Government and Civics (241): This course is designed to provide a comprehensive understanding of the principles of the American government. The course will support digital literacy, as students use interactive technology to explore a citizen's civic responsibilities through political participation. Completion of the Student Civics project is a required component of this course for all students.

Genocide and Human Behavior (265): This 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 and that they confront today and consider how they can make a difference by becoming thoughtful, responsible citizens. Students will explore issues of racism, intolerance, discrimination, segregation, prejudice, and belonging.

SENIOR COURSES

United States History II (2202, 2225, 2283): United States History II, is the course for students who are repeating United States History II senior year. This is a semester course which will examine the history of the United States from the Reconstruction to the present, including many outstanding achievements as well as the nation's major challenges.

Advanced Placement European History (205): This college-level course follows the National College Board Curriculum and examines the history of western civilization from 1450 to the present. 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 Year II: History of Europe: (IB2253): 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 19th century to the present. Other topics of study include the move to the global war, the rise and rule of 20th-century authoritarian states, and the causes and effects of 20th-century wars. ***NOTE: This course is restricted to current IB history students.***

IB Year II: Psychology: (IB260): The second year of this two-year course is designed to help students understand behavior: biological, cognitive and sociocultural approaches. Students study and critically evaluate the knowledge, concepts, theories, and research that have developed the understanding in these fields. The contribution and the interaction of the three approaches are understood through the four options in the course, focusing on areas of applied psychology: abnormal psychology, developmental psychology, health psychology, and the psychology of relationships. The options provide an opportunity to take what is learned from the study of the approaches to psychology and apply it to specific lines of inquiry. ***NOTE: This course is restricted to current IB history students.***

African American History (215, 248): 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, contributions of African Americans in the development of the nation, and the evolution of African American culture.

Genocide and Human Behavior: (265): This 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 and that they confront today and consider how they can make a difference by becoming thoughtful, responsible citizens. Students will explore issues of racism, intolerance, discrimination, segregation, prejudice, and belonging.

Economics (218, 243): 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.

Ancient American Civilizations (211, 231): This is a one-semester senior elective designed to examine the geography, history, and culture of early Americans. Students will explore the techniques used by archeologists and anthropologists to study various civilizations including the Inca, Aztec, Maya, and Olmec from their origin through the era of exploration.

Psychology (245, 255): This is a one-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.

Foreign Policy and the Roots of Terrorism (2230): This course is designed to increase students' knowledge of U.S. foreign policy in relation to the rise of terrorism in the second half of the 20th century, culminating with the 9/11 attacks that led to a substantial shift in focus on international terrorism. Students will learn about the different motivating factors, including religious, social, economic, undertaken in response to U.S. foreign policy in the Middle East. This course will also examine the origins of 9/11, the War on Terror, cultural, religious, and political circumstances of those who engage in violence against the West and its allies. As well as, the U.S. foreign policy in the Middle East, the rise of ISIS and the changing nature of warfare in the 21st century.

Art History (237): Students will look at who is creating art and the audience to examine power structures, politics, and culture from Prehistoric art to major art movements of today. Historical analysis skills will be used to critically evaluate a variety of visual arts from canonical pieces, such as the Mona Lisa, to contemporary political cartoons and graffiti.

American Government and Civics (241): This course is designed to provide a comprehensive understanding of the principles of the American government. The course will support digital literacy, as students use interactive technology to explore a citizen's civic responsibilities through political participation. Completion of the Student Civics project is a required component of this course for all students.

BILINGUAL / ESL SERVICES DEPARTMENT

BILINGUAL / ESL SERVICES COURSES				
COURSE	TITLE	YEAR	TERM	CREDITS
ENGLISH AS A SECOND LANGUAGE				
840	ESL Through Content-Beginner CP	All	Full Year	6
841	ESL Through Literature-Beginner CP	All	Full Year	6
840SP	ESL Through Content Co-Taught-Beginner-CP	All	Full Year	6
844E	ESL Through Content – Emerging CP	All	Full Year	6
845ES	ESL Through Literature – Emerging CP	All	Full Year	6
844	ESL Through Content – Intermediate CP	All	Full Year	6
845	ESL Through Literature – Intermediate CP	All	Full Year	3
844SP	ESL Through Literature Co-Taught-Intermediate CP	All	Full Year	6
8849A	ESL Through Literature- Advanced CPA	9,10	Full Year	6
849A	ESL Through Literature – Advanced CP	9,10	Full Year	6
8849B	ESL Through Literature-Advanced CPA	11,12	Full Year	6
849B	ESL Through Literature-Advanced CP	11,12	Full Year	6
849SP	ESL Through Literature Co-Taught-Advanced CP	All	Full Year	6
848E	ELD4 Literature CP	All	Full Year	6
849E	ELD4 Literature CP	All	Full Year	6
848ES	ESL Content Through Current Events CP	All	Semester	3
849ES	ESL Literature through Movies CP	All	Semester	3
848SPK	ESL Through Public Speaking CP	All	Semester	3
MATHEMATICS				
811	CV Algebra CP	9	Full Year	6
827	HT Algebra CP	9	Full Year	6
803	SP Algebra CP	9	Full Year	6
7740I	IMM Algebra CPA	9	Full Year	6
740I	IMM Algebra CP	9	Full Year	6
812	CV Geometry CP	10	Full Year	6
828	HT Geometry CP	10	Full Year	6
795	SP Geometry CP	10	Full year	6
7742I	IMM Geometry CPA	10	Full Year	6
742I	IMM Geometry CP	10	Full Year	6
473B	IMM Math Review CP	11,12	Semester 1	3
474B	IMM Math Review CP	11,12	Semester 2	3
474C	CV Math Review CP	11,12	Semester	3
SCIENCE				
796FY	CV Introduction to Biology CP	9	Full Year	6
746FY	HT Introduction to Biology CP	9	Full Year	6
800FY	SP Introduction to Biology CP	9	Full Year	6
792FY	IM Introduction to Biology CP	9	Full Year	6
816	CV Biology CP	10	Full Year	6
832	HT Biology CP	10	Full Year	6
800	SP Biology CP	10	Full year	6
785I	IMM Biology CPA	10	Full Year	6
796I	IMM MCAS Biology Review - CP	11,12	Semester	3
819I	IMM Chemistry CPA	11,12	Full Year	6
8819I	IMM Chemistry CP	11,12	Full Year	6

796H	IMM Human Anatomy and Physiology	11,12	Semester	3
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SOCIAL SCIENCE				
7737FY	IMM US History I CPA	9	Full year	6
737I	IMM US History I CP	9	Full year	6
808FY	CV US History I CP	9	Full year	6
824FY	HT US History I CP	9	Full year	6
790FY	SP US History I CP	9	Full year	6
7738I	IMM US History II CPA	10	Full year	6
738I	IMM US History II CP	10	Full year	6
809	CV US History II CP	10	Full year	6
825	HT US History II CP	10	Full year	6
804	SP US History II CP	10	Full year	6
77739I	IMM World History CPA	11,12	Full year	6
7739I	IMM World History CP	11,12	Full Year	6
LITERACY				
878C	ESL Literacy Through Content CP	9	Full Year	6
878L	ESL Literacy Through Literature CP	9	Full Year	6
893	Literacy Math CP	9	Full Year	6
887	Literacy Science CP	9	Full Year	6
879	Literacy Social Science CP	9	Full Year	6
COMPUTER LITERACY				
8893A	ESL Through 21st Century Computer Applications	9	Semester	1.5
8893B	ESL Through 21st Century Computer Applications	10,11,12	Semester	3
8894	ESL Through Computer Applications 2	All	Semester	3

ESL Directed Academics 839: Assigned by guidance counselors.

ENGLISH AS A SECOND LANGUAGE

ESL Through Content – Beginner (840, 840SP): 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 Through Literature – Beginner 841: 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 Through Content – Intermediate (844, 844SP): The course is designed for students with a Developing English Proficiency Level. All four domains of second language acquisition (listening, speaking, reading, and writing) will be developed through content-based instruction.

ESL Through Literature – Intermediate 845: This course is designed for students with a Developing English Proficiency Level. All four domains of second language acquisition (listening, speaking, reading, and writing) will be developed through theme-based literature instruction.

ESL Through Literature - Advanced 9-10 (849A, 8849A), ESL Through Literature - Advanced (11-12) (849B, 8849B): 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 Content Through Current Events 849ES: Designed for students at Entering through Developing English proficient levels, this elective course promotes language development through the analysis of current events.

ESL Literature Through Movies 848ES: Designed for students at Entering through Developing English proficient levels, this elective course promotes language development through the literary analysis of movies.

ESL Through Public Speaking 848SPK: Designed for English Learners with Intermediate language proficiency, this course focuses on the development of students' ability to speak clearly and effectively on both social and academic topics.

MATHEMATICS

Algebra I (811, 827, 803, 7741I, 741I): This study of Algebra 1 includes topics listed in the Massachusetts Curriculum Frameworks for Mathematics. Topics include Expressions and Equations, Graphs, Lines, Exponents and Functions, Statistics and Fitting Lines, Introduction to Geometry, Introduction to Geometry, Congruence, and Transformations. Additionally, students will develop proficiency in the language of Mathematics.

Geometry (812, 828, 742I, 7742I): This study of Geometry includes topics listed in the Massachusetts Curriculum Frameworks for Mathematics. Topics include Congruence and Proof, Similarity, Circles, Using Similarity, Analytic Geometry, Real Numbers, Polynomials, Quadratic and Complex Numbers, Functions, Applications of Probability. Additionally, students will develop proficiency in the language of Mathematics.

Immersion Math Review 473B (1st semester), Immersion Math Review 474B (2nd semester), CV 474C: These courses are designed for students who need additional support in essentials skills for MCAS preparation. Topics include number sense, operations, patterns, relations, algebra, geometry, measurement, data analysis, statistics, and probability.

SCIENCE

Intro to Biology (796FY, 746FY, 800FY, 792FY): This course is specifically designed to introduce freshmen English Learners to the scientific vocabulary and major concepts that will be further developed in the sophomore biology curriculum.

Biology (816, 832, 800, 785I): 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.

Immersion MCAS Biology Review (796I): This semester course is designed for students who have passed a full-year biology course but need the additional review to successfully pass MCAS. This course follows the curriculum of a full year Biology course at an accelerated pace. Students will expand their multiple-choice and open response test-taking skills.

Immersion Chemistry (8819I, 819I): This course introduces the fundamentals of chemical theory. Topics include properties of matter, atomic structure, molecular behavior, chemical

bonding, stoichiometry, nuclear chemistry. Formulas and equations are presented so that the practical aspects of the importance of chemicals and chemical behavior may be realized. Laboratory work is an integral part of the program.

Human Anatomy and Physiology (796H): 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

United States History I (7737FY, 737FY, 808FY, 824FY, 790FY): This required course for all freshmen examines the establishment of the nation and its struggles, including the American Revolution, the development of the government, slavery, and events leading up to and including the Civil War and Reconstruction. Students will examine industrialization, immigration, Progressivism, and World War I in a global context.

United States History II (7738I, 738I, 809, 825, 804): This required course for all sophomores examines the history of the United States during the 20th and 21st centuries. Students will learn about the economic history of the Great Depression, New Deal, World War II, and the Cold War, and examine domestic and global policies and politics in the 21st century.

World History (77739I, 7739I): This course, offered to juniors and seniors, explores the economic and political roots of the modern world, the causes and consequences of the great military and economic events, the rise of nationalism and the continuing persistence of political, ethnic, and religious conflicts around the world.

LITERACY

Approval by the head of the Department of Bilingual/ESL Services is required to enroll in Literacy courses.

ESL Literacy Through Content (878C): Designed for SLIFE students and English Learners with limited literacy skills, the focus of these courses will be the development of communicative language skills through vocabulary development, oral communication, reading and writing through content-based and theme-based literature instruction. A major goal of this class is to prepare students for Beginner ESL classes.

ESL Literacy Through Literature (878L): Designed for SLIFE students and English Learners with limited literacy skills, the focus of these courses will be the development of communicative language skills through vocabulary development, oral communication, reading and writing through literature-based instruction. A major goal of this class is to prepare students for Beginner ESL classes.

Literacy Social Science (879): Designed for SLIFE students and English Learners with limited literacy skills, this course teaches basic information about the history of America, from the first Americans to today's 21st-century society, while promoting English literacy in the content area. Students will learn important dates and events in American history, as well as information about the Constitution, the Bill of Rights, and responsible citizenship. A major goal is to prepare students for US History I classes.

Literacy Math (893): Designed for SLIFE students and English Learners with limited literacy skills, this course offers remediation in basic mathematics concepts while promoting the development of English literacy in the content area. A major goal is to prepare students for Algebra classes.

Literacy Science (887): Designed for SLIFE students and English Learners with limited literacy skills, this course provides an overview of the three branches of science with an emphasis on the basic science skills of measurement and the scientific method while promoting the development of English literacy in the content area. A major goal is to prepare students for Biology classes.

COMPUTER LITERACY

ESL through 21ST Century Computer Applications (8893A): This course introduces students to Microsoft ® (MS) Office using automated technologies. Students will learn to format business and personal documents. Additionally, students will receive an introduction to the various Microsoft Office applications (Word, Excel, Publisher, PowerPoint, Office 365).

ESL through 21ST Century Computer Applications (8893B): This course introduces students to Microsoft ® (MS) Office using automated technologies. Students will learn to format business and personal documents. Additionally, students will receive an introduction to the various Microsoft Office applications (Word, Excel, Publisher, PowerPoint, Office 365).

ESL through Computer Applications 2 (8894): 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	YEAR	TERM	CREDITS
1364	Mandarin Chinese I CP	9,10,11	Full Year	6
364	Mandarin Chinese I CPA	9,10,11	Full Year	6
365	Mandarin Chinese I H	9,10,11	Full Year	6
1366	Mandarin Chinese II CP	9,10,11,12	Semester	3
366	Mandarin Chinese II CPA	9,10,11,12	Semester	3
368	Mandarin Chinese II H	9,10,11,12	Semester	3
1378	Mandarin Chinese III CP	9,10,11,12	Semester	3
378	Mandarin Chinese III CPA	9,10,11,12	Semester	3
379	Mandarin Chinese III H	9,10,11,12	Semester	3
1394	Mandarin Chinese IV CP	10,11,12	Semester	3
394	Mandarin Chinese IV CPA	10,11,12	Semester	3
395	Mandarin Chinese IV H	10,11,12	Semester	3
1397	Mandarin Chinese V CP	10,11,12	Semester	3
1398	Mandarin Chinese V CPA	10,11,12	Semester	3
1399	Mandarin Chinese V H	10,11,12	Semester	3
3399	AP Mandarin Chinese	12	Full Year	6
IB398	IB Mandarin Chinese SL Year 1	11	Full Year	3
IB399	IB Mandarin Chinese HL Year 1	11	Full Year	6
IB3398	IB Mandarin Chinese SL Year 2	12	Full Year	6
IB3399	IB Mandarin Chinese Year 2	12	Full Year	6

Mandarin Chinese I (1364, 364, 365): 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 (1366, 366, 368): 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 (1378, 378, 379): 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 (1394, 394, 395): 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 (1397, 1398, 1399): 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 (3399): 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 (IB398, IB399) (IB Year 1—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 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 peoples. **Prerequisite:** 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 (IB3398, IB3399) (IB Year 2—Language B—Standard Level/High Level): 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 junior IB Mandarin Chinese, teacher recommendation, and Coordinator approval. This class will be conducted in Mandarin.

LATIN				
COURSE	TITLE	YEAR	TERM	CREDITS
1340	Latin I CP	9,10,11	Full Year	6
340	Latin I CPA	9,10,11	Full Year	6
341	Latin I H	9,10,11	Full Year	6
1343	Latin II CP	9,10,11,12	Semester	3
343	Latin II CPA	9,10,11,12	Semester	3
344	Latin II H	9,10,11,12	Semester	3
1345	Latin III CP	9,10,11,12	Semester	3
345	Latin III CPA	9,10,11,12	Semester	3
346	Latin III H	9,10,11,12	Semester	3
1347	Latin IV CP	10,11,12	Semester	3
347	Latin IV CPA	10,11,12	Semester	3
348	Latin IV H	10,11,12	Semester	3
1373	Latin V CP	10,11,12	Semester	3
373	Latin V CPA	10,11,12	Semester	3
374	Latin V H	10,11,12	Semester	3
342	AP Latin	12	Full Year	6
IB342	IB Latin SL Year 1	11	Full Year	3
IB343	IB Latin HL Year 1	11	Full Year	6
IB3342	IB Latin SL Year 2	12	Full Year	6
IB3343	IB Latin Year 2	12	Full Year	6

Latin I (1340, 340, 341): 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 complete the first 15 chapters of the Lingua Latina series.

Latin II (1343, 343, 344): 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 complete chapters 16 through 25 in the Lingua Latina series.

Latin III (1345, 345, 346): 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 complete chapters 26 through 35 in the Lingua Latina series.

Latin IV (1347, 347, 348): 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 (1373, 373, 374): Students will continue to develop reading, writing, and translating skills in Latin through the Wheelock series. The course includes extensive new vocabulary and review of advanced grammatical structures.

Advanced Placement Latin (342): The goal of the Advanced Placement Latin class, as set forth by the College Board, is for students to achieve a high level of proficiency in the language skills established by the National Standards for Foreign Language Learning. Upon completing the course, students are expected to be able to comprehend, interpret and translate Latin, and to read and write with a high level of proficiency. Students will be required to take the Latin Language Advanced Placement Exam in May. **Prerequisite:** A B+ or better in Latin IV or V Honors classes or an A- or better in Latin IV or V College Preparatory Advanced level language classes, teacher recommendation, application, and Coordinator approval.

IB Latin (IB342, IB343) (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 the 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:** B+ or better in Latin IV or V Honors classes or an A- or better in all Latin IV or V College Preparatory Advanced level language classes, teacher recommendation, application and Coordinator approval.

IB Latin (IB3342, IB3343) (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:** Completion of Junior IB Latin, teacher recommendation and Coordinator approval.

SPANISH				
1351T	Spanish I Topics	10,11,12	Semester	3
1351	Spanish I College Prep	9,10,11	Full Year	6
351	Spanish I College Prep Advanced	9,10,11	Full Year	6
352	Spanish I Honors	9,10,11	Full Year	6
1354	Spanish II College Prep	9,10,11,12	Semester	3
354	Spanish II College Prep Advanced	9,10,11,12	Semester	3
355	Spanish II Honors	9,10,11,12	Semester	3
1357	Spanish III College Prep	9,10,11,12	Semester	3
357	Spanish III College Prep Advanced	9,10,11,12	Semester	3
358	Spanish III Honors	9,10,11,12	Semester	3
1359	Spanish IV College Prep	10,11,12	Semester	3
359	Spanish IV College Prep Advanced	10,11,12	Semester	3
360	Spanish IV Honors	10,11,12	Semester	3
1370	Spanish V College Prep	10,11,12	Semester	3
370	Spanish V College Prep Advanced	10,11,12	Semester	3
372	Spanish V Honors	10,11,12	Semester	3
376	AP Spanish	10,11,12	Full Year	6
IB376	IB Spanish SL Year 1	11	Full Year	3
IB377	IB Spanish HL Year 1	11	Full Year	6
IB3376	IB Spanish SL Year 2	12	Full Year	6
IB3377	IB Spanish HL Year 2	12	Full Year	6
1352	Spanish Heritage I	9,10,11,12	Semester	3
1353	Spanish Heritage II	9,10,11,12	Semester	3
3350	Spanish Cinema	10,11,12	Semester	3
3351	Spanish Through Music & Dance	10,11,12	Semester	3

Spanish I Topics(1351T): 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. Course content is presented thematically with cultural aspects woven throughout. The curriculum is the same as Spanish I, but a review for students to re-learn in a shorter time frame.

Spanish I (1351, 351, 352): 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 (1354, 354, 355): 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 (1357, 357, 358): 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 (1359, 359, 360): 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 (1370, 370, 372): 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 (376): 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 (IB376, IB377) (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 peoples.

Prerequisites: Completion of Spanish 3, teacher recommendation, and Coordinator approval. The class will be conducted in Spanish

IB Spanish (IB3376, IB3377) (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 1, teacher recommendation, application, and Coordinator approval. The class will be conducted in Spanish.

Spanish 1 Heritage Honors (1352): **This course is for native Spanish speakers.** 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 bi-literate in our global environment and eventually advancing to the IB, AP or Medical Interpretation courses offered at BHS. **Admission to this course is by application to the Foreign Language Department Coordinator for Grade 8 students. High School students may be admitted with permission from the Coordinator.**

Spanish 2 Heritage Honors (1353): This course is for native Spanish speakers. Students who study Spanish 2 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 further 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 bi-literate in our global environment and eventually advancing to the IB, AP or Medical Interpretation courses at BHS. **Prerequisite:** Spanish 1 Heritage Honors

Spanish Cinema (3350): 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 Honors with a B+ or better. The class will be conducted in Spanish.

Spanish Through Music and Dance (3351): 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 Honors or CPA with a B or better. The class will be conducted in Spanish.

MEDICAL INTERPRETATION AND FRENCH				
MD320	French/Haitian Medical Interpretation I	11	Semester	3
MD321	Portuguese/Cape Verdean Medical Interpretation I	11	Semester	3
MD322	Spanish Medical Interpretation I	11	Semester	3
MD323	French/Haitian Medical Interpretation II	12	Full Year	6
MD324	Portuguese/Cape Verdean Medical Interpretation II	12	Full Year	6
MD325	Spanish Medical Interpretation II	12	Full Year	6
MD326	10-Hour Medical Interpretation Internship	12		1.5
IB3302	IB French <i>ab initio</i> Year 1	11	Full Year	3
IB3303	IB French <i>ab initio</i> Year 2	12	Full Year	3

Medical Interpretation and Translation I

French/Haitian Creole MD320, Portuguese/Cape Verdean Creole MD321, Spanish MD322:

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 semester two of the junior year and will continue for a full year of senior year. Application for Coordinator Approval. ***Internship participation is strongly recommended for this course.**

Medical Interpretation and Translation II

French/Haitian Creole MD323, Portuguese/Cape Verdean Creole MD324, Spanish MD325:

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 MD326: Placement at a local medical facility is available for a 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 (IB3302, IB3303) (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 of the French language*. In this course, interactive, productive, and receptive skills are developed through contextualized study of language, text, and themes. **Prerequisites:** IB application and Coordinator approval.

ART DEPARTMENT

	Foundation/Proficient/ Advanced	Course No.	Course Title	Level AP, IB, H, CPA CP, N	Year of Students Fr, So, Jr, Sr	Sem (S) or Full Year (FY)	Meets Every Day (ED) or Alternate Day (AD)	Credits
	F	9923	Art Exploration	N	Fr, So, Jr, Sr,	S	AD	1.5
	F	923	Drawing and Painting I	N	Fr, So, Jr, Sr	S	AD	1.5
		923FS			Fr, So	S	AD	1.5
*	P	924	Drawing and Painting II	N	So, Jr, Sr	S	AD	1.5
*	A	925	Advanced Drawing and Painting	H	So, Jr, Sr	S	ED	3
*	A	927	Advanced Placement Art Studio	AP	Jr, Sr	FY	ED	3
*	A	912	Art Studio	H	Jr, Sr	S	ED	3
*	F	964	Illustration	N	Fr, So, Jr, Sr	S	AD	1.5
*	P	931	Printmaking	N	So, Jr, Sr	S	AD	1.5
	F	906	Ceramics	N	Fr, So, Jr, Sr	S	AD	1.5
		906 FS			Fr, So	S	AD	1.5
*	P	907	Ceramics II	N	So, Jr, Sr	S	AD	1.5
*	P	914	Sculpture	N	So, Jr, Sr	S	AD	1.5
	F	953	Digital Photography	N	Fr, So, Jr, Sr	S	AD	1.5
		953 FS			Fr, So	S	AD	1.5
*	P	918	Digital Photography II	N	So, Jr, Sr	S	AD	1.5
	A	9957	Digital Art	N	Fr, So, Jr, Sr	S	AD	1.5
		9957FS			Fr, So	S	AD	1.5
*	P	9954	Digital Art II	N	So, Jr, Sr	S	AD	1.5
	F	943	Acting	N	Fr, So, Jr, Sr	S	AD	1.5
		943 FS			Fr, So	S	AD	1.5
*	P	917	Acting II	N	So, Jr, Sr	S	AD	1.5
*	F	941	Theatrical Set Design	N	Fr, So, Jr, Sr	S	AD	1.5
*	F	929	Musical Theatre Production Workshop	N	Fr, So, Jr, Sr	S	AD	1.5
*	F	945	Play Production	N	Fr, So, Jr, Sr	S	AD	1.5
	A	920	History of Theatre	N	Jr, Sr	S	ED	3.0 English
	A	956	Aesthetics of Film	N	Jr, Sr	S	AD	3.0 English
	F	963	Producing Television Programs	N	Fr, So, Jr, Sr	S	AD	1.5
	P	9985	Television Multicamera Production	N	Fr, So, Jr, Sr	S	AD	1.5
	A	1960	Advanced Television and Media Production	N	So, Jr, Sr	S	ED	3
	A	IB927	IB Art I	IB	Jr	FY	AD	1.5

	A	IB928	IB Art II	IB	Sr	FY	AD	1.5
	A	IB920	IB Theatre I	IB	Jr	FY	AD	1.5
*	A	948	Visual Arts- Independent study	N	Jr, Sr	S	AD	1.5
*	A	988	Television – Independent Study	N	Jr, Sr	S	AD	1.5
*	A	926	Theatre Arts - Independent Study	N	Jr, Sr,	S	AD	1.5

- * Indicates the course may be taken more than once for credit.
 - Course requires prerequisites – see the course guide.
 - Course requires application and department head approval.
 - Course requires individual student/teacher contract and department head approval.

Art Exploration 9923: 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 (923, 923FS): 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 964: 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 drawings 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 924: 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: 923, Drawing and Painting I or 964 Illustration

Printmaking 931: 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:** 923 Drawing and Painting I, or 964 Illustration or 9923 Art Exploration

Advanced Drawing and Painting 925: 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:** 923, 924 Drawing and Painting I and II

Art Studio 912: 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:** 923, 924 Drawing and Painting I and II

Advanced Placement Art Studio 927: 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 a concentration under a concept/theme. Portfolios are sent to a national panel for judgment and grading on the AP scale. **Prerequisite:** Portfolio review and Department Head approval

Photography I (953, 953FS): 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 918: 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:** 953 Photography I

Digital Art I (9957, 9957FS): 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 9954: 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 skill and craftsmanship are emphasized. The creative process is emphasized through visual, oral and written methods. **Prerequisite:** 9957 Digital Art I

Ceramics I (906, 906FS): 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 principals 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 907 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, 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:** 906 Ceramics I

Sculpture 914: 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:** 906 Ceramics

Acting I (943, 943FS): 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 performance may be included as part of the class.

Acting II 917: This course is an extension of Acting I. Students will expand their knowledge of acting techniques, 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 for 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:** 943 Acting I

Aesthetics of Film 956: 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. This course may be taken more than once for credit.

History of Theatre 920: 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.

Theatrical Set Design 941: 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.

Play Production 945: 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 929: 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 926: 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, Department head approval needed. This is an individual contract between teacher and student.

Producing Television Programs 963: 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 9985: 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: 963 Producing Television Programs

Advanced Television and Media Production 1960: 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 on independent as well as in groups to write scripts, develop interviewing skills, and edit video in Final Cut Pro and iMovie. This course may be taken more than once.

Prerequisite: 9985 Television Multicamera Production

Independent Study in Educational Television Service 988: 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 first, second, or both semesters and must receive approval from the department head to enroll. **Prerequisite:** 963 Producing Television Programs and 9985 Television Multicamera Production. **Teacher recommendation and department head approval are required for enrollment**

IB Art I IB927: 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.

IB Art II IB928: 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. **Prerequisite:** **IB Art I**

IB Theatre I IB920: This theatre course is multifaceted and allows students to actively engage in theatre as creators, designers, directors, and performers. It emphasizes working both individually and collaboratively as part of an ensemble. Students learn to apply research and theory to inform and to contextualize their work. Through researching, creating, preparing, presenting and critically reflecting on theatre.

Visual Arts I 948: 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. **Prerequisite: Teacher Referral, Department head approval. This is an individual contract between teacher and student.**

VOCATIONAL AND CAREER EDUCATION DEPARTMENT (VCE)

COURSE	TITLE	YEAR	TERM	CREDITS
BUSINESS AND CONSUMER EDUCATION				
620	Introduction to Business	9,10,11,12	Semester	1.5
646	Principles of Finance	10,11,12	Semester	1.5
606	Finance Analytics	11,12	Semester	3.0
601	Principles of Marketing	10, 11, 12	Semester	3.0
604	Marketing Analytics	11, 12	Semester	3.0
664	Automated Accounting I	11, 12	Semester	3.0
665	Automated Accounting II	11, 12	Semester	3.0
608	Principles of Management	11, 12	Semester	3.0
6607	Business Management: Capstone	11,12	Semester	3.0
650	DECA: Business Capstone	12	Full Year	6.0
675	Banking Training	12	Semester	3.0
677	Banking Internship	12	Semester	3.0
COMMUNICATION DESIGN				
707	Graphic Design Experience	9, 10, 11	Semester	1.5
666	Web Design I	10, 11	Semester	1.5
613	Web Design II	10, 11	Semester	1.5
6611	Web Design III: Capstone	12	Semester	3.0
663	Digital Publishing I	10, 11	Semester	1.5
662A	Digital Publishing II	11, 12	Semester	1.5
6662	Digital Publishing III: Capstone (Yearbook)	12	Full Year	6.0
AUTOMATION				
7710	Auto CAD (Computer Aided Design)	10, 11, 12	Semester	3.0
7712	3-D Modeling I	11, 12	Semester	3.0
7713	3-D Modeling II	11, 12	Semester	3.0
7714	Architectural Design and BIM	11, 12	Semester	3.0
COMPUTER SCIENCE				
6671PLTW	Computer Science Essentials (PLTW)	9, 10	Full Year	6.0
6672PLTW	Cybersecurity (PLTW)	9, 10	Full Year	6.0
INFORMATION TECHNOLOGY				
7770	CISCO Academy I	9, 10	Semester	3.0
7771	CISCO Academy II	9, 10	Semester	3.0
7773	CISCO Academy III	10, 11	Semester	3.0
7775	CISCO Academy IV	10, 11	Semester	3.0
682	A+ Software: CISCO Networking Academy	11, 12	Semester	3.0
771	A+ Hardware: CISCO Networking Academy	11, 12	Semester	3.0

ENGINEERING TECHNOLOGIES				
7716	Engineering Experience	9, 10, 11	Semester	1.5
780PLTW	Introduction to Engineering Design (PLTW)	9, 10	Full Year	6.0
781PLTW	Computer Integrated Manufacturing (PLTW)	9, 10	Full Year	6.0
7718	Introduction to Electronic Technology	10, 11, 12	Semester	1.5
7719	Electronic Engineering Systems	11, 12	Full Year	6.0
7720	Electrical Engineering Principles	11, 12	Full Year	3.0
7728T	Engineering and Manufacturing (MACWIC)	9, 10, 11, 12	Semester	3.0
7721	Engineering Blueprint Reading (MACWIC)	10, 11, 12	Semester	3.0
77717	Engineering Lab II: Engineering Capstone	12	Semester	3.0
723	Auto Care and Maintenance	11, 12	Semester	1.5
7730	Launching into Aviation (Fall)	9,10, 11, 12	Semester	3.0
7731	Exploring Aviation and Aerospace (Spring)	9,10, 11, 12	Semester	3.0
7732	Introduction to Flight (Fall)	9,10, 11, 12	Semester	3.0
7733	Aircraft Systems and Performance (Spring)	9,10, 11, 12	Semester	3.0
OFFICE TECHNOLOGIES				
690	21 ST Century Computer Applications	9	Semester	1.5
688	MOS Word	11, 12	Semester	3.0
689	MOS Excel	11, 12	Semester	3.0
HEALTHCARE PATHWAYS				
766	Health Assisting I	9, 10	Semester	1.5
767	Health Assisting II	10, 11	Semester	1.5
7768	Health Assisting III: Nurse Assistant Training	12	Full Year	6.0
749	Health Assistant Externship	11, 12	Semester	1.5
508IP, 508IPH	Innovation Pathways: Healthcare Biotech I	9	Full Year	6.0
521IP, 521IPH	Innovation Pathways: Healthcare Biotech II	10	Full Year	6.0
HOSPITALITY AND RESTAURANT FOOD PRODUCTION				
880	Food and Nutrition Lab.	9, 10	Semester	1.5
734	Hospitality and Restaurant Food Production I	11	Semester	6.0
735	Hospitality and Restaurant Food Production II	12	Semester	12
VOCATIONAL EDUCATION				
700	Exploratory Program	9	Semester	1.5
6603 I	CTE MYCAP I	9	Semester	1.5
6603 II	CTE MYCAP II	10	Semester	1.5
6603 III	CTE MYCAP III	11	Semester	1.5
6603 IV	CTE MYCAP IV	12	Semester	1.5
701	Automotive Technology I	10	Full Year	6.0
702	Automotive Technology II	11	2 x SEM	9.0
702T	Automotive Technology III	12	2 x SEM	9.0
703	Construction Technology I	10	Full Year	6.0
704	Construction Technology II	11	2 x SEM	9.0
704T	Construction Technology III	12	2 x SEM	9.0
710	Graphic Communications I	10	Full Year	6.0
711	Graphic Communications II	11	Full Year	9.0
711T	Graphic Communications III	12	Full Year	9.0
7700	SOAR: Exploratory	9	Full Year	6.0
7710	SOAR: Computer and Electronic Engineering	10, 11	Full Year	6.0
7702	SOAR: Culinary Arts	10, 11	Full Year	6.0

7703	SOAR: Cosmetology	10, 11	Full Year	6.0
7776	SOAR: Automotive Technology	10, 11	Full Year	6.0
7777	SOAR: Dental Assisting	10, 11	Full Year	6.0
7778	SOAR: Medical Assisting	10, 11	Full Year	6.0
7779	SOAR: Early Education & Care	10, 11	Full Year	6.0
7780	SOAR: Marketing & Entrepreneurship	10, 11	Full Year	6.0
7781	SOAR: Precision Machining Engineering	10, 11	Full Year	6.0

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 year 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

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

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

Introduction to Business 620 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 646: 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' grade. This course has been

aligned with the Massachusetts Curriculum Frameworks for Mathematics, The National Business Education Standards, and the BHS Literacy Goals. **Pre-requisite:** C or better in Introduction to Business.

Finance Analytics 606: 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. **Pre-requisite:** B or better in Principles of Finance, Auto Accounting I and/or II.

Principles of Marketing 601: This course provides opportunities to learn and experience a variety of topics in marketing. Students are exposed to The 4P's 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 Schoology platform. **Pre-requisite:** C or better in Introduction to Business.

Marketing Analytics 604 This course provides opportunities to learn and experience a variety of topics in marketing. Students are exposed to The 4P's 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. **Pre-requisite:** B or better in Principles of Marketing.

Automated Accounting I 664: 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. **Pre-requisite:** C or better in Introduction to Business.

Automated Accounting II 665: 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 company's 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 1. **Prerequisite:** B or better in Automated Accounting I or teacher recommendation.

Principles of Management 608: 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. **Pre-requisite:** C or better in Introduction to Business.

Business Management: Capstone 6607: 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. **Pre-requisite:** C or better in Principles of Management.

DECA: Business Capstone 650: DECA Education is a full-year course for seniors designed to provide students with an opportunity to explore the management process of planning, organizing, promoting and controlling a school-based enterprise (SBE). Students accept full responsibility for this operation, using a team-based approach. Students also agree to affiliate with DECA, a national organization for high school students enrolled in Marketing, Finance, Hospitality and Management courses, and to attend the DECA conferences held throughout the school year. Students are required to submit a research project structured by National DECA or to create a business plan based on their SBE. This course is aligned to NCTM Standards, NBEA Computation Standards, and Massachusetts Curriculum Framework Standards. **Pre-requisite:** At least two courses with B or better in Business and Consumer Education: Marketing, Finance, Hospitality and or Business Management, plus teacher recommendation. Students must complete a DECA application.

Banking Training 675

Banking Internship 677

These two one-semester courses are designed to prepare students for employment as bank tellers or entry-level positions within the banking or finance industry. Students will learn skills and tasks which are relevant to handling banking and personal finance transactions and work in the HarborOne branch at BHS. This course is aligned to NCTM Standards, NBEA Computation Standards, and the Massachusetts Curriculum Framework Standards. Students must take BOTH courses to participate in the program.

Prerequisites: * seniors only

1. Personal Finance approved with at least a B
2. Proficient in grade 10th MCAS Math
3. Excellent attendance

Personal interview and instructor's approval.

COMMUNICATION DESIGN

Career Interest	WEB DESIGN	WEB DEVELOPMENT	DIGITAL MEDIA PUBLISHING
Recommended courses	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)
Useful courses	21 st Century Computer Applications Digital Imaging	21 st Century Computer Applications Digital Imaging	21 st Century Computer Applications Graphic Design Experience Digital Photography Digital Imaging

Graphic Design Experience 707: 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 666: 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 on programs Adobe Photoshop, Illustrator, and more. **Prerequisite:** C or Better in Graphic Design Experience or Digital Imaging.

Web Design II 613: 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 6611: 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

specifics careers in web design and web development. **Prerequisite:** B or better in Web Design II; Students must complete a program application.

Digital Publishing I 663: 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. **Pre-requisite:** C or Better in Graphic Design Experience

Digital Publishing II 662A: 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. **Pre-requisite:** B or better in Digital Publishing I

Digital Publishing III: Capstone (Yearbook) 6662 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 as a team in the production of the graduating class yearbook. Students will use the software and assume several roles and responsibilities to produce the yearbook. **Prerequisite:** B or better in Digital Publishing II. Students must complete a Digital Publishing III application.

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

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 st Century Computer Applications Electronics	21 st Century Computer Applications	21 st Century Computer Applications	21 st Century Computer Applications Engineering and Manufacturing

Auto CAD 7701: 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 the 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 7712: 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 7713: 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 7714: The course will focus on the forms of residential architecture in the United States. The following topics will be supported using the online curriculum: architectural styles, basic house designs, preparing for a career in architecture and residential architectural design. Designs for health, safety, and sustainability using Building Information Modeling (BIM) for house design, and plan development. **Prerequisite:** C or Better in Auto CAD.

Computer Science Essentials (Project Lead the Way I) 6671PLTW: 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 a professional developer. 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.

Cybersecurity (Project Lead the Way II) 6672PLTW: Students in Cybersecurity apply their knowledge of coding and computational thinking to seek out vulnerabilities in data storage systems and online commerce sites, 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 or a company’s data, students in Cybersecurity establish an ethical code of conduct while proactively defending data in today’s complex cyberworld.

Prerequisite: PLTW 1 – Computer Science Essentials and instructor approval.

CISCO Academy I 7770: This course covers the fundamentals of computer hardware and software as well as advanced concepts. Topics include internal components of a computer, assembling a computer system, installing an operating system, troubleshooting using system tools and diagnostic software, connecting to the Internet, and sharing resources in a network environment. Additional topics include laptops and portable devices, wireless connectivity and basic implementation skills, Voice over Internet Protocol (VoIP), security, safety, and environmental issues, applied network configuration and troubleshooting, and communication skills. **Prerequisite:** Application, interview and instructor approval. **NOTE:** CISCO Academy I and II should be scheduled together.

CISCO Academy II 7771: This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing, and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. **Prerequisite:** CISCO Academy I and instructor approval. **NOTE:** CISCO Academy I and II should be scheduled together.

CISCO Academy III Switching, Routing and Wireless Essentials 7773: This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. **Prerequisite:** Cisco Academy II Introduction to Networking and instructor approval. **NOTE:** CISCO Academy III and IV should be scheduled together.

CISCO Academy IV Enterprise, Networking, Security, and Automation 7775: This course describes the architecture, components, and operations of routers and switches in large and complex networks. Students learn how to configure routers and switches for advanced functionality. By the end of the course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks. Students also develop the knowledge and skills needed to implement a WLAN in a small-to-medium network. **Prerequisite:** Cisco Academy III Switching, Routing, and Wireless Essentials and instructor approval. **NOTE:** CISCO Academy III and IV should be scheduled together.

A+ Software 682 (CISCO): This is an intensive junior and senior course designed to take students from the user level to understanding customizing, optimizing and troubleshooting a Windows Operating System and the most common software applications. Students will learn all the differences between Windows, Unix, Linux, and the Mac OS, understanding the boot process, supporting and installing Windows, managing memory, printers and I/O devices, and the responsibilities of a PC technician. **Students will be required to complete approximately 30 additional hours of training in addition to the regular class to prepare for the certification test (A+ Core Software Exam).** **Prerequisite:** CISCO Academy I-IV and instructor approval.

A+ Hardware 771 (CISCO): This intensive course for juniors and seniors is designed to take students from the just-a-user level to the I-can-fix-it level for most common PC hardware issues. Students will learn all aspects of computer hardware including identifying components, electricity and power supplies, motherboards, memory, hard drives, supporting I/O devices, modems and networks, laptops and PDA's, printers, building a PC, troubleshooting, and the responsibilities of a PC technician. **Students will be required to complete approximately 30 additional hours of training in addition to the regular class to prepare for the certification test (A+ Core Hardware Exam).** **Prerequisite:** CISCO Academy I-IV and instructor approval. **Note:** Students MUST also take course 682 (A+ Software)

ENGINEERING TECHNOLOGIES PATHWAY

Career Interest	Manufacturing Engineering	Electronics/Electrical Engineering	Mechanical Engineering	Architecture and Civil Engineering	Aviation
Recommended courses	Engineering Experience Computer Integrated Manufacturing (PLTW) Engineering & Manufacturing Blueprint reading Engineering Lab II: Capstone	Engineering Experience Intro. to Electronics Electronic Engineering Concepts Electrical Engineering Principles Engineering Lab II Capstone	Engineering & Manufacturing Intro to Electronics Blueprint reading Electrical Engineering Principles Engineering Lab II: Capstone	AutoCAD 3-D Modeling I 3-D Modeling II Architectural Design & BIM Engineering Lab II: Capstone	Launching into Aviation Exploring Aviation and Aerospace Introduction to Flight Aircraft Systems and Performance
Useful courses	21 st Century Computer Applications AutoCAD 3-D Modeling I 3-D Modeling II	21 st Century Computer Applications AutoCAD 3-D Modeling I 3-D Modeling II	21 st Century Computer Applications AutoCAD 3-D Modeling I 3-D Modeling II	21 st Century Computer Applications AutoCAD 3-D Modeling I 3-D Modeling II	21 st Century Computer Applications AutoCAD 3-D Modeling I 3-D Modeling II

Engineering Experience 7716: Project-based introductory engineering course in which students will explore the diverse pathways in engineering through the application of the Engineering Design Process. Students are challenged to solve real-life, day to day, world problems and are encouraged to apply critical thinking and problem-solving skills to reach solutions. This course is a requirement for students seeking to take additional engineering courses (other than PLTW Courses)

Introduction to Engineering Design (Project Lead the Way) 780PLTW: 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. This is an honors course for the highly committed student.

Computer Integrated Manufacturing (Project Lead the Way) 781PLTW: 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. This is an honors course for the highly committed student.

Engineering Lab II: Capstone 77717: Engineering Lab II is a higher-level project-based engineering course in which higher-level engineering students work independently as engineering teams. Students will be presented with complex challenges. They will be expected to be ready to apply mathematical concepts and engineering principles learned either in manufacturing, electronics or any of their engineering design courses. Students are expected to apply higher-level critical thinking skills and work independently. **Pre-requisite:** Engineering teacher recommendation. Successfully passed an engineering course with a B or better. Successful completion of Engineering Lab I, and Engineering Drawing or Engineering Manufacturing. Teacher recommendation.

Introduction to Electronic Technology 7718: This is an exploratory course with a lab component that introduces students to the basic concepts of electronics and electronic devices including diodes, transistors, transistor biasing, rectifiers, and amplifiers. Skills covered involve

electric soldering, basic repair, and maintenance of electronic equipment, reading schematics, identifying components and building breadboard circuits. The course will also include an examination of career opportunities in electrical engineering as well as electronic technologies. Students will participate in individual and group projects. **NOTE:** This course is highly recommended for students planning to pursue a career in electrical engineering, electronics or as an electrician license in the future.

Electronics Engineering Systems 7719: This is a full year higher-level course for students interested in advancing knowledge in the field of electronics and electronic engineering. During the first semester, students will learn about the use of electronic components in fields of communication, automation and control, computer, and space technology. During the second semester, students continue delving into theory, terminology, equipment, and practical experience to develop the skills needed for careers in electronic engineering. Students will work in engineering teams to construct robotic arms and compete. **Prerequisite:** B or better in Introduction to Electronic Technology.

Electrical Engineering Principles 7720: This course is an exploratory course aimed to help students understand the basic electrical theory and the concepts and applications associated with electrical engineering. Students will learn basic electrical principles applicable to various fields and explore the many applications of an electrical engineering degree. This course is recommended for those students planning to major in electrical engineering. **Pre-requisite:** C or better in Introduction to Electronic Technology.

Engineering and Manufacturing (MACWIC) 7728T: This is a competency-based, standardized engineering and manufacturing curriculum developed by Worcester Polytechnic Institute (WPI). It includes Principles of Lean Manufacturing and Metrology among other concepts. Students completing this course will be able to test their knowledge at the end of the course by taking the level one MAC (MA-Manufacturing Advanced Center) exam. Acceptable scores will confer students a level 1 Manufacturing Certification. **NOTE:** Required to complete Advanced Manufacturing courses.

Engineering Blueprint Reading (MACWIC) 7721: This course is designed for students who want to develop the basic skills needed to become architects, civil, mechanical or manufacturing engineers or machinist. The ability to portray accurate images of an object enables it to be created or manufactured. Students will be challenged to visualize three dimensions and to execute drawings with freehand perspectives using accurate measurements and scales. This course will teach students about drawing three-dimensional objects with the appropriate coordinates and perspective. Isometric and trimetric drawings will also be discussed. Basic concepts in technical blueprint reading will also be covered. Shop Math and Lean Concepts are an integral part of the course. **Pre-requisite:** C or better in Engineering and Manufacturing

Automobile Care and Maintenance 723: 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 must provide for themselves a pair of an instructor approved shoes with leather uppers and oil resistant soles before working on any vehicles.

Launching into Aviation 7730: This course will provide the foundation for advanced exploration in the areas of flying, aerospace engineering, and unmanned aircraft systems. Students will learn about engineering practices, problem-solving, and the innovations and technological developments that have made today's aviation and aerospace industries possible. Students will look at the problem-solving practices and innovative leaps that transformed space exploration from the unimaginable to the common in a single generation. Students will also gain a historical perspective, starting from the earliest flying machines and leading to a wide variety of modern aircraft, and the integral role they play in making today's world work.

NOTE: Taken in conjunction with Exploring Aviation and Aerospace 7731. **Pre-requisites:** 9th, 10th, and 11th Graders with Interest in Aviation and Aerospace.

Exploring Aviation and Aerospace 7731: This core aerospace and aviation course provides the foundation for both pathways. It is designed to give students a clear understanding of career opportunities in aviation and aerospace and the critical issues affecting the aviation system. Students will also begin to drill down into the various sectors of aviation and the elements that make up the aviation and aerospace ecosystem. They will discover how advances in aviation created a need for regulation and will learn about the promulgation of civil aviation oversight. Students will explore modern innovations and develop their innovative ideas to address real world challenges facing the aviation industry. They will be exposed to a variety of career options in aviation and aerospace and take an in-depth look at the opportunities available. For schools offering multiple pathways, this course will allow students to begin to define their interests.

NOTE: Taken in conjunction with Launching into Aviation 7730. **Pre-requisites:** C or Better in Launching into Aviation.

Introduction to Flight 7732: In the Introduction to Flight Course, students pursuing the pilot and UAS tracks will take a closer look at the aircraft they may one day operate. Students will begin with an exploration of the types of aircraft in use today before going on to learn how aircraft are made and how they fly. Students will understand how aircraft are categorized, be able to identify their parts, and learn about aircraft construction techniques and materials. They will gain an in-depth understanding of the forces of flight—lift, weight, thrust, and drag—including how to make key calculations. They will then touch on aircraft design, looking at stability, aircraft controls, and maneuvering flight. The course will conclude with a focus on career skills related to these topics. **NOTE:** Taken in conjunction with Aircraft Systems and Performance.

Pre-requisites: 9th, 10th, and 11th Graders with Interest in Aviation and Aerospace.

Aircraft Systems and Performance 7733: In the Aircraft Systems and Performance course, students in the UAS and Pilot tracks will take an in-depth look at the systems that make manned and unmanned aircraft work as well as the instrumentation powered by those systems. Beginning with aircraft powerplants and fuel systems, students will learn about the different options available and how they affect aircraft design and performance. They will go on to explore other key aircraft systems, including electrical, pitot-static, and vacuum systems. Throughout, they will learn about the flight instruments associated with each system and how to identify and troubleshoot common problems. This unit also covers airplane flight manuals, the pilot's operating handbook, and required aircraft documents. Finally, students will learn about the factors that affect aircraft performance and how to determine critical operating data for aircraft.

NOTE: Taken in conjunction with Introduction to Flight. **Pre-requisites:** C or Better in Introduction to Flight.

OFFICE TECHNOLOGIES

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 st Century Computer Applications	21 st 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 690: 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 688: 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, insert and format graphic elements. **Prerequisite:** C or better in 21st Century Computer Applications.

Microsoft Office Specialist (MOS) Excel 689: 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, the creating 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 21st Century Computer Applications

HEALTHCARE PATHWAYS

Health Assisting I 766: 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 767: 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 7768: 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 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 749: 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 508IP, 508IPH: 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 9th Grade Science Expo project. **Note:** Students must complete an application to be eligible to participate in the program.

Innovation Pathways: Healthcare Biotech II 521IP, 521IPH: 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 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

HOSPITALITY AND RESTAURANT FOOD PRODUCTION

Food & Nutrition Lab 880: 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 the 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 year.

Hospitality and Restaurant Food Production I 734: Students enrolled in Food Production I will experience various aspects of the foodservice industry, as part of the National Restaurant Association ProStart Program. The goal is to learn both culinary essentials and basic food service management, preparing students to fill the need for skilled managers. Students will operate the Fine Arts Café. The students will use hand tools, learn knife skills and operate larger food preparation equipment. Safety and Sanitation will be the most important aspect of this program. Students must take the year-end NRAEF ProStart exam. **Pre-requisite:** Foods & Nutrition Lab (or similar courses) and instructor approval.

Hospitality and Restaurant Food Production II 735: Students will experience various aspects of the foodservice industry, as part of the National Restaurant Association ProStart Program. The goal is to learn culinary essentials and basic foodservice management, preparing students to fill the need of skilled managers. Students will participate in the operation of the Fine Arts Café student-operated restaurant. Students will be required to complete a 400-hour paid internship within the hospitality industry to gain ProStart Certification. Students must take the year-end NRAEF ProStart exam. **Prerequisite:** Food Production I must be completed with a final grade of 80% or better before Food Production II may be taken.

VOCATIONAL EDUCATION

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 st Century Computer Applications Intro to Business Principles Finance Principles of Marketing Drawing and Painting Illustration Digital Imaging Digital Photography Web Design Digital Publishing	21 st Century Computer Applications Intro to Business Principles of Finance Principles of Marketing Auto CAD Architectural Design & BIM	21 st Century Computer Applications Intro to Business Principles Finance Principles of Marketing Intro to Electronic Technology

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 9th, 10th, or 11th 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 major part of the school day will be involved in shop practice, while the remainder of the school day will comprise of related subject areas and the academic subjects.

Freshman Vocational Exploratory 700: Freshman Vocational Exploratory 700: Freshmen who participate in the Exploratory Program will receive instruction in the three majors offered in our vocational program: Automotive, Carpentry and Graphics. Students will be exposed to three rotations of thirty (30) days each in which 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 potentials careers. Students can make an informed decision about continuing in the Career and Technical program and receive training for sophomore, junior and senior years.

CTE MYCAP (6603 I, 6603 II, 6603 III, 6603 IV): This is a college and career education course that runs along with the vocational program courses. It is aimed to provide students with career literacy. Students will complete activities for career exploration and post-secondary options and planning. Students will take a battery of tests including interest, personality, skills and values inventories to explore careers that match their profiles. Students will generate

academic, personal and career goals and evaluate them as they move through high school. Students will learn how to find jobs, create a resume, a cover letter, have a successful interview, and complete applications. The courses will be supported by MEFA Pathways and MASSCIS. Students will be trained in OSHA 10 to obtain certification. This is a mandatory course for students in the Vocational Program.

Automotive Technology I 701: 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 702: Juniors will receive additional instruction in automotive repair technology include engine mechanics, suspension, brakes, electrical, and engine performance. **Prerequisite:** Successful completion of Automotive Technology I.

Automotive Technology III 702T: 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.

Construction Technology I 703: Sophomores who participate in the Construction Technology I program will have successfully completed the exploratory program as freshmen and will have gained awareness to 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.

Construction Technology II 704: Juniors who participate in the Construction Technology II program will have successfully 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 given the opportunity 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.

Construction Technology III 704T: Seniors who participate in the Construction Technology III program will have successfully 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 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.

Graphic Communications I 710: 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 711: 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 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 711T 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 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

SOUTHEASTERN VOCATIONAL ACCESS PARTNERSHIP (SOAR)

SOAR: Exploratory 7700: Students will participate in an Exploratory program during their first year. They will then select a "major" and participate in that specific program for their Sophomore, Junior, and Senior years.

SOAR: Computer and Electronic Engineering 7710: Invent, design, and produce solutions to complex engineering challenges from concept to completion. Learn the fundamentals of cybersecurity and networking. Students will have successfully completed the SOAR: Exploratory course and been accepted into this specific shop.

SOAR: Culinary Arts 7702: Create and present delicious gourmet masterpieces while working in a full-service restaurant. Students will have successfully completed the SOAR: Exploratory course and been accepted into this specific shop.

SOAR: Cosmetology 7703: Express your creativity by providing a wide range of artistic hair, nail, and skincare services. Students will have successfully completed the SOAR: Exploratory course and been accepted into this specific shop.

SOAR: Automotive Technology 7776: Students will have successfully completed the SOAR: Exploratory course and been accepted into this specific shop.

SOAR: Dental Assisting 7777: Students will have successfully completed the SOAR: Exploratory course and been accepted into this specific shop.

SOAR: Medical Assisting 7778: Students will have successfully completed the SOAR: Exploratory course and been accepted into this specific shop.

SOAR: Early Education & Care 7779: Students will have successfully completed the SOAR: Exploratory course and been accepted into this specific shop.

SOAR: Marketing and Entrepreneurship 7780: Students will have successfully completed the SOAR: Exploratory course and been accepted into this specific shop.

SOAR: Precision Machining Engineering 7781: Students will have successfully completed the SOAR: Exploratory course and been accepted into this specific shop.

VCE ADVANCED OPPORTUNITIES

VCE Independent Study 686: 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 705C: 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 Do's and Don'ts, 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.

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	YEAR	TERM	CREDITS
040	Leadership Education and Training (LET) IA	Fr, So, Jr	Semester	1.5
041	Leadership Education and Training (LET) IB	Fr, So, Jr	Semester	1.5
042	Leadership Education and Training (LET) IIA	So, Jr, Sr	Semester	1.5
045	Leadership Education and Training (LET) IIB	So, Jr, Sr	Semester	1.5
052	Leadership Education and Training (LET) IIIA	Jr, Sr	Semester	1.5
043	Leadership Education and Training (LET) IIIB	Jr, Sr	Semester	1.5
044	Leadership Education and Training (LET) IVA	Sr	Semester	1.5
053	Leadership Education and Training (LET) IVB	Sr	Semester	1.5

Leadership Education and Training (LET) IA 040: 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 041: LET IB, The Emerging Leader continues areas of study covered in LET IA.

Leadership Education and Training (LET) IIA 042: LET IIA, The Developing Leader, continues to build on LET I knowledge and skills, while introducing new content that will help you develop as a leader in the program, your school and 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 045: LET IIB, The Developing Leader, continues areas of study covered in LET IIA.

Leadership Education and Training (LET) IIIA 052: 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 043: LET IIIB, The Supervising Leader, continues areas of study covered in LET IIIA.

Leadership Education and Training (LET) IVA 044: 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 053: LET IVB, The Managing Leader, continues areas of study covered in LET IVA.

MUSIC DEPARTMENT

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

COURSE	TITLE	YEAR	TERM	Meets Every day or alternate days.	CREDITS
971	Repertory Chorus	Fr, So, Jr.	FY	ED	3.0
972	Concert Choir	So, Jr, Sr.	FY	ED	3.0
973	Concert Band	Fr, So, Jr, Sr	FY	ED	3.0
974	Advanced Concert Band	So, Jr, Sr.	FY	ED	3.0
976	Jazz Band	Fr, So, Jr, Sr	FY	All classes meet at night	1.5
978	Music Theory I	So., Jr., Sr.	S	AD	1.5
979	Music Theory II	So., Jr., Sr.	S	AD	1.5
983	Piano I	So., Jr., Sr.	S	AD	1.5
984	Piano II	So., Jr., Sr.	S	AD	1.5

Repertory Chorus 971: This performing ensemble is open to all Freshman students who have completed requirements in the Junior High Vocal Program. The Repertory Chorus is for singers who have a Soprano or Alto range. Students with Tenor or Bass range should audition for Concert Choir. All students must be recommended by their junior high school choral teacher. The high school choral director must recommend all students for continuation in or entry into the Repertory Choir. The course covers knowledge of choral concepts, vocal production, sight-reading, performance experience, three-part singing, choral technique. **Required performances include a Holiday Concert, Spring Concert, and Pops Concert.**

Concert Choir 972: This performing ensemble course 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 junior high choral director. The High School choral director must recommend all students for continuation in or entry into the Concert Choir. The course continues choral concepts, four-to-five part-singing, musical performances from major musical periods, a higher standard of literature, advanced sight-reading. **Required performances include the Holiday Concert, Spring Concert, and Pops Concert.**

Concert Band 973: This performing ensemble course is open to 9th-grade students who have completed requirements in the Junior High Instrumental Program. All students entering Concert Band must be recommended by the junior high instrumental teacher. The high school band director must recommend all students for continuation in or entry into the Concert Band. The course covers tonal production, phrasing, articulation, performance concepts, 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 974: 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 in 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 instrument program. The course covers performance concepts, history of music and performers as students develop higher standards of literature, individual performance, and aesthetic values of music. **Required performances include the Holiday Concert, Spring Concert, and Pops Concert.**

Jazz Band 976: In this performance course, participants will perform the best in jazz and jazz-rock music. Improvisation and arrangement techniques will be an important part of the course. The course covers jazz literature, improvisation, performance concepts, and history. An audition is required. **This Ensemble meets after school.**

Music Theory I 978: This course is geared to the serious music student who intends to continue music study in college or has the desire to better understand the study and structure of music. The course covers the rudiments of music, musical terminology, scales and keys, intervals, chords, and progressions, transpositions, harmonization, music form, composition.

Music Theory II 979: This course is a continuation of Music Theory I. **Prerequisite: Music Theory I**

Piano I 983: Students will learn fundamentals of how to read music using both hands in this piano course. The student will develop a good hand position, correct fingering and ability to read music from the treble and bass clef staves. All students will have the opportunity to use midi computer technology, including Garage Band.

Piano II 984: In this advanced piano course students will continue to study piano repertoire, improve on skills, and further study chords and scales. All students will learn to improvise and create compositions using the Garage band sequencing program on the computer. **Prerequisite:** Piano I or at least one year of piano lessons.

WELLNESS

COURSE	TITLE	YEAR	TERM	CREDITS
007W	Intro to Wellness	9	S	1.5
007E	Intro to Wellness ELL	9	S	1.5
012W	Project Boxer	Jr, Sr	S	1.5
009W	Physical Education	So, Jr, Sr	S	1.5
019	Strength and Conditioning	So, Jr, Sr	S	1.5
034	Aerobic Water Fitness/First Aid	So, Jr, Sr	S	1.5
061W	Stress Management/Yoga	Jr, Sr.	S	1.5
064	Healthy Living	Jr, Sr	S	1.5
031	Health Advocacy for Today's Youth	Jr, Sr	S	1.5
033	Peer Mediation	So, Jr, Sr	S	1.5
035	Peer Mediation II	Jr, Sr	S	1.5

Introduction to Wellness (007W, 007E): 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 developing sound decision-making skills about relevant health topics facing young adults.

Introduction to Wellness ELL 007E: This course serves as an introduction to physical Education to all incoming English language learners. This course will provide 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 ELL students develop the skills, knowledge, and attitudes necessary for a successful introduction to high school.

Physical Education 009W: 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. The 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 workout 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.

Peer Mediation 033: Students who have completed the 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 can work independently. **Pre-requisite: Interview and approval by Peer Mediation Advisors is required**

Stress Management / Yoga 061W: Adolescence is considered a very stressful time, in this course students will recognize signs of stress and develop “coping strategies” which will help with the daily demands and pressures of everyday life. Students will practice yoga, mindfulness exercises and breathing techniques to control tension. This course will focus on classroom applications to bring the mind and body into balance.

Healthy Living 064W: In this wellness course, students will analyze the impact of making healthy decisions and taking actions to increase life expectancy. 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 which will impact their wellness into adulthood.

Health Advocacy for Today’s Youth 031: This course offers students the opportunity to analyze current health issues relevant to today’s youth. Students will explore positive and negative health behavior patterns that impact short and long-term wellness while investigating reliable health resources to address these health issues. The development of leadership skills and community service-learning projects will be a significant component of this course.

Peer Mediation II 035: Juniors and Seniors who have completed Peer Mediation I will be recommended for this course. Students will serve in a leadership role assisting with planning and implementing Freshman Wellness lessons, preparing and executing the peer mediator training as well as assisting with mediation office practices. **Pre-requisite: Interview and approval by Peer Mediation Advisors is required**

Project Boxer 012W: 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 the successful outcome.