



**EXCELLENCE FOR ALL: A Medway Mindset**

# **Medway High School Program of Studies**

---

**2021-2022**

## **TABLE OF CONTENTS**

Letter From the Principal	3
---------------------------	---

### **GENERAL INFORMATION**

Administration/Curriculum and Instruction Leaders/School Counselors	4
Medway High School Mission Statement and Expectations for Student Learning	4
Graduation and Promotion Requirements	5
Course Offerings, Levels and Scheduling Process	7
Yearly and Alternate Year Electives	8
Grade Point Average	11
Sample Educational Plan	12
School Counseling Services	12

### **MHS COURSE OFFERINGS BY DEPARTMENT**

English/Language Arts	13
Mathematics	18
Science/Technology/Engineering and Computer Science	24
History/Social Sciences	33
World Languages	39
PE/Health & Wellness	46
Performing Arts	48
Visual Art	52
Technology & Career Readiness Education	55
Virtual High School	57
Independent Study Program	57
Early Enrollment Program	58

# Letter from the Principal

February, 2021

Dear Students and Families,

It is a pleasure to share with you the *Medway High School Program of Studies* for 2021-2022. This Program of Studies has been developed so that our students will have access to a well-rounded four-year educational program. As you review the content, I believe that you will be impressed by the academic strength of the curricular program and the diversity of the curricular offerings. The courses offered at Medway High School are designed to foster the scholastic achievement, responsible citizenship, and social skills necessary for success after high school.

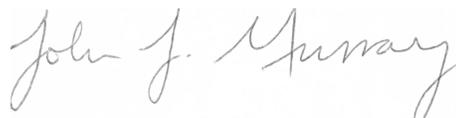
In addition to describing classes, the Program of Studies provides information about graduation requirements, credits, grades, course levels, weighted grades, Advanced Placement courses, and special programs.

Students are expected to select classes that are academically challenging and provide rewarding learning opportunities in areas of interest. More importantly, though, you will engage in conversations to explore new interests, challenge yourself in possibly unexpected ways, and further develop academic and life skills that prepare you to navigate a wide range of learning experiences in a complicated world. It is important that students and parents review the course offerings for each department before completing the online registration. Teachers, counselors, and administrators are available to assist students and parents in making these selections.

The scheduling process begins in the spring and will be completed in June. Student schedules will be released over the summer. During the later part of the registration process, honoring requests for changes becomes increasingly difficult. Therefore, it is essential that students complete the registration process as early as possible, making the best choices available to them.

As you explore the extensive course offerings described in the *MHS Program of Studies*, we hope you will identify courses that satisfy your curiosity, encourage your critical thinking, and open your mind to new ways of thinking about the world around you. Best wishes for a successful school year!

Sincerely,



John J. Murray, Ed.D.  
Principal

### Administrators

John J. Murray, Ed.D.	Principal
David M. List	Assistant Principal
Jeff Parcels	Athletic Director
Christine Noonan	Evaluation Team Supervisor

### Instructional Leaders

Melanie Sabtchev	Grade 5-12 History/Social Sciences Curriculum and Instruction Leader
Leslie Knight	Grade 5-12 Science, Technology, Engineering and Computer Science Curriculum and Instruction Leader
Kathleen Mioduszewski	Grade 5-12 Mathematics Curriculum and Instruction Leader
Ryan Sherman, Ph.D.	Director of Wellness

### School Counselors

Charlsey Gentile	2022 (Co-Di & Do-K), 2023 (D-Di & Do-K), 2024 (A-G)
Jacqueline O'Leary	2022 (A-Bo & L-P), 2023 (A-Bo & L-P), 2024 (H-M)
Allison Jasmin	2022 (Br-CI & Q-Z), 2023 (Br-C & Q-Z), 2024 (N-Z)
Maura McCormack	Grade 5-12 School Counseling and 504 Coordinator

## **MEDWAY HIGH SCHOOL MISSION**

The philosophy of Medway High School, in partnership with the community, is to foster an environment that encourages the pursuit of excellence for all through learning. The school community strives to create opportunities for students to acquire and apply knowledge, develop talents and skills, think independently, and become informed, responsible and productive citizens.

## **EXPECTATIONS FOR STUDENT LEARNING**

Upon graduation from Medway High School students will be able to:

### *ACADEMIC DOMAIN*

1. Acquire, integrate, and apply essential knowledge in all disciplines.
2. Use appropriate reading, observing and listening skills to communicate effectively through writing, speaking and artistic expressions.
3. Generate ideas and define problems, analyze and solve complex problems, and apply acquired knowledge.
4. Apply appropriate technologies to acquire, organize, and communicate knowledge, and information.
5. Organize for learning, and work both independently and in teams.

### *SOCIAL AND CIVIC DOMAINS*

1. Use effectively one or more of the arts to investigate and express ideas and feelings.
2. Identify the rights and responsibilities of citizenship by participating in meaningful community-service and school-service activities.
3. Identify the differences and the similarities among people in our diverse society.
4. Achieve and maintain a healthy level of physical fitness.
5. Utilize principles of training and conditioning.

## CORE VALUES AND BELIEFS



## PROMOTION/GRADUATION REQUIREMENTS

### YEARLY REQUIREMENTS

Every student in grades 9 and 10 must select a *minimum* of 39 credits (6.5 courses) per school year. Of these 39 credits, 36 must be in major academic subjects and a minimum of 3 credits (one course) in physical education. Students in grades 11 and 12 must enroll in a *minimum* of 37.5 credits (6 courses plus 1.5 credits in PE) per school year. Students who are enrolled in 5 AP courses (30 credits) in 12th grade may elect an additional directed study along with their PE graduation requirement. A major academic subject is any course that meets six or more times in one cycle. Semester courses that meet every day for half of the school year earn 3 credits and yearlong courses that meet every day earn 6 credits.

## PROMOTION REQUIREMENTS

To be a Sophomore	33 Credits
To be a Junior	66 Credits
To be a Senior	96 Credits
To Graduate	136 Credits

## GRADUATION REQUIREMENTS

All students must successfully complete a minimum of 136 credits. Students in their senior year must enroll in a *minimum* of 37.5 credits (6 courses plus PE) and successfully pass at least thirty credits (30) regardless of the number of previous credits earned in order to graduate. Students who are enrolled in 30 credits of AP courses in 12th grade may elect an additional directed study. Courses that are taken outside of the Medway High School Program of Studies offerings will only be counted toward graduation requirements if prior approval is given from administration.

### *Minimum requirements:*

English/Language Arts	24 credits	4 classes
Mathematics	24 credits	4 classes
Science/Technology/Engineering and Computer Science	18 credits	3 classes (lab sciences)
History/Social Sciences	18 credits	3 classes (including United States History and World History)
PE/Health/Wellness	9 credits	4 classes
<b>Fine and Performing Arts</b>	<b>6 credits</b>	<b>1 year-long class or 2 semester classes (<i>Beginning with the Class of 2024</i>)</b>
World Languages	12 Credits	2 classes in the same World Language
Electives	25 credits	Electives from any content area
Pass the English Language Arts, Mathematics, and Science portions of the MCAS.		

Medway High School graduation requirements fulfill the minimum course requirements that meet the state's MassCore requirements. [MassCore](#) is a state-recommended program of study intended to align high school coursework with college and workforce expectations. Our graduation requirements also fulfill the minimum course requirements for the Massachusetts State Universities. Information on

Undergraduate Admissions Standards for the Massachusetts State University System and The University of Massachusetts can be found [here](#). For course recommendations for four year colleges, including private institutions, please view [Course Recommendations for Four Year Colleges](#).

**\*Special Considerations:**

While many colleges will take any three history courses, some require you take specifically World History (Not AP European). A small number of colleges require one year of visual or performing arts prior to admission. Lastly, many competitive colleges require or recommend three, and even four years of the same World Language course.

## SUMMER SCHOOL REQUIREMENTS

To enroll in a Summer School Program, a student must obtain written permission from the Principal prior to enrolling. In order to be eligible to receive credit in a Summer School Program, a student must meet the following requirements:

1. Students must have at least a '50' final average in the Medway High School course and receive at least a '70' average in the summer school course to obtain the credit necessary to pass the course.
2. All grades received from courses taken in summer school will be entered on both the student's permanent record card and the transcript but will not be used in computing cumulative grade point average. A passing grade will appear as a P on the students transcript.
3. Students may only take courses at an accredited summer school program with an approved curriculum.

## COURSE OFFERINGS, LEVELS AND SCHEDULING PROCESS

**Not all courses listed in this Program of Studies will be taught during the 2021-2022 academic year.** Registration requests must be sufficient to justify scheduling a course. Students should select multiple elective choices for each course, other than the core courses. In scheduling elective courses, preference is given to upperclassmen who may need to fulfill graduation requirements. Due to scheduling constraints, students may have to choose between courses that are offered at the same time. In cases where conflicts exist, students need to prioritize their course selections by working closely with their school counselor. All courses are run on a space available basis, the principal determines what courses will be offered and taught in any given school year.

\*\*Several elective courses at Medway High School are offered on alternating school years. It is important that students interested in taking these courses plan accordingly.

### Every year Electives

Psychology	AP Calculus AB	Band
AP Psychology	AP Calculus BC	Chorus
AP European History	Intro to Programming	Treble Chorus
Genocide and Persecution Studies	Statistics CP	Piano
Principles of Biomedical Science	AP French/ French V	Guitar

AP Biology	Government and Politics H/AP Gov't	Foundations of Art
Human Body Systems	AP Physics 1	Painting & Drawing
PLTW Capstone	AP Chemistry	Ceramics I/II
AP Statistics	AP Spanish/Spanish V	Video Tech I/II/III
Fine Arts/Adv Fine Arts H/CP	Film Studies	Honors Art Portfolio

**“A” Year Electives  
2022-2023 and 2024-2025**

Civics in Action	AP Computer Science	Theatre I
Criminal Justice	Intro/Advanced Journalism	Music in American Culture
History of Boston	Forensic Science I/II	Environmental Science
Sociology	Photography I	Principles of Engineering
Medical Interventions	Civil Engineering & Architecture	

**“B” Year Electives  
2021-2022 and 2023-2024**

Economics	Environmental Science H/AP	PLTW Capstone:Engineering
Financial Literacy	Intro to Robotics	PLTW Capstone: Biomedical
AP Economics	Advanced Robotics	Advanced Programming/AP Computer Science A
Speech/Debate	Intro to Engineering and Design	Digital Media & Design
AP Music Theory	Theatre I/ II	Advanced Fine Arts

**COURSE LEVELS**

**Advanced Placement/Honors Level**

Courses labeled Honors/AP contain advanced material taught at an accelerated pace. Students are expected to work independently on inquiry, problem solving, critical thinking, and reading and writing within each content area. AP courses are the equivalent of a college-level course and prepare students for the AP examinations. Medway High School offers Advanced Placement (AP) courses in 22 subject areas. **Students enrolled in AP courses are expected to sign up and pay for the test in the fall and take the College Board AP examination in May. Students who do not sign up and pay for the exam in the fall will not receive the AP designation or AP GPA weighting on their transcript.** Students receiving a score of 3 or higher may be eligible to receive college credit.

**College Prep (CP)**

College Prep (CP) courses are also available every year, freshman through senior years. These are academic programs requiring serious study. Students electing CP courses should read and compute with accurate comprehension and should expect regular homework assignments. CP courses offer academic preparation for students planning to further their education beyond high school in two or four-year college programs.

**College Prep I**

College Prep I courses are college preparatory courses in which students will work with increasing independence on inquiry, problem solving, critical thinking, and reading and writing within each content

area. The courses are often smaller, feature more structured instruction, and in some cases offer co-teaching to allow for more individualized attention.

## **SCHEDULING PROCESS**

The scheduling process at MHS is a collaborative process between the students, families, and our staff to meet the needs of all of our students. It is important for families to have conversations about the courses students request to take to ensure that it provides the appropriate challenge and balance. Our goal is for all of our students to have completed course lists for the 2021-2022 school year completed by the end of this school year. There are five major steps involved in the Scheduling Process.

- I. Course Recommendations** (entered by teachers)
- II. Placement Review Process** (initiated by the student)
- III. Elective Request Process** including AP electives (entered by students)
- IV. Academic Advising** (with School Counselors)
- V. Building the Master Schedule**

As this is our first year working with this process, we ask for your patience and feedback so that we can improve the process going forward.

### **I. Course Recommendations (March 8- March 23)**

- Teachers will engage in conversations with students about which course will be the most appropriate challenge for the student in that teacher's subject area.
- Course Recommendations will be available for students and families to view after school on March 24th

### **II. Placement Review Process (March 26- April 9)**

In situations where a student's desired level placement and teacher recommendation do not align, the student may request a Placement Review. Before initiating a Placement Review, please refer to the Program of Studies to learn more about the expectations of each level.

- The student will obtain the Placement Review form beginning on March 26th. The form will ask students to explain the reason for the Placement Review and obtain signatures from their current teacher, their school counselor, and their parents. Students must submit Placement Review forms to their school counselor by **April 2nd**.
- It is important that students initiate the Placement Review process in a timely manner as there will **not** be a summer override process before the start of the school year.
- The school counselor will arrange a meeting between the student, parent, counselor and the subject area Curriculum and Instruction Leader to discuss the placement review and the expectations for the course in question by **April 9, 2021**.
- If the level change is still desired at this juncture, the override will be granted and the placement will be updated in Infinite Campus. This process will be completed by **May 17, 2021**.

- Students who override into a class that was not recommended may be asked to complete additional coursework to ensure that the student is as prepared as possible for the increased rigor and expectations.

### **III. Elective Request Process (March 26th- April 9th)**

Students may review available course electives in the Program of Studies on the MHS website beginning on **March 15th**, students will have access to the course request module within Infinite Campus. In that module, students will be able to see course recommendations and make elective requests. Students will not be able to change any previous recommendation that has been entered by a teacher. **Elective Requests must be entered into Infinite Campus by the end of the school day on April 9th.** All elective requests will be reviewed by school counselors during the academic advising sessions.

### **IV. Academic Advising with Counselors (April 3 - May 14th)**

Each student will have an individual academic advising session with their school counselor after the elective requests and course recommendations are in Infinite Campus. These short meetings will ensure that all students are fully scheduled for courses, are meeting all graduation requirements, and are appropriately challenged. Teachers will receive a list of student appointment times for Academic Advising.

### **V. Building the Master Schedule**

We will begin building the master schedule for 2021-2022 at the conclusion of Academic Advising. Registration requests must be sufficient to justify scheduling a course. Students should select multiple elective choices for each course. In scheduling elective courses, preference is given to upperclassmen who may need to fulfill graduation requirements. All courses are run on a space available basis, the principal determines what courses will be offered and taught in any given school year. Our goal is for all students to have completed course lists for the 2021-2022 school year completed by the end of this school year.

### **COURSE/LEVEL CHANGES AFTER THE START OF THE SCHOOL YEAR**

Once courses are selected, it is very difficult to change them. Changes will be made only for serious academic reasons. Parent requests for specific teachers will not be honored. All changes, additions, or drops must be submitted in writing using the *Medway High School Course Change Request Form*. All signatures must be included on this form before consideration by the principal. A student must continue to attend all classes until the details of the change have been worked out and approved. No change requests for first semester courses will be considered after the first cycle (7-day cycle) of the school year. No changes for second semester courses will be considered after the first cycle of the second semester.

The grading and reporting procedures for courses that are changed/dropped are:

1. Courses changed/dropped **during** the first cycle of the course do not appear on the final report card.
2. Courses changed/dropped **after** the second cycle of the course have a grade recorded for the quarter and a “W” (withdrawn) recorded for the remaining quarters and for the year, which will appear on the student’s report card.

Our course and teacher schedules are developed based on information that we receive from our students, teachers, and their parents or guardians in the winter and spring about course choices.

## **GRADE POINT AVERAGE**

All courses that meet six (6) or more times in a seven-day (7) cycle will be used in the calculation of the Grade Point Average (GPA). The weighted GPA will be calculated at the end of each school year, and at the end of the senior year for graduation, final transcripts, valedictorian, salutatorian, and honor essayist purposes. Medway High School also calculates an unweighted GPA on a traditional 4.0 scale at the end of each school year. The weighted and unweighted GPA will be reported on the student's transcript. Courses must be completed to earn credits and withdrawn courses receive no credit. Failed courses receive no credit but will be included in all calculations. Courses that are taken outside of the Medway High School Program of Studies offerings will not be calculated into the Medway High School GPA. Many colleges and universities recalculate GPA during the admissions review.

### **MHS GPA Scale**

<b>Grade</b>	<b>AP</b>	<b>Hon</b>	<b>CP</b>	<b>Unweighted</b>
<b>100</b>	7.30	7.00	6.30	4.30
<b>99</b>	7.30	7.00	6.30	4.30
<b>98</b>	7.20	6.90	6.20	4.20
<b>97</b>	7.20	6.90	6.20	4.20
<b>96</b>	7.10	6.80	6.10	4.10
<b>95</b>	7.10	6.80	6.10	4.10
<b>94</b>	7.00	6.70	6.00	4.00
<b>93</b>	7.00	6.70	6.00	4.00
<b>92</b>	6.90	6.60	5.90	3.90
<b>91</b>	6.80	6.50	5.80	3.80
<b>90</b>	6.70	6.40	5.70	3.70
<b>89</b>	6.60	6.30	5.60	3.60
<b>88</b>	6.50	6.20	5.50	3.50
<b>87</b>	6.40	6.10	5.40	3.40
<b>86</b>	6.30	6.00	5.30	3.30
<b>85</b>	6.20	5.90	5.20	3.20
<b>84</b>	6.10	5.80	5.10	3.10
<b>83</b>	6.00	5.70	5.00	3.00
<b>82</b>	5.90	5.60	4.90	2.90
<b>81</b>	5.80	5.50	4.80	2.80
<b>80</b>	5.70	5.40	4.70	2.70
<b>79</b>	5.60	5.30	4.60	2.60
<b>78</b>	5.50	5.20	4.50	2.50
<b>77</b>	5.40	5.10	4.40	2.40
<b>76</b>	5.30	5.00	4.30	2.30
<b>75</b>	5.20	4.90	4.20	2.20
<b>74</b>	5.10	4.80	4.10	2.10
<b>73</b>	5.00	4.70	4.00	2.00
<b>72</b>	4.90	4.60	3.90	1.90
<b>71</b>	4.80	4.50	3.80	1.80
<b>70</b>	4.70	4.40	3.70	1.70
<b>69</b>	4.60	4.30	3.60	1.60
<b>68</b>	4.50	4.20	3.50	1.50

67	4.40	4.10	3.40	1.40
66	4.30	4.00	3.30	1.30
65	4.20	3.90	3.20	1.20
64	4.10	3.80	3.10	1.10
63	4.00	3.70	3.00	1.00
62	3.90	3.60	2.90	0.90
61	3.80	3.50	2.80	0.80
60	3.70	3.40	2.70	0.70
59 or below	0.00	0.00	0.00	0.00

Grade point averages are calculated based on grades earned in college preparatory courses. Each state University of Massachusetts campus to which a student applies will calculate his/her GPA for purposes of applying the admissions standards. If an applicant's GPA falls below the required minimum GPA, a sliding scale will apply. Information on Undergraduate Admissions Standards for the Massachusetts State University System and The University of Massachusetts can be found [here](#).

### **SAMPLE - 4 YEAR EDUCATIONAL PLAN**

<b><u>FRESHMAN YEAR</u></b>	<b><u>CREDIT</u></b>	<b><u>SOPHOMORE YEAR</u></b>	<b><u>CREDIT</u></b>
English*	6	English*	6
United States History I*	6	United States History II*	6
Mathematics*	6	Mathematics*	6
Biology*	6	Physics*	6
World Language*	6	World Language*	6
IPEC 9*	3	IPEC 10*	3
Fine and Performing Art*	3	Fine and Performing Art*	3
Elective	3 or 6	Elective	3 or 6
<i>(Minimum)</i>	<i>(39)</i>	<i>(Minimum)</i>	<i>(39)</i>

<b><u>JUNIOR YEAR</u></b>	<b><u>CREDIT</u></b>	<b><u>SENIOR YEAR</u></b>	<b><u>CREDIT</u></b>
English*	6	English*	6
World History*	6	Mathematics*	6
Chemistry*	6	World Language	6
Mathematics*	6	PE/Wellness*	1.5
World Language	6	Elective	6
PE/Wellness*	1.5	Elective	6
Elective	3 or 6	Elective	6
Elective	3 or 6		
<i>(Minimum)</i>	<i>(37.5)</i>	<i>(Minimum)</i>	<i>(37.5)</i>

\*Required course

Note that special education services, as required by a student's Individualized Education Plan, may impact a student's schedule.

### **SCHOOL COUNSELING SERVICES**

Through developmentally appropriate activities that include individual student planning, individual counseling, in class lessons, responsive services, and collaboration with parents, students, administration and teachers, the school counseling office works to promote and enhance the academic,

personal/social, and career development of students. Each student is assigned a school counselor and has access to our school adjustment counselor also.

In each grade, students will be scheduled for school counseling lessons with the following focus:

- Grade 9 Transition, Self-Awareness, and Social-Emotional Skills
- Grade 10 Self-Awareness & Career Exploration
- Grade 11 Career/College Exploration & Post-Secondary Planning
- Grade 12 Post-Secondary Planning, Application Process & Transition

Please review the full list of [School Counseling Services](#) available

Academically, school counselors will assist the student and their parents with choosing the appropriate level of subjects in the light of the student's grades, past achievements and standardized test results; as well as interests and future aspirations. The counselors will also facilitate the adjustment from one school or grade to another and assist with the selection of curricular school subjects. During the scheduling process for the next academic year, counselors will review academic records and course selections with students.

## Courses and Descriptions by Department

### English Language Arts

The goal of the study of English Language Arts is for students to embrace communication – the necessity of it, the beauty of it, and the power it affords with its effective use in all arenas of life. Today, students must develop sophisticated communication skills, including a shrewd understanding of the motivations for and the meanings inherent in any exchange.

Reading, thinking, listening, speaking, and writing skills developed through the study of English Language Arts act as a doorway, which leads both outward toward successful communication skills and inward toward emotional and intellectual growth. The study of literature serves as both a mirror unto ourselves and a window into society. Its analysis challenges us to seek perspective and balance in a world inundated with information and all too often dominated by excessive materialism and a lack of interest in what is true art.

Although the study of English Language Arts offers many skills necessary for success in the academic world after high school, perhaps its greatest fruit is that it promises a greater knowledge of self and an appreciation of the complexities of human life.

### Core Courses

Grade(s)	Course	Level	Periods/ Cycle	Credits
9	English I	H, CP	6	6
10	English II- Multicultural Literature	H, CP	6	6
11, 12	English III- American Literature	H, CP	6	6

11, 12	AP Language and Composition	AP	6	6
12	AP Literature and Composition	AP	6	6
12	English IV	H, CP	6	6

**Semester Electives**

SPEECH & DEBATE  
 CREATIVE WRITING\*  
 INTRODUCTION TO JOURNALISM\*  
 ADVANCED JOURNALISM\*

*\*Not offered in 2021-2022*

**COURSE DESCRIPTIONS**

**ENGLISH I**

Grade 9 Periods: 6  
 020 (Honors) Credits: 6  
 021 (CP)

This course requires extensive reading, writing, critical thinking and literary analysis. Over the course of the year, students in grade 9 ELA read several novels, as well as drama, poetry, short fiction, and selected nonfiction. Students develop their ability to write in a variety of formal and informal styles and to respond to language with increasing sensitivity and discrimination. Considering each literary work in depth, students are required to write formal academic essays as they strive to develop superior analytical skills. Students complete several research based projects throughout the course.

Students who enroll in English I Honors can expect to read and respond with a higher level of independence and self-directed learning. Students should consider their interest in the subject and overall motivation in selecting this course. English I Honors students are recommended on the basis of grades 7 and 8 performance and the recommendation of the grade 8 teacher.

Prerequisite for Honors: Recommendation of Grade 8 teacher

**ENGLISH II- MULTICULTURAL LITERATURE**

Grade 10 Periods: 6  
 040 (Honors) Credits: 6  
 041 (CP)

This is the second year of the four-year program which continues the study of communication begun in grade nine. Included in this second year is an intensive reading of different genres of literature and cultural perspectives. Emphasis is placed on critical and independent reading and includes writing for appreciation, comprehension and analysis. Work includes speaking and presentation skills along with a review of grammatical principles and composition skills. A formal, academic research paper is required

of each student.

Students who enroll in English Honors can expect to read and respond with a higher level of independence and self-directed learning; students should consider their interest in the subject and overall motivation in selecting this course. GLCC designated course.

Prerequisite for Honors: Recommendation of Grade 9 teacher

### **ENGLISH III- AMERICAN LITERATURE**

Grade 11	Periods:6
051 (Honors)	Credits: 6
052 (CP)	

This is the third year of the English Language Arts program, focusing on prominent works of fiction and nonfiction from throughout American history. Written work includes the following: narrative, persuasive, process, comparison/contrast and research essays, while placing an emphasis on literary analysis. Preparation for the College Boards is included in this year's study.

*\* A grade 12 student who took AP Language and Composition in grade 11 may elect to take this class to fulfill grade 12 English requirements.*

Prerequisite for Honors: Recommendation of Grade 10 teacher

### **AP LANGUAGE AND COMPOSITION 050 (AP)**

Grade: 11 & 12	Periods: 6
	Credits: 6

AP Language and Composition, designed as a college-level learning experience through its examination of prose writing in a variety of periods, disciplines and rhetorical contexts, will prepare highly motivated students to be more aware of the connection between writers and their purpose, audience and language. Fiction, non-fiction and visual texts will prepare students to successfully analyze and write in a variety of forms (narrative, expository, and argumentative) and communicate effectively in any context. Students will be required to participate in the writing process, involving the writing of many short essays in a variety of forms, on a variety of topics, as well as communicate effectively through oral presentations and peer revisions. Collaborative writing, personal journal keeping, and in-class responses, as well as summer reading, will be required. Upon the completion of the course, students will be required to take the Advanced Placement Language and Composition examination from the CEEB. Scores of 3 or better, out of a possible 5, will often qualify students for advanced standing in college English programs. Students should check with the college of their choice regarding individual advanced placement credit policies.

\*Part of Global Leadership Pathway

Prerequisite: 85 or higher in previous English class; for grade below 85, teacher recommendation required. Students may be required to complete a writing sample to support the override.

### **AP LITERATURE AND COMPOSITION 060 (AP)**

Grade: 11 & 12	Periods: 6
	Credits: 6

Designed as a college level learning experience, this course, through its speaking, listening, reading and writing experiences, will prepare highly motivated senior students to become more aware of the nuances in the use of language (connotation, metaphor, irony, paradox, syntax, tone, and point of view). With representative samplings of works from several genres and literary periods, students will intensively read, analyze, and seek to identify the author's purpose and the assumptions underlying her/his various rhetorical figures and devices of exposition. Students will be required to write many short papers on literary topics, at least one major thesis paper, and analyze orally several pieces of literature. Students will learn to analyze texts critically and structure essays appropriately under pressure of time. Literary personal journals will also be required of students. 15 - 20 percent of each term grade will consist of class participation. Summer reading is required. At the end of the course, students will be required to take the Advanced Placement Examination in English (Literature and Composition version) from the CEEB. Scores of 3 or better (of a possible 5 total) on this test often qualify students for advanced standing in college English programs. Students should check with the college of their choice regarding their advanced placement policy. GLCC designated course.

Prerequisite: Successful completion of Advanced Placement Language and Composition, or an average of 88 or higher in American Literature; for grade below 88, teacher recommendation required. Students may be required to complete a writing sample if entering from American Literature CP.

#### **ENGLISH IV**

---

Grade: 12	Periods: 6
071 (Honors)	Credits: 6
072 (CP)	

This is the fourth year of the English Language Arts program, focused on exposing students to multiple genres in fiction and nonfiction works. Each quarter, students will read selections from the following genres:

- MODERN BRITISH LITERATURE
- SCIENCE FICTION & FANTASY
- NONFICTION
- MODERN & CONTEMPORARY FICTION

Written work includes the following: narrative, persuasive, process, comparison/contrast and research essays, while placing an emphasis on literary analysis. Seniors not taking AP English or American Literature in grade 12 must enroll in this course to meet the graduation requirements for ELA. This course is designed as a full-year College Preparatory course.

*\*Students wishing to obtain Honors credit will be required to complete an additional research-based project.*

#### **ENGLISH/LANGUAGE ARTS ELECTIVES**

##### **SPEECH AND DEBATE**

Grades 9-12 (Semester course)	Periods: 6
066 (CP)	Credits: 3

Despite the emergence of a digital age, the need for effective communication skills in both speaking and

listening has not faltered. This project-based course is designed to impart upon students the art of public speaking as well as the necessary skills of analysis to make them more competitive in the 21<sup>st</sup> century. With a focus on logic and argumentation, this course will enhance students' research, debate, and creative performance skills while teaching and modeling respect and tolerance. The initial portion of the course will begin with attention to the key components of effective public speaking such as facial expression, body language, pacing, tone, along with an exploration of *glossophobia*, or fear of public speaking. Students will then begin to explore the different style of speech writing, such as persuasive, informative, original oratory, and extemporaneous. These will be accented by the integration of significant speeches by important historical figures such as Martin Luther King, Jr., Winston Churchill, and Theodore Roosevelt. The second portion of the course will revolve around the different styles of debate such as Lincoln-Douglas, parliamentary, and value. In doing so, instruction will identify important research tools and techniques and well as develop students' analytical and refutation skills. Throughout the course, students will be required to work both individually and collaboratively in the pursuit of the course objectives. In addition, there will be an expectation that students will maintain an understanding of current events throughout the course.

### **CREATIVE WRITING 067**

(CP)

Grades: 9-12 (Semester course)

Periods: 6

Credits: 3

In this introductory course students will experiment with poetry, short fiction, creative nonfiction, and personal narratives. Students will read published examples of each genre and discuss the possibilities of these forms, the potential of language and wordplay, the uses of narration, reflection and perception, and the changing shape of memory. The course is workshop-based and there will be an emphasis on steady production and revision with the help of peer editing in a nurturing and encouraging environment. Through open exercises and directed writing assignments, students will produce a portfolio at the end of the course for a final grade.

*\*Not offered in 2021-2022*

### **INTRODUCTION TO JOURNALISM 068**

(CP)

Grades: 9-12 (Semester Course)

Periods: 6

Credits: 3

Students will explore a brief history of journalism including radio, television, Internet, and print. Ethics and law will also be covered at the beginning of the course so students will understand the importance of journalism and how the decisions they will make as student journalists will affect them and the community on which they are reporting. Students will then receive instruction on how to layout their articles for all types of mass media. Once students have this overview and background, they will begin working on particular areas of news writing and broadcasting. Each news writing unit will focus on a particular type of news article which students will then explore in all aspects of media. For example, with the feature writing unit, students will learn first what a feature story is and how it is created by dealing first with professional examples. Then they will work on feature story writing for print, radio, television, and Internet. Each subsequent unit will follow the same format. Students will end the semester with a final exam where they either create a print newspaper, online newspaper, broadcast or radio news program to demonstrate the skills they have acquired over the course of the semester.

*\*Not offered in 2021-2022*

### **ADVANCED JOURNALISM 069**

(Honors/CP)  
 Grades 11 - 12 (Semester course)

Periods: 6  
 Credits: 3

This course, which meets concurrently with Introduction to Journalism, will explore advanced topics in media and journalistic writing and focus on applied skills from Introduction to Journalism. Students wishing to obtain Honors credit will be required to complete additional assignments.

*Prerequisite: Passing grade in Journalism I and teacher recommendation*

\*Not offered in 2021-2022

## Mathematics

Medway High School offers a sequence of integrated mathematics courses that is aligned with the *2017 Massachusetts Curriculum Framework for Mathematics*. Most courses integrate the study of Algebra, Geometry, Probability, and Data Analysis. The aim of this integrated approach is to explore mathematics as a cohesive whole, while emphasizing mathematical practices such as reasoning, problem solving, and modeling.

Ninth grade placement is determined by the 8th grade recommendation process. Placement in grades 10-12 is based on prerequisite content knowledge as determined by previous performance in courses. Access to higher level mathematics courses is available to students throughout multiple pathways for students throughout their high school career. Because students learn at different rates, this may mean that summer or additional coursework may be necessary at some point in order for students to meet their desired goals. The chart below maps out the typical pathways for students both currently and beginning with the incoming 9th grade class. Students should consult their math teacher and counselor to support their movement through the pathways to meet their math goals.

### Math Course Offerings 2021-2022

Grade 9	Grade 10	Grade 11	Grade 12
Math II H	Integrated Math 10 H	Pre-Calculus H (Elective AP Stats)	AP Calculus AB or BC (Elective AP Stats)
Math II CP	Integrated Math 10: AlgebraII/Geometry/Statistics CP	Pre-Calculus CP	Calculus CP (Elective AP Stats or Stats)
Math I CP	Integrated Math 10: Algebra I Part B/Geometry/Statistics	Integrated Math 11 CP	Integrated Math 12 CP

**Level Change Prerequisite:** Students wishing to move up a level in mathematics, must earn at least an 85% in the previous year math course and/or receive a teacher recommendation. Additional coursework

prior to the start of the school year may be required to support the override.

## 2021-2022 Core Courses

Grade(s)	Course	Level	Periods/ Cycle	Credits
9	Math II: Algebra II/ Geometry/Statistics	H, CP	6	6
9	Math I: Algebra I/Geometry/Statistics	CP	6	6
10	Integrated Math 10: Algebra II/Geometry/Statistics	H, CP	6	6
10	Integrated Math 10:Algebra I Part B/ Geometry/Stats	CP	6	6
11,12	Pre-Calculus	H, CP	6	6
11	Integrated Math 11: Concepts of Algebra II/ Statistics	CP	6	6
11,12	Statistics	AP, CP	6	6
12	Calculus AB	AP	6	6
	Calculus BC	AP	6	6
12	Calculus	CP	6	6
12	Integrated Math 12: Trigonometry/ Statistics	CP	6	6

### *Electives*

INTRODUCTION TO PROGRAMMING  
 AP COMPUTER SCIENCE PRINCIPLES\*  
 AP COMPUTER SCIENCE A/ADVANCED PROGRAMMING

\*Not offered in 2021-2022

### **MATH I- Algebra I/Geometry/Statistics**

(CP)

Periods: 6

Credits: 6

Math I students will learn to reason quantitatively, interpret mathematical expressions, create equations to describe relationships, and use the concept and notation of functions. They will examine linear and exponential functions using algebraic and graphical approaches, and use these function types for modeling and problem solving. Students will solve linear equations and inequalities, as well as systems

of equations. They will use descriptive statistics to summarize, represent, and interpret one-variable and two-variable data involving categorical or quantitative variables. Students will develop knowledge of transformations of the plane, use transformations to establish triangle congruence criteria, and use coordinate geometry. This course is aligned with the Model Mathematics I course of the *Massachusetts Curriculum Framework*.

**MATH II- Algebra I/II/Geometry/Statistics**

(CP)

Periods: 6

Credits: 6

Math II students will examine functions of varied types, with an emphasis on quadratic functions and their use in modeling. They will develop skills in rewriting expressions, using exponent properties, and solving equations and inequalities. Students will understand the geometric concepts of congruence and similarity in terms of transformations. They will investigate geometry theorems about triangles, parallel lines, and circles, and prove them by writing deductive proofs and coordinate proofs. They will compute and interpret probabilities of compound events and conditional probabilities. As well, there is an emphasis on the mathematical practices: make sense of problems and persevere in solving them; attend to precision; reason abstractly and quantitatively; construct viable arguments and critique the reasoning of others; model with mathematics; use appropriate tools strategically; look for and make use of structure; look for and express regularity in repeated reasoning.

**MATH II- Algebra II/Geometry/Statistics**

(Honors)

Periods: 6

Credits: 6

Math II students will examine functions of varied types, with an emphasis on quadratic functions and their use in modeling. They will develop skills in rewriting expressions, using exponent properties, and solving equations and inequalities. Students will understand the geometric concepts of congruence and similarity in terms of transformations. They will investigate geometry theorems about triangles, parallel lines, and circles, and prove them by writing deductive proofs and coordinate proofs. They will compute and interpret probabilities of compound events and conditional probabilities. As well, there is an emphasis on the mathematical practices: make sense of problems and persevere in solving them; attend to precision; reason abstractly and quantitatively; construct viable arguments and critique the reasoning of others; model with mathematics; use appropriate tools strategically; look for and make use of structure; look for and express regularity in repeated reasoning. This course is generally aligned with the Model Mathematics II course of the *Massachusetts Curriculum Framework*.

**INTEGRATED MATH 10- Algebra I Part B/Geometry/Statistics**

(CP)

Periods: 6

Credits: 6

Students study geometry: triangles (further study), similarity, quadrilaterals, and circles. Students will study quadratic functions, properties of exponents, factoring polynomials and probability. Finally, students will analyze, organize, and present data. There is an emphasis on the mathematical practices: make sense of problems and persevere in solving them; attend to precision; reason abstractly and quantitatively; construct viable arguments and critique the reasoning of others; model with mathematics;

use appropriate tools strategically; look for and make use of structure; look for and express regularity in repeated reasoning.

**INTEGRATED MATH 10- Algebra II/Geometry/ Statistics**

(CP)

Periods: 6

Credits: 6

Students study geometry: triangles(further study), similarity, quadrilaterals, and circles. Students will study quadratic functions, properties of exponents, factoring polynomials and probability. Finally, students will analyze, organize, and present data. There is an emphasis on the mathematical practices: make sense of problems and persevere in solving them; attend to precision; reason abstractly and quantitatively; construct viable arguments and critique the reasoning of others; model with mathematics; use appropriate tools strategically; look for and make use of structure; look for and express regularity in repeated reasoning. In addition, radical, rational, exponential, and logarithmic functions are studied.

**INTEGRATED MATH 10- Algebra II/Geometry/Statistics**

(Honors)

Periods: 6

Credits: 6

Students study geometry: triangles(further study), similarity, quadrilaterals, and circles. Students will study quadratic functions, properties of exponents, factoring polynomials and probability. Finally, students will analyze, organize, and present data. There is an emphasis on the mathematical practices: make sense of problems and persevere in solving them; attend to precision; reason abstractly and quantitatively; construct viable arguments and critique the reasoning of others; model with mathematics; use appropriate tools strategically; look for and make use of structure; look for and express regularity in repeated reasoning. Additional topics include sequences and series. Students are expected to solve more complex problems, integrating a variety of topics.

**Prerequisite:** Successful completion of Integrated Math 9

**INTEGRATED MATH 11: Concepts of Algebra II/Statistics 245**

(CP)

Grade: 11

Periods: 6

Credits: 6

This course is designed specifically for students who need more time to become proficient with the concepts of Algebra. It will review and extend the algebraic topics introduced in Integrated Mathematics. Students explore and analyze mathematics algebraically, numerically, and graphically. Topics will include linear, quadratic, polynomial, rational, radical, exponential and logarithmic functions. Students will study the irrational and complex numbers, as well as variations. Students will also summarize, represent, and interpret data on a single count or measurement variable.

**Prerequisite:** Successful completion of Integrated Math 10

**PRE-CALCULUS 237**

---

(CP)

Grade: 11, 12

Periods: 6

Credits: 6

This is the study of elementary and trigonometric functions. Students study the rational, inverse,

polynomial, exponential, logarithmic and trigonometric functions. After reviewing right triangle trigonometry, students learn about circular trigonometry along with periodic functions.

### **PRE-CALCULUS 236**

(Honors)

Grade: 11, 12

Periods: 6

Credits: 6

Additional topics such as vectors, polar and parametric coordinates, limits, sequences and series, are included. This course provides preparation for the Advanced Placement Calculus BC course. Students will be expected to complete a summer review packet prior to the beginning of school.

### **ADVANCED PLACEMENT CALCULUS AB 239**

(AP)

Grade: 12

Periods: 6

Credits: 6

This course is the College Board's Advanced Placement Calculus AB curriculum. The topics include: limits, differentiation, applications of differentiation, differential equations, integration, and applications of integration. The student will be prepared to take the AP level examination upon completion of this course.

**Prerequisite:** Successful completion of Honors Pre-Calculus or teacher recommendation

### **ADVANCED PLACEMENT CALCULUS BC 240**

(AP)

Grade: 12

Periods: 6

Credits: 6

This course is the College Board's Advanced Placement Calculus BC curriculum. The topics include: derivatives, integrals, transcendental functions, series, parametric and polar functions. The student will be prepared to take the AP level examination upon completion of this course.

**Prerequisite:** Successful completion of Honors Pre-Calculus or teacher recommendation

### **CALCULUS 241**

(CP)

Grade: 12

Periods: 6

Credits: 6

This course will include the study of rates of change, the theory of limits, differentiation, integration, and area under a curve.

**Prerequisite:** Successful completion of Pre-Calculus

### **INTEGRATED MATH 12 246**

(CP)

Grade: 12

Periods: 6

Credits: 6

Integrated Math 12 is a combination of trigonometry and statistics. In the first half of the course students will learn how to model periodic behavior using radians or degrees; use the unit circle, special right triangles, and Laws of Sine and Cosine to solve real-world problems; and graph trigonometric functions. The second half of the year students learn to organize and interpret the meaning of data sets

in context. The topics include: data representation, collecting data, probability and the normal distribution.

### **STATISTICS 242**

(CP)

Grades: 11, 12

Periods: 6

Credits: 6

This course presents basic statistical concepts and techniques, and presents real-life opportunities for applying them. Students will study descriptive measures, methods in regression and correlation, probability and random variables, the normal distribution, sampling, confidence intervals and hypothesis tests.

**Prerequisite:** Successful completion of PreCalculus or teacher recommendation.

### **AP STATISTICS 255**

(AP)

Grades: 11, 12

Periods: 6

Credits: 6

This college-level course will help students grasp basic statistical concepts and techniques and present real-life opportunities for applying them. Students will study four major areas in statistics: exploring data, sampling and experimentation, utilizing probability and simulation and estimating population parameters and testing hypotheses. A major portion of the course will entail collaborative projects and computer software.

**Prerequisite:** Recommendations of Mathematics teacher and/or English teacher.

## **MATHEMATICS ELECTIVES**

*\*Please note that electives might not be counted by colleges as a fourth year of mathematics.\**

### **INTRODUCTION TO PROGRAMMING 243**

(CP)

Grades: 9-12

Periods: 6

Credits: 6

Using a program developed by professors from Brown, Northeastern, and WPI, students will learn the basics of program design through the use of variables, functions, parameters, data types, conditionals, recursion, and testing. Students will develop interactive animations and simple video games using the program design.

### **AP COMPUTER SCIENCE PRINCIPLES A/ADVANCED PROGRAMMING 256**

(AP/Honors)

Grades: 10-12

Periods: 6

Credits: 6

The course will introduce students to the creative aspects of programming, as well as abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. This course will give students the opportunity to use technology to address real-world problems and build relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.

**Prerequisite:** Introduction to Programming

## Science, Technology, and Engineering

Science is a quest for explanations of the problems, which beset us as we attempt to adjust to our environment. It begins in the cradle and follows to the end. In this quest for answers, new knowledge is inevitably discovered and new patterns of relationship for older knowledge are found.

An effective way of getting better explanations is through a mode of inquiry, which in essence is experimental. Science students will probe their environment through a process of inquiry, which involves many facets - observation, classification, hypothesis, analysis, synthesis and interpretation. Thus, both knowledge and process are of equal importance.

If our students are to live in a society that is strongly influenced by science and technology, they must have a real understanding of their environment and the forces that govern it.

### **Core Courses**

<b>Grade(s)</b>	<b>Course</b>	<b>Level</b>	<b>Periods/ Cycle</b>	<b>Credits</b>
9	Biology	H, CP	6	6
10	Physics	H, CP	6	6
11	Chemistry	H, CP	6	6
10, 11, 12	AP Biology	AP	6	6
12	AP Chemistry	AP	6	6
10, 11, 12	AP Physics 1	AP	6	6
9-12	Engineering Pathway(PLTW) <ul style="list-style-type: none"><li>● Intro to Engineering Design</li><li>● Principles of Engineering</li><li>● Civil Engineering &amp; Architecture</li><li>● Engineering Design and Development</li><li>● PLTW Capstone</li></ul>	H, CP H, CP H, CP H, CP H, CP	6 6 6 6 6	6 6 6 6 6
9-12	Biomedical Pathway (PLTW) <ul style="list-style-type: none"><li>● Principles of Biomedical</li></ul>	H, CP	6	6

	Science <ul style="list-style-type: none"> <li>● Human Body Systems</li> <li>● Medical Intervention</li> <li>● PLTW Capstone</li> </ul>	 H, CP H, CP H, CP	6 6 6	6 6 6
9-12	Science Electives	AP, H, CP	6	3/6

***Electives***

AP BIOLOGY

AP PHYSICS

AP CHEMISTRY

INTRO TO ROBOTICS

ADVANCED ROBOTICS

FORENSIC SCIENCE

ENVIRONMENTAL SCIENCE H/AP

## CORE SCIENCE/TECHNOLOGY/ENGINEERING CLASSES

---

### **BIOLOGY**

330 (Honors)

Periods: 6

331 (CP)

Credits: 6\_\_\_\_\_

Grade: 9

The Biology Curriculum is aligned with the 2016 MA State Frameworks in Science, Technology and Engineering. The main topics covered are: The Chemistry of Life, Structure and Function of Cells, Genetics, Human Anatomy and Physiology, Evolution and Biodiversity, and Ecology. Descriptive and experimental laboratory exercises will be emphasized to provide an opportunity for students to develop laboratory skills, reinforce principles and present novel material. Students will be required to take the Biology MCAS test at the end of the year. Passing a high school STE test is required by the state of Massachusetts for high school graduation.

Prerequisite- Teacher recommendation is required to enroll in Biology 330 (Honors)

---

### **PHYSICS**

Grade: 10

351 (Honors)

Periods: 6

352 (CP)

Credits: 6

This course details the essential knowledge and skills required of a full first year Physics Program. Topics include: Motion, Forces, Energy, Waves, and Electromagnetism. At the end of their study of these standards, students can understand the evidence that underlies more complex concepts of physics including forces and vectors, and transformations of energy. Graphical representations and the gradual introduction of functions will introduce students to well-defined laws and principles of physics. Hands-on

laboratory projects support the learning process throughout the course.

Prerequisite-Teacher recommendation is required to enroll in Physics 351 (Honors)

## **CHEMISTRY**

Grade: 11

340 (Honors)

Periods: 6

341 (CP)

Credits: 6 \_\_\_\_\_

This course consists of a study of the following topics: Properties of Matter, Atomic Structure and Bonding, Chemical Reactions and Stoichiometry, Solutions, Acids and Bases, These are the standards described in the Massachusetts Frameworks for a full first year course in Chemistry. Laboratory experiences provide each student the opportunity to learn laboratory techniques and to solve problems related to experimentation. Basic algebraic concepts are used to solve chemical problems.

### **CHEMISTRY 340 (Honors)**

Prerequisite: Successful completion of Physics and teacher recommendation

Corequisite: Enrollment in CP or Honors level math

## **SCIENCE/TECHNOLOGY/ENGINEERING ELECTIVES**

### **AP PHYSICS 1 350**

(AP)

Periods: 6

Grades: 10, 11, 12

Credits: 6

This is a college-level course designed to prepare students to participate in the Advanced Placement Physics (AP) test administered in May. General physics topics presented during this algebra-based course closely follow those outlined by the College Board and also mirror an introductory-level university physics course. Students explore principles of Newtonian mechanics (including rotational motion), work, energy and power, mechanical waves and sound, and introductory, simple circuits. The course is based on six “Big Ideas”, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about the physical world.

Prerequisite: Introductory Physics or teacher recommendation from science and math

### **AP BIOLOGY (360)**

(AP)

Periods: 6

Grades 10, 11, 12

Credits: 6

AP biology is designed to offer students a solid foundation in introductory college-level biology, as well as foster critical and conceptual thinking. The curriculum emphasizes several themes that unify and connect living organisms and focuses on the four big ideas that have become the cornerstones of AP Biology. These ideas include the following: Evolution is the process that drives the diversity and unity of life; Biological systems utilize free energy and molecular building blocks for maintaining homeostasis; Living systems process information at many levels; Interactions between living systems are critical to survival and involve many complex properties. Emphasis is placed on inquiry-based learning, conceptual understanding, critical thinking skills and preparation for potential careers in science. By the end of the course, students will have a more encompassing view of biology than they were exposed to in their first

year biology course. Lastly, students will leave this course with a broader knowledge of biological issues that may impact their future lives. Students will be expected to complete a summer reading assignment and a study skills review packet prior to the opening of school in September.

Prerequisites: Successful completion of an introductory Biology course. Students should have earned at least an 80 average in Honors Biology and a 90 average in CP Biology or have a teacher recommendation.

### **AP CHEMISTRY 370**

(AP)

Periods: 6

Grade 12

Credits: 6

The AP Chemistry course is a second year chemistry course designed to be equivalent to the general chemistry course usually taken during the first year of college. Students may earn college credit for this course with an appropriate grade on the AP examination (typically a 3 or higher). Topics covered are those outlined by the College Board and include: Atomic Structure and Properties, Molecular and Ionic Compound Structure and Properties, Intermolecular Forces and Properties, Chemical Reactions, Kinetics, Thermodynamics, Equilibrium, and Acids & Bases. Labs are inquiry-based and center on the 6 big ideas: properties, gravimetric analysis, calorimetry, molecular modeling, spectrometry, and titrimetric analysis.

Prerequisite: Successful completion of an introductory Chemistry course and teacher recommendation.

Corequisite: Enrollment in Honors or AP level math

### **ENVIRONMENTAL SCIENCE H/AP**

---

Grades 10, 11, 12

Periods: 6

Credits: 3

Honors/Advanced Placement Environmental Science is an interdisciplinary science class designed to allow students to investigate how the natural world functions and inquire how humans interfere with the environment. Students will explore a variety of present day topics such as an intensive study of ecological principles, the growth of the human population, the causes and effects of polluting our natural resources, anthropogenic climate change, and an in-depth analysis of different energy sources. Students will work collaboratively to investigate these topics and explore solutions to these environmental issues. This course will encourage students to become active and responsible global citizens. Students who choose to take this for AP credit are required to take the AP exam in May.

### **INTRO TO ROBOTICS 377 (Semester I)**

(CP)

Periods: 6

Grades 9-12

Credits: 3

This course introduces the principles of robotics and the role in which robots play in our technologically evolving world. Students will study the principles of mechanical engineering, electronics and computer programming as they design and build robots to perform specific tasks and functions. Robotics is a hands-on engineering course with an emphasis on problem solving, design construction and teamwork. Students signing up for this course should consider signing up for Advanced Robotics for Semester II.

### **ADVANCED ROBOTICS 387 (Semester II)**

(CP/ Honors)  
Grades 9-12

Periods: 6  
Credits: 3

A continuation of Introduction to Robotics includes advanced integration / application of hardware and software. Using a design process, students will mix and match sensors and hardware from different sources to test their robots in challenges. Students wishing to obtain Honors credit will be required to complete additional course work, including but not limited to: weekly assignments, enrichment activities, and an additional literature or research-based project.

Prerequisite: Principles of Engineering, Intro to Robotics, or Teacher Recommendation

**FORENSIC SCIENCE 376 (Semester 1)\***

(CP)  
Grade 11, 12

Periods: 6  
Credits: 3

This course will focus on Forensics as a science in which events such as crimes and accidents can be reconstructed in accordance with the law, using various technologies and deductive reasoning. The students will be instructed in proper scene techniques and lab procedures to analyze numerous types of evidence. The course will be divided into units beginning with responding to, documenting, and collecting evidence from a crime scene, autopsy, time and cause of death, fingerprinting, and blood spatter and serology, and will include studies of historical and current cases pertaining to each unit. Students will learn proper procedures for collecting and documenting evidence and will become familiar with many of the instruments and the range of practices employed for the analysis of evidence.

*\*This course is not offered in 2021-2022*

**FORENSIC SCIENCE 376 (Semester 2)\***

(CP)  
Grade 11, 12

Periods: 6  
Credits: 3

This course is a continuation from Semester I Forensic Science and will pick up where the first left off. Students will study units on the proper collection and analysis of DNA, hair and fiber, toxicology, and trace evidence. This course will also include pertinent case studies with each unit. Students will learn proper procedures for collecting and documenting evidence and will become familiar with many of the instruments and the range of practices employed for the analysis of evidence.

Prerequisite: Successful completion of Forensic Science semester I.

*\*This course is not offered in 2021-2022*

**ENVIRONMENTAL SCIENCE\***

(CP)/(Honors)  
Grades 10, 11, 12

Periods:6  
Credits: 3

All Environmental Science courses are semester courses that introduce the student to the basic principles of freshwater, oceanography, earth's atmosphere and climate, astronomy, earth's resources, ecology and engineering. These courses emphasize experimental investigations and encourage the

development of analytical thinking. Students wishing to obtain Honors credit will be required to complete additional coursework, including but not limited to: weekly assignments, enrichment activities, and an additional literature or research-based project.

*\*This course is not offered in 2021-2022*

## **PROJECT LEAD THE WAY (PLTW)**

Global and local challenges surround us. To address these challenges and move forward, we need people who know problem-solving strategies, think critically and creatively, communicate and collaborate with others, and persevere when something does not work the first time. Project Lead The Way empowers students with these skills – relevant to any career or role they take on – and prepares teachers to engage their students in hands-on learning. PLTW students and the teachers who support them are empowered to make a difference in their classrooms, in their communities, and around the world.

### **BIOMEDICAL PATHWAY**

Students who take courses in the biomedical pathway will develop skills used by professionals in hospitals and labs before even graduating high school. In this pathway, students will be engaging in compelling, hands-on activities, and collaborate to find solutions to real-world challenges. Students will develop skills that can be used in any career path they take. Watch this [video](#) for an overview of the opportunities and student experiences in the PLTW Biomedical Pathway.

<b><u>Biomedical Pathway</u></b>
<b>Principles of Biomedical Sciences</b>
<b>Human Body Systems</b>
<b>Medical Interventions</b>
<b>PLTW Capstone: Biomedical</b>

### **PRINCIPLES OF BIOMEDICAL SCIENCES (PBS) 379/379a**

(CP /Honors)

Grades 9-10

Periods: 6

Credits: 6

Principles of Biomedical Science (PBS) is a full-year high school course in the PLTW Biomedical Science Program. This course serves to provide foundational knowledge and skills in fields such as biology, anatomy & physiology, genetics, microbiology, and epidemiology, as well as engage students in how this content can be applied to real world situations, cases, and problems. Through both individual and collaborative team activities, projects, and problems, students will tackle real-world challenges faced by biomedical professionals in the field. They will work with the same tools and equipment used in hospitals and labs as they engage in relevant hands-on work. Students will develop skills in technical documentation to represent and communicate experimental findings and solutions to problems. In addition, students will explore how connections to other disciplines such as computer science and engineering shape the future of medicine and practice collaboration techniques that will help them

connect with professionals across any field. *Students wishing to obtain Honors credit will be required to complete four additional research-based projects.*

### **HUMAN BODY SYSTEMS (HBS) 382/382a**

(CP/Honors)

Periods: 6

Grades 10-12

Credits: 6

Students examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries. *Students wishing to obtain Honors credit will be required to complete four additional research-based projects.*

Prerequisite: Successful completion of Biology and/or Principles of Biomedical Science

### **MEDICAL INTERVENTIONS (MI) 389/389a\***

(CP/Honors)

Periods: 6

Grades 10-12

Credits: 6

MI is the third of a four-course series. The students will follow the life of a fictitious family, the Smiths, as they investigate how to prevent, diagnose, and treat disease. They will explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students will be exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Students wishing to obtain Honors credit will be required to complete additional research-based projects. Prerequisite: Successful completion of Biology and either Principles of Biomedical Science or Human Body Systems.

*\*Not offered in 2021-2022. Students interested in this course should take PLTW Capstone (below).*

### **PLTW CAPSTONE:BIOMEDICAL**

(CP/Honors) Grade 11- 12

Periods: 6

Credits: 6

The knowledge and skills students acquire throughout the PLTW Biomedical pathways come together in a Capstone Course. Students who are following the Biomedical pathway will design innovative solutions for the most pressing health challenges of the 21st century. Students have the opportunity to work with a mentor/advisor from local businesses, universities, medical facilities, and research institutions. Students address topics ranging from public health and biomedical engineering to clinical medicine and physiology. This course will be taught in conjunction with the PLTW Capstone for Engineering students. Prerequisite: Successful completion of Principles of Biomedical Science and Human Body Systems or teacher recommendation. This course is also offered as an Independent Study for students who have also completed Medical Interventions

## **ENGINEERING PATHWAY**

The Engineering pathway serves students who are interested in exploring the various career fields that relate to science, technology, engineering, and math. The curriculum is problem based which involves learning the 21st century technological skills that are used in today's industry. The Engineering Pathway provides a cohesive atmosphere where students set and achieve career goals, become self directed learners, and prepare for their professional futures.

<b><u>Engineering Pathway</u></b>
<b>Intro to Engineering Design</b>
<b>Principles of Engineering</b>
<b>PLTW Capstone: Engineering</b>

### **INTRO TO ENGINEERING DESIGN (IED) 380/380a**

(CP/Honors)

Grades 9-12

Periods: 6

Credits: 6

In this course, students use 3D solid modeling design software to help them design solutions to solve proposed problems. Students will learn how to document their work and communicate solutions to peers and members of the professional community. The major focus of the IED course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation. Students wishing to obtain Honors credit will be required to complete additional research.

### **PRINCIPLES OF ENGINEERING (POE) 381/381a**

(CP/Honors)

Grades 9-12

Periods: 6

Credits: 6

This survey course of engineering exposes students to some of the major concepts they'll encounter in a postsecondary engineering course of study. Students have an opportunity to investigate engineering and high-tech careers and to develop skills and understanding of course concepts. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges. Students also learn how to document their work and communicate their solutions to peers and members of the professional community. This course represents the second foundation course offered in the Project Lead the Way engineering program. Students wishing to obtain Honors credit will be required to complete an additional research-based project.

### **PLTW CAPSTONE: ENGINEERING 384/384a**

(CP/Honors)

Grades 11-12

Periods: 6

Credits: 6

PLTW Capstone is the capstone course in the PLTW high school engineering program. It is an engineering research course in which students work in teams to design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. The course applies and concurrently develops secondary level knowledge and skills in mathematics, science, and technology. Students wishing to obtain Honors credit will be required to complete an additional research-based project.

Prerequisite: Successful completion of Physics and 1 other engineering course, either Introduction to Engineering Design, Principles of Engineering, or Civil Engineering & Architecture.

### **CIVIL ENGINEERING AND ARCHITECTURE (CEA) 383/383a\***

(CP/Honors)

Grades 11-12

Periods: 6

Credits: 6

Students learn about various aspects of civil engineering and architecture and apply their knowledge to the design and development of residential and commercial properties and structures. In addition, students use 3D design software to design and document solutions for major course projects. Students communicate and present solutions to their peers and members of a professional community of engineers and architects. Students wishing to obtain Honors credit will be required to complete an additional research-based project.

*This is a PLTW elective and can be taken as a standalone course. Students can complete the Engineering Pathway without this course.*

*\*Not offered in 2021-2022*

### **AP+PLTW STUDENT RECOGNITION**

College Board AP Program and Project Lead the Way courses combine to provide pathways to increase college and career readiness in STEM. Students may pursue pathways in engineering or biomedical science that combine related AP courses with PLTW courses.

Students who successfully complete an engineering or biomedical pathway that includes one AP course, one PLTW course, and a third course that is either an AP or a PLTW course, and earn a qualifying score on the corresponding exam, may earn AP+ PLTW Student Recognition. A qualifying score is a 3 or higher on an AP exam and Accomplished or higher on the PLTW End of Course assessment. Please see the chart below to determine the corresponding AP courses for each pathway.

### **AP+PLTW Student Recognition Courses Menu**

<b>Program</b>	<b>Engineering Pathway</b>	<b>Biomedical Science Pathway</b>
AP	AP Biology AP Calculus AB AP Calculus BC AP Chemistry AP Computer Science Principles AP Physics 1: Algebra-Based AP Statistics	AP Biology AP Chemistry
PLTW	Introduction to Engineering Design Principles of Engineering Civil Engineering & Architecture Environmental Sustainability	Principles of Biomedical Science Human Body Systems Medical Interventions

## History/Social Sciences

History is ongoing and dynamic. Our students must be active, informed, and effective citizens and consumers of information, both about the past and the present. Recognizing points of view including bias, demonstrating respect and appreciation for differences, valuing multiple perspectives on historical events or processes through the lens of the time period that they occurred, and uncovering motivations behind different beliefs drive our learning. Students are empowered to take risks, ask questions, and are expected to think critically. Above all, our students, individually and collaboratively, embrace their responsibility to **live locally, think globally, and act ethically.**

## **Core Courses**

<b>Grade(s)</b>	<b>Course</b>	<b>Level</b>	<b>Periods/ Cycle</b>	<b>Credits</b>
9	U.S. History I	H, CP	6	6
10	U.S History	CP	6	6
	AP US History	AP	6	6
11	World History	CP	6	6
	AP European History	AP	6	6
11, 12	AP U.S. History	AP	6	6
	AP European History	AP	6	6
	AP/H Government & Politics	AP, H	6	6
	AP Macro/Micro Economics	AP	6	6

	AP Psychology			
11, 12	Genocide & Persecution Studies	H, CP	6	6
	<b>Semester Courses</b>			
9, 10, 11, 12	American Criminal Justice System	CP	6	3
9, 10, 11, 12	History of Boston	CP	6	3
11, 12	Sociology	CP	6	3
11, 12	Psychology	CP	6	3
11, 12	Economics	CP	6	3
11, 12	Civics in Action	CP	6	3
11, 12	Financial Literacy	CP	6	3

### **HISTORY/SOCIAL SCIENCES CORE COURSES**

The required area of study will be as follows:

- Grade 9 US History I (Colonial America to World War I)
- Grade 10 US History II (World War to Present)
- Grade 11 Modern World History (19th century to Present)

#### **UNITED STATES HISTORY I (Honors/Pre-AP) 130**

Grade: 9

Periods: 6

Credits: 6

This course is designed for students who have a strong interest in history as a discipline and want to work with advanced materials in an enriched program. This course will conclude next year with the AP US History course. Students will acquire a comprehensive knowledge of early American history while developing skills to deal with documentary and interpretive materials. Class discussions will revolve around significant issues of each historical period.

Prerequisite: Recommendation of Grade 8 teacher; Grade 7-8 Academic Performance

#### **UNITED STATES HISTORY I 131**

Grade: 9

Periods: 6

(CP)

Credits: 6

This full-year course is designed as a survey of the Colonial Era through World War I. Attention is given to America's colonial development, the growth of a spirit of American Independence, the drafting of the US Constitution, Jacksonian democracy, the antebellum era; the Civil War and Reconstruction, and the early 20th century. This is the first course of a two year sequence that meets state graduation

requirements.

### **ADVANCED PLACEMENT (AP) UNITED STATES HISTORY 140**

Grade: 10 (meets US History II Graduation Requirement)

Periods: 6

Grades: 11 and 12 (elective for Grade 12)

Credits: 6

This is a continuation of US History I Honors 130 from 1877- present day. This course is designed for students who have a strong interest in history as a discipline and want to work with advanced materials in an enriched program. This survey course focuses on key controversies and conflicts which helped shape the social, political, economic, and diplomatic history of the United States. This course is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems, significant events, individuals, developments, and processes in United States History. Excellent writing skills are essential for success in this course. Materials employed in this course include primary source documents, selected literature and a college level text. *Students taking this course should anticipate that they will be reading a substantial amount of class material outside of class and the most successful students will be able to implement that existing knowledge during in-class discussions.*

Prerequisite: Passing grade in United States History I and teacher recommendation

### **UNITED STATES HISTORY II 141**

Grade: 10

Periods: 6

(CP)

Credits: 6

This course is a chronological examination of our nation's history from the end of World War I to the present day. Students will study the progressive era, isolationism, the "golden twenties", World War I and II, the modern civil rights movement, and the analysis of our nation's role in world affairs during and after the Cold War to the present day. This is the second and final course of a two year sequence that meets graduation requirements.

### **ADVANCED PLACEMENT (AP) EUROPEAN HISTORY 150**

Grade: 11

Periods: 6

Grade: 12 (elective)

Credits: 6

The focus of this course is to prepare students to take the AP Exam in European History. In addition to providing a basic narrative of events and movements in European History Students will focus on major themes of intellectual and cultural; political and diplomatic; and social and economic history. This course also refocuses on the changing views of man, science, and politics from the Renaissance to the present. Excellent writing skills are essential for success in this course. Materials employed in this course include primary source documents, selected literature and a college level text. *Students taking this course should anticipate that they will be reading a substantial amount of class material outside of class and the most successful students will be able to implement that existing knowledge during in-class discussions.* GLCC designated course.

Prerequisite: Teacher recommendation

### **MODERN WORLD HISTORY 151**

Grade: 11

Periods: 6

(CP)

Credits: 6

19th Century-Present. The study of modern world historical events constitutes the main thrust of this course. This course is global in nature examining history throughout the world including such regions as Europe, Latin America, the Middle East, and the Far East. Events will be analyzed through a multi-causal approach revolving around the themes of politics, economics, religion, social interactions, and intellectual and artistic movements. Furthermore, the study of each topic will culminate with an analysis of both its immediate and long-term impact on world history. GLCC designated course.

## **HISTORY/SOCIAL SCIENCES ELECTIVES**

### **GENOCIDE & PERSECUTION STUDIES 182**

(CP/Honors)  
Grades: 10 – 12

Periods: 6  
Credits: 6

While many of the perpetrators of genocide have been publicly condemned and raised international response, why does history continue to repeat itself? Despite the international awareness and understanding of the horrid events of the Holocaust, genocide still remains a global problem. This course will utilize the “10 Stages of Genocide” framework as defined by George Stanton, President of Genocide Watch, and the history of the Holocaust to investigate other alleged cases of genocide around the globe including, but not limited to: Rwanda, Darfur, Ukraine, Armenia, and Cambodia. While much of the first portion of the semester will focus on understanding the history of the most notorious and well-documented genocide, the Holocaust, the remainder of the semester will be comprised with the refinement and application of historical thinking skills to other genocides around the world and throughout history. This research and discussion-based course will utilize oral histories and government documentation as its main resources, but will also integrate other sources as a point of debate such as propaganda and raise questions on source validity. Participation in this course, requires students to approach history with both an unbiased and mature lens, as much of the information may be considered sensitive in nature. Students wishing to obtain Honors credit will be required to complete additional course work, including but not limited to: weekly assignments, enrichment activities, and an additional literature or research-based project. GLCC designated course.

### **ADVANCED PLACEMENT (AP) PSYCHOLOGY 190**

Advanced Placement (AP)  
Grades 11, 12 (full-year course)

Periods: 6  
Credits: 6

This course is designed to be an intensive introduction to psychology and the use of the scientific method for the study of human behavior. The research methods of psychologists will be studied and utilized to examine a wide variety of issues from the fields of developmental, cognitive, social, and clinical psychology. Topics to be studied may include, but are not limited to, an introduction and brief history of psychology, research and measurement, perception, sleeping and dreaming, learning and memory, stages of development, personality, and disorders. Psychological research from these areas will be examined and students will participate in activities related to these fields of study.

Prerequisite: Recommendation of social studies teacher

### **PSYCHOLOGY 192**

(CP)

Periods: 6

Grades: 11, 12 (semester course)

Credits: 3

This course is designed to be an intensive introduction to psychology and the use of the scientific method for the study of human behavior emphasizing psychology as a science. The research methods of psychologists will be studied and utilized to examine a wide variety of issues from the fields of general, developmental, physiological, social, and abnormal psychology. Topics to be studied include an introduction and brief history of psychology, research and measurement, perception, sleeping and dreaming, hypnosis, learning and memory, developmental, social, personality and abnormal psychology. Psychological research from these areas will be studied and students will design and conduct research and participate in activities related to these fields of study. Time will be used to discuss issues such as love, friendship, human developmental stages, death and dying, attitudes, personality, suicide and mental illness. This course provides students with a basic understanding of what and how psychologists have learned about human behavior.

### **ECONOMICS 193**

(CP)

Periods: 6

Grades: 11, 12 (semester course)

Credits: 3

This course provides students with the fundamental background necessary for the study of college level economics in either a liberal arts or a business curriculum. Content topics include a study of the interaction between the consumer, business, labor, and government in the marketplace. Special emphasis is placed on questions such as: How can American business remain competitive? What causes inflation, recession, and depression? Can the federal budget be balanced?

Course assignments include: problem solving, outside readings, case studies, and an independent project. GLCC designated course.

### **ADVANCED PLACEMENT (AP) MICRO/MACROECONOMICS 194**

Advanced Placement (AP)

Periods: 6

Grades: 11, 12 (full-year course)

Credits: 6

This course will prepare students for the Advanced Placement Economics exam. Both micro and macro economics will be covered with particular emphasis placed on the following: the role of the consumer, government, business and labor in the economy; the determinants of supply and demand and their relationship to pricing; income distribution; theories concerning fiscal and monetary policy; the relationship between inflation and unemployment, and factors influencing international trade. GLCC designated course.

Prerequisite: Recommendation of social studies teacher

### **AP/ HONORS US GOVERNMENT & POLITICS 165**

(AP/ Honors)

Periods: 6

Grade: 11, 12 (full-year course)

Credits: 6

This course will give students an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. government and politics. Students who choose to take this for AP credit are required to take the AP exam in May.

Prerequisite: Recommendation of social studies teacher

## **FINANCIAL LITERACY 250**

(CP)

Grades: 11-12 (Semester Course)

Periods: 6

Credits: 3

"Financially responsible individuals accept the fact that they are accountable for their financial future." (P9- *National Standards in Personal Finance*) "All young people from the nation's high schools should have sufficient knowledge and skill to enable each student to take individual responsibility for personal economic well-being."(P3) The goal of the course is to provide students with the tools and knowledge to do just that. Topics will be taken from four different standard areas: income, money management, spending and credit, saving and investment. This is a project-based course.

## **SOCIOLOGY 191\***

(CP)

Grades: 11, 12 (semester course)

Periods: 6

Credits: 3

This course will enable students to develop a basic understanding of the concepts which are fundamental to sociology. After demonstrating an ability to define these concepts, students will then apply them through the use of case studies. Students will investigate general principles governing social organization and social behavior in a variety of settings including the family, religion, education, government, community, and the economy. GLCC designated course.

*\*Not offered 2021-2022*

## **THE AMERICAN CRIMINAL JUSTICE SYSTEM 157 \***

(CP)

Grades: 10 – 12 (semester course)

Periods: 6

Credits: 3

This course is open to Grade 9, 10, 11 and 12 students. This course will enable students to examine criminal behavior and assess the backgrounds of certain high profile criminals. The course also will explore and study recent famous court cases such as the Simpson case, the Woodward trial and the Unabomber case. Other topics will include prisons, prison reform, and the history of organized crime in America. A working knowledge of current events will be frequently applied and students will often be required to examine and apply case studies and other primary sources in their learning.

*\*Not offered 2021-2022*

## **CIVICS IN ACTION 188\***

CP

Grades: 11-12 (semester course)

Periods: 6

Credits: 3

American Government is a study of the formal and informal structures of government and the processes of the American political system, with an emphasis on policy making and implementation. This course includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. government and politics. Students will become acquainted with the variety of theoretical perspectives and explanations for various behaviors and outcomes in government and politics. This course is rooted in the historic foundations of American government, with an eye towards understanding why things are the way they are. This course also will seek to connect the structure and evolution of our government to contemporary politics and elections. Accordingly, there is a current events emphasis that is necessary over the span of the entire course.

*\*Not offered '21-'22*

## HISTORY OF BOSTON 185\*

(CP)

Grades: 10-12 (semester course)

Periods: 6

Credits: 3

The History of Boston is a course which examines the history of Massachusetts from 1620 to today, with a particular focus on Boston. While often the history of this region tends to lean heavily on the Revolutionary era, this course will examine the region's history from a variety of perspectives, including the environmental history, which is an especially rich story, infrastructure development, including the Big Dig, the political history, and the role played during the nation's wars. Of particular value in this course is the use of local and regional history to develop an understanding of the broader historical trends in American history. For instance, how do the demographic shifts and cultural evolution of various neighborhoods in Boston represent national trends over the decades? The nature of the course also allows for actual engagement with the region outside of school. In this way, Boston and the surrounding region become a laboratory for historic inquiry. Assignments would include traditional tests and essays, but also investigations of all this region has to offer – the Freedom Trail, New Bedford's whaling industry, Battleship Cove, Plymouth, and even Medway's own local history.

*\*Not offered '21-'22*

## World Languages **Course Offerings**

The mission of the MHS World Languages Department is to promote linguistic, cultural and intercultural proficiency that empowers all students to become global citizens. Proficiency in a second language empowers students to communicate in the target language while actively connecting to different cultures. World Languages have become an integral component of 21st century education. Our program encourages multilingual experiences and multicultural awareness that promotes global citizenship skills. Our curricula follows the ACTFL standards and focuses on five major goal areas: Communication, Culture, Connections, Communities and Comparisons.

## **Core Courses**

<b>Grade(s)</b>	<b>Course</b>	<b>Level</b>	<b>Periods/ Cycle</b>	<b>Credits</b>
9	Spanish I	CP	6	6
	French I	CP	6	6
	Latin I	H, CP	6	6
	French II	H, CP	6	6
	Spanish II	H, CP	6	6
	Mandarin II	H, CP	6	6
10	French II	H, CP	6	6
	French III	H, CP	6	6
	Spanish II	H, CP	6	6
	Spanish III	H, CP	6	6
	Latin II	H, CP	6	6

	Mandarin II	H, CP	6	6
	Mandarin III	H, CP	6	6
11	French III	H, CP	6	6
	French IV	H, CP	6	6
	Spanish III	H, CP	6	6
	Spanish IV	H, CP	6	6
	Latin III	H, CP	6	6
	Mandarin III	H, CP	6	6
	Mandarin IV	H, CP	6	6
12	French IV	H, CP	6	6
	French V	AP, H	6	6
	Spanish IV	H, CP	6	6
	Spanish V	AP, H	6	6
	Latin IV	H, CP	6	6
	Mandarin IV/V	H, CP	6	6

Students wishing to obtain Honors credit will be required to complete additional course work, including but not limited to: weekly assignments, enrichment activities, and an additional literature or research-based project.

### **WORLD LANGUAGES CORE CLASSES**

Students beginning a world language at Medway High School must take French I, Latin I or Spanish I. The Massachusetts Public four-year Colleges and Universities require students to have taken at least two years (but recommend three years) of a High School World Language.

#### **FRENCH I 401**

(CP)

Grades: 9 - 12

Periods: 6

Credits: 6

This course is intended for those students who are beginning their formal study of French for the first time. This course will stress the four basic skills of language acquisition, listening, speaking, reading and writing. It will also introduce the students to the French-speaking world. This course will maintain an appropriate pace for successful acquisition of the spoken language.

#### **FRENCH II 411/412**

(CP/Honors)

Grades: 9 – 12

Periods:6

Credits: 6

This is a continuation of the skills developed in French I, or who have developed sufficient skills in Middle School French, with additional emphasis on reading and speaking.

Prerequisite: Passing grade in French I or teacher recommendation

#### **FRENCH III 420/421**

Grades 10-12

Periods: 6

(CP/Honors)\_\_\_\_\_

Credits: 6

This level is a continuation of the development of listening, speaking, reading, and writing skills, with an emphasis on reading for comprehension and writing in a controlled progression. Additional grammar will be presented and will be practiced through extensive use of tapes and oral exercises. Cultural readings are an integral part of the text.

**FRENCH IV 430/431**

Grades 11-12

Periods: 6

(CP/Honors)\_\_\_\_\_

Credits: 6

Emphasis is placed on written and oral communication. Class discussions are conducted in French, and written assignments are completed with the goal of allowing the student to freely express his or her thoughts based on: literary readings of works from the seventeenth century through modern times, current events in France and other Francophone countries, customs, and cultural and historical aspects of different French provinces. Basic grammar and literature texts are used, along with magazines, readers, resource books and French newspapers. Audiovisual materials are an integral part of the course.

Students who enroll in French 430 (French IV Honors) can expect to read, write, and respond with a higher responsibility of independence, more self-directed learning, and less scaffolding of assignments; students should consider their interest in the subject and overall motivation in selecting this course. French IV Honors students are recommended on the basis of French III performance and the recommendation of the French III teacher.

Prerequisite: Passing grade in French III CP

**AP FRENCH/ FRENCH V 440/441**

(AP/Honors)

Periods: 6

Grade: 12

Credits: 6

AP French is a course designed for those students preparing to take the AP exam. This course provides students the opportunity to go from general language acquisition/comprehension to improved oral and written communication. Students read, summarize and discuss authentic literature, mimic native pronunciation, and discuss current events. The objective of this course is to expand the knowledge of the French language and culture and to develop the necessary skills to successfully complete the AP exam. Those students who do not wish to take the AP exam may receive Honors credit for this course. Please see your guidance counselor for more information.

Prerequisite: Passing grade in French IV and teacher recommendation

**SPANISH I 451**

(CP)

Periods: 6

Grades: 9 - 12

Credits: 6

This course is intended for those students who are beginning their formal study of Spanish for the first time. This course will stress the four basic skills of language acquisition, listening, speaking, reading and writing. It will also introduce the students to the Spanish-speaking world. This course will maintain an appropriate pace for successful acquisition of the spoken language.

**SPANISH II 461/462**

Grades 9-12

(CP/Honors)\_\_\_\_\_

Periods: 6

Credits: 6

This course is a continuation of the content and skills developed in Spanish I, with additional emphasis on reading and listening comprehension. This course is designed to solidify the basic language structures learned in Spanish I with the emphasis turning towards the application of these structures in communicating both verbally and in writing. Students are expected to manipulate the language to be able to expand their communicative abilities as they explore more grammar concepts and vocabulary. Use of the target language will continue to be an expectation when we address all ACTFL oriented goals: communication, culture, connections, communities and comparisons. Students who enroll in Spanish 462 (Spanish II Honors) can expect to read and respond with a higher responsibility of independence, more self-directed learning, and less scaffolding of assignments.

Prerequisite: Passing grade in Spanish I and teacher recommendation.

**SPANISH III 471/472**

Grades 10-12

(CP/Honors)\_\_\_\_\_

Periods: 6

Credits: 6

This course assumes a solid foundation of the language and that students have the ability to manipulate the language as they apply it to new situations. Topics will change from personal to social and society. Students will also be able to apply grammatical concepts as they learn a wide variety of tenses. Most communications in the class will be performed in the target language by both the instructor and students. This course includes a thorough and intensive review of the grammatical principles of Spanish. The course will include practice in Spanish conversation and reading. Emphasis is placed on the development of the ability to understand the spoken language.

Prerequisite: Passing grade in Spanish II CP and teacher recommendation

**SPANISH IV 480**

Grades 11-12

(CP/Honors)\_\_\_\_\_

Periods: 6

Credits: 6

This course includes a review of grammatical principles of Spanish, with opportunity to use previously learned structures and vocabulary. This course will include practice in conversation, composition, and correspondence. There will be readings of cultural and literary content. Emphasis on the four skills (listening, speaking, reading, and writing) of learning a foreign language is an integral part of the course.

Students who enroll in Spanish 480 (Spanish IV Honors) can expect to read, write, and respond with a higher responsibility of independence, more self-directed learning, and less scaffolding of assignments; students should consider their interest in the subject and overall motivation in selecting this course. Spanish IV Honors students are recommended on the basis of Spanish III performance and the recommendation of the Spanish III teacher.

Prerequisite: Passing grade in Spanish III CP and teacher recommendation.

**AP SPANISH/SPANISH V H 490**

(AP/Honors)

Grade: 12

Periods: 6

Credits: 6

This course provides students the opportunity to go from general language acquisition/comprehension to improved oral and written communication. Students read, summarize and discuss authentic literature, mimic native pronunciation, and discuss current events. The objective of this course is to expand the knowledge of the Spanish language and culture and to develop the necessary skills to successfully complete the AP exam. \_Those students who do not wish to take the AP exam may receive Honors credit for this course. Please see your guidance counselor for more information.

Prerequisite: Passing grade in Spanish IV and teacher recommendation

**SPANISH V 491**

(CP)

Grade: 12

Periods: 6

Credits: 6

This course will include readings from classical and contemporary literature. The difference of style of various Spanish authors will be compared and discussed. More sophisticated grammatical structures will be studied. Students will be expected to read and review works in Spanish as the entire course will be conducted in Spanish.

Prerequisite: Passing grade in Spanish IV CP and teacher recommendation

**LATIN I 496/497**

(CP/Honors)

Grades: 9 - 12

Periods: 6

Credits: 6

The overall objectives of Latin I are to bring students quickly to the point where they can read the Latin of classical authors with confidence; to develop awareness of the culture of the Romans, its historic significance, and its contemporary relevance; to enhance general language learning techniques and aptitudes, including facility with English; to develop the students' full intellect by strengthening skills of deductive and analogous reasoning, interactive learning, comparative analysis and critical assessment. Through graded readings in Latin, the topics covered will include basic Latin grammar concepts, strong Latin vocabulary and English derivatives and pertinent Roman culture and history.

**LATIN II 498/499**

(CP/Honors)

Grades: 10 - 12

Periods: 6

Credits: 6

The overall objectives of Latin II are to bring students quickly to the point where they can read the Latin of classical authors with confidence; to develop awareness of the culture of the Romans, its historic significance, and its contemporary relevance; to enhance general language learning techniques and aptitudes, including facility with English; to develop the students' full intellect by strengthening skills of deductive and analogous reasoning, interactive learning, comparative analysis and critical assessment. Through continued graded readings in Latin, the topics covered will include intermediate Latin grammar concepts, more expansive vocabulary and English derivatives and further, pertinent Roman culture and history.

Prerequisite: Passing grade in Latin I (CP)

**LATIN III 499/500**

(CP/Honors)

Grades: 10 - 12

Periods: 6

Credits: 6

This course requires students to utilize the Latin grammar concepts and vocabulary attained in Latin I and II as well as to deepen and expand their grammar knowledge in order to begin the exploration of classical Roman authors with confidence. Students will be required to analyze sophisticated, unadapted works including, but not be limited to, those of Eutropius, Caesar, Cicero, Augustus, Pliny, Petronius, and Vergil. In addition, students will continue their study of Roman history while gaining a more expansive, authentic vocabulary. This course will also further emphasize ancient Latin vocabulary connections to English derivatives as well as create a deeper understanding of Roman culture and history.

Prerequisite: Passing grade in Latin II (CP) & Teacher recommendation (Honors)

### **LATIN IV 501/502**

(CP/Honors)

Grades: 11 - 12

Periods: 6

Credits: 6

This course requires students to utilize the Latin grammar concepts and vocabulary attained in Latin I, II, and III and to continue the exploration of classical Roman authors with confidence. Students will be required to analyze sophisticated, unadapted works including, but not be limited to, those of Caesar, Cicero, Pliny, Ovid, and Vergil. Students will be able to read and understand sentences featuring complex syntactical elements and passages of Latin prose and poetry from the Classical and later Latin poets with appropriate assistance provided by notes. They will be able to recognize some figures of speech and features of style found in passages. In addition, students will continue their study of Roman history while gaining a more expansive, authentic vocabulary.

Prerequisite: Passing grade in Latin III (CP) & Teacher recommendation (Honors)

### **MANDARIN I 510\***

(CP)

Grades: 9-12

Periods: 6

Credits: 6

This course is meant to provide students a solid foundation of pronunciation, grammar, and essential vocabulary in their pursuit of Mandarin language acquisition. The overarching goal of the Mandarin program is to provide students the skills necessary to communicate in Mandarin through listening, speaking, reading and writing at home, at school, and in the community. Through the acquisition of these skills, students gain knowledge and understanding of the cultures of Chinese-speaking countries. Through the connection of Chinese learning with other disciplines, students develop insights into the nature of language and culture by comparing Chinese-speaking cultures with his/her own culture.

*\*Not offered in 2021-2022*

### **MANDARIN II 520**

(CP/Honors)

Grades: 9-12

Periods: 6

Credits: 6

Students who have completed their study of Mandarin I may continue to pursue their study in Mandarin II. This course will provide students with a greater focus on sentence structure and further provide students the skills necessary to communicate in Mandarin through listening, speaking, reading and writing at home, at school, and in the community. The translation of literature, such as short stories, will be integrated into the course to further enhance student understanding of the culture and history of China.

Prerequisite: Passing grade in Mandarin I

**MANDARIN III 530**

(CP/Honors)  
Grades: 9-12

Periods: 6  
Credits: 6

Students who have completed their study of Mandarin II may continue to pursue their study in Mandarin III. This course will provide students with a greater application of the language with the assumption that students have a greater ability to manipulate the language. Topics will expand from personal to include social and society. Students will be expected to read, write, and speak using a variety of tenses and more advanced sentence structure as well as understand when listening to these tenses and structures. The course will continue the translation of literature, and texts will be integrated into the course to further enhance student understanding of the culture and history of China.

Prerequisite: Passing grade in Mandarin II

**MANDARIN IV 540/541**

(CP/Honors)  
Grades: 11-12

Periods: 6  
Credits: 6

Mandarin IV curriculum focuses on conversations, vocabulary in the context of social issues and cultures such as Chinese history and festivals, Environmental Protection and Energy Conservation, Changes in China, Life and Wellness, Gender Equality. It is designed to expose students to the problem solving skills needed in China and global communities, such as Interviewing for a job, Money Management and Investing, traveling and living as Foreigners.

The class is conducted mostly in Chinese Mandarin and students are expected to communicate in the target language. Group and individual projects will be used to help students to build teamwork and self-learning skills. Throughout the year students increase their ability to communicate in target language using four skills (listening, speaking, reading, and writing) and three modes of communication (interpersonal, interpretive, and presentational). Students this year will work towards the Intermediate-mid level of the ACTFL Can-do Benchmarks.

Prerequisite: Passing grade in Mandarin III & Teacher recommendation (Honors)

**MANDARIN V 550/551**

(CP/Honors)  
Grades: 11-12

Periods: 6  
Credits: 6

Students who have completed their study of Mandarin IV or followed the Mandarin IV curriculum as an Mandarin III student may continue to pursue their study in Mandarin V. This is an advanced level Mandarin course that will challenge the students' reading, listening, reading, and writing abilities. It will further expand students' application of the language with the assumption that students have an extensive knowledge of how to manipulate the language. Topics will expand from personal to include social and society. Students will be expected to read, write, speak using a variety of tenses and more advanced sentence structure as well as understand when listening to these tenses and structures. Students who wish to take this class should be expected to assume a heavy workload as this is the ideal course for establishing a solid foundation of pursuing Mandarin in higher level academic settings (e.g., college).

The course will continue the translation of ancient and contemporary literature. Other texts will also be integrated into the course to further enhance student understanding of the culture and history of China.

Prerequisite: Mandarin IV; Mandarin III students who followed the Mandarin IV curriculum

## Physical Education and Wellness

Physical Education is an integral part of the total education process. The fundamental purpose is to assist each student in his individual social, emotional, intellectual, physical, and psychomotor growth. Through planned developmental experiences, Physical education offers each student the opportunity to develop motor skills, social-interaction techniques, and an appreciation of movement.

Good health and physical fitness are vital to today’s living, a positive attitude toward participation in physical activity is essential; especially in an era when more people than ever have leisure time.

As physical activity can positively affect a person’s health throughout his lifetime, it is important that, at an early age, students learn, understand, and appreciate the health benefits to be gained. The curriculum emphasizes concepts and activities, which enable the student to continue throughout their adult years, whether as a spectator or participant.

### **Core Courses**

Grade	Courses ‘	Level	Periods/ Cycle	Credits
9	IPEC 9 ( <i>Full-year, alternating day</i> )	Unleveled	3	3
10	IPEC 10 ( <i>Full-year, alternating day</i> )	Unleveled	3	3
11-12	PERSONAL HEALTH & WELLNESS I ( <i>One Semester</i> )	Unleveled	3	1.5
11-12	TEAM & INDIVIDUAL SPORTS ( <i>One Semester</i> )	Unleveled	3	1.5
11-12	FITNESS FOR LIFE	Unleveled	3	1.5

### PHYSICAL EDUCATION

#### IPEC - Interdisciplinary Physical Education Curriculum

##### IPEC 9 940

Year-long, Alternating day \_\_\_\_\_ Periods: 3  
 Grade: 9 \_\_\_\_\_ Credits: 3

IPEC 1- This is a full year wellness course that will develop student’s social emotional skills by focusing on team building, communication, cooperation, and conflict resolution. The course will also focus on the development of the concepts of health related fitness through adventure activities. As an

interdisciplinary course, content will also include project based activities aligned with the grade 9 curriculum in ELA, Socials Studies, Math and Science.

### **IPEC 10 941 (Year Long Course)**

Year-long, Alternating day	_____	Periods: 3
Grade: 9		Credits: 3

IPEC2 is a non-traditional, adventure based curriculum for all sophomore students. Through non-traditional initiative based activities and training students will develop trust amongst their peers and individual leadership skills. This course is designed to challenge students both physically and mentally and will encourage students to work together in a cooperative manner to accomplish common goals. Throughout this course students will continue to learn about the importance of healthy mind/body development and gain a better appreciation for individual differences. As an interdisciplinary course, content will also include project based activities aligned with the grade 10 curriculum in ELA, Social Studies, Math and Science.

### **PERSONAL HEALTH & WELLNESS 960**

Semester-long, Alternating day	_____	Periods: 3
Grades: 11		Credits: 1.5

This course is designed to give students the basic understanding of what is needed to live a healthy lifestyle. Through a combination of classroom lessons and physical activity, students will learn about concepts of good nutrition, stress management, components of fitness, and how to make healthy lifestyle choices. Students will develop fitness plans, set wellness goals, and track their progress throughout the semester.

### **TEAM AND INDIVIDUAL SPORTS 962**

Semester-long, Alternating day	_____	Periods: 3
Grades: 11		Credits: 1.5

This course is for the student who is interested in a competitive team as well as individualized sports. Outdoor field sport activities may include: Flag football, field hockey, baseball, softball, soccer, lacrosse, and ultimate Frisbee. Indoor court sport activities may include: basketball, floor hockey, handball, volleyball. Activities will be determined by interest, facility availability, and weather.

### **AEROBICS & CARDIO FITNESS 963**

Semester-long, Alternating day	_____	Periods: 3
Grades: 11		Credits: 1.5

This course will focus on cardiovascular fitness and endurance. The course will consist of a variety of classes including kickboxing, step aerobics, circuit training, abdominal strengthening, and group activities/games. Students will assess their levels of physical fitness, set goals, and work to meet those goals each day in class.

### **FITNESS FOR LIFE 965**

Semester-long, Alternating day	_____	Periods: 3
Grades: 11		Credits: 1.5

This course is designed for students who would like to improve their fitness in a non-competitive environment and develop a personal fitness plan.. Activities may include yoga, weight room, circuit training as well as cardiovascular training.

## **PERFORMING ARTS**

Anthropologists have found no society anywhere that functions without music. In every culture, music plays a role, not only in the rituals of society, but also in the personal lives of its citizens. Music provides a means of self-expression and expressing one’s creative ability. Music is a form of communication. It possesses a symbol system that is unique, most powerful, and profound. Through the study of music, students are better able to comprehend the nature of humankind.

Music as a discipline involves the three traditional domains of learning: cognitive, affective, and psychomotor. As well as an additional domain referred to as the “aesthetic domain” an area that the arts make a unique contribution to the development of the whole being, offering insight into human feelings and emotions.

Music courses at Medway High School offer a variety of musical styles and genres. All courses emphasize the educational value and techniques while also providing entertainment and social opportunities to its participants and the community.

### **Course Offerings**

<b>Grade(s)</b>	<b>Course</b>	<b>Level</b>	<b>Periods/ Cycle</b>	<b>Credits</b>
9-12	Band	H, CP	6	6
9-12	Chorus	H, CP	6	6
9-12	Treble Chorus	H, CP	6	6
11-12	Music Theory*	H, CP	6	3
11-12	AP Music Theory	AP	6	6
	<b>Electives</b>			
9-12	Beginning Guitar	CP	6	3
9-12	Advanced Guitar	CP	6	3
9-12	Beginning Piano	CP	6	3
9-12	Music in American Culture*	CP	6	3
9-12	Theatre Workshop I*	CP	6	3
9-12	Theatre Workshop II	CP	6	3

9-12	Intro to Film Studies	CP	6	3
9-12	Music Technology & Production*	CP	6	3

*\*Not offered in 2021-2022*

## MUSIC

### **BAND 725**

(CP/Honors)  
Grades: 9 - 12

Periods: 6  
Credits: 6

Band provides an opportunity for all wind, brass and percussion players to enjoy music through performance of a large variety of band literature. During the fall, the band performs as a "Pep Band". Members are required to perform at home football games, unless they are members of the football team or fall cheerleading squad. Performances may include evening concerts, festivals, community events, and parades.

### **CHORUS 731**

(CP/Honors)  
Grades: 9 - 12

Periods: 6  
Credits: 6

The Medway High School Chorus is open to all students who wish to expand their technical ability to sing, as well as their knowledge of and interest in choral music. The students will gain and refine skills at individual and ensemble levels as they learn to work together to produce the highest quality music possible. The ensemble will perform music from a wide variety of genres, and will be enriched not only in the technical aspects of music, but in the cultural and historical aspects as well. Chorus performs at each of the MHS music concerts in December, March, and May.

### **Band and/or Chorus Honors Credit**

Students have the option to take chorus and/or band for honors credit. Students participating in performance ensembles at the honors level are expected to conduct themselves as section leaders during rehearsal and provide assistance when needed. Outside of rehearsal, honors students are expected to audition for the Central District Music Festival in November. Additional assignments outside the regular curriculum may also be required. A conference with the ensemble director is required before admission to the honors program.

## ELECTIVES

### **MUSIC THEORY 735\***

(CP)  
Grades: 9 – 12 (Semester Course)

Periods: 6  
Credits: 3

This semester course is designed to develop each student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. Topics covered include areas such as scale patterns, rhythmic devices, tonality, and basic part writing.

*\*Not offered in 2021-2022*

### **BEGINNING ACOUSTIC GUITAR 737**

(CP)  
Grades 9-12 (semester course)

Periods: 6  
Credits: 3

This introductory course is designed for beginners who have limited or no experience in guitar. Basic strum patterns, open chords, progressions, and note reading are studied. Basic music theory and notation are covered as part of the curriculum. Students do not need to own a guitar to enroll in this course.

### **ADVANCED ACOUSTIC GUITAR 747**

(CP) Periods: 6  
Grades 9-12 (semester course) Credits: 3

This course advances the skills for students with some exposure/mastery of beginning guitar. Barre chords, tablature, improvisation, and genre-specific playing styles (folk, blues, rock, etc.) are studied. Music theory and notation are covered as part of the curriculum. Students do not need to own a guitar to enroll in this course.

PREREQUISITE: Grade of 80 or above in Beginning Guitar or by Student Audition with Instructor.

### **BEGINNING PIANO 738**

(CP) Periods: 6  
Grades 9-12 (semester course) Credits: 3

This introductory course is designed for beginners who have no experience in piano. The concepts of reading and performing standard notation, basic level piano repertoire, piano technique, sight-reading, and improvisation be presented. No experience in choral or instrumental music is necessary.

### **MUSIC IN AMERICAN CULTURE 739**

(CP) Periods: 6  
Grades 9-12 (semester course) Credits: 3

From blues to the Beatles to Justin Bieber, this semester-long music elective will examine the evolution of music throughout our country's history and its impact on American society and culture. Through listening, analysis, and interpretation, students will have the opportunity to investigate the historical and cultural developments of music and discover its symbiotic relationship with their country, their culture, and their lives.

### **MUSIC TECHNOLOGY & PRODUCTION 740\***

(CP) Periods: 6  
Grades 9-12 (semester course) Credits: 3

The Music Technology and Production course provides students opportunities in music in performing, analyzing, arranging, and composing music through the use of specific software and web resources. Students create original music using non-traditional (sequencing/loops) methods as well as traditional methods (notation assignments). Students also perform on keyboard and develop a portfolio of performances and media projects showing musical growth over time.

*\*Not offered in 2021-2022*

### **INTRODUCTION TO FILM STUDIES 070**

(CP) Periods: 6  
Grades 9-12 (Semester Course) Credits: 3

This course will be an introduction to film, acquainting students with the technical vocabulary necessary to dissect the complexities of film as a form of narrative. Much like an author uses words and language to focus the reader's viewpoint, a filmmaker uses the camera to tell a story. Students will study how

visual elements challenge the imagination by viewing many films from the past 100 years. Students will discuss and analyze film topics such as aesthetics, narrative techniques, characterization, editing, cinematography and art direction. Students will be able to answer questions such as: What is the relation of one scene to another? What meanings are created by camera position and distance? How does a film draw us in, making us collaborators or voyeurs?

### **THEATRE I\***

(CP)  
Grades 9-12 (Semester Course)

Periods: 6  
Credits: 3

This course provides opportunities for students that are interested in learning basic theatre skills and techniques including pantomime, improvisation, vocal production, theatre vocabulary and theatre history. Students will learn the fundamentals of theatre through projects including the creation and performance of short scenes and ensemble acting.

*\*Not offered in 2021-2022*

### **THEATRE II**

(CP)  
Grades 9-12 (Semester Course)

Periods: 6  
Credits: 3

Theatre II is for the student who has developed a deeper interest in the craft of theatre. In this course students will spend more time perfecting their individual skill through scene work, monologues, staging, and script writing.

*Prerequisite: successful completion of Theatre I and/or recommendation from instructor.*

### **AP MUSIC THEORY**

(AP)  
Grades 11-12

Periods: 6  
Credits: 6

This is a yearlong course that teaches a wide array of musical concepts. Along with music theory and beginning composition, the students also deal with aural skills, dictation, and sight singing. Students learn the basics of music notation and score analysis along with knowledge of basic tonal harmony in the eighteenth century common-practice period style. The ultimate goal of the course is to develop a student's ability to recognize, understand, analyze, and describe the aspects and processes of music that is heard or seen on a score. Students engage in a variety of written, singing, and compositional exercises that teach them the many aspects of musical composition and analysis. The focus is on learning the foundational principles of music theory that lead to aptitude in analysis and beginning composition. Students who pass the AP exam may earn college credit at a number of colleges and universities. The instruction and practice in this course will serve to greatly enhance and improve a student's ability to comprehend, analyze, and notate music in a traditional style.

*Prerequisite: successful completion of Music Theory and/or recommendations from the music faculty.*

## Visual Art

The Medway High School Art Program is committed to the belief that all students can be challenged through instructional art courses. Using the vehicle of visual art, students learn to think and communicate in a non-verbal language. This practice deepens understanding and awareness of the self and the world in which we live. By expressing ideas and understandings in this way, students get to have what James Joyce called “two things at a time.” The art department recognizes that when the multiple intelligences are engaged in learning, the result is deeper and longer lasting results for the student.

All art courses are sequentially designed to build upon and enhance the learning acquired in previous years. Our course offerings appropriately meet the needs of both students enrolled for personal enrichment and the serious art student who is a potential art major developing a portfolio for college admission.

Our program is committed to education by and of the senses. We guide our students in how to use materials and techniques in support of ideas.

### *Core Course Offerings*

FOUNDATIONS OF ART  
PAINTING AND DRAWING  
FINE ARTS  
ADVANCED FINE ARTS/PORTFOLIO

### *Semester Electives*

PAINTING I  
CERAMICS I  
CERAMICS II  
DIGITAL MEDIA AND DESIGN I  
DIGITAL MEDIA AND DESIGN II  
PHOTOGRAPHY

### **FOUNDATIONS OF ART 751**

(CP)

Grades: 9 - 12 (Semester Course)

Periods: 6

Credits:3

This is a survey course that introduces students to the fundamental artistic principles of composition and design. Students will receive a solid foundation in drawing from life, memory, and imagination. They will learn color theory and practice through painting with tempera, watercolors, and acrylics. They will extend and expand their knowledge by applying the principles learned to printmaking, sculpture, ceramics, and crafts. In conjunction with their studio work, students will become acquainted with the artworks of past and present. They will be trained to analyze and evaluate their own work and the work of other artists.

*Foundations of Art is the Prerequisite for all Visual Arts courses*

### **PAINTING AND DRAWING 752**

(CP/Honors)

Grades: 9- 12

Periods: 6

Credits: 3

This is a continuation of the Foundations I course, dedicated to expanding students critical thinking and

craftsmanship in preparation for more specific disciplines. Students will be exposed to various studio techniques and media such as pastels, charcoal and pen and ink. Students will also expand their knowledge of color theory with an introduction to acrylic painting, and watercolor. They will further their critical thinking skills, and develop a vocabulary for discussing and critiquing their own work and the work of other artists.

Prerequisite: Teacher recommendation

### **PAINTING I 770**

(CP/Honors)

Grades: 10 - 12 (Semester Course)

Periods: 6

Credits: 3

This course introduces concepts and techniques in painting, immersing students in abstract values in the language of painting. Students will investigate image and metaphor, figuration and abstraction, iconography and narrative, color and drawing, pictorial space and its compression. Various projects and specific activities may be required, and students will be expected to explore individual styles and ideas.

Prerequisite: Foundations of Art and Painting & Drawing

### **FINE ARTS 761**

(CP/Honors)

Grades: 10 - 12

Periods: 6

Credits: 6

This course is an intensive exploration of drawing and painting techniques. Students will be exposed to a variety of painting and drawing mediums and encouraged to develop a large repertoire of artistic abilities. Equal emphasis will be placed upon the ideas and subject matter painted and drawn so that students will not only gain technical expertise, but also the ability to formulate original ideas and express them clearly in a visual way. They will learn to analyze and understand a wide range of artistic forms; ancient and modern art, commercial art and illustration, design and graphics, and how these diverse disciplines relate to our daily lives.

Prerequisite: teacher recommendation

### **ADVANCED FINE ARTS 763**

(CP/Honors)

Grades: 11, 12

Periods: 6

Credits: 6

This course extends and deepens the drawing and painting experiences learned in Fine Arts. The lessons will build sequentially on the concepts taught in Fine Arts. Students will become more accomplished at controlling the various mediums to make deeper and more sophisticated visual statements. Students will study artists of the past in depth. A portfolio of artwork will be prepared. GLCC designated course.

Prerequisite: teacher recommendation

### **PORTFOLIO 791**

(CP/Honors/AP)

Grade: 11, 12

Periods: 6

Credits: 6

This upper level course would focus on the creation of a student portfolio that showcases visual art abilities and skills. Such a portfolio is an asset for students who plan to pursue art as a major and for students intending to continue on in other studies. The emphasis of this course will be on in-depth

development of ideas and personal themes. Students will be encouraged to use materials and techniques to skillfully express the important universal ideas and themes that have always engaged humanity.

Prerequisite: Passing grade in Fine Arts or Advanced Fine Arts and teacher recommendation

### **CERAMICS I 781**

CP

Grades: 10 - 12 (Semester Course)

Periods: 6

Credits: 3

This course introduces students to the oldest art form. Students will use the hand building techniques of pinch, coil, slab and sculpture, to express their unique ideas and visions in a three dimensional medium. This experience reinforces spatial and mathematics skills as well as enhancing problem solving abilities. Clay is at once challenging and forgiving. As students learn to manipulate materials and techniques in support of ideas, they build their imagination and ability to think. The emphasis is on hand building techniques because they best develop cognitive abilities. Students will also be introduced to the potter's wheel.

Prerequisite: Foundations I

### **CERAMICS II 782**

(CP/Honors)

Grades: 10 - 12 (Semester Course)

Periods: 6

Credits: 3

This course offers the student advanced techniques in hand building, potter's wheel, sculpture, glazes and firing. Prerequisite: passing grade in Ceramics I and teacher recommendation

### **DIGITAL MEDIA & DESIGN I 783**

---

(CP)

Grades: 10-12 (Semester course)

Periods: 6

Credits: 3

This is a survey class that will introduce the students to the history and design principles of graphic design and basic photographic digital process and imaging. Students will learn to create layouts, work with fonts and apply their knowledge to create vibrant compositions and print ready work. Learning digital camera controls and computer programs such as Adobe PhotoShop will be explored. Students are encouraged to have the use of their own digital camera. The work associated with this class will be executed primarily on computers.

Prerequisite: Foundations I

### **DIGITAL MEDIA & DESIGN II 784**

(CP/Honors)

Grades: 10-12 (Semester course)

Periods: 6

Credits: 3

Students in Graphic Design II will further their skills from Graphic Design 1. Introduction to Illustrator, and more intensive layouts, color theory, design and artistic skills will be studied. Students are encouraged to have the use of their own digital camera. The work associated with this class will be executed primarily on computers.

Prerequisite: Graphic Design I

## **PHOTOGRAPHY 793\***

(CP)

Grades: 10 - 12 (Semester Course)

Periods: 6

Credits: 3

This semester long course will explore the history of photography along with basic black and white photographic processes. Students will learn to use a 35mm camera, and develop and print their own black and white film. Class size is limited to ten due to the size of the dark room and number of photographic enlargers.

*\*Not offered 2021-2022*

## **Technology**

Technology education involves solving problems in the areas of communication, manufacturing, production, power and energy. Students will apply the use of materials, tools, processes and technical ideas to develop insight and understanding of technology in our changing society.

Career readiness and success after graduation education is designed to aid the student in achieving and learning according to individual preferences via classroom curriculum and project based learning. Students will be prepared for the next chapter in their life, whether it is a post secondary education, the world of work, or becoming a member of the armed forces.

### ***Course Offerings***

VIDEO TECHNOLOGY I

VIDEO TECHNOLOGY II

VIDEO TECHNOLOGY III/MHS NEWSWATCH

## **VIDEO TECHNOLOGY 1 850**

(CP)

Grade: 9-12 (Semester Course)

Periods: 6

Credits: 3

This course is open to any student and will provide students with a fundamental knowledge of the basics of television production. It is designed to familiarize students with equipment and procedures used for basic audio/video recording. Units will include: operation of video equipment, video editing, scriptwriting, and on-camera techniques. This step-by-step class will take students through the hands-on process of learning how to operate a camcorder, various microphones, non-linear editing software and be introduced to electronic news gathering. Students will work individually and in small groups on assigned projects and activities designed to enhance the video production experience. No prior experience is required.

## **VIDEO TECHNOLOGY II 852**

(CP)

Grade: 9-12 (Semester Course)

Periods: 6

Credits: 3

This course is a continuation of Video Technology I and will emphasize advanced skills in video technology. Topics include: advanced audio techniques, project planning, including scriptwriting and storyboarding, as well as video movie making and multi-camera studio production. Students will work individually and in small groups on assigned, hands-on projects designed to enhance the video

production experience.

Prerequisite: Successful completion of Video Technology I

**VIDEO TECHNOLOGY III/ MHS NEWSWATCH 853**

(CP)

Grade: 9-12 (Semester Course)

Periods: 6

Credits: 3

This course will emphasize students developing advanced skills in Video Technology. This course is a continuation of Video Technology I and II. Topics include: scriptwriting, project planning, and various styles of video production such as fictional drama, comedy, documentary and commercial production. Students in this class will produce segments for the MHS Newswatch. Students will work in various roles both in front of and behind the camera. Those enrolled in this course will act as designers, writers, anchors, and reporters covering all things MHS. Students must complete 850/852 in order to take this course. Students will work individually and in small groups on assigned, hands-on projects designed to enhance the video production experience. Students will work individually and in small groups on assigned, hands-on projects to enhance their electronic field production experience.

Prerequisite: Successful completion of Video Technology II and teacher recommendation

**INTERDISCIPLINARY COURSES**

**CAREER READINESS FOR SUCCESS AFTER GRADUATION 846\***

Grade 12 (Semester Course)

Periods: 3

Credits: 3

Related to the Department of Secondary and Elementary Education’s definition of college and career readiness, this course seeks to support student development of knowledge, skills, and experiences for future success and employability, according to individual preferences. This project-based course will focus on career development benchmarks related to academic, personal-social and employability readiness to prepare for college, workplace readiness and civic engagement.

*\* Not offered in 2021-2022*

**PEER MENTORING**

Periods: 3/6

Grades 11, 12

Credits: 1.5/3

This course is designed to foster the development and enhancement of peer connections between Medway High School and ACCEPT Education Collaborative communities. This peer mentoring course will focus on team building, community based opportunities, social engagements, academic tutoring, and other peer mentoring activities between the shared communities. Through this mentoring experience students will be provided with growth opportunities in a variety of skills areas, including but not limited to communication, problem solving, team work, leadership, accountability, and collaboration

**S.H.O.P TECH HELP DESK**

Periods 1-6

Grade 9-12

Credits: 1.5-6

SHOP (Students Helping Other People) is the Medway High School student-run technology helpdesk. This program is very student centered and managed mostly through digital means on Google Classroom and Gmail. Students involved in SHOP participate in three areas of the program: IT, 21st Century Skills, and Student Centered Projects. The IT portion of the program has students answering help desk

questions as they come in from both students and teachers. The students also develop an understanding of how to go about a troubleshooting process and manage the inventory and repair of our 1:1 chromebook initiative.

## VHS LEARNING

Medway High School participates in the distance-learning program, VHS Learning. Any student in grades 10 – 12 at Medway High School may apply to take a course given by VHS Learning. This program allows Medway High School students the opportunity to take a wide variety of courses that are not offered at Medway High School.

Some of the potential courses that can be selected are: Art History (Pre-Renaissance to Present), Bioethics, Computer Animation with Scratch, Entrepreneurship, Environmental Science, Investing in the Stock Market, Pre-veterinary Medicine, Programming in Visual Basic, Screenwriting Fundamentals, Twentieth Century Women Authors: A Reflection of a Changing America, Video Game Design Using Game Maker, Web Design: Artistry and Functionality, World Conflict: A United Nations Introduction. Course catalogs can be researched at their website ([www.govhs.org](http://www.govhs.org)).

The VHS teacher (non-Medway staff) assigned by the program creates the criteria and submits all of the grading for the course. The level of the VHS course will be integrated and interpreted into the grading for Medway High School. Only VHS courses that are scheduled into the school day of a student, therefore replacing another course selection, will receive weighting and calculation.

The program space is limited. Selection will be done by grade, beginning with seniors. If further limitations are required, students will be selected by lottery and/or recommendation of the VHS coordinator. Once enrolled, a student and his/her parent will sign a contract, which explains the responsibilities of taking a distance-learning course.

Students may not enroll in VHS Learning courses that are offered as part of the Medway High School curriculum.

## Independent Study Program

1. The Independent Study program is in addition to the regular class load of the individual student. The credits earned for Independent Study fluctuate between one and six depending upon the number of periods per week.
2. The maximum amount of credits earned for an Independent Study Program will be six credits per year.
3. No advisor will have more than three students in the Independent Study Program.
4. Advisors will meet with individual students during study halls or after school when it is deemed necessary. Advisors must be members of the faculty; approval of an Independent Study must follow established administrative processes.
5. This program is open only to juniors and seniors and may be taken in any subject area. The student will absorb any extra expenses for projects, although the school facilities and equipment will be available under supervised conditions.

6. The Independent Study Program must be completed by May 1st of the school year in which credit is to be awarded.
7. Grades and credits earned in this program are not included in class rank.
8. Independent study courses may not be taken in lieu of core courses, yearly requirements or graduation requirements.

## Early Enrollment Program

The mission of the Rhode Island College Early Enrollment Program is to provide qualified high school students the challenge and opportunity to earn transferable college credits at an affordable price. The EEP staff works collaboratively and cooperatively with high school and college faculty to offer a rigorous post-secondary experience to students in their own supportive high school environment. The EEP is committed to maintaining the standards of excellence as established by the National Alliance of Concurrent Enrollment Partnerships of which we are a founding member.

The Early Enrollment Program is a school/college partnership with Rhode Island College which offers Medway high school seniors and juniors an opportunity to earn college credits while they are completing their high school diplomas. EEP has granted thousands of students, college credits for courses that they have completed while still in high school. In many instances, students have eliminated as much as one full semester of college work by enrolling in the EEP. **Medway High School has been approved to offer the following courses for the 2021-2022 school year: ECONOMICS, ADVANCED FINE ART, FRENCH 5 (CP), SPANISH 5 (CP) and MUSIC IN AMERICAN CULTURE, Please note that approval was granted but this does not mean that Medway High School would be able to offer these courses for the 2021-2022 school year due to various reasons. High School administration will notify parents and students of courses with final approval to run, prior to the end of the course change request period.** These courses overlap with courses being offered at Rhode Island College. Students who choose to sign up for these courses at Medway High School may do so without commitment to the college; however, if they decide to take these courses for college credit, then they enter into a partnership with the college by registering and paying a nominal registration fee and a substantially reduced tuition for each credit in which they enroll. When they successfully complete the course, the grade they receive appears on their high school transcript and on an official RIC transcript; they may use these credits as they enter RIC or transfer them to one of the many colleges and universities which accept RIC credits.

For information on the EEP program please visit their website.

<https://www.ric.edeep/index.php>

