

# Medway High School Program of Studies 2010-11

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*MESSAGE FROM THE PRINCIPAL-Richard L. Pearson*

To Students and Parents:

The purpose of this book is to help students and their parents make choices from among the range of courses available at Medway High School.

Please read this Program of Studies booklet carefully. At our annual Program of Studies night, administrators, guidance counselors, and department heads will be available to explain programs and to answer questions. I encourage you to attend this evening to develop a clear understanding of the course selection process.

The selection of an appropriate program of studies requires careful thought. Students are encouraged to develop their current interests and to try new areas to stimulate new interests. Students are urged to be ambitious but also realistic in their selection of a program of study.

While parents have the final responsibility for the selection of a program of study, questions are encouraged and should be brought to the Guidance Department. A program, once selected and scheduled, is difficult to change.

Ninth graders and their parents are asked to tentatively select all of their courses desired during the four years of high school. We have provided a Student Career Planning Worksheet for this purpose. While the plan will require updating each year, advance planning will help to ensure that your goals are attained. We look forward to working with you as you select an educational program.

Sincerely,

Richard L. Pearson

**“EXCELLENCE FOR ALL THROUGH LEARNING”**

ADMINISTRATORS

Richard L. Pearson	Principal
Frank T. Jackson	Assistant Principal

GUIDANCE COUNSELORS

Teresa Campana	Counselor Grades: 9-12 (A-F)
Claire Ford	Counselor Grades: 9-12 (O-Z)
Jennifer Lisk	Counselor Grades 9-12 (G-N)

DEPARTMENT HEADS

David Andreoni	Social Studies
Richard Boucher	K – 12 Director of Technology
Susan Cecchi	Foreign Language
Donna Colace	Science
Mary Dolan	Library/Media Center
Shanley Heller	Mathematics
Linda Matondi	English

MEDWAY HIGH SCHOOL  
PROGRAM OF STUDIES

MISSION STATEMENT

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.

## **GENERAL INFORMATION - GRADES 9-12**

Since Medway High School is a comprehensive high school, different ranges of abilities, interests, and goals must be considered. Each course is geared not only to particular levels of ability and achievement, but also to meet specific educational requirements. The progress of students in the various levels is evaluated periodically, and when through teachers' and counselors' recommendations, changes are deemed advisable, levels may be changed to meet the ability and achievement of students.

Depending upon individual goals, interests, abilities, and achievement, students will eventually further their education at a four-year college, two-year college, school of nursing, technical school, specialized school, the Armed Forces or enter employment immediately after graduation. Medway High School will endeavor to assist each student to become more aware of his or her potential.

### **SCHOOL COMMITTEE POLICY #52** **COURSE SELECTION CRITERIA**

Medway Public Schools encourages students to select the most challenging courses appropriate to the individual offered within each department or curriculum. There are several factors which the schools will consider when admitting students to courses:

#### **General**

1. Grade averages at Medway Public Schools and/or other schools.
2. Successful completion of required prerequisites.
3. Teacher recommendation(s).
4. Successful completion of entrance exam for admission to the course.
5. Recommendation of department head.
6. Staffing resources.
7. Space availability.
8. Any additional information which a student feels should be considered. (i.e.: A student's statement explaining the reasons why he/she should be enrolled in a particular course).

#### **Ninth Grade Honors Testing**

The academic honors program in the ninth grade is for those students who wish to challenge themselves at the highest level. Honors courses are offered in English, mathematics, science, and United States history. Students that are accepted into the honors program are expected to be highly self-motivated. The honors level coursework and subject matter "requires an intense commitment to independent thought and inquiry" (*Medway High School Program of Studies*). The honors program at the high school is for those students who have excelled at the highest level and plan to work toward Advanced Placement courses. Although honors courses begin in the ninth grade, the expectations will remain consistent with those of Advanced Placement students.

## Acceptance Criteria

Acceptance into the Honors Program in the 9<sup>th</sup> grade will be based upon three criteria:

- |  |     |
|--|-----|
| 1) Grade Averages of 7 <sup>th</sup> and 8 <sup>th</sup> grade | 50% |
| 2) Honors Placement Test score                                 | 40% |
| 3) Teacher Rubric Evaluation                                   | 10% |

These percentages will be combined for a final honors testing average. The cutoff for acceptance into the ninth grade program for all honors testing areas will be 90 and above.

The weighting of the grade averages will be:

- |  |     |
|--|-----|
| 7 <sup>th</sup> Grade (final average):     | 40% |
| 8 <sup>th</sup> Grade (first three terms): | 60% |

Within the grade level courses, there will be a multiplier for each level which was developed to represent the different level expectations.

- |                          |
|--------------------------|
| Level 1 – 1.1 multiplier |
| Level 2 – 1.0 multiplier |

Finally, the current eighth grade teachers will complete a Teacher Rubric Evaluation that will be factored into the final average using the following 4-point scale:

- |                    |  |
|--------------------|--|
| <b>4 = 10 pts</b>  | (The candidate exhibits <i>superior</i> mastery of the knowledge and skills of the subject as outlined in the Massachusetts State Frameworks.)   |
| <b>3 = 7.5 pts</b> | (The candidate exhibits <i>intermediate to advanced</i> performance in relation to the essential knowledge and skills of the subject as outlined in the Massachusetts State Frameworks.) |
| <b>2 = 5.0 pts</b> | (The candidate exhibits <i>minimum</i> performance in relation to the essential knowledge and skills of the subject as outlined in the Massachusetts State Frameworks.)                  |
| <b>1 = 2.5 pts</b> | (The candidate exhibits <i>below</i> the minimum acceptable expectations as outlined in the Massachusetts State Frameworks.)   |

As is stated above, if a student does not meet the above honors criteria, the schools will consider any additional information which a student feels should be considered, (i.e.: A student's statement explaining the reasons why he/she should be enrolled in a particular course).

### Time Frame – Contacts

Testing will be arranged so as to not create an unusual burden on participating students. Therefore, testing will take place between March 1<sup>st</sup> and April vacation with the intent of no more than 2 tests in a given week.

All eighth grade students with very strong academic skills and self-motivated commitment will be eligible for honors testing.

Once testing is complete, averages will be computed and all students will be informed of the results of the testing program. Questions pertaining to the results of the testing program should be directed to the curriculum coordinator of the testing area.

If a student does not meet the honors criteria in grade nine, he or she is not precluded from the honors or AP programs during the remaining high school years. Students will have the opportunity to apply and test into these courses at the conclusion of each school year. A placement test and the final grade will be used as the criteria for acceptance.

### **YEARLY REQUIREMENTS**

Every student in grades 9 through 12 must select a minimum of 32 credits per school year. Of these 32 credits, 30 must be in major academic subjects and 2 in physical education. A major academic subject is any course that meets seven 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. Virtual High School (VHS) courses cannot be used to meet the 32 credit per school year minimum.

Any students, who have not earned the minimum number of credits, as indicated below, are in danger of not graduating with their class. To advance to the next grade level homeroom, students must earn the following number of credits:

Grade 9	30 credits
Grade 10	60 credits
Grade 11	96 credits
For Graduation	128 credits

### **LEVELING PRACTICES**

Medway High School is committed to providing equitable educational opportunity to all students in accordance with the requirements of the Massachusetts Education Reform Act of 1993. As a result, programs are offered at Advanced Placement (AP), Honors, Accelerated, Standard, and College Core levels. The expectations of these levels vary in difficulty, pace, and depth of coverage.

### Advanced Placement/Honors Level

The AP and Honors student is highly self-motivated. A great deal of the work and course expectations will require an intense commitment to independent thought and inquiry. The AP course of study, in particular, is considered equivalent to a college freshman course and may lead to college credit depending on the result of the AP exam. Students enrolled in an AP course are required to take and pay for the AP exam. The cost of the AP exam ranges from \$80-\$90 per test. Registration and additional information can be found on the AP Central website at [www.apcentral.collegeboard.com](http://www.apcentral.collegeboard.com)

### Accelerated Level

At the Accelerated level, students should continue to have a genuine commitment to independent learning. The Accelerated student will be highly motivated and willing to accept the challenge of an academically rigorous curriculum.

### Standard Level

At the Standard level courses are intended to prepare students for attendance at a four-year college or university. These courses will challenge students to further their critical reading, writing, mathematical skills and thinking skills.

### College Core

The College Core level courses will prepare students for post-secondary college or employment. These courses have a strong emphasis on the development of essential skills in reading, writing, speaking, thinking and mathematical concepts necessary to become well-informed, educated citizens.

## **SELECTION OF COURSES**

As a student selects courses for the following year, please examine all of the options within the Program of Studies. Read the descriptions of the courses that are being considered, as well as those that a student may want to know more about. Also, talk with parents, teachers, counselors and curriculum coordinators to help make wise decisions concerning the best selection of courses for the future. Remember that the selected program should reflect the best judgment about a student, his/her interests, and ambitions, as well as the school's requirements. Try to select as broad a program and as competitive a program as possible in order to provide many alternatives for life after high school.

## **SCHEDULING/COURSES NOT OFFERED**

Courses contained in this booklet will be offered if there is adequate staffing, and funding. As the final schedule is built and student selections confirmed, some courses may be cancelled due to inadequate enrollments. Every consideration will be made to offer a full sequential program to as many students as possible. All students are encouraged to select alternative courses in anticipation of potential course cancellations.

## COURSE/LEVEL CHANGES

Once courses are selected, it is very difficult to change them. Changes will be made only for serious academic reasons. 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 two cycles (7-day cycle) of the school year. No changes for second semester courses will be considered after the first two cycles of the second semester.

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

1. Courses changed/dropped during the first half of the first quarter do not appear on the report card or transcript.
2. Courses changed/dropped after the middle of the first quarter have a grade recorded for the quarter and a “W” (withdrawn) recorded for the remaining quarters and for the year.

Parent requests for specific teachers cannot be honored. If a conflict arises that cannot be resolved by teacher/student/parent discussion, the parent should arrange a meeting with the department head. If the apparent problem remains unresolved, the parent should then contact the principal who will review the situation and arrive at a decision in a reasonable time.

## ELECTIVE COURSES

Elective courses are offered in all of the disciplines at Medway High School. These courses offer students the opportunity to explore other areas of interest outside of the basic graduation requirements. Since elective courses do vary in level of difficulty, it is strongly advised that students discuss their elective choices with the subject teacher, guidance counselor, and parents before making their final choices. Courses found in this Program of Studies within the elective area of each discipline cannot be used to meet the listed graduation requirements. The criteria for changing or dropping an elective course are the same as listed for all course/level changes.

The Virtual High School Program (VHS) is a distance learning offering for Medway High School students. The elective offerings within this program are quite extensive and can afford a student the ability to explore other areas of study outside of Medway High School. Programs enrolled in by past Medway High School students are: Introduction to Visual Basic, Contemporary American Poetry, Introduction to Astronomy, Young Adult Literature, Personal Finance, Web Design, and Film and Literature Study to name a few. More information can be found on page 68.

Another elective option for highly motivated and self-directed learners is the Independent Study program. This program is usually reserved for those students wishing to explore deeper content in a specific area of study. Cooperation with a Medway High School faculty member is mandatory. More information can be found on page 67.

## **GRADE POINT AVERAGE**

All courses that meet seven or more times in a seven-day cycle will be weighted and used in the calculation of the Grade Point Average (GPA). The GPA will be calculated at the end of six semesters for the college application process and at the end of the senior year for graduation, final transcripts, valedictorian, salutatorian, and honor essayist purposes. The weighted 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.

For transfer students, credits earned at another school will be interpreted by the administration and integrated into Medway High School's grading and credit system. A transfer student must complete 3 consecutive semesters and be enrolled on the first day of his/her senior year in order to be eligible for consideration as valedictorian, salutatorian, or honor essayist.

## **GRADUATION REQUIREMENTS**

All students must successfully complete a minimum of 128 credits. A minimum of 5 major academic courses and physical education, totaling 32 credits must be scheduled each year. Students in their senior year must successfully pass at least twenty-four (24) credits regardless of the number of previous credits earned in order to graduate. Courses that are taken outside of the Medway High School Program of Studies offerings will not be counted toward graduation requirements.

Minimum requirements:

English	24 credits	4 classes
Mathematics	18 credits	3 classes
Science	18 credits	3 classes
Social Studies	18 credits	3 classes
Physical Education	8 credits	4 classes

\* Most four-year colleges require a minimum of 2 years of the same foreign language.

## **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.
3. Students may only take courses at an accredited summer school program with an approved curriculum.
4. A subject area test may be required at the completion of the summer school course. This test will be averaged in as 20% of the summer school grade.

### **VIRTUAL HIGH SCHOOL**

Website: [www.govhs.org](http://www.govhs.org)

Medway High School participates in the distance-learning program, Virtual High School (VHS). This program allows Medway High School students the opportunity to take a wide variety of courses that are not offered at Medway High School. The VHS program is a tremendous opportunity for students to explore specific content of personal interest. The expectations and approach of the VHS program will help develop those study habits and skills that will benefit students as they move toward deeper independent learning.

VHS offers many basic courses similar to those offered in most high schools: such as advanced mathematics, anatomy, and writing courses. One distinct advantage for students is the opportunity to explore, in greater detail, interests of a very personal nature. Some of the potential courses that can be selected are: Animation and Effects: Flash MX Basics, Art History: Renaissance to Present, Desktop Publishing: In an Information Age, Digital Geography-More than a Jeopardy Category, Gods of CNN Section: The Power of Modern Media, Mythology: Stories from Around the World, Personal Finance, Poetry Writing, Preparing for College Essays, Technology and Multimedia, Twentieth Century Women Authors: A Reflection of a Changing America, Web Design: Artistry and Functionality, World Conflict: A United Nations Introduction, and Young Adult Literature: Issues in Tolerance and Diversity to name a few. Course catalogs can be researched at their website.

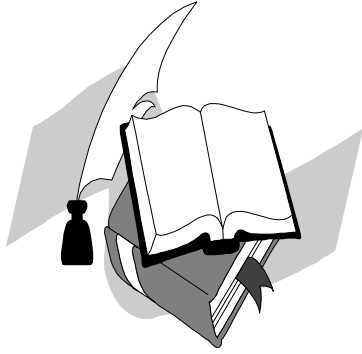
Other teachers from around the country teach the courses in the VHS program. The VHS teacher (non-Medway staff) assigned by the program creates the criteria and submits all of the grading for the course. The level of the VHS course will be integrated and interpreted into the grading for Medway High School by the Medway High School VHS coordinator and administration. Only VHS courses that are scheduled into the school day of a student, therefore replacing another course selection, will receive weighting and calculation for valedictorian and salutatorian. Virtual High School (VHS) courses cannot be used to meet the 32 credit per school year minimum.

Any student in grades 10 – 12 at Medway High School may apply to take a course given by VHS. A student who wishes to enroll must demonstrate a sense of responsibility as a “good citizen” at Medway High School. Students will be accepted based on a variety of criteria:

1. Ability to work independently
2. Record of punctuality
3. Respect for faculty and peers
4. Record of responsible use of technology
5. Space and availability of courses

The VHS coordinator will meet with all students wishing to enroll in the program. The program space is limited by the number of teachers assigned by Medway High School to teach a VHS course and trained by the VHS program. If enrollment 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 Virtual High School courses that are taught as part of the Medway High School curriculum.



# English

## *Course Offerings*

ENGLISH I Honors (Grade 9)  
ENGLISH I (Grade 9)

ENGLISH II Honors (Grade 10)  
ENGLISH II (Grade 10)

AP Language and Composition  
(Grade 11)  
ENGLISH III Honors (Grade 11)  
ENGLISH III (Grade 11)

AP Literature and Composition  
(Grade 12)  
ENGLISH IV (Grade 12)

## *Semester Electives*

DRAMA

WRITING WORKSHOP

CREATIVE WRITING

JOURNALISM I AND II

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 venues 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, 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. Literature is a mirror held up to ourselves and to 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 truly art.

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

## ENGLISH

### ENGLISH I 020 (Honors/Pre-AP)

Grade 9

Periods: 6

Credits: 6

Designed to prepare English Language Arts students for Junior and Senior AP courses and exams, this course will require extensive reading and literary analysis writing along with a strong study of non-fiction reading and writing assignments requiring critical thinking. Students will develop their ability to write in a variety of formal and informal styles and to respond to language with increasing sensitivity and discrimination. The regular ninth grade curriculum will be enhanced and enriched to meet with the rigors of the program. Considering each literary work in depth, students will be required to write formal academic essays as they strive to develop superior analytical skills. One major research project and several smaller research projects will be required. Summer reading is also required. Successful completion of this course with a grade of 85 or above and the recommendation of her/his teacher will enable a student to elect English II Honors and continue on the Pre-AP track. Students who are not recommended are invited to take an entrance exam.

Prerequisite: 9<sup>th</sup> Grade Honors Testing Program Requirements

### ENGLISH I 021/022

Grade 9

Periods: 6

Credits: 6

This is the first year of a four-year program of English language arts, which is based upon a definition that English Language Arts is the study and celebration of communication. This four-year program will provide many opportunities for the students to become effective communicators through the integration of the two essential strands of powerful and effective communication: constructing and conveying meaning. Throughout the four-year program, pupils will use language to construct meaning by accessing, analyzing, evaluating, and applying knowledge to engage in conveying ideas, knowledge, and feelings for a variety of purposes, audiences, and situations. Work includes a review of grammatical principles and composition skills. A formal research project is required of each student.

ENGLISH I 021 (Accelerated)

ENGLISH I 022 (Standard)

Prerequisite for 021 & 022: Recommendation of 8<sup>th</sup> Grade teacher.

### ENGLISH II 040 (Honors/Pre-AP)

Grade 10

Periods: 6

Credits: 6

Designed to prepare English students for Junior and Senior AP courses and exams, this course will require extensive reading and literary analysis writing along with a strong study of non-fiction reading and writing assignments requiring critical thinking. Students will develop their ability to

write in a variety of formal and informal styles and to respond to language with increasing sensitivity and discrimination. The regular tenth grade curriculum will be enhanced and enriched to meet with the rigors of the program. Considering each literary work in depth, students will be required to write formal academic essays as they strive to develop superior analytical skills. One major research project and several minor research projects will be required. Summer reading is also required. Successful completion of this course with a grade of 85 or above and the recommendation of her/his teacher will enable a student to elect Junior AP English. Students who are not recommended are invited to take an entrance exam.

Prerequisite: Entrance exam and teacher recommendation

**ENGLISH II 041/042**

Grade 10

Periods: 6

Credits: 6

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 will be an intensive reading of different genres of literature. Emphasis is placed on outside reading and includes writing for appreciation and comprehension and analysis. Work includes review of grammatical principles and composition skills. A formal academic research paper is required of each student.

ENGLISH II 041 (Accelerated)

ENGLISH II 042 (Standard)

Prerequisite for 041 & 042: Passing grade in English I and teacher recommendation

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

Grade: 11

Periods: 6

Credits: 6

Junior 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, language. Fiction, non-fiction and visual texts will prepare students to successfully analyze and write in a variety of forms (narrative, exploratory, 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. Students must take and pay for the AP exam in order to receive AP credit and AP weighting.

Prerequisite: Entrance exam and teacher recommendation

**ENGLISH III 051/052/053**

Grade: 11

Periods: 6

Credits: 6

This is the third year of the English Language Arts program focuses intensely on American Literature from Native Americans to present day writers. Along with the reading and analysis of works by American authors and poets, classic works such as Shakespeare's *Hamlet* are studied. 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.

**ENGLISH III 051** (Honors)

Prerequisite for 051: 85 in English II 040 or 90 in English II 041 and teacher recommendation

**ENGLISH III 052** (Accelerated)**ENGLISH III 053** (Standard)

Prerequisite for 052 &amp; 053: Passing grade in English II and teacher recommendation

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

Grade: 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 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. Students must take and pay for the AP exam in order to receive AP credit and AP weighting.

Prerequisite: Successful completion of Advanced Placement Language and Composition (Grade 11), entrance exam, and/or teacher recommendation

**ENGLISH IV 062/063**

Grade 12

Periods: 6

Credits: 6

This is the fourth year of the program in English language arts. The language processes of reading, writing, speaking, listening, viewing, and presenting are integrated so that the students become effective communicators. The literature strand focuses on intensive reading of works by major

British authors. Written work includes the following: narrative, persuasive, process, comparison/contrast and research essays, while placing an emphasis on literary analysis.

ENGLISH IV 062 (Accelerated)

ENGLISH IV 063 (Standard)

Prerequisite for 062 & 063: Passing grade in English II and teacher recommendation

## ELECTIVES

**DRAMA I 064** (Standard)

Grades 9 - 12 (Semester course)

Periods: 6

Credits: 3

This course in dramatic arts introduces the student to some basic acting principles through the practice and development of performance and communication skills: voice, body language/movement, emotion/expression, characterization, and pace. It will also investigate an understanding of drama through analysis and interpretation of film.

**DRAMA II 065** (Standard)

Grades 9 - 12 (Semester course)

Periods: 6

Credits: 3

This course is a continuation of Drama I. Students choosing to enroll in this course will explore the topics of Drama I with greater detail and more self-directed inquiry.

Prerequisite: Passing grade in Drama I and teacher recommendation

**WRITING WORKSHOP 066** (Standard)

Grades: 9-12 (Semester course)

Periods: 6

Credits: 3

This course is designed to provide individualized instruction in the techniques and skills basic to non-fiction writing. Students will be afforded the opportunity to write in the following rhetorical modes: narrative, persuasive, process, and comparison/contrast, while placing an emphasis on literary analysis. Students will also have the freedom to explore topics of their choice in these non-fiction modes. Students will be expected to write daily and to share their writing with their peers. The important issues of meeting deadlines, understanding the validity of numerous rewrites, and the editing process are emphasized

**CREATIVE WRITING 067** (Accelerated)

Grades: 9-12 (Semester course)

Periods: 6

Credits: 3

In this introductory course students will experiment with poetry, short fiction, creative non-fiction, and personal narratives. Students will read published examples of each genre and discuss the possibilities of these forms, the potential of language and word play, 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.

**JOURNALISM 1 068** (Standard)  
Grades: 9-12 (Semester Course)

Periods: 6  
Credits: 3

This class is intended for the student who is interested in journalism. Lessons will cover newspaper writing basics, straight news, sports, editorials, consumer reviews, features, personality profiles, sidebars and surveys, captions, headlines – plus journalistic ethics and evaluation techniques. Activities will also focus on criticizing and correcting sample stories and features, writing editorials and articles, practicing sentence building, punctuation, style, copyediting, and proofreading. The product of this course will be a class-generated school newspaper that will be published at least once a term. Course work will also cover a brief history of journalism in the United States and an overview of careers in journalism.

**JOURNALISM II 069** (Standard)  
Grades 9 - 12 (Semester course)

Periods: 6  
Credits: 3

This course is a continuation of Journalism I. Students choosing to enroll in this course will explore the topics of Journalism I with greater detail and more self-directed inquiry. This course also adds the study of broadcasting and internet journalism.

Prerequisite: Passing grade in Journalism I and teacher recommendation



# *Social Studies*

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## *Course Offerings*

U.S.HISTORY PART I (GRADE 9)

AP U.S. HISTORY (GRADE 10)

U.S. HISTORY PART II (GRADE 10)

AP EUROPEAN HISTORY  
(GRADE 11)

WORLD HISTORY (GRADE 11)

## *Electives*

AP EUROPEAN HISTORY  
(GRADE 12)

MODERN EUROPEAN HISTORY

ECONOMICS

AP MICRO/AP MACRO  
ECONOMICS

THE AMERICAN CRIMINAL  
JUSTICE SYSTEM (SEMESTER)

CURRENT EVENTS (SEMESTER)

SOCIOLOGY

COMMUNITY SERVICE  
(SEMESTER)

The social studies curriculum includes course offerings in both history and the social sciences. These courses are directed toward providing Medway students with a comprehensive knowledge of our global society.

The social studies program incorporates the objectives outlined in the school's statement of purpose. Therefore, students in social studies classes learn to communicate effectively while developing solutions to complex societal problems. Students gain experience in employing critical thinking skills while working both independently and as members of teams. It is the goal of the social studies program to assist students in understanding their rights and responsibilities as citizens, and in developing a respect and appreciation for the differences among our citizens that are woven into the common fabric that is American culture.

## SOCIAL STUDIES

The core area of study will be as follows:

- Grade 9 US History I (exploration to Civil War and Reconstruction)
- Grade 10 US History II (Reconstruction to the Present)
- Grade 11 World History II (Age of Absolutism to the 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: 9<sup>th</sup> Grade Honors Testing Policy

### UNITED STATES HISTORY I 131/132

Grade: 9

Periods: 6

Credits: 6

This full-year course is designed as a survey of the Age of Exploration to 1865. Attention is given to America's colonial development; the growth of a spirit of American Independence; the drafting of the US Constitution; Jacksonian democracy; antebellum era; and the Civil War.

U.S. HISTORY PART I 131 (Accelerated)

U.S. HISTORY PART I 132 (Standard)

Prerequisite for 131 & 132: Recommendation of 8<sup>th</sup> grade teacher

### ADVANCED PLACEMENT UNITED STATES HISTORY II 140

Grade 10

Periods: 6

Credits: 6

1860 – Present: This is a continuation of US History I Honors 130. 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 analytical skills and factual knowledge necessary to deal critically with the problems and materials in United States History. Students must take and pay for the AP exam in order to receive AP credit and AP weighting.

Prerequisite: United States History I 130

**UNITED STATES HISTORY II 141/142**

Grade: 10

Periods: 6

Credits: 6

1865-Present; A chronological examination of our nation's history from the end of the Civil War to the present day. requirements in us history. An examination of the rise of industrialism, the conquering of the last frontier, the progressive era, isolationism, the "golden twenties", World War I and II and the analysis of our nation's role in world affairs today as well as the future. A required course that fulfills the state

UNITED STATES HISTORY II, Part 141 (Accelerated)

UNITED STATES HISTORY II, Part 142 (Standard)

Prerequisite for 141 & 142: Passing grade in US History I and teacher recommendation

**AP EUROPEAN HISTORY 150** (AP)

Grade 11 (meets World History Graduation Requirement)

Grade 12 (Elective for grade 12)

Periods: 6

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 from 1450 to the present, students will focus on the intellectual and cultural; political and diplomatic; and social and economic history. Students will be expected to complete regularly assigned major reading and writing assignments. 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 must take and pay for the AP exam in order to receive AP credit and AP weighting.

Prerequisite: By invitation only

**WORLD HISTORY 151/152**

Grade 11

Periods: 6

Credits: 6

1500 Absolutism-Present; This study of modern world historical events constitute the main thrust of this course. The course is global in nature examining history throughout the world including such regions as Europe, Latin America, the Middle East and the Far East. Major focus will be on the rise of nation states in Europe, the Enlightenment and Revolution, industrialization, 19<sup>th</sup> century imperialism, the world wars, the Cold War, and the post-Cold War era. There will also be an emphasis on analysis of global issues relevant to the present.

WORLD HISTORY 151 (Accelerated)

WORLD HISTORY 152 (Standard)

Prerequisite for 151 & 152: Passing grade in World History II and teacher recommendation

## SOCIAL STUDIES ELECTIVES

**THE AMERICAN CRIMINAL JUSTICE SYSTEM 157** (Standard)  
Grades: 9 – 12 (Semester Course)

Periods: 6  
Credits: 3

This course is open to Grade 9, 10, 11 and 12 students. It is a course, which will enable students to study criminal behavior and examine 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.

**MODERN EUROPEAN HISTORY 161** (Accelerated)  
Grades: 12

Periods: 6  
Credits: 6

This college preparatory course deals with our Modern European heritage and background. Included are such topics as Capitalism, Communism, The Rise of the National State, Causes of World War I and World War II and the Emergence of Fascism's and Nazi Germany. Included also are the European Cultural contribution in art, music and literature from Beethoven to the Beatles.

Prerequisite: '75' in US History accelerated or '90' in US History standard and teacher recommendation

**CURRENT EVENTS 171** (Standard)  
Grades: 11, 12 (Semester course)

Periods: 6  
Credits: 3

This course will focus on events and issues locally, statewide, nationally, and worldwide that are of timely importance. The course will stress the importance of knowledge of these events, and their immediate and long-range effects, as well as critical thinking skills in the areas of investigation, examination, and analysis of issues and events. The treatment of these events and issues by print, television, and radio media will be examined.

**SOCIOLOGY 191/192**  
Grades: 11, 12

Periods: 6  
Credits: 6

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.

**SOCIOLOGY 191** (Accelerated)  
**SOCIOLOGY 192** (Standard)

**ECONOMICS 193** (Accelerated)

Grades: 11, 12

Periods: 6

Credits: 6

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 market place. 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; Third World problems.

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

Prerequisite: '75' in US History accelerated or '90' in US History standard or '75' in World History accelerated or '90' in World History standard and teacher recommendation

**AP MICRO/AP MACRO ECONOMICS 194** (AP)

Grades: 11, 12

Periods: 6

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. Students must take and pay for the AP exam in order to receive AP credit and AP weighting.

Prerequisite: By invitation only.

**COMMUNITY SERVICE 195**

Grade: 12 (Semester Course)

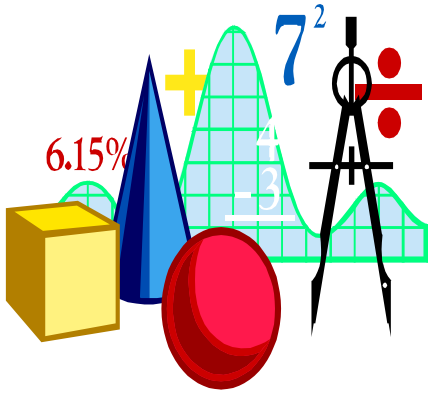
Periods: 6

Credits: 3

This semester course is an elective for students who wish to expand their learning beyond the classroom. Students will: 1. explore the needs of Medway while working in and with community service organizations and the many people already addressing those needs; 2. be made aware of the many challenges confronting our community; 3. gain practical experience through involvement in an approved community project. Students will be required to keep a daily reflective journal.

**Social Studies Course Flow Charts**

	NINTH GRADE	TENTH GRADE	ELEVENTH GRADE	TWELFTH GRADE
AP		AP US History II – 140	AP European - 150	(AP Euro – 150) Elective
HONORS	US History 1 - 130			
ACCEL	US History 1 – 131	US History II – 141	World History – 151	(Modern European) Elective
STD	US History 1 – 132	US History II – 142	World History – 152	



# Mathematics

## *Course Offerings*

INTEGRATED MATH II

INTEGRATED MATH III

ADVANCED ALGEBRA

TRIGONOMETRY

PRE-CALCULUS

CALCULUS

ADVANCED PLACEMENT  
CALCULUS AB & BC

## *Electives*

AP STATISTICS

STATISTICS

INTRODUCTION TO  
PROGRAMMING

PERSONAL FINANCE

The ever-evolving world of mathematics and its application to a broader spectrum of careers is creating a need for a mathematically competent society. In an attempt to meet this demand, we require students to take three years of mathematics and are encouraged to take four. According to the Massachusetts High School Program of Studies, students taking the equivalent of four years of challenging math including Algebra, Geometry, Algebra II and one additional higher level course are more likely to graduate on time from college.

## MATHEMATICS

Medway High School offers an integrated mathematics program for the core courses. The branches of algebra, geometry and statistics are integrated throughout the year, so students will approach problem solving in a more natural manner. Topics are spiraled during the three-year sequence, enabling students to develop more difficult concepts along the way. Most students have taken the first year of integrated mathematics in the eighth grade.

**INTEGRATED MATH II 228** (Honors)  
Grade 9

Periods: 6  
Credits: 6

Students concentrate on geometry in preparation for the Advanced Placement Calculus BC in senior year. Algebra and statistics are still integrated into the curriculum. Students study proofs, similar triangles, geometry on the circle, transformations, areas of sectors and polygons, quadrilaterals, factoring, solving and graphing linear equations. The pace is fast and students are required to complete a review packet prior to the start of the school year.

Prerequisite: 9<sup>th</sup> Grade Honors Testing Policy

**INTEGRATED MATH II 225/226**  
Grade 9/10

Periods: 6  
Credits: 6

This is the second year of the program, with students studying logic, inductive and deductive reasoning, congruence and similarity, systems of equations and solutions of quadratic equations. Students graph quadratics, translate parabolas, and apply the attributes of quadrilaterals and coordinate geometry to proofs.

Prerequisite: 8<sup>th</sup> or 9<sup>th</sup> grade teacher recommendation

**INTEGRATED MATH II 225** (Accelerated)  
**INTEGRATED MATH II 226** (Standard)

**INTEGRATED MATH III 230** (Honors)  
Grade 10

Periods: 6  
Credits: 6

This course continues the unified study of algebra and geometry, this year with an emphasis on algebra. Students will study systems of equations, quadratic, polynomial, radical, rational, exponential and logarithmic functions. Also studied are applications in sequences and series, probability and statistics, and geometry. This is an MCAS year. This will be a fast-paced course and students will be expected to complete a review packet prior to the start of school.

Prerequisite: Successful completion of Math II 228 honors, teacher recommendation or 85 or better on the honors entrance criteria.

**INTEGRATED MATH III 231/232**

Grade 10, 11

Periods: 6

Credits: 6

This is the third year of the integrated math sequence. Topics of study will include: properties of functions, composition of functions, inverses, break-even points, introduction to the complex numbers, geometry of the circle and polygons, basic statistics, sequences and series, solution of radical, rational, piece-wise, exponential and logarithmic (accelerated only) functions. This is an MCAS year for all sophomores.

Prerequisite: Passing grade in Math II

INTEGRATED MATH III 231 (Accelerated)

INTEGRATED MATH III 232 (Standard)

**PRE-CALCULUS 236/237**

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. As well as right triangle trigonometry, students learn about circular trigonometry along with periodic functions. Students are introduced to conic sections in rectangular coordinates.

PRE-CALCULUS 236 (Honors)

Grade 11, 12

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.

Prerequisite: Passing grade in Math III 230 honors, teacher recommendation or 85 or better on the honors entrance criteria.

PRE-CALCULUS 237 (Accelerated)

Prerequisite: Passing grade in Math III 231 (Accelerated)

**ADVANCED ALGEBRA 245** (Standard)

Grade 11, 12

Periods: 6

Credits: 6

This course will review and extend the algebra topics introduced in Integrated Mathematics. Topics will include linear, quadratic, polynomial, rational, radical, exponential and logarithmic functions. Students will study the irrational and complex numbers, as well as variations.

Prerequisite: Successful completion of Math III

**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: 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. Students will be expected to complete a packet of review work prior to the opening of school. Students must take and pay for the AP exam in order to receive AP credit and AP weighting

Prerequisite: Successful completion of Honors Pre-Calculus

**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. Students will be expected to complete a packet of review work prior to the opening of school. Students must take and pay for the AP exam in order to receive AP credit and AP weighting.

Prerequisite: Successful completion of Honors Pre-Calculus

**CALCULUS 241** (Accelerated)

Grade 12

Periods: 6

Credits: 6

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

Prerequisite: Successful completion of Pre-calculus or Trigonometry Standard

**TRIGONOMETRY 246 – Full Year** (Standard)

Grades 11, 12

Periods: 6

Credits: 6

This is a thorough study of trigonometry to prepare students for college-level mathematics. The course will include the study of right-triangle trigonometry, trigonometry with oblique triangles, circular trigonometry and wave, or periodic functions. Students will simplify, solve, and apply trigonometric functions to real life situations. As well, students will prove trigonometric identities.

## MATHEMATICS ELECTIVES

### INTRODUCTION TO PROGRAMMING 243 (Accelerated)

Grades: 9-12

Periods: 6

Credits: 6

This introductory course will utilize the TeachScheme! Project, with a focus on systemic design. Students will make use of a relatively simple computer language, Scheme, to learn the basics of programming: design, variables, functions, parameters, data types, conditionals, recursion and testing. Using just this core language, students can develop complete programs during the first session with a teacher. If time permits, students will apply their programming skills to learn the basics of Java, an object-oriented program.

### PERSONAL FINANCE 250/251

Grades: 9-12(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.

PERSONAL FINANCE 250 (Accelerated)

PERSONAL FINANCE 251 (Standard)

### STATISTICS 242/252

Grade 11, 12

Periods: 6

Credits: 6

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

Prerequisite: Successful completion of Pre-calculus or teacher recommendation.

STATISTICS 242 (Accelerated)

STATISTICS 252 (Standard)

### AP STATISTICS 255 (AP)

Grade 12

Periods: 6

Credits: 6

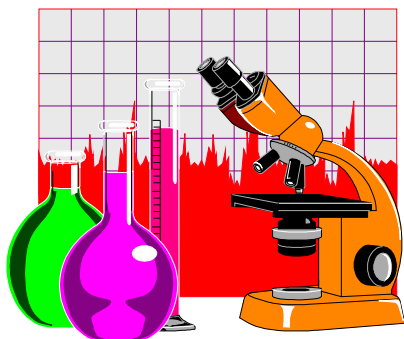
This college-level course will help students grasp basic statistical concepts and techniques and present real-life opportunities for applying them. Students will study four major areas in statistics: exploring data, sampling and experimentation, utilizing probability and simulation and estimating population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

collaborative projects and computer software. Students must take and pay for the AP exam in order to receive AP credit and AP weighting.

Prerequisite: Recommendation of AP Statistics teacher and Department Head

## Mathematics Course Flow Chart

	NINTH GRADE	TENTH GRADE	ELEVENTH GRADE	TWELFTH GRADE
AP				AP Calculus - 240
HONORS	Integrated Math II – 228	Integrated Math III - 230	Pre-Calculus - 236	
ACCEL	Math II – 225	Math III – 231	Pre-Calculus – 237	Calculus – 241 or Statistics - 242
STD	Math II – 226	Math III – 232	Advanced Algebra - 245	Trigonometry - 246
COL CORE	(Math I – 223 not offered for 2010-11)	Math II Std– 226	Math III Std.- 232	Advanced Algebra – 245



# Science

## *Course Offerings*

INTRODUCTORY PHYSICS

BIOLOGY

HONORS CHEMISTRY

CHEMISTRY

HONORS PHYSICS

PHYSICS

## *Electives*

AP PHYSICS

PROJECT PHYSICS

DIGITAL ELECTRONICS

ELECTRONICS

AP BIOLOGY

HUMAN PHYSIOLOGY

SCIENCE OF BEHAVIOR

AP CHEMISTRY

FORENSIC SCIENCE

AP PSYCHOLOGY

INTRODUCTION TO ENGINEERING DESIGN

PRINCIPLES OF ENGINEERING

Science is something more than a subject in the curriculum. It is a quest for explanations of the problems, which beset man as he attempts to adjust to his 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.

Science must be learned but the learning must be more than just learning *about* science; it must be a full and rich experience relating science principles to everyday life.

## SCIENCE

### INTRODUCTORY PHYSICS 320/321/322/323

Grade 9

Periods: 6

Credits: 6

This course details the essential knowledge and skills required of a full first year Introductory Physics Program as articulated in the 2001 Science and Technology/Engineering Curriculum Frameworks. The topics, which are core to any study of physics, will include: Motion, Forces, Energy, Waves, and Electromagnetism. At the end of their study based on 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 investigations support the learning process throughout the course. All students in this course will be required to take the MCAS Introductory Physics test at the completion of this course.

#### INTRODUCTORY PHYSICS 320 (Honors)

Prerequisite: 9<sup>th</sup> Grade Honors Testing Program Requirements

#### INTRODUCTORY PHYSICS 321 (Accelerated)

#### INTRODUCTORY PHYSICS 322 (Standard)

#### INTRODUCTORY PHYSICS 323 (College Core)

Prerequisite for Intro Physics 321, 322, 323: Recommendation by 8<sup>th</sup> grade teacher

### BIOLOGY 330/331/332/333

Grade 10

Periods: 6

Credits: 6

The Biology Curriculum is aligned with the 2001 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. Only those students who did not successfully pass the Introductory Physics MCAS as ninth graders or students who have not yet taken any Science MCAS will be required to take the Biology MCAS test at the completion of this course.

#### BIOLOGY 330 (Honors)

Prerequisite: Grade of '80' in Honors Physics and teacher recommendation

#### BIOLOGY 331 (Accelerated)

#### BIOLOGY 332 (Standard)

#### BIOLOGY 333 (College Core)

Prerequisite for Biology 331, 332, & 333: Successful completion of Introductory Physics and teacher recommendation

**HONORS CHEMISTRY 340** (Honors)  
Grade 11

Periods: 6  
Credits: 6

This course is an intensive treatment of chemistry covering topics that are found in an advanced placement course. Utilizing an advanced placement text, this program introduces problem solving early in the year and will place emphasis on chemical calculations and mathematical formation of principles. Laboratory exercises are designed to develop a student's ability to think clearly and express ideas logically. This course differs from Accelerated Chemistry with respect to the text used, topics covered, the emphasis on chemical calculations and mathematical formation of principles and the laboratory work done by students. The guidelines for this course and its curriculum mirror the Massachusetts Frameworks in Chemistry.

Prerequisite: By invitation only

**CHEMISTRY 341/342**  
Grade 11

Periods: 6  
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, Equilibrium and Kinetics. 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 341** (Accelerated)  
**CHEMISTRY 342** (Standard)

Prerequisite for Chemistry 341 & 342: Successful completion of Biology and teacher recommendation

**PHYSICS 351** (Accelerated)  
Grade 11, 12

Periods: 6  
Credits: 6

This course is intended to give students a more in depth understanding of the basic concepts of physics and by means of many interesting applications and interactive projects, to prepare them for the demands of a college curriculum. Topics will encompass the entire spectrum of physics including mechanics, properties of matter, thermodynamics, acoustics, optics, electricity, magnetism, and modern physics. This course is an algebra/trigonometry-based program.

Prerequisite: Passing grade in Introductory Physics, '80' in Accelerated Math III and an elective in Honors Pre-Calculus, or Calculus, '80' in Accelerated Chemistry or '90' in Standard Chemistry, and teacher recommendation

## SCIENCE ELECTIVES

**AP PHYSICS B 350** (AP)  
Grades 11, 12

Periods: 6  
Credits: 6

This is a college-level course designed to prepare students to participate in the Advanced Placement Physics (AP) test administered in May. AP Physics “B” is the approximate equivalent of a two-semester course in non-calculus based physics. Topics will range over the entire spectrum of physics including mechanics, properties of matter, thermodynamics, acoustics, optics, electricity, magnetism, and modern physics. Students must take and pay for the AP exam in order to receive AP credit and AP weighting.

Prerequisite: Successful completion of Introductory Physics, currently enrolled in Calculus, and “80” in Honors Chemistry, or with teacher recommendation

**PROJECT PHYSICS 357** (Standard)  
Grade 11, 12

Periods: 6  
Credits: 6

This project-based course is designed for the student who enjoyed Introductory Physics. This student is interested in pursuing the study of physics for another year using a hands-on approach. Projects will be designed to cover a multitude of physics topics ranging from but not limited to mechanics, light, optics, sound, electricity, and magnetism.

Prerequisite: Successful completion of Introductory Physics or teacher recommendation

**DIGITAL ELECTRONICS (DE) 358** (Accelerated)  
Grades 10 - 12

Periods: 6  
Credits: 6

This course is the study of electronic circuits that are used to process and control digital signals. Digital electronics is the foundation of all modern electronic devices such as cellular phones, MP<sub>3</sub> players, laptop computers, digital cameras and high-definition televisions. The major focus of the DE course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards and technical documentation. This course represents the second of three foundation courses offered in the Project Lead the Way engineering program.

**ELECTRONICS 359** (Standard)  
Grades 11, 12

Periods: 6  
Credits: 6

This course in basic electronics deals with those phases of D.C. and A.C. electricity as they apply to electric circuits. The course objectives are: (1) to solve basic electronics problems involving current, voltage, resistance and power. (2) to develop and employ schematic diagrams in constructing circuits with components such as: capacitors, relays, switches, lamps, batteries, and resistors. (3) to understand and operate various testing devices such as the VOM, VTVM, and

oscilloscope. This course will also include a detailed analysis of AC circuits, leading to an understanding of: RC; RL; and RLC circuits. Basic concepts of binary codes, gates, counters, and integrated circuits as well as flip-flops are studied. This course provides an insight to the high technology world in a language that can be understood by the novice.

Prerequisite: Currently enrolled in standard Chemistry or Physics

**AP BIOLOGY 360** (AP)

Grades 11, 12

Periods: 6

Credits: 6

AP Biology has been designed to be taken by students who have successfully completed Honors Biology. It aims to provide students with the concepts, factual knowledge, and analytical skills necessary to master the major themes regarded as the framework of AP Biology. The twelve (12) laboratory investigations conducted in Honors and AP Biology emphasize the core material needed in preparation for the AP examination taken in the spring. Students will be expected to complete a summer reading assignment and a study skills review packet prior to the opening of school in September. Students must take and pay for the AP exam in order to receive AP credit and AP weighting.

Prerequisites: Successful completion of Honors Biology and teacher recommendation.

**HUMAN PHYSIOLOGY 366** (Accelerated)

Grades 11, 12

Periods: 6

Credits: 6

This course is designed for students desiring an intensive, in-depth study of the human body and how it operates. The anatomy and physiology of the major systems of the human body are examined in detail. Specific parts and functions are to be mastered. Group work, class discussion and dissections are essential components of the course. This course is especially helpful for students going into medicine, nursing or other health related field.

Prerequisite: Successful completion of Honors Biology, a grade of '80' in Biology 331, or '90' in Biology 332, or teacher recommendation

**HUMAN PHYSIOLOGY 367** (Standard)

Grades 11, 12

Periods: 6

Credits: 6

This course is designed for students desiring a better understanding of the human body and how it operates. The anatomy and physiology of the major systems of the human body are examined in detail with emphasis on what can go wrong. Laboratory work is designed to provide a greater understanding of physiological processes. This course is especially helpful for students going into medicine, nursing or a health related field.

Prerequisite: Successful completion of Biology 322 or teacher recommendation

**SCIENCE OF BEHAVIOR 368** (Accelerated)  
Grades 11, 12

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 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 during the first semester include an introduction and brief history of psychology, research and measurement, perception, sleeping and dreaming, hypnosis, and learning and memory. Students will also be required to design and conduct their own research. Topics to be studied during the second semester include 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.

Prerequisite: '75 in the previous year's accelerated science course or '85 in the previous year's standard science course or teacher recommendation

**SCIENCE OF BEHAVIOR 369** (Standard)  
Grade 11, 12

Periods: 6  
Credits: 6

This course emphasizes psychology as a science and is designed to provide students with a background in psychology – the study of human behavior. The course content is similar to the Accelerated Level but it is less intensive both in terms of the amount of material examined and the research required. In the second semester students will continue to study interesting topics from the same fields studied in course 381. Students will be given the opportunity to design and conduct research and participate in hands on activities related to materials being studied.

Prerequisite: Passing grade in previous years science course or teacher recommendation

**AP CHEMISTRY 370** (AP)  
Grades 12

Periods: 6  
Credits: 6

The AP Chemistry course is a second year chemistry course designed to be the equivalent of the general chemistry course usually taken during the first college year. This course meets the general chemistry requirement for most colleges with an appropriate grade on the AP examination (typically a 3 or higher). Students should attain a depth of understanding of the fundamentals of chemistry and a reasonable competence in dealing with chemical problems. The course should also contribute to the development of the student's abilities to think clearly, express ideas orally and in writing, and with clarity and logic. The knowledge gained from the course is determined by both the laboratory and academic experiences. Topics covered include: Structure of Matter, States of Matter, Chemical Reactions, Descriptive Chemistry and Laboratory Chemistry. Students must take and pay for the AP exam in order to receive AP credit and AP weighting.

Prerequisite: Math III, Honors Chemistry and invitation by recommendation of the science department

**FORENSIC SCIENCE 376** (Accelerated)  
Grades 12

Periods: 6  
Credits: 6

This course will focus on Forensics as a science in which events, such as crimes and accidents can be reconstructed using various technologies and deductive reasoning. The students will be instructed in proper scene techniques and lab procedure in learning to analyze numerous types of evidence collected. The course will be divided into units such as fingerprinting, document analysis, DNA analysis, blood spatter analysis and ballistics to name only a few. 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: A grade of '75' in Physics, Biology, and accelerated Chemistry

**AP PSYCHOLOGY 377** (AP)  
Grades 11, 12

Periods: 6  
Credits: 6

Students are introduced to the systematic and scientific study of the behavioral and mental processes of humans and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students assess some of the differing approaches adopted by psychologists, including the biological, behavioral, cognitive, humanistic, psychodynamic and sociocultural perspectives. The course aims to provide students with a learning experience equivalent to that obtained in a typical, one-semester introductory college psychology course. Students must take and pay for the AP exam in order to receive AP credit and AP weighting.

Prerequisite: Recommendation of AP Psychology teacher and Department Head

**INTRODUCTION TO ENGINEERING DESIGN (IED) 380** (Accelerated)  
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. This course is meant to be the first of three foundation courses offered in the Project Lead the Way engineering program.

**PRINCIPLES OF ENGINEERING (POE) 381** (Accelerated)

Grades 10-12

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 last of the three foundation courses offered in the Project Lead the Way engineering program.

Prerequisite: Introduction to Engineering Design 380



## *Foreign Language*

### *Course Offerings*

FRENCH I

FRENCH II

FRENCH III

FRENCH IV

AP FRENCH

FRENCH V

SPANISH I

SPANISH II

SPANISH III

SPANISH IV

AP SPANISH

SPANISH V

LATIN I

LATIN II

Learning a foreign language has almost become a necessity. We are now a global community. We must be able to communicate with our neighbors from around the world. Technology puts us in immediate contact with any country. Our students must be prepared for this environment.

The goal of the foreign language department is to develop the basic skills of listening, speaking, reading and writing to enable our students to communicate effectively in a global setting.

The experience of the foreign language staff and their varied teaching styles present many enriching experiences to our students.

## FOREIGN LANGUAGE

Students beginning a foreign language in the high school must take either French I or Spanish I. As you select a Foreign Language be aware that 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 Foreign Language.

**FRENCH I 402** (Standard)  
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. Students enrolled in this course will select French II HS in their sophomore year.

Prerequisite: First year of French instruction

**FRENCH II 411/412**  
Grades: 9 – 12

Periods: 6  
Credits: 6

This is a continuation of the skills developed in French I, with additional emphasis on reading and speaking.

**FRENCH II 411** (Accelerated)  
**FRENCH II 412** (Standard)

Prerequisite: Passing grade in French I and teacher recommendation

**FRENCH II HS 413**  
Grades: 10 - 12

Periods: 6  
Credits: 6

This course will continue to develop the basic skills of language acquisition from French I. It will also continue the study of the French-speaking world and its influences on our country. Students enrolled in this course should have been enrolled in the high school French I in the previous year.

Prerequisite: Passing grade in high school French I and teacher recommendation

**FRENCH III 421/422**  
Grades: 10 - 12

Periods: 6  
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 III 421 (Accelerated)

FRENCH III 422 (Standard)

Prerequisite for French III 421 & 422: Passing grade in French 2 and teacher recommendation

**FRENCH III HS 423** (Standard)

Grades: 10 - 12

Periods: 6

Credits: 6

This course is for those students who began their French instruction in grade 9. This will be the third year of foreign language instruction in high school. This level continues with the development of listening, speaking, reading, and writing skills. Grammar will be presented and will be practiced through extensive use of tapes and oral exercises.

Prerequisite: Passing grade in French II HS and teacher recommendation

**FRENCH IV 430** (Honors)

Grades: 11, 12

Periods: 6

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 French-speaking 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. Audio-visual materials are an integral part of the course.

Prerequisite: Passing grade in French III accelerated and teacher recommendation

**FRENCH IV 431** (Accelerated)

Grades: 11, 12

Periods: 6

Credits: 6

This course is a continuation of the development of listening, speaking, reading and writing skills with an emphasis on reading for comprehension. French grammar will be reviewed completely. Students will be introduced to basic literary works and will read magazines and other cultural materials.

Prerequisite: Passing grade in French III standard and teacher recommendation

**AP FRENCH 440** (AP)

Grade: 12

Periods: 6

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. Students must take and pay for the AP exam in order to receive AP credit and AP weighting.

Prerequisite: Teacher recommendation

**FRENCH V 441** (Accelerated)  
Grade: 12

Periods: 6  
Credits: 6

This course will include readings in classical and contemporary French literature. Nuances of style of various French authors will be compared and discussed. Sophisticated grammatical constructions will be studied. Students will be expected to read French magazine articles and other outside reading material and prepare reviews in French for class discussion. These reading assignments will be tested as part of the mid-year and final examinations. Conversation skills will be reinforced by a study of: radio broadcasts; recordings of 'everyday' street conversations. The course will be conducted entirely in French.

Prerequisite: '75' in French IV accelerated and teacher recommendation.

**SPANISH I 452** (Standard)  
Grades: 9 - 12

Periods: 6  
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. Students enrolled in this course will select Spanish II HS in their sophomore year.

Prerequisite: First year of formal Spanish instruction

**SPANISH II 461/462**  
Grades: 9 - 12

Periods: 6  
Credits: 6

This course is a continuation of the skills developed in Spanish I, with additional emphasis on reading and speaking.

**SPANISH II 461** (Accelerated)  
**SPANISH II 462** (Standard)

Prerequisite for Spanish II 461 & 462: Passing grade in 8<sup>th</sup> grade Spanish and teacher recommendation

**SPANISH II HS 463** (Standard)  
Grades: 10 - 12

Periods: 6  
Credits: 6

This course will continue to develop the basic skills of language acquisition from Spanish I. It will also continue the study of the Spanish-speaking world and its influences on our country.

Students enrolled in these courses should have been enrolled in the high school Spanish I in the previous year.

Prerequisite: Passing grade in high school Spanish I and teacher recommendation

**SPANISH III 471** (Accelerated)  
Grades: 10 - 12

Periods: 6  
Credits: 6

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 accelerated and teacher recommendation

**SPANISH III 472** (Standard)  
Grades: 10 - 12

Periods: 6  
Credits: 6

This course includes a thorough review of the grammatical principles of Spanish. There will be ample opportunity to practice the various grammatical elements by means of extensive drills and exercises. 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 standard and teacher recommendation

**SPANISH III HS 473** (Standard)  
Grades: 10 - 12

Periods: 6  
Credits: 6

This course is for those students who began their Spanish instruction in grade 9. This will be the third year of foreign language instruction in high school. This level continues with the development of listening, speaking, reading, and writing skills. Grammar will be presented and will be practiced through extensive use of tapes and oral exercises.

Prerequisite: Passing grade in Spanish II HS and teacher recommendation

**SPANISH IV 480** (Honors)  
Grades: 11, 12

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.

Prerequisite: Passing grade in Spanish III accelerated and teacher recommendation

**SPANISH IV 481** (Accelerated)  
Grades: 11, 12

Periods: 6  
Credits: 6

This course includes an intensive grammatical review of previously learned structure and vocabulary. There will be opportunity to practice the four basic skills through intensive drills and readings. Reading will be of cultural and literary content.

Prerequisite: Passing grade in Spanish III standard and teacher recommendation

**AP SPANISH 490** (AP)  
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. Students must take and pay for the AP exam in order to receive AP credit and AP weighting.

Prerequisite: Teacher recommendation

**SPANISH V 491** (Accelerated)  
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: '75' in Spanish IV Accelerated and teacher recommendation

**LATIN I 496** (Accelerated)  
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. This course is intended for students who have already pursued successfully a previous foreign language and who wish to add this as a second foreign language. Students must continue the study of their first foreign language.

Prerequisite: '75' in 8th grade English Level I or '80' in 8<sup>th</sup> grade English Level II and/or recommendation of Foreign Language Department.

**LATIN II 498** (Accelerated)  
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.

## Foreign Language Course Flow Chart

	NINTH GRADE	TENTH GRADE	ELEVENTH GRADE	TWELFTH GRADE
AP				AP French – 440 AP Spanish – 490
HONORS			French IV – 430 Spanish IV – 480	
ACCEL	French II – 411 Spanish II – 461	French III – 421 Spanish III – 471	French IV – 431 Spanish IV – 481	French V – 441 Spanish V – 491
STD	French II – 412 Spanish II – 462	French III – 422 Spanish III – 472		
STD	French I – 402 (1 <sup>st</sup> year) Spanish I – 452 (1 <sup>st</sup> year)	French II HS – 413 Spanish II HS – 463	French III HS – 423 Spanish III HS - 473	



# Music

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## *Course Offerings*

BAND

CHORUS

## *Semester Electives*

MUSIC THEORY

POPULAR MUSIC IN AMERICA

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: the cognitive, the 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.

## MUSIC

### BAND 725 (Standard)

Grades: 9 - 12

Periods: 6

Credits: 6

Membership is open to qualified instrumentalists. The band offers rewarding experiences in performing a wide range of concert literature. During the fall, the band functions as a marching unit and all members are expected to participate at football games unless they are members of the football team or fall cheerleading squad. The band, whenever possible, will perform in marching, concert, festival competitions, and parades.

### CHORUS 731 (Standard)

Grades: 9 - 12

Periods: 6

Credits: 6

Membership is open to all students interested in developing the ability to sing better individually and in a group. The chorus prepares concert literature in a wide range of music styles for public performance. Students learn basic music notation and choral singing techniques. Since this course explores extensive 3 & 4 part harmony, minimum requirements for participation include matching pitch, blend, and learned dynamics.

#### Band and/or Chorus Accelerated Credit

Students may request to participate for Accelerated credit. Accelerated level credit will follow criteria based on the Music Educators National Conference (MENC) standards as well as Massachusetts Music Educators Association (MMEA) guidelines and the Massachusetts Arts Curriculum Frameworks. Students will also be expected to participate in other music endeavors such as private lessons, district/All-State auditions and/or ensembles or other music performance achievement. Students must have performing group teacher recommendation.

### MUSIC THEORY 735 (Standard)

Grades: 9 – 12 (Semester Course)

Periods: 6

Credits: 3

This course will provide an opportunity for all students with a musical background to have a chance to study the important fundamentals of music theory, basic piano technique, sight reading and sight singing techniques, musical composition and basic arranging.

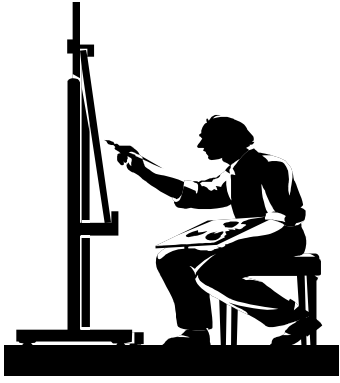
### POPULAR MUSIC IN AMERICA 736 (Standard)

Grades: 9-12 (Semester Course)

Periods: 6

Credits: 3

This course is open to students who are interested in the evolution of pop music from early roots in folk, blues, jazz, and rock up to the present. Through listening and interpretation, students will have the opportunity to investigate the historical and cultural developments of music and its significance as a reflection of society.



# Art

## *Course Offerings*

BASIC ART

FINE ARTS

ADVANCED FINE ARTS

PORTFOLIO

## *Semester Electives*

CERAMICS I

CERAMICS II

SCULPTURE and 3-D

PHOTOGRAPHY

Medway's high school Art Program is committed to the belief that all students can learn. 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 thinks 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, except for Ceramics/Sculpture, 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.

## ART

**BASIC ART 751** (Standard)  
Grades: 9 - 12

Periods: 6  
Credits: 6

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 art works of past and present. They will be trained to analyze and evaluate their own work and the work of other artists.

**FINE ARTS 761** (Accelerated)  
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: '85' in Basic Art and teacher recommendation

**ADVANCED FINE ARTS 763** (Accelerated)  
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.

Prerequisite: '85' in Fine Arts and teacher recommendation

**CERAMICS I 781** (Standard)  
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.

**CERAMICS II 782** (Standard)  
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: '70' in Ceramics I and teacher recommendation

**SCULPTURE AND 3-D 783** (Standard)  
Grades 10 - 12 (Semester Course)

Periods: 6  
Credits: 3

This course offers the student a chance to be involved with the creation of original pieces of three-dimensional sculpture. He will experience a variety of techniques and learn many related skills such as carving, modeling, etc. The course will include work with materials such as plaster, wood, clay, wax, and metal.

**PORTFOLIO 791** (Accelerated)  
Grade: 11, 12

Periods: 6  
Credits: 6

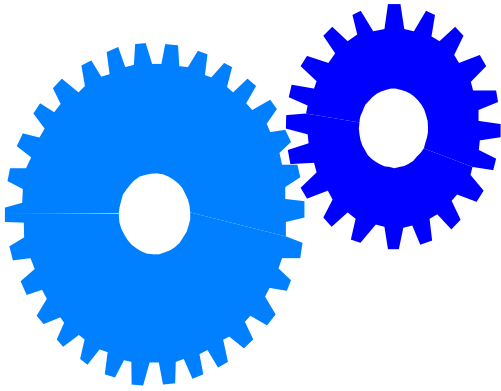
This upper level course would focus on the creation of a student portfolio that showcases visual art abilities and skills. Such a portfolio is an asset for students who plan to pursue art as a major and for students intending to continue on in other studies. The emphasis of this course will be on in-depth 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: '80' in Fine Arts or Advanced Fine Arts and teacher recommendation

**PHOTOGRAPHY 793** (Standard)  
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 35 mm 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.



# *Technology Education*

## *Course Offerings*

WOODWORKING TECHNOLOGY I

WOODWORKING TECHNOLOGY II

## *Semester Electives*

VIDEO TECHNOLOGY I

COMPUTER AIDED DRAFTING  
AND DESIGN (CADD)

Technology 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.

The programs offered by this department will help students develop skills, creative abilities, positive self-concepts and individual potential in technology. There is a combined emphasis on the knowledge and techniques involved in technology work.

Using hands on activities, students will have the opportunity to explore technology. Students will learn to work cooperatively with others and solve problems in an efficient and orderly manner.

## TECHNOLOGY EDUCATION

**WOODWORKING TECHNOLOGY I 841** (Standard)  
Grades: 10 - 12

Periods: 6  
Credits: 6

This course is designed to provide the students with a basic knowledge in the field of woodworking. Students will deal with the techniques of design, construction, and manufacture of a product through the use of hand tools, power tools, and machines. Instruction on the safe and proper use of equipment will be emphasized during hands-on activities.

**WOODWORKING TECHNOLOGY II 842** (Standard)  
Grades: 11, 12

Periods: 6  
Credits: 6

This is a continuation of Woodworking Technology I. It is an advanced woodworking course that will include a study of industrial methods in planning, design, and construction of one or several articles using the mass production process.

Prerequisite: '70' in Woodworking Technology I and teacher recommendation.

**VIDEO TECHNOLOGY 1 850** (Standard)  
Grade: 9-12 (Semester Course)

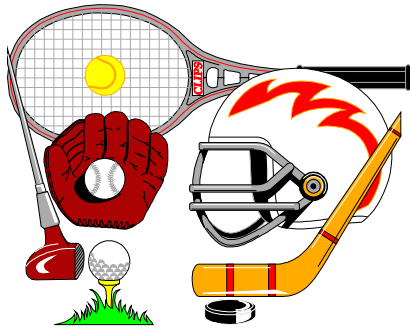
Periods: 6  
Credits: 3

This course will provide students with a fundamental knowledge of the basics of television production. Units will include: the operation of video equipment, video editing, scriptwriting, and on camera techniques.

**COMPUTER AIDED DRAFTING AND DESIGN (CADD) 855** (Standard)  
Grades 9-12 (Semester Course)

Periods: 6  
Credits: 3

This course is designed to introduce the students to the language of Technology. Students will create technical drawings using the computer as the main tool utilizing industry-standard software. Students will learn three-view, sectional, isometric and architectural drawings.



# Physical Education

## *Course Offerings*

PHYSICAL EDUCATION GRADE 9

IPEC GRADE 10  
IPEC: INTERDISCIPLINARY  
PHYSICAL EDUCATION  
CURRICULUM

PHYSICAL EDUCATION GRADE 11

PHYSICAL EDUCATION GRADE 12

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 his adult years, whether as a spectator or participant.

## PHYSICAL EDUCATION

**PHYSICAL EDUCATION** (Semester course)  
Grade: 9 (Co-Ed)

Periods: 2  
Credits: 1

Students are offered a physical education curriculum designed to give each student a broad spectrum of planned and directed learning experiences. Skills are taught in progression for each unit or activity to provide continuity of learning. Activities in this course are flag football, hockey, karate, floor hockey, tennis, field hockey, aerobics, wrestling, basketball, volleyball, lacrosse, team handball, fitness testing, softball, and obstacle course. During units of instruction involving contact sports, classes will be grouped homogeneously by gender.

Physical Education 921 – 1<sup>st</sup> semester  
Physical Education 922 – 2<sup>nd</sup> semester

**PHYSICAL EDUCATION (IPEC) 941**  
Grade: 10 (Co-Ed)

Periods: 3  
Credits: 3

IPEC (Interdisciplinary Physical Education Curriculum) is a non-traditional, adventure-based curriculum for all sophomore students. The purpose of this program is to provide alternatives in Physical Education through activities involving lifetime skills, such as cross-country skiing, CPR instruction, orienteering, backpacking, climbing activities, camping, survival techniques and canoeing. IPEC is designed to help students to improve their problem-solving abilities, to increase their ability to meet a crisis situation, and to increase their self-awareness, esteem, trust, and mutual support within a group. Through non-competitive activities the IPEC program strives to reduce the emphasis on competition and winning as a measure of success.

**PHYSICAL EDUCATION** (Semester course)  
Grade: 11 (Co-Ed)

Periods: 2  
Credits: 1

The 11<sup>th</sup> grade curriculum is designed to correlate with the progression of skills from 9<sup>th</sup> grade and into game play. Emphasis will be on proper techniques, rules, strategies, and competitive games. A sampling of activities for this course include football, hockey, ultimate Frisbee, floor hockey, tennis, field hockey, aerobics, basketball, volleyball, lacrosse, badminton and softball. The eleventh grade program will maintain strong emphasis on physical fitness and self-evaluation. The curriculum also has a health component through which students will be introduced to a variety of topics directly related to their current age. Some topics covered will include alcohol awareness, human sexuality, drugs, body image, nutrition, and stress reduction. This program will introduce health topics that will be relevant to the student's progression as a young adult.

Physical Education 971 – 1<sup>st</sup> semester  
Physical Education 972 – 2<sup>nd</sup> semester

**PHYSICAL EDUCATION** (Semester course)  
Grade: 12 (Co-Ed)

Periods: 2  
Credits: 1

The 12<sup>th</sup> grade curriculum is designed to correlate with the progression of skills from 11<sup>th</sup> grade. Emphasis will be on proper techniques, rules, strategies, and competitive games. A sampling of activities for this course include football, hockey, ultimate Frisbee, floor hockey, tennis, field hockey, aerobics, basketball, volleyball, lacrosse, badminton and softball. The twelfth grade program emphasizes fitness and leisure-time activities. The curriculum also has a health component through which students will be introduced to a variety of topics directly related to their current age. Some topics covered will include alcohol awareness, human sexuality, drugs, body image, nutrition, and stress reduction. The program will continue to introduce health topics that will be relevant to the student's progression into life after high school.

Physical Education 981 – 1<sup>st</sup> semester  
Physical Education 982 – 2<sup>nd</sup> semester

## **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 may or may not be members of the faculty.
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.

## School Banking Program

**SCHOOL BANKING** (Standard)  
Grades 11, 12

Period: TBD  
Credits: TBD

This course is an internship at the MHS branch of the Charles River Bank. Students will be working as tellers performing the full array of financial services offered at any branch including checking accounts, savings accounts, deposits, withdrawals, check cashing, certificated of deposits, money market accounts and various other programs. Students will conduct themselves in a professional manner while following all of the employee policies of the Charles River Bank. The hours of operation will be 10-1 daily. Participating students will work during the elective period that falls within this time frame. Credit will be awarded based on the number of periods per seven day cycle in which the student interns.

Prerequisite: A successful interview with the Charles River Branch Manager and the School Banking Coordinator  
An acceptable attendance/tardiness record  
A willingness to accept the terms of employment

**CAREER PLANS**

Occupational Choices

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Further Education Plans (check)

- Vocational Training (1 year)
- College (2 years)
- College (4 years)

SAMPLE - 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
Intro Physics	6	Biology	6
Foreign Language	(6)	Foreign Language	(6)
Physical Education	2	Physical Education/IPEC	3
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
<i>(Minimum)</i>	<i>(32)</i>	<i>(Minimum)</i>	<i>(32)</i>

Total Yearly Credits \_\_\_\_\_

Total Yearly \_\_\_\_\_

<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	Physical Education	2
Chemistry	6	_____	_____
Mathematics	6	_____	_____
Physical Education	2	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
<i>(Minimum)</i>	<i>(32)</i>	<i>(Minimum)</i>	<i>(32)</i>

Total Yearly Credits \_\_\_\_\_

Total Yearly Credits \_\_\_\_\_  
*(Minimum of 128 credits required for graduation)*