

# MARBLEHEAD HIGH SCHOOL



*2 Humphrey Street  
Marblehead, Massachusetts 01945  
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## Program of Studies 2024 - 2025

The core values of Marblehead High School are:

**Engage every person, every day.**

Communicate clearly and with purpose.

Analyze, organize, and evaluate information.

Honor people, place, and time.

**Navigate your opportunities; chart your future**

*Please Note: The running of any course is enrollment dependent. Students will be notified if a course has been cancelled and will be given an opportunity to choose an alternate course.*

**All students, regardless of race, color, sex, gender identity, religion, national origin, sexual orientation, disability or homelessness, have equal access to the general education program and the full range of any education programs offered by Marblehead Public Schools.**

## **MHS LEARNING EXPECTATIONS**

*The following is a list of expectations for students who attend Marblehead High School. Achievement of these outcomes will be attained through participation in a variety of student programs and activities offered at our school.*

### **CRITICAL AND ANALYTICAL THINKING SKILLS**

Students will...

- Read actively and critically in a variety of genres and subjects
- Analyze and evaluate information
- Demonstrate an ability to organize and develop ideas
- Evaluate and apply multiple problem-solving strategies in a variety of disciplines

### **EFFECTIVE COMMUNICATION**

Students will...

- Communicate ideas and information with clarity and with an understanding of audience
- Communicate information effectively using a variety of communication forms
- Listen effectively and critically and respond appropriately
- Demonstrate a proficient use of standard English conventions

### **21st CENTURY LEARNING**

Students will...

- Understand and utilize technology as a tool to research, organize, evaluate, and communicate information
- Apply a fundamental understanding of the ethical and legal issues surrounding the access and use of information technologies
- Leverage collaborative work in solving problems and accomplishing goals to improve individual learning
- Create a plan for a successful transition into post-graduate life

### **CIVIC AND SOCIAL EXPECTATIONS**

Students will...

- Accept responsibility and consequences for their actions and demonstrate honesty, fairness, and integrity
- Show respect for themselves and others
- Appreciate the importance of diversity and act responsibly as a member of the community by participating in school and/or community service
- Apply fundamental wellness and fitness concepts, and demonstrate the skills to foster positive decision-making and healthy lifestyle behaviors

## ACCREDITATION

Marblehead High School is accredited by the New England Association of Schools and Colleges, Inc., a non-governmental, nationally recognized organization whose affiliated institutions include elementary schools through collegiate institutions offering postgraduate instruction.

Accreditation of an institution by the New England Association indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer group review process. An accredited school or college is one which has available the necessary resources to achieve its stated purpose through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the New England Association is not partial but applies to the institution as a whole. As such, it is not a guarantee of the quality of every course or program offered, or the competence of individual graduates. Rather it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

**All students, regardless of race, color, sex, gender identity, religion, national origin, sexual orientation, disability or homelessness, have equal access to the general education program and the full range of any education programs offered by Marblehead Public Schools.**

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## TELEPHONE INFORMATION

**MHS Main Office** Phone: (781) 639-3100 Fax: (781) 639-3105  
Principal – Michele Carlson ext. 20108  
Assistant Principal – Lindsay Donaldson ext. 20209  
Assistant Principal – Dan Richards ext. 20300  
Main Office Secretary – Kari Roy-Githinji ext. 20105  
Main Office Secretary – Kristina Gallagher ext. 20101  
Registrar and Student Activities – Victoria Morency ext. 20107  
Reception/Attendance – Linda Kuzmar ext. 20199 or 0

**School Counseling** Phone (781) 639-3100 Fax: (781) 639-3111

Admin. Asst., Loretta Benman ext. 20113  
Rebecca Bagnall ext. 20130  
Tiffany Costello ext. 20126  
Jamie Kennedy ext. 20122  
Sarah Vuona ext. 20124  
Christine Chaykowski, Director ext. 20120

Adjustment Counselor – Tyler Eanes ext. 20106  
Adjustment Counselor – Gina Hart ext. 20126  
Adjustment Counselor – Alison Carey ext. 20311  
Adjustment Counselor – Kim Carpenter ext. 26110

Psychologist – Elizabeth Gasparini ext. 20114  
Psychologist – Sarah McCabe ext. 26108

**Nurse** – Vanessa Coonan ext. 20118  
Julie Berman ext. 20116

**Special Education Chairperson** – Lauren Skelton ext. 20111  
Secretary – Peg Slattery ext. 20103

**Athletic Director** – Greg Ceglarski ext. 26105  
Assistant Athletic Director – Mark Tarmey ext 26115

**Performing Arts** – Andrew Scoglio ext. 26103

## **GRADUATION REQUIREMENTS**

### **English - 4 years**

Grade 9: required year program

Grade 11: required year program

Grade 10: required year program

Grade 12: required year program

### **Math - 4 years**

*Whatever sequence a student takes it must include the completion of Algebra II or its equivalent.*

### **Science - 4 years**

*(Required courses) - Biology, Chemistry, Physics or Engineering, One Additional Year*

### **Social Studies - 4 years**

*(Courses below are required)*

Grade 9: World Cultures

Grade 10: Western Traditions

Grade 11: U.S. History

Grade 12: ½ year of Civics

***One additional semester elective is required. It may be taken any time in Grades 9-12***

### **World Languages - 2 years**

Two years in the same language required for all students

### **Visual Arts, Performing Arts, Practical Arts, Applied Arts and Business – two semesters**

One year (five credits) required during Grades 9 – 12

### **Wellness Education – four semesters**

One semester is required each year in Grades 9-12.

### **Notes:**

- 1. All students are required to take the equivalent of seven full-time courses as a minimum each semester. A minimum of 120 credits are required to receive a Marblehead High School Diploma.***
- 2. Credits are earned only when courses are fully completed. Partial credit will not be assigned when courses are dropped or when students are removed.***
- 3. If a student is placed in a full-year course any time after the first quarter, the credits earned for that course will be determined by the principal.***
- 4. In addition to the above requirements, students must earn qualifying scores on the English, Science, and Mathematics MCAS exams to receive a Marblehead High School diploma.***

## **SELECTING COURSES**

Students should plan their program for four years, making sure their schedule will meet both graduation requirements and their personal goals. As you select courses be sure to discuss selections with parents, teachers and school counselor. Please check each course for prerequisites.

## **COURSE PLACEMENT REVIEW PROCESS**

The purpose of the review process is not to limit student or parent choice, but to ensure that such choices are based on the best available information about a student's tenacity and perseverance relative to the curricular challenges they will encounter in the coming year. If a student believes they would like to change course levels, the first step is to discuss their concerns with the classroom teacher. Students wishing to override a teacher's recommendation must complete a Placement Review Form, available online. Once completed and electronically signed by a parent or guardian, the form should be submitted by the due date outlined in the course selection materials. The principal may contact the parent/guardian depending on the nature of the request and may require a placement test to gather further information before making a decision.

If a student overrides a teacher's placement recommendation on appeal, they will be expected to remain at the selected level for the first quarter. A level change may be made earlier, but only in extreme circumstances with

the approval of the lead teacher and an administrator. In all cases, a student's grades in the previous level of the course will be directly translated to the new level of the course.

### **Course Level Changes During the Academic School Year**

#### **Moving Up a Level:**

- To move up, students must achieve an A for their first quarter grade in their current class. The student is responsible for having a conversation with their current teacher and school counselor a week prior to the end of the quarter.
- Students will not be allowed to move up after the first quarter.
- The student must then follow up with their school counselor to finalize the process.
- The change may not be granted if moving the student causes sections to be over or under-enrolled
- It is the student's responsibility to make up the missed work
- The student will receive a "W" on their transcript in the lower level course, which indicates the withdrawal.
- Moving up into an AP course is not permitted.

#### **Moving Down a Level:**

- Students who are struggling despite consistent effort, attendance, and seeking extra help will be considered for a level change.
- The student must then follow up with their school counselor to finalize the process.
- Students who were misplaced in a course recommended by MHS will not receive a "W" on their transcript if the change takes place prior to October 1 of the first quarter.
- Students who move down after overriding into a course will automatically receive a "W" on their transcript.

*Note: Changes after the midpoint of the first quarter will only be considered for extreme circumstances and must have administrative approval. In all cases, students' grades in the previous level of the course will be directly translated (unchanged) to the new course. All changes will result in a "W" on the transcript after October 1st.*

### **GENERAL REQUIREMENTS**

Incoming credit requirements needed for class status:

<b>SOPHOMORE</b>	<b>JUNIOR</b>	<b>SENIOR</b>	<b>GRADUATION</b>
25	55	85	120

Credits are awarded only if the final course grade is A, B, C, D, or P.

### **COLLEGE PREPARATION**

In the five major academic fields (English, world language, mathematics, science, and social studies) a student should select personally challenging courses and pursue any continuing academic subjects, such as a language or mathematics, to the most advanced level offered. Also, the student is strongly urged to continue to include courses in the fields of music, art, technology, and business. We suggest the following as an optimal college preparatory program:

English	4 years
Social Studies	4 years
Mathematics	4 years
World Language	4 years
Science	4 years

Students should look at each department's statements and charts for further recommendations and also confer with their school counselor regarding their selections.

### **COURSE DESIGNATIONS**

College Prep 2 courses (CP2) are college preparatory courses that provide extra support in literacy skills, problem-solving or help with time management and organizational issues.

College Prep 1 courses (CP1) follow a strong college preparatory curriculum. Students must have solid reading, writing, and problem-solving skills. Students must also have a strong work ethic about school.

Honors courses (H) proceed at a rapid pace with a challenging curriculum. Students are expected to have a demonstrated work ethic in regard to homework and test preparation.

Advanced Placement (AP) courses are designed to be taught at the same level as a first-semester college course of the same name. They are exceedingly rigorous in both scope and sequence. Students who choose this level of difficulty are expected to participate in subject-specific national examinations. Advanced Placement courses are extremely time-consuming. Enrolling in more than two AP classes per year represents a tremendous commitment. This should be done with caution. If a student elects to do a Senior Project in the second semester, the student must still attend all Advanced Placement classes. **Taking the AP exam is required.**

Students coming from other educational settings who have the prerequisites for courses must see their school counselor for appropriate placement.

### **COURSE LOAD**

All students are required to take a full course load regardless of the number of credits they have already earned. This is typically 35 credits.

### **ACADEMIC POLICIES**

**GRADING:** Marblehead High School uses the following marking system. Plus and minus grades are also used:

- A: excellent
- B: above average
- C: average; quality sufficient to continue in sequential subjects
- D: poor
- F: failing; no credit
- I: incomplete; no credit
- P: pass; credit may be awarded; not included in GPA
- W: withdrawn; no credit
- N: no credit due to attendance



## GRADE POINT AVERAGE (GPA)

MHS uses a grade weighting system in an effort to create a more equitable GPA calculation. Grade weights are as follows:

Grade	CP1 & CP2	Honors	AP
A	4.000	4.500	5.000
A-	3.670	4.167	4.670
B+	3.330	3.833	4.333
B	3.000	3.500	4.000
B-	2.670	3.167	3.670
C+	2.330	2.833	3.330
C	2.000	2.500	3.000
C-	1.670	2.167	2.670
D+	1.330	1.830	2.330
D	1.000	1.500	2.000
D-	0.670	1.167	1.670
F	0.000	0.000	0.000

**MHS Honor Roll GPA requirement is 3.40 to 3.79 MHS High Honors GPA requirement is 3.80 and above**  
**Please Note: The scores above need to be achieved without rounding; for example, a 3.399 would not qualify a student for honor roll (3.4).**

## ADVANCED PLACEMENT PROGRAM

The Advanced Placement Testing Program of the College Entrance Examination Board (CEEB) provides students with the opportunity to receive college credit for rigorous, demanding high school work. These tests are administered by the CEEB and certain test scores are accepted for credit by most colleges and universities. One of our goals at MHS is to place students in courses that provide an appropriate challenge. In an effort to be inclusive and yet also provide a successful course placement for each student, the following selection criteria may be used:

- Success in pre-requisite courses (where appropriate)
- MCAS scores (where appropriate)
- Teacher recommendation

MHS offers several courses at this level providing an intellectually stimulating experience. Students interested in an academic challenge requiring analysis, synthesis, and evaluation of difficult subject matter are encouraged to apply for advanced placement courses. Summer work may be required. AP candidates are required to attend AP meetings in the spring.

AP courses are not required for graduation and as such are a choice, not an obligation. By choosing to take an AP course, students are also committing themselves to taking the AP exam. Significant attention is paid to preparing for the AP exam in May, which students are required to take. ***A fee is charged for each test taken, students should plan accordingly.*** As mentioned by the College Board, "The College Board provides a fee reduction per exam for eligible students with financial need." The College Board uses the free and reduced lunch program to determine financial need. Due to changes in College Board deadlines, AP students are required to pay for their exams by September 30th. **If the commitment to take the exam is not met by September 30th, a course change for the AP class(es) will be implemented.**

### **AP Exam**

United States Government and Politics  
United States History  
Art History  
Biology

### **MHS Courses**

AP American Government (pg 25)  
AP United States History (pg 25)  
AP Art History (pg 25 & 49)  
AP Biology (pg 38)

Calculus AB	AP Calculus AB (pg 29) (equivalent to one semester of college level calculus)
Calculus BC	AP Calculus BC (pg 29) (equivalent to a full year of college level calculus)
Chemistry	AP Chemistry (pg 39)
Computer Science A	AP Computer Science A (pg 29)
Computer Science Principles	AP Computer Science Principles (pg 29)
English Language & Composition	AP Language & Composition (pg 16)
English Literature & Composition	AP Literature & Composition (pg 16)
Seminar	AP English Seminar (pg 16)
Research	AP Research (pg 19)
Environmental Science	AP Environmental Science (pg 38)
European History	AP European History (pg 25)
French Language and Culture	AP French 5 (pg 35)
Latin	AP Latin 5 (pg 36)
Music Theory	AP Music Theory (pg 53)
Physics C: Mechanics	AP Physics C-Mechanics (pg 40)
Psychology	AP Psychology (pg 26 )
Spanish Language and Culture	AP Spanish 5 (pg 33)
Statistics	AP Statistics (pg 29)

### **ESSEX TECH AFTER DARK PROGRAM**

Marblehead High School has partnered with the Essex Tech After Dark Program. The program provides vocational educational opportunities for juniors and seniors. Career & Technical Education (CTE) Programs are offered. Three Career Technical Education programs are offered that align with the Massachusetts Career/Vocational Technical Education (CVTE) Frameworks. The programs currently include: Construction Craft Labor, Health Assisting, and Sustainable Horticulture. Students apply for the program in their second semester sophomore year. If accepted, it is a two year commitment.

Students will spend the morning at Marblehead High School enrolled in three MHS courses. They will be transported to Essex Tech in the afternoon. Additional online work will be required in order to complete graduation requirements. The school counselor will work closely with the student to ensure all requirements are met.

### **ACADEMIC TRANSCRIPTS**

Requests for official transcripts should be made at the school counseling office. The school counseling office sends materials for college applications, which include a profile of Marblehead High School, official student transcript, and any MHS recommendations. A fee is charged to cover the cost of the Naviance program as well as preparing and sending these documents.

### **INDEPENDENT STUDY**

Independent study may be available in areas not covered and/or which do not fit into the existing curriculum schedule. Initial approval must be given by the teacher. The School Counseling Office will then facilitate the required paperwork. All independent study courses are graded pass/fail. They are not included in the GPA and will not count towards any graduation requirements other than total credits earned. Final approval lies with the high school administration.

### **DUAL ENROLLMENT - SALEM STATE UNIVERSITY**

Salem State University expanded Dual Enrollment eligibility for all high schools located within Essex County. For more information about the Dual Enrollment program at Salem State University please check their website; <https://www.salemstate.edu/dualenrollment>.

Students who are accepted into the dual enrollment program at Salem State will have their tuition and fees waived by the University for a maximum of one class per semester. Students will be responsible for textbooks, transportation, and instructional materials. It will be the responsibility of the student to pay for any additional classes. Eligible Massachusetts high school students can enroll in college courses and simultaneously earn

high school and college credit. For more detailed information regarding this program, please visit the *Massachusetts Department of Higher Education website*.

An eligible course must be a 100 or 200-level, credit-bearing college-level course that counts for no less than three credit hours. The Department of Higher Education has also placed an emphasis on courses that are "easily transferable" and qualify under the *MassTransfer General Education Foundation* or are within the disciplines of computer science, technology or engineering. Certain courses such as remedial and physical activity courses are not allowed for participation in this program.

SSU dual enrollment courses are included on the MHS transcript for credit and weighted the same as an AP course. Dual enrollment courses do not fulfill MHS graduation requirements.

### **Massachusetts State Seal of Biliteracy**

The State Seal of Biliteracy is an award provided by state approved districts that recognizes high school graduates who attain high functional and academic levels of proficiency in English and a world language in recognition of having studied and attained proficiency in two or more languages by high school graduation. Our vision is to help students recognize the value of their academic success and see the tangible benefits of being bilingual. The State Seal of Biliteracy takes the form of a seal that appears on the transcript or diploma of the graduating senior and is a statement of accomplishment for future employers and for college admissions.

### **Manufacturing/Engineering Technology Pathway Program (MET)**

The MHS Innovations Pathway program provides students with an opportunity to explore career trajectories in the industries of manufacturing and engineering technology. This career path prepares students for life beyond high school whether they pursue college, training programs, trade schools, or immediate employment. These fields have been identified as a priority industry in the Northeast region and offer high quality career paths, and ample employment opportunities. Students will have enriched experiences that include ongoing advising, support, meaningful and exciting coursework, industry connections, credentials, certifications, post-secondary linkages, skill-building and hands-on learning opportunities. All students are welcome to join regardless of academic standing or grade level. Start as early as 9th grade! 10th grade, 11th and 12th graders may participate as long as the required coursework is fulfilled. Students in the Pathway Program will work closely as a cohort and enjoy shared experiences learning in the classroom and connecting with industry partners.

### **PASS/ FAIL OPTION**

Students may request to take **one course per year** on a pass/fail basis. The pass/fail course must be taken in addition to five majors, and the decision **must** be made no later than the 10<sup>th</sup> day of an applicable course. Teachers must give approval as well as the principal. Students who take sequential courses on a pass/fail basis should note that they may only continue in the sequence if they receive a "P" and have their teacher's recommendation. If a student is taking six major core courses, then the student has the option to take **two (2)** courses on a pass/fail basis subject to approval by the principal. Graduation requirements cannot be taken on a pass/fail basis.

### **INCOMPLETES**

*A grade of incomplete may only be assigned with administrative approval. Incomplete grades should be completed within two weeks of the close of the quarter.* Extensions may be granted by the Administration. When an "Incomplete" is not completed by the deadline, the "I" grade becomes an "F". Waivers from this procedure may be granted due to illness or extenuating circumstances.

### **ACADEMIC ELIGIBILITY FOR ATHLETICS**

In order to qualify for participation, a student must have no F's in the relevant quarter or semester. Eligibility for First Quarter is determined by final grades for the year preceding the activities. All other eligibility is determined by quarterly grades in the last marking period preceding the activities (e.g., Second Quarter grades and not semester grades determine Third Quarter eligibility). Eligibility will be removed or resorted in a manner consistent with MIAA policy; that is, on the date on which report cards are issued. In all other matters concerning this policy, unless otherwise stated, the District will follow MIAA policy. In extreme situations due to

a student's health (documented by medical personnel) or family circumstances (e.g., death of an immediate family member) the principal may grant a waiver of the "no F's" for one marking period.

A student must take the required number of courses. Academic eligibility of all students shall be considered as official and determined only on the date when the report cards for that marking period have been issued to the parents of all students within a particular class. Incomplete grades may not be counted toward eligibility.

A student who repeats work upon which he/she has once received credit cannot count that subject a second time for eligibility. A student cannot count for eligibility for any subject taken during summer vacation, unless that subject has been previously taken and failed.

A student receiving services under Chapter 766 whose Individualized Education Plan is a 504 or more restrictive prototype, may be declared academically eligible by the principal provided that all other eligibility requirements are met. Participants of extracurricular activities must abide by the high standards of citizenship. Students must be present in school for the equivalent of two periods or blocks to participate that day in extracurricular activities and/ or athletics. An administrator must approve exceptions to this rule.

### **Summer School and Credit Recovery**

If students have failed a full-year course, but passed two quarters, they will be eligible for credit recovery. Options are taking either a local summer school course or an online credit-recovery course through Educere or Edgenuity. MHS does not cover the cost of summer school. If students have failed more than half the course, they may either repeat the course during the following school year or enroll in the course online through Educere or Edgenuity. The desired course must have the approval of the school counselor and the principal. School counselors have information regarding summer school opportunities.

The credit recovery or summer school course grades will be recorded separately on the student's transcript and will NOT be part of the GPA. The original grade will remain on the transcript. Students will not be placed in the next sequential course until the previous course is successfully completed. If a student does not fulfill the credit recovery requirements, the student will be required to retake the course. If course failures result in not meeting the required number of credits then the student's year of graduation may be impacted.

**Marblehead Academy** – Marblehead Academy is a referral-based academic support program that offers students opportunities for Credit Recovery through online classes and in-person tutoring. Marblehead Academy offers an After School Session during the school year and a Summer Session after the school year ends. Students are referred by their school counselor, and they are supported by Marblehead High School Educators throughout their enrollment in the program.

### **SCHOOL COUNSELING PROGRAMS**

In the spring of the 8<sup>th</sup> grade, counselors visit the middle school and area private schools to discuss the freshman year curriculum and course registration. These visits are scheduled close to the same week as the **Curriculum Night** for parents/guardians.

Incoming freshmen are invited to a **Step-up Day** at the high school in the spring. They are introduced to their peer mentor and given a tour of the building. **Peer Mentors** also meet with their mentees prior to the start of school and show them where their classrooms are located. A freshman orientation takes place prior to the start of school.

**Grades 9 - 11:** School counselors have individual meetings with all students in the spring in order to discuss course selections for the following year. The school counseling department has implemented **MyCAP** (My Career and Academic Plan). MyCAP is a student-centered, multi-year planning tool designed to provide students with ongoing opportunities for students to plan for their academic, personal/social and career success.

## **School Counseling Program: Grade 9**

**Freshman Seminars:** Counselors meet in small groups with students to review course requirements, develop appropriate individual 4-year academic plans, and acquaint students with the various resources available to them. Counselors also discuss the importance of academic success, extracurricular involvement, and standardized testing. All freshmen will be registered and introduced to Naviance through MyCAP lessons. Students begin to set goals for themselves in these seminars.

## **School Counseling Program: Grade 10**

Counselors present to sophomores in the fall to introduce the PSAT and later meet to review the results with them. In the spring, counselors run a **Sophomore Seminar** on career and college awareness. Students use *Naviance* to complete a career interest inventory and a personality profile. Sophomores continue to set goals for themselves through MyCAP lessons. Essex Tech presents to sophomores in the winter regarding the After Dark Program.

## **School Counseling Program: Grade 11**

Counselors present to juniors in the fall to review the registration process for taking the PSAT and later meet to review the results with them. Counselors run **Junior Seminars** to discuss the college planning process and other post-secondary options. Students are informed about standardized testing and are taught how to compile a list of colleges to visit before their senior year. Students will utilize *Naviance* to search for colleges, scholarships, and/or career information.

Parents/guardians of juniors are invited to **Junior Parent/Guardian Night**. The college search process, standardized testing, and all relative information covered in the students' **Junior Seminars** will be reviewed with the parents.

Counselors host a **College Admissions Panel** every spring. Admissions counselors from various colleges present the college admissions process from the college perspective and answer questions. All juniors attend this in-house field trip. Counselors will run seminars in the spring for juniors to create their resume.

Parents/guardians of juniors are invited to a **Financial Aid Night**. A presenter is invited to explain the financial aid process and answer questions pertaining to FAFSA and CSS profile. Juniors meet individually with their school counselor to develop their post secondary plans.

## **School Counseling Program - Grade 12**

Counselors run **Senior Seminars** in the fall that cover all aspects of the college application process including standardized testing deadlines and procedures, the college list, organizing the application process, college visits, college interviews, creating a Common Application account, and financial aid. Students will work with their school counselor to develop their post secondary plans.

Parents/guardians of seniors are invited to **Senior Parent/Guardian Night** during the first month of school. The college application process and all relative information covered in the **Senior Seminars** will be reviewed. Parents/guardians of seniors are invited to a **Financial Aid Night** in the fall. A presenter is invited to explain the financial aid process and answer questions pertaining to FAFSA and CSS profile.

Counselors meet with all seniors individually to review college lists and/or to ensure that they have a post-secondary plan. The school counselors are available during MAGIC block in the fall. Students can drop in and get additional help with the Common Application and post secondary plan needs.

The school counseling department hosts college admissions visits throughout the fall. Seniors are able to register on Naviance to attend the visits.

School counselors invite all seniors to a **Scholarship Assembly** at the beginning of March to present the Marblehead High School scholarship offerings and review the relevant application procedures. The scholarship website is available in early March of each school year.

## **School Adjustment Counselors & School Social Workers**

Our school adjustment counselors and social workers provide a variety of services to students and families. Working within a proactive/intervention model, the adjustment counselors and social workers help to identify those students having academic and/or social and emotional issues that may impact their ability to function within the high school setting and affect their progress. Problems may include: adolescent transition issues, substance use, abuse and addiction, eating problems and disorders, depression, anxiety, other medical psychological and psychiatric problems, divorce, step family, loss and grief. Once a problem is assessed in a confidential manner, appropriate recommendations will be made. Services may include: information/education, short-term counseling, specialized group work, crisis intervention, and referrals to a range of resources. The adjustment counselors and social workers also serve as a liaison to a variety of community programs and committees that help to provide education, support and awareness for students, parents, faculty and staff.

## **Special Education**

The Marblehead Public Schools, in accordance with the Individuals with Disabilities Education Act (IDEA 2004 ) and MGL 71B , offer a diverse and comprehensive continuum of special education services to children who qualify. At MHS, access to special education programs is determined by the High School Evaluation team. Referrals to the team for a special education evaluation may come from a variety of sources including school personnel, parents, and physicians or in some cases, the student. State and Federal regulations govern the procedures of the evaluation team. The high school Special Education Chairperson, School Counselor, Principal and/or Director of Student Services and Program Accountability, are available to provide a more in-depth explanation of the evaluation process.

## **School Health Services**

The school nurse supports education by providing health care, counseling and health education for students and their families. The nurse manages a comprehensive health service program within the school setting. This includes:

- Implementing the mandated health screening programs (vision, hearing, height, weight, postural, etc.) Parents are notified of outcomes that do not meet screening criteria and follow-up is recommended
- Managing the school's medication program
- Preventing the spread of communicable disease
- Providing emergency care
- Coordinating health service and education efforts with teachers, the athletic director, health educators, school counselors, food service personnel, etc.
- Collaborating with community health providers

All students, except in emergencies, must obtain a pass before coming to the Health Office. Students are to report to the classroom teacher for a pass to the Health Office. The school nurse must assess all students who request dismissal for illness or injury. Parents must pick up students from the Health Office and sign them out in the main office at dismissal.

All medications, including over-the-counter medications and inhalers, must be housed in the Health Office. A written order from the student's physician as well as parental permission is necessary for any prescription medication requiring daily or as needed administration. Medications must be provided in a pharmacy-labeled container. The nurse, student, family and family physician will make any decision about student self-administration for some medications.

Emergency cards are to be turned in promptly with current and updated information on allergies and/or medication changes as well as addresses, home and work cell phone numbers. Contacts on the emergency cards should have daytime phone numbers listed. Please notify the nurse about a designated guardian to authorize medical treatment if parents or guardians plan a trip. The nurse needs to be able to contact a parent or guardian at all times.

## **LIBRARY MEDIA CENTER**

The Library Media Center provides an environment that encourages learning through the use of organized and accessible resources. It features a computer lab, conference room, wireless Internet, tables for group work, carrels for quiet study, and a comfortable lounge area. The Library Media Center promotes student and faculty interest in reading and research. The resources include a comprehensive collection of books, periodicals, newspapers, databases, and audio-visual materials. The Library Media program fosters the development of information literacy skills and teaches students to become effective users of information. This is accomplished through the teaching of research techniques such as task definition, information-seeking strategies, location and access to materials, use, synthesis, and evaluation of information. Instruction for all grade levels focuses on subject-specific resources and research techniques, including using subscription databases, evaluating websites, and writing bibliographies. Students are welcome to use the library before, during, and after school. Library hours are 7:30-3:00 on Monday –Thursday and 7:30-2:30 on Friday.

# COURSE CATALOG

## DEFINITION OF TERMS

**Course Title:** Name of the course

**Course Number:** Number assigned for computer and transcript purposes

**Level:** There are four proficiency levels: *Advanced Placement*, *Honors*, *College Preparatory 1*, and *College Preparatory 2*. The level means that the course requires a knowledge/skill level and the volume of work varies according to the course level.

**Credits Given:** Full-year courses earn 5 credits depending on the amount of time they meet. Half-year courses earn 2.5 credits. Exceptions are noted in course descriptions.

**Prerequisite:** A course that must have been taken and passed before this course can be taken.

**Co-requisite:** A course that must be taken at the same time as this course.

Students coming from other educational settings who have the prerequisites for courses must see their school counselor or Administration for appropriate placement.

## ENGLISH

Literature illuminates what it means to be human and serves as a reflection of history. By studying literature, we better understand ourselves and gain perspective on the world and its people. English programs in each grade include Honors, College Prep 1 (CP1), and Advanced Placement (grades 11 & 12). All courses are challenging and emphasize reading, writing, speaking, listening, and thinking skills.

### Language Arts/English Department Four Year Planner

Grade	Required Courses
9 <sup>th</sup>	Honors or College Prep 1
10 <sup>th</sup>	Honors or College Prep 1
11 <sup>th</sup>	Advanced Placement or Honors or College Prep 1
12 <sup>th</sup>	Advanced Placement or Honors or College Prep 1

## GRADE 9 – REQUIREMENTS (choose one)

Freshman year lays the foundation for the study of literature. All levels of instruction will address the following essential questions: What is a classic? What are the elements of fiction? How does one communicate effectively?

### ENGLISH 9 - H

**Level: Honors**

**Course Number: 111**

**Credits: 5**

The literature studied may include *The Odyssey*, *Romeo and Juliet*, *Of Mice and Men*, *Lord of the Flies*, *Open Mic: Riffs on Life Between Cultures in Ten Voices / Born a Crime*, and selected poetry, short stories, and nonfiction. Students will read additional texts, including *Frankenstein* and other classic works. Students will learn the research process and explore forms of academic writing, including analytical, persuasive, and narrative pieces. This is a rigorous course with extensive homework.

### ENGLISH 9 - CP1

**Level: College Prep 1**

**Course Number: 112**

**Credits: 5**

The literature studied may include *The Odyssey*, *Romeo and Juliet*, *Of Mice and Men*, *Lord of the Flies*, *Open Mic: Riffs on Life Between Cultures in Ten Voices / Born a Crime*, and selected poetry, short stories, and nonfiction. Students will learn the research process and explore forms of academic writing, including analytical, persuasive, and narrative pieces. This course requires daily homework.



## GRADE 10 – REQUIREMENTS (choose one)

Sophomore year expands the foundation of literary analysis. All levels of instruction will address the following essential questions: What forms can a classic take? How do authors utilize the elements of fiction? How does one communicate effectively?

### ENGLISH 10 - H

**Level: Honors**

**Course Number: 121**

**Credits: 5**

The literature studied includes *Maus*, *The Catcher in the Rye*, short stories including those from The Norton Introduction to Literature, and selected poetry from a range of sources. Teachers encourage or require supplemental outside reading for the thematic units. The course stresses analytical, persuasive, and narrative writing. Skill building in grammar, usage and vocabulary is an ongoing part of the lessons. Homework at the honors level is extensive.

### ENGLISH 10 - CP1

**Level: College Prep 1**

**Course Number: 122**

**Credits: 5**

The literature studied includes *Maus*, *The Catcher in the Rye*, short stories including those from The Norton Introduction to Literature, and selected poetry from a range of sources. Students will also focus on writing essays of various types, strengthening their grammar, usage, and vocabulary skills, and preparing for the MCAS English Language Arts exam. This course requires daily homework.

## GRADE 11 – REQUIREMENTS (choose one)

Junior year explores national identity through literature. All levels of instruction will address the following essential questions: How does one apply the understanding of a classic to understanding national identity? How does the application of literary elements affect the understanding of national identity? How does one communicate effectively?

### Language & Composition - AP

**Level: Advanced Placement**

**Course Number: 130**

**Credits: 5**

This course in English Language and Composition engages high school juniors and seniors in a rigorous study of language, rhetoric, and argument through reading and analysis of several genres of writing, including short- and long-form journalism, essay, speech, advertisements, as well as visual texts. While the reading material is wide-ranging, students' own writing consists mainly of non-fiction prose composed for a variety of purposes, audiences, and subjects. Students will pay particular attention to the relationship between a writer's purpose and objectives and his stylistic choices. Projects and presentations will also focus on oral and/or visual aspects of rhetorical strategies. Significant attention is paid to preparing for the AP English Language & Composition exam in May, which students are required to take. This course may fulfill the English 11 or English 12 requirement.

### Literature & Composition - AP

**Level: Advanced Placement**

**Course Number: 140**

**Credits: 5**

Advanced Placement English Literature and Composition is a challenging, year-long course for high school juniors and seniors in the reading and critical analysis of literature. Students in AP English Literature analyze poetry, plays, novels, short stories, and essays written in various literary periods. Students are expected to be actively involved in every aspect of the course, from leading Socratic discussions to writing complex critical analyses. Summer responsibilities include reading at least three novels, with additional assignments based on readings. Significant attention is paid to preparing for the AP English Literature and Composition exam in May, which students are required to take. This course may fulfill the English 11 or English 12 requirement.

### English Seminar - AP

**Level: Advanced Placement**

**Course Number: 139**

**Credits: 5**

English Advanced Placement Seminar is a rigorous foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing different perspectives. Using an inquiry framework, students learn to investigate a problem or issue, analyze arguments, compare different perspectives, synthesize information from a variety of media sources,

and develop their own perspectives in writing as well as oral and visual presentations, both individually and as part of a team. AP Seminar requires students to have the level of maturity and skill to thoughtfully consider and analyze diverse perspectives. Significant time is spent working in teams for the first of three requirements of the College Board Exam which consists of research reports and a team presentation within the first semester--this is 20% of the students' AP score and it is a full semester of students' high school academic career -- students need to be present and need to be diligent. Students must fulfill their responsibilities to their teams for credit throughout the semester in this first requirement. The second requirement of the course requires intense attention to an individual argument essay and presentation--this is completed within the third quarter plus a week or two. The third requirement is the end of course sit-down exam given in May and directed by the College Board--there will be some practice. These three requirements all contribute to the students' AP exam score. This course may fulfill the English 11 or English 12 requirement.

### **ENGLISH 11 - H**

**Level: Honors**

**Course Number: 131**

**Credits: 5**

Students will read and analyze outstanding American authors from the seventeenth century through the present day. Students study the genres of the novel, poetry, short story, biography, drama, and essay. Core texts for this class are *The Crucible*, *The Great Gatsby*, *A Raisin in the Sun*, *Between the World and Me / Home*, and *The Things They Carried*. Additional representative works may include *The Scarlet Letter*, *The Grapes of Wrath*, *Death of a Salesman*, *The Glass Menagerie*, *Twelve Angry Men*, and selections from different movements throughout American literature. Students will write different types of essays including analytical, persuasive, and reflective, as well as present oral projects. This is a rigorous class involving extensive work.

### **ENGLISH 11 - CP1**

**Level: College Prep 1**

**Course Number: 132**

**Credits: 5**

Students will read and analyze outstanding American authors from the seventeenth century through the present day. Students study the genres of the novel, poetry, short story, biography, drama, and essay. Core texts for this class are *The Crucible*, *The Great Gatsby*, *A Raisin in the Sun*, *Between the World and Me / Home*, and *The Things They Carried*. Additional representative works may include *The Scarlet Letter*, *The Grapes of Wrath*, *Death of a Salesman*, *The Glass Menagerie*, *Twelve Angry Men*, and selections from different movements throughout American literature. Students will write different types of essays including analytical, persuasive, and reflective, as well as present oral projects. This course requires daily homework.

## **GRADE 12 – REQUIREMENTS** (choose one)

Senior year explores the ways literature transcends time and global location. All levels of instruction will address the following essential questions: How does time and place influence a story? How do cultures share and change ideas? How does one communicate effectively?

### **Language & Composition - AP**

**Level: Advanced Placement**

**Course Number: 130**

**Credits: 5**

This course in English Language and Composition engages high school juniors and seniors in a rigorous study of language, rhetoric, and argument through reading and analysis of several genres of writing, including short- and long-form journalism, essay, speech, advertisements, as well as visual texts. While the reading material is wide-ranging, students' own writing consists mainly of non-fiction prose composed for a variety of purposes, audiences, and subjects. Students will pay particular attention to the relationship between a writer's purpose and objectives and his stylistic choices. Projects and presentations will also focus on oral and/or visual aspects of rhetorical strategies. Significant attention is paid to preparing for the AP English Language & Composition exam in May, which students are required to take. This course may fulfill the English 11 or English 12 requirement.

### **Literature & Composition - AP**

**Level: Advanced Placement**

**Course Number: 140**

**Credits: 5**

Advanced Placement English Literature and Composition is a challenging, year-long course for high school juniors and seniors in the reading and critical analysis of literature. Students in AP English Literature analyze

poetry, plays, novels, short stories, and essays written in various literary periods. Students are expected to be actively involved in every aspect of the course, from leading Socratic discussions to writing complex critical analyses. Summer responsibilities include reading at least three novels, with additional assignments based on readings. Significant attention is paid to preparing for the AP English Literature and Composition exam in May, which students are required to take. This course may fulfill the English 11 or English 12 requirement.

### **English Seminar - AP**

**Level: Advanced Placement**

**Course Number: 139**

**Credits: 5**

Advanced Placement English Seminar is a rigorous foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing different perspectives. Using an inquiry framework, students learn to investigate a problem or issue, analyze arguments, compare different perspectives, synthesize information from a variety of media sources, and develop their own perspectives in writing as well as oral and visual presentations, both individually and as part of a team. AP Seminar requires students to have the level of maturity and skill to thoughtfully consider and analyze diverse perspectives. Significant time is spent working in teams for the first of three requirements of the College Board Exam which consists of research reports and a team presentation within the first semester--this is 20% of the students' AP score and it is a full semester of the students' high school academic career -- students need to be present and need to be diligent. Students must fulfill their responsibilities to their teams for credit throughout the semester in this first requirement. The second requirement of the course requires intense attention to an individual argument essay and presentation--this is completed within the third quarter plus a week or two. The third requirement is the end of course sit-down exam given in May and directed by the College Board--there will be some practice for this. These three requirements all contribute to the students' AP exam score. This course may fulfill the English 11 or English 12 requirement.

### **ENGLISH 12 - H**

**Level: Honors**

**Course Number: 141**

**Credits: 5**

The literature studied includes *Beowulf*, *Grendel*, *The Metamorphosis*, *The Stranger*, *Persepolis*, and excerpts from professional personal narratives/memoirs along with additional texts and nonfiction essays. Students will write personal, critical, and persuasive essays based on international literature and personal topics, learning to write with a more sophisticated use of anecdotes, imagery, tone, and voice. This is a challenging course of composition and literature with extensive homework.

### **ENGLISH 12 - CP1**

**Level: College Prep 1**

**Course Number: 142**

**Credits: 5**

The literature studied may include *Beowulf*, *Grendel*, *Persepolis*, and excerpts from professional personal narratives/memoirs along with additional texts, essays, and poems. Students write persuasive and critical essays throughout this course. Students will also write cover letters and resumes, compose personal and expository pieces, and will develop appropriate usage, strong organization, and personal style through the writing and editing process. This course requires daily homework.

## **ENGLISH ELECTIVES**

Electives are designed to teach real-world skills as well as to encourage students' creativity. Each faculty member runs an elective with his or her own creative twists--giving the teacher the latitude to stretch out a bit. Courses designate which grade students may take a course. Teachers adhere strictly to this as the grade designates the level of experience and skills necessary to be successful in the course.

### **RTI English**

**Level: College Prep 1**

**Open to Grade: All Grades**

**Course Number: 165**

**Credits: 2.5**

This course is designed for students who require support with their English course. Students will receive individual interventions based on their specific needs.

**AP Research****Level: Advanced Placement**

Advanced Placement Research: English is a rigorous course that allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. The course culminates in an academic paper of 4,000–5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation (15-20 minutes) with an oral defense. There is currently no sit-down exam in May. During the summer, students enrolled in this course should be considering their research topic, any products that will need to be produced, a mentor/expert with whom to work, and should engage in experiences over the summer to provide a base for the portfolio, paper, products, and presentation. **Prerequisite per the College Board: AP Seminar.** This course enables students' eligibility for the [College Board's AP Capstone Diploma](#) (earn scores of 3 or higher in AP Seminar, AP Research, and 4 other AP exams) or the AP Seminar and Research Certificate (earn scores of 3 or higher in AP Seminar and Research).

**Course Number:****Credits: 5****FILM STUDIES I - CP1****Level: College Prep 1****Open to Grades: 10, 11, 12**

Film Studies is a one-semester elective in which students learn to view film analytically by genre. In addition to the technical and cultural history of the form, students will learn and practice techniques for criticism. Individual film histories, technical vocabulary, cinematographic (shot-by-shot) analytical essays and culturally focused reviews will be the primary forms of assessment. Film Studies is open to all students. Its goal is to foster both a better understanding of the medium and the way in which films affect popular culture.

**Course Number: 153****Credits: 2.5 – one semester****FILM STUDIES I - H****Level: Honors****Open to Grades: 10, 11, 12**

Film Studies is a one-semester elective in which students learn to view film analytically by genre. In addition to the technical and cultural history of the form, students will learn and practice techniques for criticism. Individual film histories, technical vocabulary, cinematographic (shot-by-shot) analytical essays and culturally focused reviews will be the primary forms of assessment. Film Studies is open to all students. Its goal is to foster both a better understanding of the medium and the way in which films affect popular culture.

**Course Number: 154****Credits: 2.5 – one semester****CREATIVE WRITING - CP1****Level: College Prep 1****Open to Grades: 9-12**

Using a workshop approach, students will write in a wide variety of genres (poetry, anecdote, speech, short story, etc.) and will share and present their work orally and in published form. Students are expected to contribute to an atmosphere conducive to learning. They are also expected to participate in criticism (positive and negative) of each other's work and to accept editorial comments and suggestions made on their own work. Furthering the development of each individual as a writer, while maintaining an atmosphere of sharing and good will, is the goal of this course.

**Course Number: 156****Credits: 2.5 – one semester****CREATIVE WRITING - H****Level: Honors****Open to Grades: 9-12**

Using a workshop approach, students will write in a wide variety of genres (poetry, anecdote, speech, short story, etc.) and will share and present their work orally and in published form. Students are expected to contribute to an atmosphere conducive to learning. They are also expected to participate in criticism (positive and negative) of each other's work and to accept editorial comments and suggestions made on their own work. Furthering the development of each individual as a writer, while maintaining an atmosphere of sharing and good will, is the goal of this course.

**Course Number: 157****Credits: 2.5 – one semester**

**AFRICAN AMERICAN LITERATURE - CP1****Level: College Prep 1****Open to Grades: 10, 11, 12**

Students will immerse themselves into the African- American Literary landscape of the past one hundred years to better understand its integral development and influence on our American identity and culture. Genres will include Poetry, Short Stories, Essays, and Novels.

**Course Number: 166****Credits: 2.5 – one semester****AFRICAN AMERICAN LITERATURE - H****Level: Honors****Open to Grades: 10, 11, 12**

Students will immerse themselves into the African- American Literary landscape of the past one hundred years to better understand its integral development and influence on our American identity and culture. Genres will include Poetry, Short Stories, Essays, and Novels.

**Course Number: 167****Credits: 2.5 – one semester****BEST SELLING FICTION - CP1****Level: College Prep 1****Open to Grades: 10, 11, 12**

This course will explore chart topping works of contemporary fiction. Students will read works that have staked out positions on *The New York Times* Bestseller's List, been considered for major awards such as the Pulitzer Prize, or that have otherwise left a mark on the contemporary fiction scene. Discussion will focus on what separates a compelling story from a work of literature and who makes this distinction, as well as how a work of fiction both reflects and comments on the society in which it was written. Works for this course will rotate from year to year, but all will have been published within the last five years.

**Course Number: 168****Credits: 2.5 – one semester****BEST SELLING FICTION - H****Level: Honors****Open to Grades: 10, 11, 12**

This course will explore chart topping works of contemporary fiction. Students will read works that have staked out positions on *The New York Times* Bestseller's List, been considered for major awards such as the Pulitzer Prize, or that have otherwise left a mark on the contemporary fiction scene. Discussion will focus on what separates a compelling story from a work of literature and who makes this distinction, as well as how a work of fiction both reflects and comments on the society in which it was written. Works for this course will rotate from year to year, but all will have been published within the last five years.

**Course Number: 169****Credits: 2.5 – one semester****GRAMMAR - CP1****Level: College Prep 1****Open to Grades: 10, 11, 12**

This course examines the ways in which Modern American English works, how it can be manipulated to include some groups and exclude others, and how it consistently changes while simultaneously being resistant to change. Students will study grammar, regional dialects, slang and profanity, and the language of AI. This course is recommended to any student who wishes to become a better writer.

**Course Number: 174****Credits: 2.5 – one semester****GRAMMAR - H****Level: Honors****Open to Grades: 10, 11, 12**

This course examines the ways in which Modern American English works, how it can be manipulated to include some groups and exclude others, and how it consistently changes while simultaneously being resistant to change. Students will study grammar, regional dialects, slang and profanity, and the language of AI. This course is recommended to any student who wishes to become a better writer.

**Course Number: 175****Credits: 2.5 – one semester****NATURE WRITING - CP1****Level: College Prep 1****Open to Grades: 10, 11, 12**

This outdoor-based, writing-based course examines nature writing before and after Linnaeus developed scientific classification. Students will read and write herbals, bestiaries, and pastorals; they'll read excerpts of

**Course Number: 176****Credits: 2.5 – one semester**

early ecologists; importantly, they'll hone the skills necessary to writing about their own local environments. This course is recommended to any student who wants to spend time outdoors or who wants to become a better writer.

**NATURE WRITING - H**

**Level: Honors**

**Open to Grades: 10, 11, 12**

This outdoor-based, writing-based course examines nature writing before and after Linnaeus developed scientific classification. Students will read and write herbals, bestiaries, and pastorals; they'll read excerpts of early ecologists; importantly, they'll hone the skills necessary to writing about their own local environments. This course is recommended to any student who wants to spend time outdoors or who wants to become a better writer.

**Course Number: 177**

**Credits: 2.5 – one semester**

**READING AND LITERATURE- CP1**

**Level: College Prep 1**

**Open to Grades: 9-12**

If slipping into a good book is your idea of a great way to spend an hour, this class is for you. Interested in becoming a better reader simply by having the time and space to read? This class is for you. What if you could pick the books you wanted to read—rather than the teacher? This class is for you. Reading and Lit is an independent reading class whereby students choose the titles *they* want to read—and keep track of their progress. This is a technology-free class which provides students with a break from screens while they dive into the books of their choosing. Brief mini-lessons and share-outs will help to develop a range of reading strategies, but students will spend most of their time reading titles they have chosen and applying those strategies to the texts of their choosing. Writing requirements will be to keep a reflective journal, contribute to a class blog, write reviews, and share-out book suggestions. This class is a great way to decompress, slow down, and savor the words on the page.

**Course Number: 178**

**Credits: 2.5 – one semester**

**READING AND LITERATURE - H**

**Level: Honors**

**Open to Grades: 9-12**

If slipping into a good book is your idea of a great way to spend an hour, this class is for you. Interested in becoming a better reader simply by having the time and space to read? This class is for you. What if you could pick the books you wanted to read—rather than the teacher? This class is for you. Reading and Lit is an independent reading class whereby students choose the titles *they* want to read—and keep track of their progress. This is a technology-free class which provides students with a break from screens while they dive into the books of their choosing. Brief mini-lessons and share-outs will help to develop a range of reading strategies, but students will spend most of their time reading titles they have chosen and applying those strategies to the texts of their choosing. Writing requirements will be to keep a reflective journal, contribute to a class blog, write reviews, and share-out book suggestions. This class is a great way to decompress, slow down, and savor the words on the page.

**Course Number: 179**

**Credits: 2.5 – one semester**

## **SOCIAL STUDIES**

Social Studies encompass all aspects of human endeavor and behavior. Social Studies are traditionally divided into disciplines such as history, anthropology, sociology, psychology, geography, economics, and religion. The Marblehead High School Social Studies department strives to teach students the knowledge base of the Social Studies disciplines and to help students develop an understanding of the decision making process essential to citizenship in a democracy. Students are guided to identify choices, take action based on those choices, and take responsibility for the consequences of those actions.

### **Social Studies Department Four Year Planner**

We encourage students to take the most challenging curriculum they can. Along with required courses below, students must take an additional one (1) semester elective in Grades 9 through 12. One year of an Advanced Placement (AP) course in the senior year will fulfill the electives' requirement.

**Freshman Electives:** Contemporary Issues, Principles of Economics and World War II & the Cold War  
**Sophomore Electives:** Contemporary Issues, U.S. Legal System, Applications of U.S. Law, Sociology, Psychology, Principles of Economics, World War II & the Cold War plus AP European History  
**Junior Electives:** All sophomore electives plus AP U.S. History  
**Senior Electives:** All sophomore and junior electives plus AP American Government

## GRADE 9 – REQUIREMENTS

### **WORLD CULTURES - CP1**

**Level: College Prep 1**

**Open to: Grade 9**

**Course Number: 212**

**Credits: 5**

This course promotes global awareness by surveying the geography, politics, economics, religions and cultures of the Middle East, Asia, Africa, and Latin America. History and current events are examined to understand the interactions between different societies. This course will emphasize the development of essential study skills for incoming high school students: reading for comprehension, note-taking, non-fiction writing, and oral communication.

### **WORLD CULTURES - H**

**Level: Honors**

**Open to: Grade 9**

**Course Number: 211**

**Credits: 5**

This course promotes global awareness by surveying the geography, politics, economics, and cultures of the Middle East, Asia, Africa, Latin America, and Canada. History and current events are examined to understand how people of these areas view themselves and others. This course will emphasize the development of essential study skills for incoming high school students: note-taking, reading comprehension, nonfiction writing, and oral communication. Honors level students will be expected to read extensively from primary sources and other supplemental materials. There will be an increased emphasis on research, oral presentation, and nonfiction writing.

## GRADE 10 – REQUIREMENTS

### **WESTERN TRADITION - CP1**

**Level: College Prep 1**

**Open to: Grade 10**

**Course Number: 222**

**Credits: 5**

This course explores the evolution of the major themes, ideas and beliefs of Western Civilization from the Classical heritage through the Enlightenment and French Revolution. Students will examine culture, conflict, economics, religion, geography and current events to understand how these themes and ideas have been transformed over time and applied throughout Western history. This course will focus on improving students' skills in research, non-fiction writing, and oral communication.

### **WESTERN TRADITION - H**

**Level: Honors**

**Open to: Grade 10**

**Course Number: 221**

**Credits: 5**

This course explores the evolution of the major themes, ideas and beliefs of Western Civilization from the Classical heritage to the origins of the Second World War. Students will examine culture, conflict, economics, religion, geography and current events to understand how these themes and ideas have been transformed over time and applied throughout Western history. This course will focus on improving students' research and presentation skills using performance based assessment.

## GRADE 11 – REQUIREMENTS (choose one or elective AP U.S. History)

### UNITED STATES HISTORY - CP1

Level: College Prep 1  
Open to: Grade 11

Course Number: 232

Credits: 5

This survey course presents events and issues critical to the development of the United States from early America to the present. This survey course presents events and issues critical to the development of the United States from early America to the present. By the end of the course, students will have explored various themes including American identity, politics and citizenship, war and diplomacy, demographic and technological change, reform, and globalization. In this course, students will further develop their skills in research, non-fiction writing, and oral presentation.

### UNITED STATES HISTORY - H

Level: Honors  
Open to: Grade 11

Course Number: 231

Credits: 5

This survey course presents events and issues critical to the development of the United States from early America to Present. By the end of the course, students will have explored various themes including American identity, politics and citizenship, war and diplomacy, demographic and technological change, reform, and globalization. This is a rigorous course in which students are expected to complete extensive reading, primary source analysis, writing, and research.

## GRADE 12 – REQUIREMENTS (Choose a one semester course from Social Studies electives, plus a Civics class OR elective AP American Government)

### CIVICS - CP1

Level: College Prep 1  
Open to: Grade 12

Course Number: 259

Credits: 2.5

The intent of the Civics course is to provide students with an understanding of political theory and the daily operations of government that help to shape public policy. Students will develop a critical understanding of the American political system, as well as their rights and responsibilities as citizens. Major areas of focus will also include the Constitution, the role of media, global interdependence and future societal challenges.

### CIVICS - H

Level: Honors  
Open to: Grade 12

Course Number: 258

Credits: 2.5 – one semester

The intent of the Civics course is to provide students with an understanding of political theory and the daily operations of government that help to shape public policy. Students will develop a critical understanding of the American political system, as well as their rights and responsibilities as citizens. Major areas of focus will also include the Constitution, the role of media, global interdependence and future societal challenges. Honors level students will be expected to read extensively from primary sources and other outside materials. There will be an increased emphasis on research and nonfiction writing.

## **SOCIAL STUDIES ELECTIVES**

*Students are required to take one (1) semester course their senior year as well as an additional one semester course in Grades 9 through 12.*

### CONTEMPORARY ISSUES - CP1

Level: College Prep 1  
Open to: Grade 9, 10, 11, 12

Course Number: 255

Credits: 2.5 – one semester

Students will study many of the pressing issues confronting the United States in the 21<sup>st</sup> century. Students will have the opportunity to select topics from a range of choices. Recent topics have included the U.S. role in the world, genocide, immigration, the Middle East, the emergence of China, global warming, and international



terrorism. Students will examine the historical background, the geographic setting and the politics and economics of real world issues and challenges that the U.S. faces. Students will be challenged to analyze events, conduct research, and formulate arguments in support of policy options.

**THE U.S. LEGAL SYSTEM - CP1**

**Level: College Prep 1**

**Open to: Grades 10, 11, 12**

**Course Number: 251**

**Credits: 2.5 – one semester**

This course will focus on basic law, the roles of police and lawyers, operation of the courts and operation of the prison system. Civil and criminal law and juvenile justice will be covered.

**APPLICATIONS OF U.S. LAW - CP1**

**Level: College Prep 1**

**Open to: Grades 10, 11, 12**

**Course Number: 252**

**Credits: 2.5 – one semester**

**Prerequisite: Successful completion of the U.S. Legal System (#251)**

This course is a continuation of "The U. S. Legal System" in which students will study criminal and civil justice systems through a focus on specific court cases, the role of the Supreme Court, the Constitution, professions in the legal system and problem solving of legal issues.

**INTRODUCTION TO PSYCHOLOGY - CP1**

**Level: College Prep 1**

**Open to: Grades 10, 11, 12**

**Course Number: 253**

**Credits: 2.5 – one semester**

This course will provide students with a fundamental understanding of the study of human behavior, thoughts, and emotions. Using historical and modern theories and perspectives, students will learn about human behavior, cognition, sense and perception, and the biological functions of the human brain and nervous system.

**SOCIOLOGY - CP1**

**Level: College Prep 1**

**Open to: Grades 10, 11, 12**

**Course Number: 254**

**Credits: 2.5 – one semester**

This course will examine society and the interactions between individuals and groups. Its goal is to help you better understand yourself, your community, and the world by studying it from a social perspective. You will focus on people, ways of life, culture, social trends, social institutions, and collective behavior to learn about human society and relationships. Specific areas of focus include socialization, gender roles, groups, crime and punishment, social class, and inequalities.

**PRINCIPLES OF ECONOMICS - CP1**

**Level: College Prep 1**

**Open to: Grades 9, 10, 11, 12**

**Course Number: 257**

**Credits: 2.5 – one semester**

This survey course will introduce students to the basic principles of microeconomics (how consumers decide what and how much to consume, how firms decide how much output to supply, and how these decisions are influenced by a market economy) and macroeconomics (recessions, unemployment, inflation, the role of banks, interest rates, and the economic effects of government policies). Discussion of examples and policies will focus on the U.S. economy.

**WORLD WAR II AND THE COLD WAR - CP1**

**Level: College Prep 1**

**Open to: Grades 9, 10, 11, 12**

**Course Number: 256**

**Credits: 2.5 – one semester**

This course will explore the causes and results of the Second World War and the origins of the Cold War conflict between the United States and the Soviet Union.

## **ADVANCED PLACEMENT COURSES - SOCIAL STUDIES**

Full-year college level courses are offered in European History, U. S. History, American Government and Politics, and Psychology. Students who successfully complete the course and pass the Advanced Placement exam may apply for college credit or college course exemptions.

### **EUROPEAN HISTORY - AP**

**Level: Advanced Placement**

**Open to: Grades 10**

**Course Number: 234**

**Credits: 5**

AP European History focuses on developing students' abilities to think conceptually about European history from approximately 1450 to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance - Interaction of Europe and the World, Poverty and Prosperity, Objective Knowledge and Subjective Visions, States and Other Institutions of Power, and Individual and Society - provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places. Significant attention is paid to preparing for the AP European History exam in May, which students are required to take.

Note: This course can be taken in lieu of Western Traditions CP1 or Honors

### **UNITED STATES HISTORY - AP**

**Level: Advanced Placement**

**Open to: Grade 11**

**Course Number: 230**

**Credits: 5**

The AP U.S. History course focuses on developing students' understanding of American history from approximately 1491 to the present. The course has students investigate the content of U.S. history for significant events, individuals, developments, and processes in nine historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides seven themes (American and national identity; migration and settlement; politics and power; work, exchange, and technology; America in the world; geography and the environment, and culture and society) that students explore throughout the course in order to make connections among historical developments in different times and places. Significant attention is paid to preparing for the AP United States History exam in May, which students are required to take.

Note: This course can be taken in lieu of United States History CP1 or Honors

### **AMERICAN GOVERNMENT & POLITICS - AP**

**Level: Advanced Placement**

**Open to: Grade 12**

**Course Number: 241**

**Credits: 5**

AP United States Government and Politics introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments. Significant attention is paid to preparing for the AP American Government and Politics exam in May, which students are required to take. **If a student elects to do a Senior Project, the student must attend all Advanced Placement classes until after the AP Exam.**

Note: This course can be taken in lieu of Civics CP1 or Honors

### **ART HISTORY - AP**

**Level: Advanced Placement**

**Open to Grades: 10, 11, 12**

**Course Number: 827**

**Credits: 5**

**AP Art History can be taken as an Art or History elective**

This course welcomes students into the global world of art as they investigate, discuss, and write about art. Students develop research-based skills through intensive visual, contextual, and comparative analysis. AP Art History students are highly engaged learners who gain an in-depth knowledge of 250 works of art representing

areas of Global Prehistory, Ancient Mediterranean, Early Europe and Colonial Americas, Later Europe and Americas, Africa, Asia, the Pacific, and Global Contemporary cultures, preparing them for the AP Art History Exam in May. Summer responsibilities include reading/research and a writing assignment. All AP Art History students are expected to take the AP exam in May. Senior Project students must continue attending all AP classes until after the AP Exam.

**PSYCHOLOGY - AP**

**Level: Advanced Placement**  
**Open to Grades: 11 and 12**

**Course Number:**  
**Credits: 5**

AP Psychology is an introductory college-level psychology course. Students cultivate their understanding of the systematic and scientific study of human behavior and mental processes through inquiry-based investigations as they explore concepts like the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Students will connect psychological concepts and theories to real-life scenarios, understand and interpret data, and analyze research studies in psychology.

**MATHEMATICS**

The Mathematics program at Marblehead High School is designed to provide students with a range of courses ensuring the necessary background to support further academic or career choices. Courses are structured so that each student receives the full benefit of developing problem solving and mathematical reasoning skills. The department offers a leveled core sequence of Algebra 1, Geometry, and Algebra 2 for students, followed by more advanced courses including studies in Algebra 3, Pre-Calculus and Statistics. Students who qualify also have options in AP offerings in Calculus, Statistics, and Computer Science

Students are required to take four years of mathematics. The mathematics department also offers computer programming course work in Intro to computer programming as well as two different AP Computer Science courses.

It is the intent of the department to ensure that all of the students at Marblehead High School succeed in meeting the Massachusetts graduation requirement of passing the MCAS test. Support plans and subsequent course work to meet this requirement are in place for those students who are in need of such a program. Students who score below 240 on the eighth grade MCAS Math Test may be scheduled for a support class. Students who receive a “Needs Improvement” or “Warning” on their 10<sup>th</sup> Grade MCAS will be required to be placed on an EPP plan which includes passing a final exam in their fourth year of mathematics.

Entry into all mathematics courses is determined by a placement process.

**TYPICAL COURSE SEQUENCE**

<b>Freshman</b>	<b>Sophomore</b>	<b>Junior</b>	<b>Senior</b>
Algebra 1 CP1	Geometry CP1	Algebra 2 CP2	Algebra 3 CP2
Algebra 1 CP1	Geometry CP1	Algebra 2 CP1	Precalculus CP1 or Algebra 3 CP1
Algebra 1 Honors	Geometry Honors*	Algebra 2 Honors	Pre-Calculus Honors
Geometry CP1*	Algebra 2 CP1	Precalculus CP1 or Algebra 3 CP1	Calculus/Stats

Students may double up on math courses involving Geometry – i.e. a student may take Geometry and Algebra 1 or Geometry and Algebra 2 the same year – particularly if they would like to take a calculus course their senior year

**ALGEBRA 1 - H**

**Level: Honors**

**Open to Grades: 9**

**Prerequisite: Placement Process**

This is a challenging and fast paced course. The topics are similar to those covered in Algebra 1 CP1, but are explained with greater depth and with more complex problems.

**Course Number: 370**

**Credits: 5**

**ALGEBRA 1 - CP1**

**Level: College Prep 1**

**Open to Grades: 9, 10**

**Prerequisite: Placement Process**

This is a college preparatory Algebra I course. Students will use the standards for mathematical practice to study the standards for mathematical content as defined by the Massachusetts Common Core State Standards. Students will study a variety of algebraic topics including but not limited to: solving one-step and two step equations, solving inequalities, graphing functions, linear functions, systems of equations and inequalities, exponential functions, polynomials and factoring, quadratics and also radical expressions.

**Course Number: 371**

**Credits: 5**

**GEOMETRY - H**

**Level: Honors**

**Open to Grades: 9, 10**

**Prerequisite: Placement process**

This proof-based geometry course offers students the opportunity to use mathematical reasoning and problem solving skills to investigate Euclidean geometry. Algebra techniques will be integrated whenever appropriate. Students will be expected to demonstrate an understanding of writing proofs, congruence, and similarity. Other topics investigated in the course include quadrilaterals, measurement, polygons, right triangles, circles, coordinate geometry, reflections, transformation, and symmetry.

**Course Number: 311**

**Credits: 5**

**GEOMETRY - CP1**

**Level: College Prep 1**

**Open to Grades: 9, 10**

**Prerequisite: Placement Process**

Students will use geometry and measurement strands to focus on developing and proving mathematical arguments while learning the reasoning skills needed to work through logical proofs. This includes creating and analyzing properties of two- and three-dimensional shapes, discussing and exploring spatial relationships using coordinate geometry, applying and combining transformations, using visualization and spatial reasoning and applying techniques to discuss geometric theorems.

**Course Number: 312**

**Credits: 5**

**ALGEBRA 2 - H**

**Level: Honors**

**Open to Grades: 10 and 11**

**Prerequisite: Placement Process**

This is a challenging and fast paced course. The topics are similar to those covered in Algebra 2 CP1, but are explained with greater depth and with more complex problems. In addition, some topics in discrete mathematics are covered.

**Course Number: 321**

**Credits: 5**

**ALGEBRA 2 - CP1**

**Level: College Prep 1**

**Open to Grades: 10, 11, 12**

**Prerequisite: Placement Process**

This course is designed to be a continuation of Algebra 1. Concepts that were studied in

**Course Number: 322**

**Credits: 5**

Algebra 1 will be expanded upon and studied in greater depth. Topics include, but are not limited to: number sense and operations; patterns, relations and functions; geometric problem solving; and statistics, probability and data analysis. A mastery of the major concepts in Algebra is the ultimate goal of this course.

**ALGEBRA 2 - CP2**

**Level: College Prep 2**

**Open to Grades: 11 and 12**

**Course Number: 334**

**Credits: 5**

***Prerequisite: Placement process***

This course covers much of the same material as other Algebra 2 courses, with a focus on the power standards determined necessary to be successful in future mathematics courses. Students enter the course already familiar with core arithmetic and algebra skills (for example, order of operations, graphing, solving linear equations), but these are refreshed and extended in parallel to the introduction of new topics. A major emphasis is the development of a positive attitude towards the possibility of success in an advanced mathematics course, based on determination, dedication to completing daily assignments, taking the initiative to seek extra help, and preparing for assessments in which expectations are realistically high. Students who demonstrate proficiency in the course and wish to take an additional year of mathematics will be well-prepared for Functions, Statistics & Trigonometry, Advanced Algebra with Financial Applications and possibly Pre-Calculus.

**ALGEBRA 3: Algebra and Trig for College Readiness - CP1**

**Level: College Prep 1**

**Open to: 11, 12**

**Course Number: 338**

**Credits: 5.0**

This course is designed specifically for students who need an additional year of math to prepare for either Pre-Calculus or other college level mathematics courses. It bridges the gaps between high school level mathematics and college level courses. It covers all of the necessary topics for students to be successful in College Level Algebra and Pre-Calculus as well as Finite Mathematics. These topics include but are not limited to: Linear, quadratic, and higher degree polynomial functions, piecewise functions, domain and range, basic set theory, counting and probability theory. Mathematical modeling and other applications of math are also presented.

**ALGEBRA 3: Algebra and Trig for College Readiness - CP2**

**Level: College Prep 2**

**Open to: 11, 12**

**Course Number: 339**

**Credits: 5.0**

This course is designed specifically for seniors who need an additional year of math to prepare for college level mathematics courses. It bridges the gaps between high school level mathematics and college level courses. As with the CP1 course, it covers all of the necessary topics for students to be successful in College Level Algebra and Pre-Calculus with a specific focus to reinforce the skills necessary for college level courses.

**PRECALCULUS - H**

**Level: Honors**

**Open to Grades: 11 and 12**

**Course Number: 331**

**Credits: 5**

***Prerequisite: Placement Process***

This course is designed to prepare students for Calculus AB or Calculus BC. Topics developed in the course will include polynomial functions, exponential functions, logarithmic functions, analytic trigonometry and analytic geometry. Students will be exposed to discrete math topics of matrix algebra and mathematical induction. An introduction to limit theory will provide students with the necessary groundwork for continuing their math studies in AP calculus.

**PRECALCULUS - CP1**

**Level: College Prep 1**

**Open to Grades: 11 and 12**

**Course Number: 332**

**Credits: 5**

***Prerequisite: Placement Process***

This course is designed to prepare students for Precalculus at the college level, AP Calculus AB or Calculus CP1 at the high school level. This is a rigorous course, focusing on the mathematics of functions, and using the skills of Algebra 2. Topics to be studied are: polynomial functions, exponential functions, logarithmic

functions, analytic trigonometry and analytic geometry. In addition, topics in discrete mathematics such as mathematical induction and probability may be covered as time permits.

### **STATISTICS - AP**

**Level: Advanced Placement**

**Open to Grades: 11 and 12**

**Course Number: 342**

**Credits: 5**

**Prerequisite: Satisfactory Completion of Algebra 2 CP1 or Honors and Teacher Recommendation**

The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data, Planning a Study, Anticipating Patterns, and Statistical Inference. During the year students will be required to complete 2-3 extensive projects and many of the lessons will be interactive. This course is the equivalent to a college introductory statistics course and a college text is used. Students will be expected to take the Advanced Placement Statistics exam in May. **If a student elects to do a Senior Project, the student must still attend all Advanced Placement classes.**

### **STATISTICS - CP1**

**Level: College Prep 1**

**Open to Grade: 12**

**Course Number: 345**

**Credits: 5**

**Prerequisite: Satisfactory Completion of Algebra 2 CP1 or Honors**

This course covers the basic concepts of probability and statistical inference, focusing on an intuitive approach to understanding concepts and methodologies. Students will study and apply aspects of statistics, including the uses and abuses of statistics, descriptive statistics, probability, sampling distributions and hypothesis testing and regression.

### **CALCULUS AB - AP**

**Level: Advanced Placement**

**Open to Grade: 12**

**Course Number: 341**

**Credits: 5**

**Prerequisite: Satisfactory Completion of Pre-Calculus CP1 or H and Teacher Recommendation**

This Advanced Placement (AP) course in calculus is comparable to a one-semester calculus course at the college level. It is primarily concerned with developing students' understanding of the concepts of calculus, and providing experience with its methods and applications. The core topics are limits, differentiation, and integration. The approach is multi-representational, with concepts, results, and problems being expressed geometrically, numerically, analytically, and verbally; proofs are kept to a minimum. Significant attention is paid to preparing for the AP Calculus AB exam in May, which students are required to take. **If a student elects to do a Senior Project, the student must attend all Advanced Placement classes.**

### **CALCULUS BC - AP**

**Level: Advanced Placement**

**Open to Grade: 12**

**Course Number: 340**

**Credits: 5**

**Prerequisite: Precalculus H and Teacher Recommendation**

This Advanced Placement (AP) course in calculus is comparable to a two-semester calculus course at the college level. It covers all of the topics in AP Calculus AB, as well as differential equations, power series representations, and the calculus of parametric and polar curves. The pace is correspondingly more demanding. Where the two courses overlap, however, a similar depth of understanding is required. Significant attention is paid to preparing for the AP Calculus BC exam in May, which students are expected to take. **If a student elects to do a Senior Project, the student must attend all Advanced Placement classes.**

### **CALCULUS - CP1**

**Level: College Prep 1**

**Open to Grade: 12**

**Course Number: 344**

**Credits: 5**

**Prerequisite: Pre-Calculus CP1 or H**

This course in calculus is designed to introduce concepts and ideas that students will see in a one-semester calculus course at the college level. It introduces the main concepts of calculus and provides experience with its methods and applications. The core topics are limits, differentiation and integration. The approach is

multi-representational, with concepts, results and problems being expressed geometrically, numerically and analytically. The material is very similar to the AP Calculus AB Course without the rigorous pacing of an AP class. The main goal of this course is to provide the students with a general understanding of calculus concepts which they will be able to expand upon in college.

#### **RTI MATH**

**Level: College Prep 1**

**Open to Grade: All Grades**

**Course Number: 356**

**Credits: 2.5**

This course is designed for students who require support with their mathematics course. Students will receive individual interventions based on their specific needs.

## **COMPUTER TECHNOLOGY**

#### **INTRO TO COMPUTER SCIENCE PROGRAMMING - CP1**

**Level: College Prep 1**

**Open to Grades: 9, 10, 11, 12**

**COURSE NUMBER: 358**

**Credits: 2.5**

***Prerequisite: Students must be taking or have taken Geometry***

The course uses object-oriented languages, such as JAVA or Python to teach fundamental programming. Students will work on labs, which include graphics-based computer science curriculum, to develop their conceptual understanding of computer science and coding skills. The course is recommended for those looking to expose themselves to programming, and also those who might have an interest in AP computer science. A Chromebook or laptop is recommended for this course.

#### **COMPUTER SCIENCE PRINCIPLES - AP**

**Level: Advanced Placement**

**Open to: 10, 11, 12**

**Course Number: 360**

**Credits: 5.0**

**Prerequisite: Algebra I**

The course provides students with a solid appreciation of the role Computer Science plays in society; how computers work and manage data, and some background in Computer Science. The course will use App Inventor, a visual programming tool for Android –based Smartphones, as an avenue for teaching.

#### **COMPUTER SCIENCE A - AP**

**Level: Advanced Placement**

**Open to Grades: 10, 11, 12**

**Course Number: 364**

**Credits: 5.0**

**Prerequisite:** Successful completion of Algebra 2.

**NOTE:** This is a challenging AP course.. Although it is not required, students taking this course should have a strong math background (i.e. A- or better in CP1 Algebra 2 or B- or better in Honors Algebra 2).

This course is comparable to a 100 level college software engineering course. It uses the Java language to teach computer programming and engineering skills, following an object-oriented approach. Topics covered include control structures, data structures, abstractions and algorithm development and analysis. The course builds on earlier programming experience with a variety of labs. Significant attention is paid to preparing for the AP exam, which students are required to take. A laptop running a Windows, Mac, or Linux based operating system is required for this course **If a student elects to do a Senior Project, the student must attend all Advanced Placement classes.**

## WORLD LANGUAGES

As world language educators, it is our mission to provide students with the skills to function successfully in today's global society. Students will learn to communicate effectively with others in a modern or classical language. Students will benefit from a better understanding of their own language and culture while learning to respect and appreciate other cultures. Students may begin first year American Sign Language, Latin, Spanish, French in 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup> or 12<sup>th</sup> but this level is only for students new to the language. Heritage speakers will be placed according to performance on a placement exam and by teacher recommendation. **Students who complete their grade 8 languages with a C or above will be placed in the second year of the language; they may not repeat level 1 of the same language at MHS.**

### World Languages Department Four Year Planner

We encourage students to take the most challenging curriculum they can.

Many students take more than one language.

Grade	French Option	Latin Option	Spanish Option
9 <sup>th</sup>	French 1 or French 1 H or French 2 or French 2 H	Latin 1 or Latin 1 H Latin 2 or Latin 2 H	Introduction to Spanish 1 or Global Spanish 2 or Spanish 1CP, Spanish 1H or Spanish 2CP or Spanish 2H
10 <sup>th</sup>	French 1 or French 1 H or French 2 or French 2 H or French 3 or French 3 H	Latin 1 or Latin 1 H Latin 2 or Latin 2 H Latin 3 or Latin 3 H	Introduction to Spanish 1 or Global Spanish 2 or Spanish 1CP or Spanish 1H or Spanish 2 or Spanish 2 H or Spanish 3 or Spanish 3 H
11 <sup>th</sup>	French 1 or French 1 H or French 2 or French 2 H or French 3 or French 3 H or French 4 or French 4 H	Latin 1 or Latin 1 H or Latin 2 or Latin 2 H or Latin 3 or Latin 3 H or Latin 4 or Latin 4 H	Introduction to Spanish 1 or Global Spanish 2 or Spanish 1CP, Spanish 1 H or Spanish 2 or Spanish 2 H or Spanish 3 or Spanish 3 H or Spanish 4 or Spanish 4 H
12 <sup>th</sup>	French 1 H French 2 or French 2 H or French 3 or French 3 H or French 4 or French 4 H or French 5 CP1, H, or AP	Latin 1 H Latin 2 or Latin 2 H or Latin 3 or Latin 3 H or Latin 4 H or Latin 5 H, or AP	Global Spanish 2 or Spanish 1H Spanish 2 or Spanish 2H or Spanish 3 or Spanish 3H or Spanish 4 or Spanish 4H or Spanish 5 CP, H, or AP

### SPANISH

#### SPANISH 1 - H

Level: Honors

Open to Grades: 9, 10, 11, 12

Course Number: 411

Credits: 5

**Prerequisite: Teacher recommendation. This class is only for students new to the language.**

The honors program is designed to challenge students to synthesize their acquired skills at a faster pace and work more independently than students in the college placement track. The curriculum develops a strong grammar foundation in order to develop the four language skills of listening, speaking, reading and writing. This course also introduces students to the cultures, customs and history of the Spanish-speaking world.

#### SPANISH 1 CP1

Level: College Prep 1

Open to Grades: 9, 10, 11

Course Number: 412

Credits: 5

**Prerequisite: This class is only for students new to the language.**

In the first year of the language, emphasis is placed on the development of a grammar foundation while also focusing on developing communication skills. Reading is limited to familiar vocabulary and grammatical structures within the reach of the student. Writing consists of grammatical exercises, brief compositions and dialogues. Students are also introduced to the history, culture and geography of the Spanish speaking world.



**INTRODUCTION to SPANISH 1 - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11****Course Number: 409****Credits: 5*****Prerequisite: This class is recommended only for students new to the language and by teacher recommendation.***

Introduction to Spanish I is the first year of a two-year sequence purposefully designed to fulfill the two-year language graduation requirement. It also gives those students new to the language the opportunity to develop a strong Spanish 1 foundation, similar to 7<sup>th</sup> grade of Spanish 1 in middle school. The course focuses on the most important elements of Spanish grammar for reading, writing, speaking and listening comprehension. This course will also introduce students to the cultures, customs and history of the Spanish speaking world.

**GLOBAL SPANISH 2 - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12****Course Number: 410****Credits: 5*****Prerequisite: Teacher recommendation.***

Global Spanish 2 is the second year of the two-year sequence, similar to 8<sup>th</sup> grade Spanish 1, purposefully designed to complete the two-year world language graduation requirement. Students who are successful with a C or higher may advance their study of Spanish and enter in Spanish 2 CP.

**SPANISH 2 - H****Level: Honors****Open to Grades: 9, 10, 11, 12****Course Number: 414****Credits: 5*****Prerequisite: Teacher recommendation.***

The honors program is designed to challenge students to synthesize their acquired skills at a faster pace and work more independently than in the college placement track. Students should expect a heavy workload and a rigorous curriculum. The course continues building a strong grammar foundation in order to develop sharper skills in listening, speaking, writing and reading. This course also continues the study of the cultures, customs and history of the Spanish speaking world.

**SPANISH 2 - CP1****Level: College Prep 1 at MHS****Open to Grades: 9, 10, 11, 12****Course Number: 415****Credits: 5*****Prerequisite: Teacher recommendation.***

This course continues to develop the skills of the second year student in the areas of listening, speaking, reading and writing. This course will be at a faster pace than Spanish 1 (usually done over two years) since it is one level of the language completed in one year. The course will focus more on synthesis of the language in speaking and writing and using previously learned skills in a more sophisticated way. Students will study grammar to use in a meaningful context while studying the cultures, customs and history of the Spanish-speaking world.

**SPANISH 3 - H****Level: Honors****Open to Grades: 10, 11, 12****Course Number: 417****Credits: 5*****Prerequisite: Teacher recommendation.***

Spanish 3H is the foundation year of grammar for Advanced Placement study, it is a rigorous curriculum developing all the skills necessary for proficiency in the four language areas of listening, speaking, reading, and writing. All grammar is completed this year and it is applied in a meaningful context while studying the cultures, customs and history of the Spanish-speaking world.

**SPANISH 3 - CP1****Level: College Prep 1****Open to Grades: 10, 11, 12****Course Number: 418****Credits: 5*****Prerequisite: Teacher recommendation.***

Spanish 3 CP emphasizes the four language skills of reading, writing, listening and speaking in a more sophisticated context, studying the cultures, customs and history of the Spanish-speaking world. Level 3

represents the transition to a more student-centered learning environment where students are now expected to produce their language skills with emphasis on speaking and writing.

**SPANISH 4 - H**

**Level: Honors**

**Open to Grades: 11, 12**

**Course Number: 419**

**Credits: 5**

***Prerequisite: Teacher recommendation.***

This course is our Pre-Advanced Placement course in Spanish. This intensive course requires a strong foundation, significant independent work outside the language classroom, and full participation in Spanish during class discussions. Reading comprehension in the target language is 50% of the AP® College Board test and therefore students must dedicate time to reading important literary works and non-fiction writing sources which are approached analytically. Compositions are expected to reflect a solid grasp of grammar and syntax as well as demonstrate critical thinking skills.

**SPANISH 4 - CP1**

**Level: College Prep 1**

**Open to Grades: 11, 12**

**Course Number: 420**

**Credits: 5**

***Prerequisite: Teacher recommendation.***

This course continues the focus on grammatical proficiency, vocabulary expansion, and cultural and political knowledge of Latin America and Spain. Using a variety of sources, students are given opportunities for conversation on many subjects, especially ones that politically connect the United States with Latin America. It also includes excerpts from the history, literature, art, and music of the Spanish-speaking world. The students read short stories by famous Hispanic authors while learning about their historical context. The class is conducted primarily in Spanish.

**SPANISH 5 - AP**

**Level: Advanced Placement**

**Open to Grade: 12**

**Course Number: 421**

**Credits: 5**

***Prerequisite: Teacher recommendation.***

This intense, year-long, college level course challenges the student to develop proficiency in all language skills. Students are prepared for the Advanced Placement® Exam in Spanish Language and are expected to take the exam in May for advanced placement and/or credits in college. Class work is conducted solely in Spanish. Significant attention is paid to preparing for the AP exam in May, which students are required to take.

**If a student elects to do a Senior Project, the student must attend all Advanced Placement classes.**

**SPANISH 5 - H**

**Level: Honors**

**Open to Grade: 12**

**Course Number: 422**

**Credits: 5**

***Prerequisite: Teacher recommendation.***

The goal of this course is to continue to move the students into a superior and advanced level of mastery in the language. This course has an emphasis on reading authentic texts, poems, and short stories of Latin America and Spain. The class will be conducted solely in Spanish.

**SPANISH 5 - CP1**

**Level: College Prep 1**

**Open to Grade: 12**

**Course Number: 423**

**Credits: 5**

***Prerequisite: Teacher recommendation.***

In this intensive conversation course, a wide range of topics will be presented and discussed. Students must be highly motivated to participate in all activities and conversations. This course gives students the opportunity to develop fluency and confidence in Spanish. Cultural and literary references focus on Spanish and Latin American poetry and short stories. Class work is conducted mostly in Spanish.

## **FRENCH**

### **FRENCH 1 - H**

**Level: Honors**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 431**

**Credits: 5**

***Prerequisite: Teacher recommendation. This class is only for students new to the language.***

Students learn the vocabulary and structures that enable them to use French in the day-to-day functioning of the classroom. They learn to describe, read, and write about themselves and everyday activities and situations. Students are expected to progress more rapidly and work more independently than in the CP1 French 1. French culture and geography are studied. Emphasis is put on learning French pronunciation. If enrollment is low, this course may not run or may be combined with French 1 CP1.

### **FRENCH 1 - CP1**

**Level: College Prep 1**

**Open to Grades: 9, 10, 11**

**Course Number: 432**

**Credits: 5**

***This class is only for students new to the language.***

Students are provided the vocabulary and structures that enable them to use French in the day-to-day functioning of the classroom. They learn to describe, read, and write about themselves and everyday activities and situations. Students study the geography and culture of France and the francophone areas of the world. If enrollment is low, this course may not run or may be combined with French 1 Honors.

### **FRENCH 2 - H**

**Level: Honors**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 433**

**Credits: 5**

***Prerequisite: Teacher recommendation.***

This course is more intensive and geared toward those who have demonstrated the language skills and motivation to work at a faster pace. Students will work on developing more advanced speaking and listening skills. Emphasis is put on being able to read texts and express themselves in written work. Students use the more complicated aspects of second year French in personalized communication. Students continue to study the culture of the French speaking world.

### **FRENCH 2 - CP1**

**Level: College Prep 1**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 434**

**Credits: 5**

***Prerequisite: Teacher recommendation.***

The students' development of competency and fluency in speaking, reading and writing is extended. Students use the more complicated aspects of second year French in personalized communication. Students continue to study the culture of the French speaking world.

### **FRENCH 3 - H**

**Level: Honors**

**Open to Grades: 10, 11, 12**

**Course Number: 435**

**Credits: 5**

***Prerequisite: Teacher recommendation.***

Students continue to develop competency and fluency in speaking and reading. Students are encouraged to participate in classroom activities solely in French. Cultural studies continue to focus on the Francophone world. Students read adaptations and authentic examples of French literature. The study of grammar and reading assignments are more challenging in the honors level.

### **FRENCH 3 - CP1**

**Level: College Prep 1**

**Open to Grades: 10, 11, 12**

**Course Number: 436**

**Credits: 5**

***Prerequisite: Teacher recommendation.***

At this level, students continue to develop competency and fluency in speaking through daily participation in classroom activities and classroom discussion of reading assignments. More complex grammatical structures are studied. Cultural studies continue to focus on the Francophone world.

**FRENCH 4 - H**

Level: Honors

Open to Grades: 11, 12

**Prerequisite: Teacher recommendation.**

Students selecting this course will deepen their knowledge of advanced language structure and verb forms. This course focuses on expressing opinions and ideas in French through advanced written work. Students will practice expressing themselves orally in fluid French. All class work is expected to be conducted in French.

Course Number: 437

Credits: 5

**FRENCH 4 - CP1**

Level: College Prep 1

Open to Grades: 11, 12

**Prerequisite: Teacher recommendation.**

Emphasis in this course is on strengthening the student's ability to communicate in French. Students are encouraged to communicate in French during class. Grammar is reviewed and expanded to enhance correctness in oral and written work. Class work is mainly conducted in French. If enrollment is low, this course may not run or may be combined with French 5 CP1.

Course Number: 438

Credits: 5

**FRENCH 5 - AP**

Level: Advanced Placement

Open to Grade: 12

**Prerequisite: Teacher recommendation.**

This course acquaints students with art, literature, and current affairs in the Francophone world. Students will be exposed to excerpts of literature from all periods of French history. Students will also read articles from online newspapers and magazines in French. Significant attention is paid to preparing for the AP exam in May, which students are required to take. **If a student elects to do a Senior Project, the student must attend all Advanced Placement classes.**

Course Number: 439

Credits: 5

**FRENCH 5 - H**

Level: Honors

Open to Grade: 12

**Prerequisite: Teacher recommendation.**

The goal of this course is to continue to move the students into an advanced level of the language. Reading, writing, listening and speaking continue to be reinforced. The class is conducted solely in French. Students should feel comfortable communicating solely in French. If enrollment is low, this course may not run.

Course Number: 440

Credits: 5

**FRENCH 5 - CP1**

Level: College Prep I

Open to Grade: 12

**Prerequisite: Teacher recommendation.**

In this course, a wide range of topics will be presented and discussed. This course gives students the opportunity to continue working on fluency and confidence in French while reviewing language structures. Students are expected to work on communicating only in French during the class. If enrollment is low, this course may not run or may be combined with French 4 CP1.

Course Number: 441

Credits: 5

**LATIN****LATIN 1 - H**

Level: Honors

Open to Grades: 9, 10, 11, 12

**Prerequisite: Teacher recommendation. This class is only for students new to the language.**

In Latin 1, students will learn to read, write, and converse in basic Latin. This course is designed around a series of Latin readings that become more challenging as the year progresses. Students will begin to learn about the geography, history, culture, and mythology of the Roman world. Students will expand their vocabulary and grammar skills in both Latin and English, study similarities and differences between the two languages, and explore some influences that Latin has had on English and the modern world. All students will take the National Latin Exam in the spring. The Honors program is designed for highly motivated students and

Course Number: 451

Credits: 5

will challenge them to synthesize their acquired skills at a faster pace. If enrollment is low, this course may be combined with Latin 1 CP1.

#### **LATIN 2 - H**

**Level: Honors**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 453**

**Credits: 5**

***Prerequisite: Teacher recommendation***

This course is designed for highly motivated students who have demonstrated a solid mastery of the skills and content encountered in Latin 1 or its equivalent. In Latin 2, students will learn more complex aspects of the language, build their reading, writing, and translation skills, and further explore the geography, history, culture, and mythology of the Roman world. In doing so, students will expand their vocabulary and grammar skills in both Latin and English and further study the influence that Latin has had on English and the modern world. All students will take the National Latin Exam in March 2015. The Honors program is designed to challenge students to synthesize their acquired skills at a faster pace, and students should expect a rigorous curriculum and a heavy workload.

#### **LATIN 3 - H**

**Level: Honors**

**Open to Grades: 10, 11, 12**

**Course Number: 455**

**Credits: 5**

***Prerequisite: Teacher recommendation.***

This course is designed for highly motivated students who have demonstrated a solid mastery of the skills and content encountered in Latin 2. In Latin 3, students will continue to improve their ability to read and write Latin through review and further study of Latin grammar and syntax. Students will transition from reading primarily adapted material to reading and studying authentic texts by Latin authors and discussing them in their cultural and historical contexts. All students will take the National Latin Exam in the spring. The Honors program is designed to challenge students to synthesize their acquired skills at a faster pace, and students should expect a rigorous curriculum and a heavy workload.

#### **LATIN 4 - H**

**Level: Honors**

**Open to Grades: 11, 12**

**Course Number: 457**

**Credits: 5**

***Prerequisite: Teacher recommendation.***

Latin 4 Honors is a course in Latin language and literature with an emphasis on poetry. Students learn to read, translate, analyze, and discuss authentic selections from major Roman poets such as Ovid, Horace, and Catullus and learn to scan and recite poetry in meter. In the latter portion of the year, students begin to study the two AP Latin authors (Vergil and Caesar) in preparation for Latin 5. Throughout the year, students will review and fine tune the grammar, syntax, and reading skills that they have learned and practiced in previous years as well as encounter and learn advanced forms and constructions as they occur in the Latin texts. All students are expected to take the National Latin Exam in the spring. The Honors program is designed to challenge students to synthesize their acquired skills at a faster pace, and students should expect a rigorous curriculum and a heavy workload.

#### **LATIN 5 - AP**

**Level: Advanced Placement**

**Open to Grade: 12**

**Course Number: 459**

**Credits: 5**

***Prerequisite: Teacher recommendation.***

In AP Latin 5 students will read selections from Vergil's Aeneid and Julius Caesar's Gallic War in Latin. Summer work includes reading the entire Aeneid and Books 1, 6, and 7 of the Gallic War in English in preparation for the AP Latin exam. During the school year, students will prepare literal English translations of the syllabus selections, demonstrate knowledge of Latin vocabulary, grammar, and syntax, analyze and interpret the texts, write critical essays, scan poetry and read it aloud with attention to meter, identify stylistic features of prose and poetry, identify textual references to Roman culture, history, and mythology, and improve their ability to comprehend Latin texts at sight. All students will take the National Latin Exam in the spring. Significant attention is paid to preparing for the AP exam in May, which students are required to take. **If a student elects to do a Senior Project, the student must attend all Advanced Placement classes.**

**LATIN 5 - H**

**Level: Honors**

**Open to Grade: 12**

**Course Number: 460**

**Credits: 5**

**Prerequisite: Teacher recommendation.**

In Latin 5 Honors, students will follow a modified version of the syllabus used for AP Latin 5, reading selections from Vergil's Aeneid and Julius Caesar's Gallic War in Latin. Students will prepare literal English translations of the syllabus selections, demonstrate knowledge of Latin vocabulary, grammar, and syntax, analyze meter, identify stylistic features of prose and poetry, and identify textual references to Roman culture, history and mythology. All students will take the National Latin Exam in the spring. If enrollment is low, this course may not run or may be combined with another upper-level Latin class.

**SCIENCE**

The Science Department offers courses designed to challenge students while continuing to build on the solid foundation developed throughout the K-8 Science program. Use of inquiry-based and hands-on instructional practices continues to promote learning at all levels and best prepares students for success. In our technologically and scientifically advanced society, it is important that students gain an understanding of the process and content of both the biological and physical sciences.

Science at Marblehead High School will:

- Actively engage learners
- Emphasize quality of teaching for understanding
- Be accessible and equitable for all students
- Foster peer and collaborative learning
- Reinforce processing skills and support critical thinking
- Provide hands-on and inquiry-based learning
- Heighten awareness of fields and careers in science, technology, and engineering

All students are required to take 4 years of science including core classes such as Biology, Chemistry, Physics or Engineering. Students are encouraged to talk with their school counselor and teachers to ensure selection of courses that are appropriate to their education and career aspirations. Upperclassmen are encouraged to consider the electives offered and the many opportunities in Science, Technology, and Engineering. All courses in science at MHS include demonstrations, hands-on activities and laboratory experiences.

**HS Science Department Four Year Planner**

We encourage students to take the most challenging curriculum possible. Crossing between levels and choosing electives from year to year is to be considered in consultation with the student's school counselor. Electives are available to all grade levels.

<b>Grade</b>	<b>Option 1</b>	<b>Option 2</b>	<b>Option 3</b>
<b>9</b>	Biology CP1	Biology CP1	Biology H
<b>10</b>	Chemistry CP1	Chemistry CP1	Chemistry H
<b>11</b>	Physics CP2/Engineering CP1	Physics CP1/Engineering CP1	Physics H/Engineering CP1
<b>12</b>	Electives	Electives	Electives

## **BIOLOGY**

### **BIOLOGY - CP1**

**Level: College Prep 1**

**Open to Grades: 9, 10**

**Course Number: 512**

**Credits: 5**

#### ***Prerequisite: Placement process***

Biology CP1 is a full-year college preparatory life science course designed to investigate concepts using analytical skills and critical thinking. Students will conduct numerous laboratory investigations that support the lecture/class discussions. This course will cover topics in molecular biology, cell structure and function, genetics, evolution, ecology, and human biology. Students considering careers in science and/or would like to take AP Biology are encouraged to take this course.

### **BIOLOGY - H**

**Level: Honors**

**Open to Grades: 9, 10**

**Course Number: 511**

**Credits: 5**

#### ***Prerequisite: Placement process***

Honors Biology is a fast paced, full-year college preparatory life science course designed to challenge students in the application of concepts in biology. Students will conduct numerous laboratory investigations that reinforce analytical skills and support the lecture/class discussions. This course will cover topics in molecular biology, cell structure and function, genetics, evolution, microbiology, and human biology. Abstract modeling is used extensively and students should have a working knowledge of the atomic model and how atoms combine to form molecules. Students considering careers in science and/or would like to take AP Biology are encouraged to take this course.

### **RTI BIOLOGY**

**Level: CP1**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 592**

**Credits: 2.5**

#### ***Prerequisite: Placement process***

This course is designed for students who require support with Biology. Students will receive individual interventions based on their specific needs. The focus of this class will be on the topics in biology in preparation for the MCAS exam.

### **BIOLOGY - AP**

**Level: Advanced Placement**

**Open to Grades: 11, 12**

**Course Number: 540**

**Credits: 5**

#### ***Prerequisite: CP1 Chemistry or H Chemistry and CP1 Biology or H Biology***

#### ***Co-requisite: Physics CP1 or Honors Physics for Juniors***

Students are required to complete a summer assignment to enroll in AP Biology. This course is equivalent to a college introductory biology course providing students with the conceptual framework, factual knowledge and analytical skills necessary to deal with the rapidly changing science of biology. A college text is used and provided, but may be purchased by the student prior to the start of the school year. Significant attention is paid to preparing for the AP exam in May, which students are required to take. **If a student elects to do a Senior Project, the student must attend all Advanced Placement classes.**

### **ENVIRONMENTAL SCIENCE - AP**

**Level: Advanced Placement**

**Open to Grades: 11, 12**

**Course Number: 520**

**Credits: 5**

#### ***Prerequisites: Honors or CP1 Biology, Chemistry & Algebra 1***

#### ***Corequisite: Physics CP1 or Honors Physics for Juniors***

Students are required to complete a summer assignment to enroll in AP Environmental Science. The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary, embracing topics from geology, biology, environmental studies,

environmental science, chemistry, and geography. Significant attention is paid to preparing for the AP exam in May, which students are required to take. **If a student elects to do a Senior Project, the student must attend all Advanced Placement classes.**

## CHEMISTRY

### CHEMISTRY - CP1

Level: College Prep 1

Open to Grades: 10, 11, 12

Course Number: 526

Credits: 5

**Prerequisite: Successful completion of Biology and teacher recommendation.**

Chemistry CP1 is a college preparatory course designed to investigate concepts using analytical skills and critical thinking. Topics covered include properties of matter, atomic structure, chemical bonding and reactions, acid/base chemistry and the interaction of matter with energy. Conceptual understanding is emphasized, although many key ideas are represented through mathematical modeling. Scientific inquiry skills such as measurement techniques, unit knowledge and manipulation, data collection and representation, and hypothesis building will be emphasized. Students will conduct laboratory investigations that reinforce analytical skills and support the lecture/class discussions. Technology is woven throughout the course as a tool to gather and analyze data.

### CHEMISTRY - H

Level: Honors

Open to Grades: 10, 11, 12

Course Number: 525

Credits: 5

**Prerequisite: Successful completion of Honors or CP1 Biology and teacher recommendation.**

Honors Chemistry is a fast paced college preparatory course. Topics covered include properties of matter, atomic structure, chemical bonding and reactions, acid/base chemistry, chemical kinetics and the interaction of matter with energy. Mathematical modeling, mathematical analysis, problem solving, analytical laboratory techniques and critical thinking are all emphasized. Students will conduct laboratory investigations that reinforce analytical skills and support the lecture/class discussions. Ideas are introduced and reinforced through a variety of methods such as hands-on activities, daily assignments, homework, and class discussions. Technology is woven throughout the course as a tool to gather data, analyze data, and find out information.

### CHEMISTRY - AP

Level: Advanced Placement

Open to Grades: 11, 12

Course Number: 541

Credits: 5

**Prerequisite: Completion of Honors or CP1 Chemistry and recommendation of the instructor;**

**Co-requisite: Physics CP1 or Honors Physics for Juniors and teacher recommendation.**

Students are expected to complete summer assignments. AP Chemistry is a fast-paced course that covers concepts that are not covered in 10th-grade chemistry. This course is equivalent to a full-year, college introductory chemistry course. It is designed for students with a strong interest in chemistry, chemical engineering, and/or medicine. Significant attention is paid to preparing for the AP exam in May, which students are required to take. **If a student elects to do a Senior Project, the student must attend all Advanced Placement classes.**

## PHYSICS

### PHYSICS - CP2

Level: College Prep 2

Open to Grades: 10, 11, 12

Course Number: 533

Credits: 5

**Prerequisite: Teacher Recommendation**

This is a college preparatory course designed to investigate concepts using analytical skills and critical thinking. This course will cover topics in mechanics, electricity and magnetism, and waves. Both conceptual and mathematical skills are presented. Lab skills include measurement techniques and data collection; representation and hypothesis building will be emphasized. Ideas are introduced through hands-on activities



while daily assignments, homework and class discussions are used to reinforce the ideas introduced in the laboratory. Technology is woven throughout the course as a tool to gather and analyze data demonstrating physics principles.

### **PHYSICS - CP1**

**Level: College Prep 1**

**Open to Grades: 10, 11, 12**

**Course Number: 535**

**Credits: 5**

#### ***Prerequisite: Teacher Recommendation***

Physics CP1 is a college preparatory course in which students investigate physical concepts using both conceptual and mathematical reasoning. Mechanics, thermodynamics, electromagnetism, and waves will be explored through guided demonstrations, algebraic manipulations, and conceptual reasoning. Assigned homework and classwork will help students to reinforce and develop their problem-solving strategies and physical intuition. Students in this course will be expected to hone their scientific communication skills and to use equations as a guide to thinking about physical situations. Due in part to the heavy math component of this course, proficiency in algebraic skills is essential. Additionally, occasional laboratory investigations will involve the extensive use of technological equipment.

### **PHYSICS - H**

**Level: Honors**

**Open to Grades: 10, 11, 12**

**Course Number: 534**

**Credits: 5**

#### ***Prerequisite: Teacher Recommendation***

Honors Physics is a rigorous college preparatory course designed to cover topics in kinematics, dynamics, electricity, magnetism, waves, optics, and thermodynamics at a fast pace and in great depth. Mathematical modeling, mathematical analysis, problem solving, and strong conceptual understanding are all emphasized in this course. Ideas are introduced through hands-on activities, while daily assignments, homework and class discussions are used to reinforce the ideas introduced in the laboratory. Technology is woven throughout the course as a tool to gather and analyze data demonstrating physics principles. Students considering careers in science and/or would like to take AP Physics are encouraged to take this course.

### **PHYSICS - AP**

**Level: Advanced Placement**

**Open to Grades: 11, 12**

**Course Number: 542**

**Credits: 5**

#### ***Prerequisite: Physics H and a co-requisite of Calculus***

This class is geared for students with a strong interest in science, engineering or medicine. Topics include: vectors, motion, particle dynamics, work and energy, conservation laws, rotational kinematics, rotational dynamics and equilibrium. A college text is used and students **must** take the Advanced Placement Physics C: Mechanics exam in May. This course is equivalent to a semester freshman college course. Significant attention is paid to preparing for the AP exam in May, which students are required to take. **If a student elects to do a Senior Project, the student must attend all Advanced Placement classes.**

## **SCIENCE ELECTIVES**

### **ASTRONOMY - CP1**

**Level: College Prep 1**

**Open to Grade: 11 & 12**

**Course Number: 555**

**Credits: 2.5 – one semester**

#### ***Pre/corequisite: Physics***

Astronomy is an introductory course in the study of the universe and its components. Students will learn about methods of observing and studying astronomical objects and the associated physics. Students will learn about current events in astronomical and physical investigations of the universe, as well as gain an historical perspective on the study of the skies. Students will have projects throughout the year focused around topics of special interest.

**Introduction to Engineering - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12****Course Number: 557****Credits: 2.5**

Introduction to Engineering is a one-semester course. Introduction to Engineering is a hands-on class designed to introduce students to the engineering design process, materials science, electricity and circuits, mechanical/structural design, creative problem solving, technical drawings, and other technology and engineering concepts in the state Technology & Engineering Curriculum Framework. Students will work independently and in teams using math to analyze and solve applied physics principles to check and validate laboratory test results where possible.

**Principles of Engineering - CP1****Level: College Prep 1****Open to Grades: 11 & 12****Course Number: 558****Credits: 5.0**

Principles of Engineering (POE) exposes students to some of the major concepts that they will encounter in a postsecondary engineering course of study. Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of materials and structures, automation, and kinematics. The course applies and concurrently develops secondary-level knowledge and skills in mathematics, science, and technology. Students have the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based (APB) learning. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community. This course is aligned to NGSS, Common Core, and Project Lead the Way standards.

**ANATOMY AND PHYSIOLOGY - H****Level: Honors****Open to Grades: 11, 12****Course Number: 554****Credits: 5*****Prerequisite: Biology and Chemistry; CP1 or Honors***

Anatomy and Physiology is a fast-paced college preparatory course designed to study the structure and function of the human body. Molecules, cells, and tissues will be examined in depth, leading to the dissection and investigation of body systems. This course is strongly recommended for students interested in studying life sciences in college or considering a career as a doctor, nurse, pharmacist, physical therapist, or other health care professional.

**FORENSICS - CP1****Level: College Prep 1****Open to Grades: 11, 12 (seniors will have Priority)****Course Number: 551****Credits: 2.5 – one semester*****Prerequisite: Chemistry and/or a co-requisite of Physics***

This course is designed to introduce the basic application of science to the law. Scientists are often involved in searching for and examining physical traces which can be used to establish or exclude a suspect's association with a crime. Topics such as criminal investigations, fingerprinting, and toxicology will be covered. Inquiry-based and hands-on activities support data collection while reinforcing analytical skills and logical thinking.

**CHEMISTRY OF COOKING - CP1****Level: College Prep 1****Open to Grades: 11, 12 (seniors will have priority)****Course Number: 529****Credits: 2.5 – one semester*****Prerequisite: Successful completion of a chemistry course***

This course focuses on the chemistry involved in cooking. It is not a food or cooking course. Topics that will be studied include measuring physical and chemical reactions, heat transfer, proteins, and the Maillard reaction, leavening agents, lipids, solutions, colloids, and suspensions, caramelization and the science of sugar. An experimental approach to understanding the scientific processes involved in cooking is incorporated.

**MARINE SCIENCE - CP1****Level: College Prep 1****Open to Grades: 10-12****Prerequisite: Biology and Chemistry**

This interdisciplinary course will introduce students to the wide variety of marine life & the complexity of oceanic systems. This course is recommended for anyone with an interest in marine science, environmental science, geology or biology. Students will investigate various topics in these disciplines, including marine ecosystems, aquatic organisms, oceanic currents & pollution, seafloor geography, climate change & coral bleaching. Participation in labs, projects & discussions are integral to the class and reinforce critical thinking skills.

**Course Number: 553****Credits: 2.5 – one semester****INFECTIOUS DISEASE AND CANCER - H****Level: Honors****Open to Grades: 10, 11, 12****Prerequisites: CP1 Biology or Honors Biology**

This honors level course is a semester-long life science course designed to help students understand infectious diseases and cancer. Studying diseases provides a highly relevant framework for learning biology and for helping students learn how to make more informed choices about their health. In the infectious disease portion of the class, students will learn about infectious diseases, why they are important, and what turns microbes into pathogens. Students will learn about how pathogens make us sick and how we recover. The specific pathogens to be studied include influenza, cholera, Lyme disease, malaria, and HIV. During the cancer portion of the course, students will learn about cancer and its impact, how normal cells become cancerous, how cancer makes people sick, and how cancer is treated.

**Course Number: 519****Credits: 2.5 – one semester****RTI SCIENCE****Level: CP1****Open to Grades: 10, 11, 12****Prerequisite: Placement process**

This course is designed for students who require support with chemistry or physics. Students will receive individual interventions based on their specific needs.

**Course Number: 591****Credits: 2.5**

## WELLNESS

Through the MHS Wellness education programs, students will receive comprehensive health/fitness education. Wellness education combines classroom with gymnasium experience. Current health and social issues are covered in the classroom. These issues are reinforced in the gymnasium. Daily performance objectives are planned and maintained. Students also engage in cooperative learning through “Project Adventure” based activities. National Association for Sport and Physical Education (NASPE) and National Health Education Standards are built into the curriculum to enhance each student’s learning, stressing individuality. Physical education is taught as a required subject in all grades for all students in public schools to promote the physical well-being of such students.

**Wellness Education – four semesters.** One semester is required each year in Grades 9-12.

<b>Grade</b>	<b>PE/Health Education</b>
<b>9</b>	PE/Health 9
<b>10</b>	PE/Health 10
<b>11</b>	PE/Health 11
<b>12</b>	PE/Health 12

**PHYSICAL EDUCATION/HEALTH EDUCATION 9 - CP1****Level: College Prep 1****Open to: Grade 9****Course Number: 601/621****Credits: 1.25 - each quarter****Health Education- 1 quarter; Physical Education- 1 quarter**

This course will provide an introduction to basic Wellness and Fitness Principles. The students participate in various personal fitness and competitive lifetime activities. Units include Tennis, Fundamentals of Fitness, Basketball, Non-competitive Games, Building Healthy Relationships and Behaviors, Stress Management, Bullying Prevention, Analyzing Influences, Drug Awareness and Self Advocacy

**PHYSICAL EDUCATION/HEALTH EDUCATION 10 - CP1****Level: College Prep 1****Open to: Grade 10****Course Number: 602/622****Credits: 1.25 - each quarter****Health Education- 1 quarter; Physical Education- 1 quarter**

The course will build upon the foundation provided in Wellness 9. The students participate in healthy decision making and goal setting, nutrition education, accessing accurate information drug awareness and human growth and development. Utilizing both cooperative and competitive activities, this course will develop fitness principles including cardiovascular endurance, muscular strength/endurance, body composition and flexibility. Units include badminton, wall climbing, volleyball, and cardiovascular games. Through Project Adventure, students will engage in activities that will strengthen social skills, self-confidence and critical thinking abilities.

**PHYSICAL EDUCATION/HEALTH EDUCATION 11 - CP1****Level: College Prep 1****Open to: Grade 11****Course Number: 603/623****Credits: 1.25 – each quarter****Health Education- 1 quarter; Physical Education- 1 quarter**

Students will set and strive to achieve measurable and realistic health goals designed to become a permanent part of their lifestyle. Fitness units will include volleyball, high element climbing and cardiovascular games. The classroom component will research and examine the leading causes of illness and death in the U.S., personal health risks, drug awareness, mental health issues, decision making skills, goal setting and advocacy .

**PHYSICAL EDUCATION/HEALTH EDUCATION 12 - CP1****Level: College Prep 1****Open to: Grade 12****Course Number: 604/624****Credits: 1.25 – each quarter****Health Education- 1 quarter; Physical Education- 1 quarter**

This course will focus on developing lifelong skills necessary for independent living. Students will continue to learn decision making skills that promote a healthy lifestyle, now and in the future. Example topics include Personal Fitness and Wellbeing, Drug Awareness, Interpersonal Relationships, Identifying and Utilizing Community Resources, Lifetime Individual Sports and Team Games.

**EVERYDAY HEALTH - Wellness****Open to Grades: 9, 10, 11, 12****Course Number: 985****Credits: 2.5 - one semester**

This course is designed to assist students with understanding the importance of whole health with a focus on the connectivity between one's physical, emotional, and social health. Students will engage in lessons and activities that allow for the individual integration of concepts learned in class to their everyday routine. Concepts addressed could pertain to goal setting, formulating healthy eating and drinking habits, living an active lifestyle, sleep, mental health, coping with stressors, self-care, exercise, strategies for responding to challenges, and building and maintaining healthy social relationships. Through learning these concepts, students will be challenged to evaluate their own whole health decisions and behaviors. *This course requires a school team referral process as it is a specialized semester course for students that cannot access a Wellness course.*

## Healthy Living Electives

### **Culinary Arts 1 - CP1**

**Level: College Prep 1**

**Open to Grades: 9, 10, 11, 12**

This half-year course focuses on developing students' understanding of the history of the culinary arts as well as examining proper identification, preparation, and evaluation of basic culinary ingredients. Students will learn the principles of cooking as well as proper cooking methods for different products. In addition, students will learn basic kitchen safety, knife safety and sanitation principles.

**Course Number: 712**

**Credits: 2.5 – one semester**

### **Culinary Arts 2 - CP1**

**Level: College Prep 1**

**Open to Grades: 10, 11, 12**

**Prerequisite – Culinary Arts 1**

This half-year course further focuses students' understanding of the history of culinary arts by exploring different regions of the world and the cultural practices that influence cuisine. Students will continue to practice proper identification, preparation and evaluation of culinary ingredients. Students will go more in-depth in the principles of cooking, baking and kitchen management. Students will be required to demonstrate a portfolio of work completed throughout the semester.

**Course Number: 713**

**Credits: 2.5 – one semester**

## **BUSINESS ELECTIVES**

The Business Department offers college prep courses that are valuable for all students. These courses serve as an introduction to college courses and to multiple emerging careers in the business sector. Business education provides the competencies needed to make informed financial decisions and to develop technical skills for college and career goals. All courses are one-semester electives, open to all grade levels.

<b>Course*</b>	<b>Number</b>	<b>Credits</b>
Accounting 1	<b>704</b>	<b>2.5</b>
Banking and Personal Finance	<b>705</b>	<b>2.5</b>
Social Media Marketing	<b>703</b>	<b>2.5</b>
Marketing/DECA	<b>708</b>	<b>2.5</b>
Entrepreneurship	<b>707</b>	<b>2.5</b>

**\*Please note that all courses satisfy the Fine Arts, Practical Arts and Business graduation requirements.**

### **ACCOUNTING 1 - CP1**

**Level: College Prep 1**

**Open to Grades: 9 - 12**

Accounting is the language of business and is an important elective for students who are considering one of several business majors in college. Completing the accounting cycle and preparing financial statements for a business organized as a proprietorship is covered in this course. Students will use online working papers to complete all problems and activities. Students may elect to take a second accounting course, through an individualized study. DECA membership is an optional co-curricular activity that is available to students taking this course.

**Course Number: 704**

**Credits: 2.5—one-semester**

### **BANKING AND PERSONAL FINANCE - CP1**

**Level: College Prep 1**

**Open to Grades: 9 - 12**

Students will experience real-world financial transactions by working at the high school branch of the National Grand Bank on a rotating schedule. These shifts are during class time when students will be under the

**Course Number: 705**

**Credits: 2.5—one semester**

supervision of bank personnel. In the classroom, students will study personal finance topics, primarily through the Budget Challenge, a ten-week real-time financial simulation that teaches students to manage finances as independent, working young adults. DECA membership is an optional co-curricular activity that is available to students taking this course.

### **SOCIAL MEDIA MARKETING**

**Level: College Prep 1**  
**Open to Grades: 9-12**

**Course Number: 703**  
**Credits: 2.5—one semester**

This course will focus on understanding and effectively using strategies of social media marketing. Students will gain an understanding of foundational marketing concepts and experience social media marketing through an online simulation. Some of the social media platforms included are Snapchat, Instagram, Twitter, YouTube, TikTok, and Facebook. Students will work on a variety of activities individually and with rotating partners. DECA membership is an optional co-curricular activity that is available to students taking this course.

### **MARKETING/DECA**

**Level: College Prep 1**  
**Open to Grades: 9-12**

**Course Number: 708**  
**Credits: 2.5—one semester**

Marketing/DECA is a course for students who want to focus on understanding and effectively using marketing strategies relating to the development and distribution of goods, services, and ideas. Students will participate in various DECA activities, including the DECA Stock Market Game. Additional topics may include selling, promotion, distribution, pricing, marketing information management, and product service management. This course is open to all students. DECA membership is an optional co-curricular activity that is available to students taking this course. This is a first semester course.

### **ENTREPRENEURSHIP - CP1**

**Level: College Prep 1**  
**Open to Grades: 9 - 12**

**Course Number: 707**  
**Credits: 2.5—one semester**

Our free enterprise system encourages individuals to own and operate their own businesses. This course is designed for students who want to study the creation, ownership, and management of a business. The entrepreneurial mindset is encouraged through creativity, innovation, and problem-solving. Each student will choose a startup, and through the process of Design Thinking will develop a Business Model Canvas for that business. DECA membership is an optional co-curricular activity that is available to students taking this course.

## **MARINE TECHNOLOGY**

The Marine Technology classes introduce students to the field of engine theory, repair, maintenance and troubleshooting. Hands-on-work, textual readings, traditional tests and a field trip are all part of the curriculum.

### **MARINE TECHNOLOGY - CP1**

**Level: College Prep 1**  
**Open to Grades: 9 - 12**

**Course Number: 740**  
**Credits: 5**

This course introduces students to the basic skills necessary to repair and maintain oceangoing pleasure craft. Students will first be taught basic safety procedures and measures necessary for working in a shop environment. Students will then be instructed in the uses of basic tools and hardware. Instruction will include generalized engine theory, repair and maintenance and basic electrical circuitry utilizing hands-on training and techniques in small group settings. Instruction will be enhanced with demonstrations and the practical application of physics. Students will be working with both diesel and gasoline engines and related components.

**MARINE TECHNOLOGY 2**

Level: College Prep 1

Open to Grades: 10 – 12

Course Number: 741

Credits: 5

**Prerequisite: Successful completion of Marine Technology**

This course will expand upon the skills and training achieved in Marine Tech 1. All aspects of engine and generator repair and maintenance will be touched upon, with an emphasis being placed on troubleshooting various mechanical and electrical systems. Instruction will involve hands-on training utilizing diesel and gasoline engines and related components. Projects will be in small group settings and will be enhanced with demonstrations and the practical application of physics.

## Visual, Performing and Applied Arts

The comprehensive programs provide students with opportunities to develop their knowledge and skills according to their personal level of interest. Programs are designed to be sequential. Courses build on skills and knowledge acquired from year to year, and must be taken in sequence.

### VISUAL ARTS

**Art Studio Program:** The Art Studio Program provides students with options to concentrate in specific areas of studio art. Art studio classes can be taken as a stand-alone or combined as a pathway to Art Studio 4 in students' junior or senior year. Classes are suitable for students who would like an opportunity to explore art making as well as for more serious art students who would like to focus on developing and expanding their skills, create a body of work, and create a portfolio for college application.

Levels 1-2 are semester courses. Art Studio 3 may be taken as a semester or full year course.				
Level 1	<b>Drawing 1 CP1</b>	<b>Painting 1 CP1</b>	<b>Sculpting 1 CP1</b>	Grades 9-12
Level 2	<b>Drawing 2 CP1 or Honors</b> Prerequisite: Drawing 1	<b>Painting 2 CP1 or Honors</b> Prerequisite: Painting 1	<b>Sculpting 2 CP1 or Honors</b> Prerequisite: Sculpting 1	Grades 9-12
Level 3	<b>Art Studio 3 Fall and/or Spring Semester</b> <ul style="list-style-type: none"> <li>Fall and/or Spring semester may be taken individually or as a Full Year course</li> <li><b>Art Studio 3 may be taken as CP1 or Honors</b></li> <li>Prerequisites: 3 semesters of any combination of Drawing 1 and 2, Painting 1 and 2, Sculpture 1 and 2, or permission of the instructor</li> </ul>			Grades 10-12
Level 4 full year course				
Level 4	<b>Art Studio 4: CP1 or Honors</b> , Prerequisite: Art Studio 3 Fall and/or Spring			Grades 11-12

**DRAWING 1 - CP1**

Level: College Prep 1

Open to Grades: 9, 10, 11, 12

Course Number: 801

Credits: 2.5 – one semester

This course is designed for the student who wants to explore instruction in drawing and to develop related skills in a variety of media and techniques. Drawing in pencil, pen & ink, and mixed media will be included. Creative thinking, individual development, and experimentation are emphasized. Students are expected to produce high-quality work. Students will be exposed to historical and contemporary artists and their practices.

**DRAWING 2 - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12*****Prerequisite: Drawing 1 or permission of the instructor***

This course is designed for the student who wants more intensive instruction in drawing and to develop related skills in a variety of media and techniques. Creativity, individual development, and experimentation will be emphasized. Students are expected to produce high-quality work. Students will be exposed to historical and contemporary artists and their practices.

**Course Number: 802****Credits: 2.5 – one semester****DRAWING 2 - H****Level: Honors****Open to Grades: 9, 10, 11, 12*****Prerequisite: Drawing 1 or permission of the instructor***

Drawing 2 Honors students will follow the same curriculum as Drawing 2 CP1 students in addition to producing an independent project outside of school.

**Course Number: 803****Credits: 2.5 – one semester****PAINTING 1 - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12**

This course is designed for the student who wants to explore instruction in painting and to develop related skills in a variety of media and techniques. Painting in watercolor, acrylic, and oils will be included. Creative thinking, individual development, and experimentation are emphasized. Students are expected to produce high-quality work. Students will be exposed to historical and contemporary artists and their practices.

**Course Number: 804****Credits: 2.5 – one semester****PAINTING 2 CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12*****Prerequisite: Painting 1 or permission of the instructor***

This course is designed for the student who wants more intensive instruction in painting and to develop related skills in a variety of media and techniques. Painting in acrylic and oil will be included. Creativity, individual development, and experimentation will be emphasized. Students are expected to produce high-quality work. Students will be exposed to historical and contemporary artists and their practices.

**Course Number: 805****Credits: 2.5 – one semester****PAINTING 2 - H****Level: Honors****Open to Grades: 9, 10, 11, 12*****Prerequisite: Painting 1 or permission of the instructor***

Painting 2 Honors students will follow the same curriculum as Painting 2 CP1 students in addition to producing an independent project outside of school.

**Course Number: 806****Credits: 2.5 – one semester****SCULPTURE 1 - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12**

This course examines sculpture methods using communication and problem solving. Creative thinking, individual development, and experimentation are emphasized while students explore a variety of techniques in materials such as clay, plaster, and mixed media. Students are expected to produce high quality work. Students will be exposed to historical and contemporary artists and their practices.

**Course Number: 814****Credits: 2.5 – one semester****SCULPTURE 2 - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12*****Prerequisite: Sculpture 1 or permission of the instructor***

This semester course expands on sculpture methods explored in Sculpture I. Creative thinking, individual development, and experimentation are emphasized while students explore a variety of techniques in materials

**Course Number: 815****Credits: 2.5 – one semester**



such as clay, plaster, and mixed media. Students are expected to produce high quality work. Students will be exposed to historical and contemporary artists and their practices.

### **SCULPTURE 2 - H**

**Level: Honors**

**Open to Grades: 9, 10, 11, 12**

**Prerequisite: Sculpture 1 or permission of the instructor**

Sculpture 2 Honors students will follow the same curriculum as Sculpture 2 CP1 students in addition to producing an independent project outside of school.

**Course Number: 816**

**Credits: 2.5 – one semester**

### **ART STUDIO 3 FALL - CP1**

**Level: College Prep 1**

**Open to Grades: 10, 11, 12**

Fall and/or Spring semester may be taken individually or as a Full Year course.

**Prerequisites: 3 semesters of studio art in any combination of Drawing 1, Drawing 2, Painting 1, Painting 2, Sculpture 1, and Sculpture 2, or permission of the instructor**

This course is for students who are interested in expanding their work in the studio arts for personal development or creating a portfolio for college applications. Creativity, individual development and experimentation will be stressed. Students are expected to produce high quality work following a personal vision. Students will be exposed to historical and contemporary artists and their practices.

**Course Number: 807**

**Credits: 2.5 – one semester**

### **ART STUDIO 3 FALL - H**

**Level: Honors**

**Open to Grades: 10, 11, 12**

Fall and/or Spring semester may be taken individually or as a Full Year course.

**Prerequisites: 3 semesters of studio art in any combination of Drawing 1, Drawing 2, Painting 1, Painting 2, Sculpture 1, and Sculpture 2, or permission of the instructor**

Art Studio 3 Honors students will follow the same curriculum as Art Studio 3 CP1 students in addition to producing an independent project outside of school.

**Course Number: 808**

**Credits: 2.5 – one semester**

### **ART STUDIO 3 SPRING - CP1**

**Level: College Prep 1**

**Open to Grades: 10, 11, 12**

Fall and/or Spring semester may be taken individually or as a Full Year course.

**Prerequisites: 3 semesters of studio art in any combination of Drawing 1, Drawing 2, Painting 1, Painting 2, Sculpture 1, and Sculpture 2, or permission of the instructor**

This course complements Art Studio 3 Fall with additional projects for students who are interested in expanding their work in the studio arts for personal development or creating a portfolio for college applications. Creativity, individual development and experimentation will be stressed. Students are expected to produce high quality work following a personal vision. Students will be exposed to historical and contemporary artists and their practices.

**Course Number: 809**

**Credits: 2.5 – one semester**

### **ART STUDIO 3 SPRING - H**

**Level: Honors**

**Open to Grades: 10, 11, 12**

Fall and/or Spring semester may be taken individually or as a Full Year course.

**Prerequisites: 3 semesters of studio art in any combination of Drawing 1, Drawing 2, Painting 1, Painting 2, Sculpture 1, and Sculpture 2, or permission of the instructor**

Art Studio 3 Honors students will follow the same curriculum as Art Studio 3 CP1 students in addition to producing an independent project outside of school.

**Course Number: 810**

**Credits: 2.5 – one semester**

**ART STUDIO 4 - CP1****Level: CP1****Open to Grade: 11, 12****Course Number: 811****Credits: 5*****Prerequisite: Art Studio 3 Fall and/or Spring or permission of instructor.***

This course builds on the Art Studio 3 experience with projects for students who are interested in expanding their work in the studio arts for personal development or creating a portfolio for college applications. Emphasis is placed on personal expression and on solving visual problems using techniques and media explored in the previous years. Creativity, individual development and experimentation will be stressed. Students are expected to produce high quality work following a personal vision. Students will be exposed to historical and contemporary artists and their practices. Maintaining a sketchbook and writing artist statements is expected.

**ART STUDIO 4 - Honors****Level: Honors****Open to Grade: 11, 12****Course Number: 812****Credits: 5*****Prerequisite: Art Studio 3 Fall and/or Spring or permission of instructor.***

Art Studio 4 Honors students will follow the same curriculum as Art Studio 4 CP1 students in addition to producing an independent project outside of school, and a related research project.

**ART HISTORY - AP****Level: Advanced Placement****Open to Grades: 10, 11, 12****Course Number: 827****Credits: 5.0****AP Art History can be taken as an Art or History elective**

This course welcomes students into the global world of art as they investigate, discuss, and write about art and the cultures in which they were made. Students develop research-based skills through intensive visual, contextual, and comparative analysis. AP Art History students are highly engaged learners who gain an in-depth knowledge of 250 works of art representing areas of Global Prehistory, Ancient Mediterranean, Early Europe and Colonial Americas, Later Europe and Americas, Africa, Asia, the Pacific, and Global Contemporary cultures, preparing them for the AP Art History Exam in May. Summer responsibilities include reading/research and a writing assignment. All AP Art History students are expected to take the AP exam in May. Senior Project students must continue attending all AP classes until after the AP Exam.

**GRAPHIC DESIGN****GRAPHIC DESIGN 1 - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12****Course Number: 817****Credits: 2.5 – one semester**

This course focuses on creating visual concepts, using computer software such as Adobe Illustrator and Adobe Photoshop to communicate ideas that inspire, inform, and captivate an audience. Students will develop overall computer illustrating skills, layout designs including but not limited to poster designs, logos, and magazine layouts, and practice their typographic skills. Students will present and discuss work to peers in class critiques and reviews. The course will expose students to the history of graphic design and typography.

**GRAPHIC DESIGN 2 - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12****Course Number: 818****Credits: 2.5 – one semester****Prerequisites: Graphic Design 1**

Students will further develop skills from Graphic Design 1 using real world projects and assignments typical of the graphic design industry. Using Adobe Illustrator, Adobe InDesign and Adobe Photoshop, students will create professionally designed products, which include original layouts for advertisements, logos, brochures, packaging and web design.

**GRAPHIC DESIGN 2 - H****Level: Honors****Open to Grades: 9, 10, 11, 12****Prerequisites: Graphic Design 1**

Graphic Design 2 Honors students will follow the same curriculum as Graphic Design 2 CP1 students in addition to producing an independent project outside of school, and visiting one museum or gallery for a related research project.

**Course Number: 819****Credits: 2.5 – one semester****PHOTOGRAPHY****PHOTOGRAPHY 1 - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12**

This introductory art course will explore photography as a creative art form. Students will develop a visual awareness based upon Elements and Principles of Art and Rules of Composition. During the semester, students will also learn to operate a Digital Single Lens Reflex (DSLR) and understand the mechanics within the camera. They will also explore the basics of how a traditional darkroom operates. Picture-taking assignments will enable students to explore their creativity and develop their technical skills. Additionally, students will study different photographers and photo genres.

**Course Number: 820****Credits: 2.5 – one semester****PHOTOGRAPHY 2 - CP1****Level: College Prep 1****Open to Grades: 10, 11, 12****Prerequisites: Photography 1**

Photography 2 is designed for students who have mastered the basic principles and techniques of digital photography and would like to pursue the art of photography to a higher level. Students are expected to be self-motivated and to strive constantly to produce new work as they develop their personal vision and technical skills. They will learn how to manipulate a photo using Adobe Photoshop. Students will also be introduced to traditional black and white photography including learning to use a single lens reflex (SLR) camera, developing film, and printing techniques in the darkroom. Ultimately each individual will produce a strong conceptual portfolio with an emerging personal vision. Students receive daily feedback from the instructor and there will be frequent group critiques. Additionally, students will study different photographers and photo genres

**Course Number: 821****Credits: 2.5 – one semester****PHOTOGRAPHY 2 - H****Level: Honors****Open to Grades: 10, 11, 12****Prerequisite: Photography 1**

Photography 2 Honors students will follow the same curriculum as Photography 2 CP1 students in addition to producing an independent project outside of school.

**Course Number: 822****Credits: 2.5 – one semester****ADVANCED: PHOTOGRAPHY 3 - CP1****Level: College Prep 1****Open to Grades: 11, 12****Prerequisites: Photography 2, or permission of instructor.**

The student enrolled in a Photo 3 has a passion for the medium, and intends to develop a portfolio. This course will offer a mix of teacher created and student driven independent projects. Students are required at the beginning of the semester to present and discuss their personal objectives, and collaborate with the instructor to develop a strategy that will yield a portfolio with a strong emerging personal vision. Each student must be a highly motivated "self-starter."

**Course Number: 823****Credits: 2.5 – one semester****ADVANCED: PHOTOGRAPHY 3 - H****Level: Honors****Open to Grades: 11, 12****Prerequisites: Photography 2, or permission of instructor.**

Photo 3 Honors students will follow the same curriculum as Photo 3 CP1 students in addition to producing an independent project outside of school.

**Course Number: 824****Credits: 2.5 – one semester**

**ADVANCED: PHOTOGRAPHY 4 - CP1****Level: CP1****Open to seniors only****Prerequisites: Advanced Photography 3, or permission of instructor.**

The student enrolled in Photo 4 class has a passion for photography and wants to continue developing a portfolio in support of their college application or for personal use. Students are required at the beginning of the semester to present and discuss their personal objectives, and collaborate with the instructor to develop a strategy that will yield a portfolio with a strong emerging personal vision. Each student must be a highly motivated "self-starter."

**Course Number: 828****Credits: 2.5 – one semester****ADVANCED: PHOTOGRAPHY 4 - H****Level: Honors****Open to seniors only****Prerequisites: Advanced Photography 3, or permission of instructor.**

Photo 4 Honors students will follow the same curriculum as Photo 4 CP1 students in addition to producing an independent project outside of school.

**Course Number: 825****Credits: 2.5 – one semester****Performing Arts****MUSIC - Full Year Courses****TREBLE CHOIR - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12**

This is a full-year course open to all Marblehead High School students with treble voices. Whether you have sung all your life or have no experience whatsoever, Treble Choir is the place for you! Repertoire may include Western art music (sacred and secular), folk and multicultural music, vocal jazz, pop and musical theatre. There will be a special emphasis on great works written for treble voices. The Treble and Mixed Choirs perform at school concerts and community events. .

**Course Number: 830****Credits: 5****TREBLE CHOIR - H****Level: Honors****Open To: Grades 10, 11, 12****Prerequisite: 1 year of CP1 Treble Choir, Mixed Choir, Band or Orchestra.**

Students participating in Honors Treble Choir will complete all course work described above in Treble Choir CP1. Additionally, students enrolled in the Honors section will:

- Complete one additional writing project
- Lead school sectionals or warm ups
- Participate in co-curricular or extracurricular musical activities

**Course Number: 831****Credits: 5****MIXED CHOIR - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12**

This is a full-year course and is open to all interested students in grades. No previous musical or singing experience is required. Please note that treble voices in grades 9 & 10 may be placed into the Treble Choir. A variety of musical styles from classical to contemporary will be rehearsed and performed. Vocal technique, ensemble skills, and music literacy are taught through varied repertoire that includes jazz, classical, world, and contemporary genres. The Treble and Mixed Choirs perform at school concerts and community events.

**Course Number: 832****Credits: 5**

**MIXED CHOIR - H****Level: Honors****Open To: Grades 10, 11, 12****Prerequisite: 1 year of CP1 Treble Choir, Mixed Choir, Band or Orchestra****Course Number: 833****Credits: 5**

Students participating in Honors Mixed Choir will complete all course work described above in Mixed Choir CP1. Please note that treble voices in grades 9 & 10 may be placed into the Treble Choir. Additionally, students enrolled in the Honors section will:

- Complete one additional writing project
- Lead school sectionals or warm ups
- Participate in co-curricular or extracurricular musical activities

**CHAMBER CHOIR - H****Level: Honors****Open to Grades: 9 – 12 by audition only****Prerequisite: Successful Audition; and Music Teacher Recommendation.****Corequisite: Students accepted into Chamber Choir are required to be enrolled in a music ensemble (Choir, Band or Orchestra) during the school day.****Course Number: 834****Credits: 3****Meets After School**

Students in the Chamber Choir will sing in one of two select a cappella groups: Luminescence or the Jewel Tones. The Chamber Choir meets after school and requires a significant time commitment including evening and weekend performances. The group performs at school concerts as well as numerous community events. While there is a heavy emphasis on contemporary a cappella music, the Chamber Choir will also perform choral pieces as one ensemble. The challenging repertoire requires independence and advanced ensemble singing skills. Students will complete required reading assignments and lead one warm-up per quarter.

**ORCHESTRA - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12**

This course is open to all students who are continuing their study of the violin, viola, cello, or double bass. Emphasis is on the highest quality of performance and the development of ensemble technique. We will take on works of various styles from multiple musical eras. In the process, we will study the history and theory of these works as we strive towards informed musicianship.

**Course Number: 850****Credits: 5****ORCHESTRA - H****Level: Honors****Open to: Grades 10, 11, 12****Prerequisite: At least of Orchestra CP1.**

Students participating in the Honors Orchestra will prepare, perform and study instrumental music alongside the students enrolled in Orchestra CP1. Additionally, students enrolled in the Honors section will plan, prepare, and lead warm-ups for school rehearsals. Enrollment in the Honors section of Orchestra requires the recommendation and approval of the instructor.

**Course Number: 851****Credits: 5.0****CONCERT BAND - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12****Prerequisite: Minimum of 4 years of instrumental experience OR permission of instructor.**

Concert Band is open to all interested continuing instrumental students. Music from a variety of musical eras and styles will be rehearsed and performed. The band will participate in multiple school concerts, and music festivals throughout the school year. Rehearsal etiquette, performance participation, band projects and performance assessments are used to determine the student's grade.

**Course Number: 840****Credits: 5.0**

**CONCERT BAND - H****Level: Honors****Open to: Grades 10, 11, 12****Prerequisite: Minimum of 4 years of instrumental experience OR permission of instructor.**

Concert Band Honors is open to all interested continuing instrumental students. Music from a variety of musical eras and styles will be rehearsed and performed. The band will participate in multiple school concerts, and music festivals throughout the school year. Rehearsal etiquette, performance participation, band projects and performance evaluations are used to determine the student's grade. Concert Band Honors students are **required** to meet honors requirements each quarter.

**Course Number: 841****Credits: 5.0****MARCHING BAND - H****Level: Honors****Open to: Grades 9, 10, 11, 12**

Marching Band is a dynamic performing ensemble open to all students. Students who do not perform on a musical instrument can perform in the band as a part of the Color Guard, spinning flags and dancing. This ensemble plays music from a variety of musical eras and styles. The Marching Band performs at all Home Football Games, Marching Band Competitions around Massachusetts, performs in a variety of Parades, and at other school functions. The typical season runs from August to December 1st, with one performance in the Spring. Participation in marching band fulfills the quarter 1 honors requirement in Concert Band.

**Course Number: 842****Credits: 2.5****Meets: After School****JAZZ BAND - H****Level: Honors****Open to Grades: 9, 10, 11, 12****Prerequisite: Successful audition AND permission of instructor.**

Jazz Band is open to all interested instrumentalist musicians. Music from a variety of jazz and rock/pop genres will be studied. The Jazz Band participates in various school concerts, special concerts and music festivals throughout the year. Participation in Concert Band is preferred, but not required.

**Jazz Band Honors students are REQUIRED to meet honors requirements each quarter****Course Number: 849****Credits: 2.5 (runs full year)****Meets: After School****CHAMBER ORCHESTRA - H****Level: Honors****Open to Grades: 9, 10, 11, 12****Prerequisite: Music Teacher Recommendation****Corequisite: Students enrolled in Chamber Orchestra are required to be enrolled in Orchestra CP1 or Honors Orchestra during the school day.**

Chamber Orchestra, also known as Fellowship of the String, meets after school. This advanced ensemble performs at school concerts as well as community events. Unlike Orchestra CP1 and Honors Orchestra, Chamber Orchestra students will play an active role in repertoire selection. Additionally, students will learn the musicianship skills necessary to perform without a conductor. During class, Chamber Orchestra students are required to take on more ownership of the rehearsal process through discussion, observations, self-assessment, and group problem-solving.

**Course Number: 883****Credits: 2.5****MUSIC THEORY - AP****Level: Advanced Placement****Open to Grades: 10, 11, 12****Prerequisite: Written permission of instructor; significant prior musical experience is required.**

AP Music Theory is a challenging, year-long, college-level course in Music Theory and Aural Skills (ear training). This course will emphasize aspects of music; such as melody, harmony, texture, rhythm, form, musical analysis, elementary composition, and, to some extent, history and style. Musicianship skills such as dictation and other listening skills, sight-singing, and keyboard harmony are considered an important part of the theory course. Students are required to take the AP Music Theory Exam in May in efforts of earning a score of 3, 4, or 5, which may yield credit towards music theory college courses.

**Course Number: 857****Credits: 5.0**

## **MUSIC Electives - Semester Courses**

### **MUSIC IN FILM**

**Level: College Prep 1**

**Open to Grades: 9, 10, 11, 12**

**Course Number:**

**Credits: 2.5**

This course will explore the use of music in film. Students will watch movies and listen to soundtracks to explore the evolution of movie music and its effect on film. This class will start with silent films and work through the 20th and 21st century, focusing on various styles of music, including movie musicals, silent films, and iconic composers such as John Williams and Hans Zimmer. No prior music experience is necessary. The course will cover music fundamentals such as pitch, tempo, form, and timbre and how composers and scorers use these elements to build a soundscape.

### **HISTORY OF ROCK AND ROLL - CP1**

**Level: College Prep 1**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 856**

**Credits: 2.5**

This course will explore the development and significance of Rock and Roll. Through listening, analysis, discussion, and videos, students will explore the historical evolution of Rock music. Class assignments will include periodic quizzes, rock reports and in-class activity projects. The course begins with an overview of early music and influences and will culminate in an exploration of today's current musical trends and icons including rock, pop, country, and hip-hop.

### **MUSIC TECHNOLOGY AND ELECTRONIC MUSIC CP1**

**Level: College Prep 1**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 864**

**Credits: 2.5**

In this course students will create their own music with BandLab online Digital Audio Workstation (DAW), and explore other aspects of music technology including live sound equipment. Students will create remixes of pop tunes, original compositions and learn the formal aspects of Pop music. On BandLab, students will explore the loop library and create/record their own MIDI and audio files. Basic musical principles will be taught including notes, key relationships, meter, chord changes and musical creativity.

### **BEGINNING GUITAR METHOD - CP1**

**Level: College Prep 1**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 860**

**Credits: 2.5 – one semester**

This half-year class is geared towards students interested in learning beginning guitar. Students will learn the fundamentals of written guitar music and chords. Students will use class time to learn through daily practice and repetition. All instruments and materials are provided. At the conclusion of the semester students will have a solid foundation of basic guitar playing and reading that can be used for further advanced study. Assessments will be given with both written and playing quizzes throughout the semester.

### **ADVANCED GUITAR METHOD - H**

**Level: Honors**

**Open to Grades: 10, 11, 12**

**Course Number: 861**

**Credits: 2.5 – one semester**

#### ***Prerequisite: Beginning Guitar Method***

This half-year class is for students who have successfully completed the beginning guitar method and wish to continue learning guitar at an advanced level. Students will learn advanced fundamentals of reading written guitar music and chords. Students will use class time to learn challenging works for guitar and proper maintenance of instruments. Advanced guitar students will also be asked to assist in teaching beginning guitar students. At the conclusion of the semester students will have a deeper understanding of guitar playing and musicianship that can be used for further advanced study. Assessments will be given with both written and playing quizzes throughout the semester.

**BEGINNING PIANO - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12****Course Number: 866****Credits: 2.5 – one semester**

This half-year class is geared towards beginning and intermediate keyboard players who want to study a wide range of musical styles and techniques. Musical genres to be studied include classical, folk, rock, jazz and blues. There will be an emphasis on composition, improvisation, theory, scales, and reading. Students will keep a regular practice journal. No musical experience is required. Assessments will be given with both written and playing quizzes throughout the semester.

**ADVANCED PIANO - H****Level: Honors****Open to Grades: 10, 11, 12****Course Number: 870****Credits: 2.5 – one semester*****Prerequisite: Beginning Piano or Permission of the instructor.***

This half-year class is geared towards advanced pianists who have previously studied the piano for several years. This course will meet during the same block as Piano Lab. In addition to personal piano study, Advanced Piano students will be expected to tutor beginning piano students for approximately thirty minutes per week. Musical genres to be studied include classical, folk, rock, jazz and blues. There will be an emphasis on theory, scales, and reading. Composition and improvisation may be incorporated depending on student interest. Students will keep a regular practice journal. Musical experience is required. Assessments will be given with both written and playing quizzes throughout the semester.

**THEATRE****THEATRE ARTS 1 - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12****Course Number: 867****Credits: 2.5 – one semester*****Prerequisite: None. No acting experience is necessary.***

Step onto the stage in this introduction to Theatre Arts! During this class, we will improvise, write plays, and perform some of the theatre's greatest monologues. Students will learn the basics of theatre through theatre games, group projects, and performances, including a final performance for the public. Never stepped on stage before? No problem, as no previous experience is necessary.

**THEATRE ARTS 2 - CP1****Level: College Prep 1****Open to Grades: 10, 11, 12****Course Number:****Credits: 2.5 – one semester*****Prerequisite: Theatre Arts 1 or written permission from instructor.***

This course is an extension of Theatre Arts 1, with an emphasis on improvisation, script work, movement, and audition technique. Students will apply the techniques of theatre to more involved improvisations and individual monologue work. Students will continue to develop their theatre skills while building an audition portfolio by studying theatrical literature and performance work. This class will culminate in a public performance. This course can be repeated for credit.

**THEATRE ARTS 2 - H****Level: Honors****Open to Grades: 10, 11, 12****Course Number:****Credits: 2.5 – one semester*****Prerequisite: Theatre Arts 1 or written permission from instructor.***

This course is an extension of Theatre Arts 1, with an emphasis on improvisation, script work, movement, and audition technique. Students will apply the techniques of theatre to more involved improvisations and individual monologue work. Students will continue to develop their theatre skills while building an audition portfolio by studying theatrical literature and performance work. This class will culminate in a public performance. This course can be repeated for credit.



## **APPLIED ARTS**

Students interested in Applied Arts are advised to take at least one course in Computer Aided Drawing. They should check with their school counselor regarding math, science and computer requirements for entry into post-high school training schools. These classes qualify for the STEAM Certificate.

### **INTRO TO COMPUTER AIDED DRAWING - CP1**

**Level: College Prep 1**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 725**

**Credits: 2.5 – one semester**

This course is an introduction to technical drawing and drawing with a computer. For the first weeks we will learn to use traditional hand-drawing instruments. Basic drawing skills and techniques including graphic geometry and orthographic drawing will be studied. AutoCAD is introduced as the class continues to explore technical drawing. The various professions that use CAD drawing will also be explored. This class is a prerequisite to all other computer aided drawing classes except for cartooning.

### **ADVANCED COMPUTER AIDED DRAWING - CP1**

**Level: College Prep 1**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 726**

**Credits: 2.5 – one semester**

#### ***Prerequisite: Intro to Computer Aided Drawing***

This course enables students to study advanced mechanical drafting, including advanced assembly drawings, and sectional views, dimensioning and technical illustration techniques, including isometrics. All drawings will be created with AutoCAD. If possible, the class will work with professional designers and engineers to review drawings. Students will also be introduced to design as they draw and create a cardboard chair that has to hold their weight. Some of the cutting will be done with the laser cutter. This class is recommended for students considering engineering college. This class is also offered as an independent study if it cannot fit the student's schedule.

### **ADVANCED COMPUTER AIDED DRAWING - Honors**

**Level: Honors**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 727**

**Credits: 2.5 – one semester**

#### ***Prerequisite: Intro to Computer Aided Drawing***

Students enrolled in this class will follow the same curriculum as the Advanced CAD CP1 class and will do a capstone project using AutoCAD's 3D Software.

### **3D COMPUTER AIDED DRAWING and PRODUCT DESIGN - CP1**

**Level: College Prep 1**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 728**

**Credits 2.5 – one semester**

#### ***Prerequisite: Intro to Computer Aided Drawing***

This class will build on students' 2 dimensional drawing skills and introduce them to 3D drawing using 3D software packages including AutoCAD and Fusion 360. Students will also be introduced to new technology such as the CNC machine, 3D scanners, printers and the laser cutter. Projects they will work on include design projects. There will be the opportunity to visit a design firm and have their work reviewed by industrial designers and engineers. This class is recommended for students considering going to college for any engineering or design disciplines. A field trip is included in this class.

### **3D COMPUTER AIDED DRAWING and PRODUCT DESIGN - Honors**

**Level: Honors**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 729**

**Credits 2.5 – one semester**

#### ***Prerequisite: Intro to Computer Aided Drawing***

Students enrolled in this class will follow the same curriculum as the 3D Computer Aided Drawing and Product Design CP1 class and will need to design and create a capstone piece using 3D software to be cut on the CNC machine.

**ARCHITECTURE - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12****Prerequisite: Intro to Computer Aided Drawing.**

All drawing will be done in AutoCAD and Sketchup. The focus of this class will be to explore the field of architecture by creating working drawings of the student's own house or dream house and a scaled architectural model using the laser cutter. An architect will review drawings when possible.

**Course Number: 730****Credits: 2.5 – one semester****ARCHITECTURE - Honors****Level: Honors****Open to Grades: 9, 10, 11, 12****Prerequisite: Intro to Computer Aided Drawing.**

Students enrolled in this class will follow the same curriculum as the Architecture CP1 class and will do readings of architects' biographies. A capstone project of their favorite architect will be required in a media of their choice.

**Course Number: 731****Credits: 2.5 – one semester****CARTOONING AND ANIMATION - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12**

This course will look into cartooning as a form of art as well as a method of communication, from drawing to political commentary and humor. Drawings will be created by hand for the first quarter and by using cartooning and animation software, called *Toon Boom* for the second quarter.

**Course Number: 733****Credits 2.5 – one semester****WOODWORKING 1 - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12**

The course is designed to introduce the student to the use of woodworking tools and the pleasure of making something with their own hands. Students will learn the techniques needed to build a cutting board, a bird house, a jewelry box, fret work, a spindle, and a bowl. They will learn to safely use the table saw, miter saw, band saw, scroll saw, jointer, thickness planer and lathe. They will also practice the art of measuring accurately, practice the math of common fractions, and learn some things about the nature of trees.

**Course Number: 720****Credits: 2.5 – one semester****WOODWORKING 2 - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12****Prerequisite: Woodworking 1**

Woodworking 2 expands on the knowledge that students acquired in Woodworking 1. They will practice and improve their skills on the table saw, jointer, thickness planer, lathe, scroll saw, band saw, drill press, and router table, through a series of projects such as model airplanes and trains. There will be an emphasis on reading plans and following written instructions. Other projects might be the segmented wood bowl or jewelry box.

**Course Number: 721****Credits: 2.5 – one semester****ADVANCED WOODWORKING - CP1****Level: College Prep 1****Open to Grades: 10, 11, 12****Prerequisite: Woodworking 2**

This course is a continuation of Woodworking 2. The student will further expand their skills on more challenging projects. Issues of what makes a set of plans, and how the student's skill set, available resources and equipment matches their design intent will be investigated.

**Course Number: 722****Credits: 2.5 – one semester****Introduction to Manufacturing - CP1****Level: College Prep 1****Open to Grades: 9, 10, 11, 12**

Introduction to Manufacturing is a one-semester course. Introduction to Manufacturing is a hands-on class designed to introduce students to the technical drawing process, materials science, mechanical/structural design, creative problem-solving, and other manufacturing and design concepts. In the woodshop the students

**Course Number: 723****Credits: 2.5**

will learn to safely use the common tools of woodworking as they prepare the woodstock for and then make a segmented wooden bowl. They will also explore CAD/CAM (computer aided drawing and manufacturing) using our CNC (computer numeric control) (computer numeric control) machine by completing a birdhouse they design in CAD and then fabricate using the woodshop's CNC machine and conventional tools.

## **VIDEO PRODUCTION**

### **STUDIO PRODUCTION - CP1**

**Level: College Prep 1**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 750**

**Credits: 2.5 – one semester**

The Studio Production class at MHS introduces students to all phases and aspects of video production in our digital television studio. Students will operate all studio equipment, write scripts for their productions, and produce individual and team video projects. The design of the course emphasizes hands-on experience through the production of student projects. Teacher presentations and critiques of in-class productions are also included.

### **FIELD PRODUCTION AND EDITING - CP1**

**Level: College Prep 1**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 751**

**Credits: 2.5**

The Field Production and Editing course at MHS introduces students to all phases of video production outside of the television studio. The class will be divided into production teams to complete several video projects, and students will learn to adapt audio and video equipment for use in field settings. They will use post-production facilities to edit their projects while adding special video effects and mixing audio elements. The design of the course emphasizes hands-on experience through the production of student projects. Teacher presentations and critiques of in-class productions are also included.

### **ADVANCED TELEVISION 1 - CP1**

**Level: College Prep 1**

**Open to Grades: 10, 11, 12**

**Course Number: 752**

**Credits: 5**

***Prerequisite: Both Studio Production and Field Production/Editing or Instructor Permission***

*Advanced Television* at M.H.S. is a year-long course that builds on concepts learned during *Studio Production* and *Field Production and Editing* classes. More advanced and complex projects will be produced, and new technologies and production techniques will be explored during this course. Each student will be expected to submit a minimum of two finished pieces per quarter, and the production of each piece will be followed by a review and critique phase. In addition to the course work, students will work with community groups to produce a major project outside of class. Each student is also responsible for a Portfolio of video projects representative of his or her work. With the permission of the instructor, this class can be scheduled as a one semester course.

### **ADVANCED TELEVISION 1 - H**

**Level: Honors**

**Open to Grades: 10, 11, 12**

**Course Number: 754**

**Credits: 5**

***Prerequisite: Both Studio Production and Field Production/Editing or Instructor Permission***

Students participating in *Advanced Television Honors* will have demonstrated a strong interest in video production and are likely to continue to pursue this subject in college. Honors students will complete all course work described above in *Advanced Television CP1*. Additionally, students enrolled in the Honors section will complete one additional video production and one additional writing assignment per quarter. They will also act as student leaders on their production teams and will lead in-class demonstrations on advanced production techniques. With the permission of the instructor, this class can be scheduled as a one semester course.

### **ADVANCED TELEVISION 2 - CP1**

**Level: College Prep 1**

**Course Number: 753**

**Credits: 5**

**Open to Grades: 11, 12**

***Prerequisite: Advanced Television***

*Advanced Television 2* at M.H.S. is a year-long course that builds on concepts and techniques learned during *Advanced TV*. Each student will be expected to submit a minimum of two finished pieces per quarter, and the production of each piece will be followed by a review and critique phase. In addition to the course work, students will work with community groups to produce a major project outside of class. Each student is also responsible for a Portfolio of video projects representative of his or her work. With the permission of the instructor, this class can be scheduled as a one semester course.

**ADVANCED TELEVISION 2 - H**

**Level: Honors**

**Open to Grades: 11, 12**

**Course Number: 755**

**Credits: 5**

***Prerequisite: Advanced Television and Permission of Instructor***

Students participating in *Advanced Television 2 Honors* will have demonstrated a strong interest in video production and are likely to continue to pursue this subject in college. Honors students will complete all course work described above in *Advanced Television 2 CP1*. Additionally, students enrolled in the Honors section will complete one additional video production and one additional writing assignment per quarter. They will also act as student leaders on their production teams and will lead in-class demonstrations on advanced production techniques. With the permission of the instructor, this class can be scheduled as a one semester course.

**STEAM (Science, Technology, Engineering, Art, Mathematics)**

The STEAM program focuses on the development of The 21<sup>st</sup> Century Skills through collaborative problem solving.

**INTRO TO COMPUTER SCIENCE PROGRAMMING - CP1**

**Level: College Prep 1**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 358**

**Credits: 2.5**

***Prerequisite: Students must be taking or have taken Geometry***

The course uses the Java language to teach fundamental programming involving data types, different control and data structures, methods, and basic class interactions. Students will work on a variety of labs throughout the course to develop their conceptual understanding of computer science and coding skills. The course is recommended for those looking to expose themselves to programming, and also those who might have an interest in AP computer science.

It is strongly suggested that students have access to a PC or Mac computer for an optimal programming environment.

**Principles of Engineering - CP1**

**Level: College Prep 1**

**Open to Grades: 11 & 12**

**Course Number: 558**

**Credits: 5.0**

Principles of Engineering (POE) exposes students to some of the major concepts that they will encounter in a postsecondary engineering course of study. Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of materials and structures, automation, and kinematics. The course applies and concurrently develops secondary level knowledge and skills in mathematics, science, and technology. Students have the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based (APB) learning. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community. This course is aligned to NGSS and Common Core standards.

**Introduction to Engineering - CP1**

**Level: College Prep 1**

**Course Number: 557**

**Credits: 2.5**

### **Open to Grades: 9, 10, 11, 12**

Introduction to Engineering is a one-semester course. Introduction to Engineering is a hands-on class designed to introduce students to the engineering design process, materials science, electricity and circuits, mechanical/structural design, creative problem solving, technical drawings, and other technology and engineering concepts in the state Technology & Engineering Curriculum Framework. Students will work independently and in teams using math to analyze and solve applied physics principles to check and validate laboratory test results where possible.

### **Other STEAM Offerings - listed in other sections of the Program of Studies**

AP COMPUTER SCIENCE PRINCIPLES	AP COMPUTER SCIENCE A
INTRO COMPUTER AIDED DRAWING	ADVANCED CAD
3D COMPUTER AIDED DRAWING and PRODUCT DESIGN	ARCHITECTURE
CARTOONING AND ANIMATION	WOODWORKING 2
INTRODUCTION TO WOODWORKING	MARINE TECHNOLOGY 1 & 2
ADVANCED WOODWORKING	INTRO MANUFACTURING
ART STUDIO PROGRAM COURSES	INTRO ENGINEERING
PHOTOGRAPHY / GRAPHIC DESIGN	

## **Additional Specialized Courses**

### **English Language Education (ELE)**

Students at MHS who are learning English in addition to the language(s) that they already know receive instructional support from an English Language (EL) teacher. The EL teacher provides support in all aspects of English language development: listening, speaking, reading and writing.

#### **Literacy Lab: Foundational**

**Level: CP1**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 989**

**Credits: 5**

This course is designed to create and/or build upon the reading, writing, speaking and listening skills, strategies and knowledge that students bring to the classroom. Students will increase their interpersonal and academic language skills through targeted practice and project-based learning that connects students to real world issues and experiences. A primary focus of this course is to equip students with the integration of content and language that will be necessary for success in their academic courses. Students' linguistic progress is measured by ELD state standards that are aligned with the mandated state assessment of ACCESS.

#### **Literacy Lab: Transitional**

**Level: CP1**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 990**

**Credits: 5**

This course is designed to build upon students' reading, writing, speaking and listening skills, strategies and knowledge. Students will deepen their academic language skills through critical thinking, comprehension, and analysis of both fiction and non-fiction texts. Students are exposed to a variety of literary genres and write for a variety of purposes including but not limited to argumentative/persuasive, explanatory, and narrative. Students' linguistic progress is measured by ELD state standards that are aligned with the mandated state assessment of ACCESS.

#### **STUDY SKILLS STRATEGIES**

**Level: CP1**

**Open to Grades: 9, 10**

**Course Number: 716**

**Credits: 2.5**

This course is designed for freshmen and sophomores who would benefit from additional instruction, practice, and development of their executive functioning skills. Topics this class will cover; study skills, time management, organization, planning and prioritization, self-advocacy, and goal setting. In addition, students will explore different methods of problem solving, strategies for dealing with anxiety in and out of the classroom, self monitoring, and growth mindset. Students are encouraged to take this class to help them

prepare for a rigorous academic curriculum and to build 21st century skills to use both inside and outside of the classroom. This course is pass/fail.

### **REAL WORLD SKILLS**

**Level: CP1**

**Open to Grades: 11, 12**

**Course Number: 715**

**Credits: 2.5**

This course is developed for juniors and seniors who are interested in learning key skills they will need to transition into adulthood. Whether they are trying to figure out a career path, exploring college options, or simply seeking to learn how to navigate car insurance, this class will cover all the tools and lessons to help equip students for the next phase of their life. The course will cover 4 key areas of “adulting”; personal development and goal setting, career/college planning, financial responsibility, and everyday life skills. We will cover professional skills such as resume writing, interviewing basics, and filling out application forms as well as communication skills, financial responsibility, and everyday life skills such as personal health and nutrition, travel, home and vehicle maintenance, taxes, insurance, and all of the things you wish someone taught you when you were in high school. This course is pass/fail.

### **CURRICULUM SUPPORT**

**Level: CP1**

**Open to Grades: 9, 10, 11, 12**

**Course Number: 988/998**

**Credits: 2.5**

#### ***Prerequisite: Placement process***

Curriculum Support is a semester course for a pass or fail grade (2.5 credits per semester) taught by a special education teacher and, in some instances, supported by a tutor or paraprofessional. During class time, students are taught skills and strategies aligned with specific goal areas of focus for each individualized learning style. Students will be provided small group instruction and engage in work that addresses their individual goal areas. Areas of focus in curriculum support may include social-emotional health (e.x. relationship skills, social awareness, self-awareness, self-management, responsible decision making), executive functioning, reading goals, functional math, writing support, study skills, vocational skills, and transition planning.

### **Additional Courses**

Special education teachers and staff, including related service providers, offer specialized instruction in a variety of settings that include, but are not limited to, inclusion support, substantially separate classes, and consultation to teachers and staff. Specialized courses for students with language-based learning disabilities, emotional disabilities, neurological/cognitive impairments, and transitional needs are also available. Students access services as determined by the Team process and indicated in their IEP. Selected English, History, Math and Science College Prep 2 (CP2) courses are offered through the team process in a sub-separate setting that meets state standards. Core content classes (English, Math, Social Studies, Science) that provide a modified curriculum are indicated by roman numerals – CPII

## **SENIOR OPTIONS**

### **SENIOR PLANNING BLOCK - College & Career**

**Open to Grade 12 Only**

**Course Number: 9995**

For seniors to navigate the college application process, college essay, Senior Project preparation and post secondary planning. This block provides a home base, access to school counseling and for college representative visits. Seniors are only permitted one senior planning block per semester.

### **SENIOR PROJECT**

**Level: College Prep 1**

**Open to Grade 12 only**

**Course Number: 150**

**Credits: up to 2.5**

This course is a chance for seniors to design and implement an independent project for their fourth and final term. The independent project pursues one of four paths: career exploration, traditional academic research, artistic expression, or community service. The Senior Project encourages students to develop mentor

relationships with adults, to acquire new skills, and to experience education outside the traditional academic climate of the high school.

Senior Project consists of an internship or project of personal interest and delivering a presentation before a panel of teachers on what the student has learned. The students are provided with program guidelines and support. Senior Project is an excellent opportunity to prepare for college, examine a future job, explore a special interest or provide community service.

The program is open to all seniors in good academic standing and with a good attendance record. It runs throughout the fourth quarter. A student selects a topic that is both a personal area of interest and a learning stretch. The student submits an application stating the topic of choice and how it will benefit him/her. A Senior Project Committee led by the Project Coordinator will approve the project. Application forms are available from the Senior Project Advisor. Complete information can be found on the Marblehead High School web page