

Educational Opportunities Handbook
2015-2016

MEDFORD HIGH SCHOOL
AND
VOCATIONAL-TECHNICAL HIGH SCHOOL

MEDFORD HIGH SCHOOL

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Educational Opportunities Handbook *2015-2016*

MEDFORD HIGH SCHOOL
¹MEDFORD VOCATIONAL-TECHNICAL HIGH SCHOOL

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STATEMENT OF ACCREDITATION

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

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

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

EDUCATIONAL OPPORTUNITIES

2015-2016

COURSE SELECTION

The selection of a student's program of study requires careful consideration on the part of both student and parent. Guidance counselors and teachers at Medford High School are prepared to help both student and parent make a proper selection by engaging them in a review of the student's natural abilities, past scholastic achievement, fulfillment of course prerequisites, and educational and career goals.

During the spring and summer, the administration of Medford High School uses student selections in making informed decisions about staffing and purchases of textbooks and supplies. In most instances, each student will receive a schedule that he or she requested; however, in some cases, a course that he or she requested will not be scheduled because there is insufficient enrollment to justify scheduling a section of the course or because staffing issues apply.

Because Medford High School's Mission calls for teachers and administrators to empower "all students to reach their potential as learners," students are encouraged to challenge themselves academically. For instance, where a student has fulfilled the pre-requisites to take either an Honors or Standard level course and is uncertain about which course-level to choose, school personnel shall encourage the student to take the more challenging course. During any given school year, a student may take courses that reflect a variety of ability levels. Also, from one year to the next, students may change the ability-level of the courses they select through the established course-selection process in cases where they have met the pre-requisites.

Parents are asked to sign the Course-Selection Form before the student returns the form to the guidance counselor in March. During the last months of the school year, however, many scheduling changes are made in advance of the next school year, and errors can be made. To catch errors, we will mail drafts of student schedules home at times during the summer and/or make schedules accessible online through iParent. During the summer we ask parents to check the student's schedule carefully and to bring any errors to the attention of the guidance counselor as soon as possible, but certainly prior to the first day of school.

During the course-selection process, teachers, curriculum directors and guidance counselors recommend certain courses for each student, considering his/her classroom preparation, teacher-assigned grades, course-pre-requisites, standardized test scores, and other data. Although the student and his/her parent may request that the schedule include courses at a higher or lower level, the only guarantee comes with the student's meeting the pre-requisite.² Of course, once the school year begins, course-changes are approved only under limited circumstances.

ADMINISTRATIVE FLEXIBILITY

For logistical reasons, the administration might choose to offer certain courses on a rotating basis, e.g., every other year. The administration might also need to cancel a course, change the frequency with which it meets, or make other changes to this Educational Opportunities Handbook. Where possible, students will be notified of the changes before the beginning of the school year.

² Where class size issues and other conditions apply, the school will need to limit enrollment in Honors and Advanced Placement courses to students who have achieved the exact pre-requisite grade as stated in this program of studies. Under unusual circumstances, for example, we might need to enforce the "A-" pre-requisite and not enroll students who have earned a "B+."

REGULATIONS FOR SCHEDULE CHANGES

Process

Students are engaged initially in the course-selection process in mid-to-late spring as they begin having conversations with their teachers about course selection, and register with their counselors. During the spring and summer, school officials provide students with a draft schedule that is accessible through iStudent and iParent. These schedules may not include teacher names or time periods.

Students and parents, who do not agree with their placements, will need to solicit and receive permission from the guidance counselor, director of guidance, assistant principal, and the appropriate curriculum director(s). If an agreement cannot be made, a meeting with the headmaster will be arranged.

Once the school year begins, scheduling changes will not be allowed. The process for changing schedules is much more complicated at this time because it involves evaluating arguments based on extenuating circumstances. Where extenuating circumstances (as stated below) apply in a specific case and thus justify a schedule change, these four individuals identify the allowable exception(s) and submit their decision to the headmaster, who will act affirmatively on all properly determined recommendations.

Rationale

There are several reasons why requests for schedule changes should not be granted after the school year begins. The call for higher standards at the national, state and local levels requires greater accountability. Time and Learning requirements, high-stakes tests and community expectations impact on the course-selection process. Under Time and Learning regulations, every student must carry a full course load to fulfill state requirements.

Changes of courses and/or teachers interrupt continuity of instruction. In changing schedules, not only do students encounter new material and different teaching styles and policies, but they also need to make up days, weeks or months of class work, tests and homework, in addition to fulfilling current assignments, thus becoming academically at-risk. Related to continuity of instruction is that, with virtually every course change, the receiving teacher is required to assign to new students equivalent class work, tests and homework and to assess these assignments and to incorporate the grades from the sending teacher. As a result, the demands that schedule changes place on teachers either usurp time and energy that they would ordinarily devote to the rest of their students or become additional burdens for the teachers.

Schedule changes contradict the integrity of the scheduling process. Each spring, after asking students and parents to complete the course selection process, the curriculum directors and headmaster make staffing recommendations to the Superintendent. Those recommendations are based on the projected number of course-sections needed to schedule the students who request each course. Allowing course changes creates imbalances not only in class sizes among courses of different ability-levels and among courses in different departments, but also in total student enrollments among teachers.

Exceptions to the Rule

Although the rule is that no schedule changes will be allowed after the school year begins, there are exceptions to the rule. The following are illustrations of allowable extenuating circumstances that are considered, under most circumstances, to be exceptions to the rule:

- The student's schedule does not include courses that are requirements for graduation.
- The student has selected a course without fulfilling the course pre-requisite.
- The student's schedule includes a course with a teacher who failed that student during a previous school year.
- A course-section is added to or deleted from the master schedule.
- An obvious mistake has been made, and school personnel have a responsibility to take corrective action.
- The student has a documented medical or psychological condition that prevents him or her from continuing with one or more courses.

- The student’s family is undergoing a documented crisis that prevents him or her from continuing with one or more courses.
- Changes in a special needs student’s Individual Education Plan require changes in the student’s schedule.
- A schedule change is needed to accommodate a student with Limited English Proficiency.
- Safety considerations require that a student’s schedule be changed.

(In addition, within the first fourteen days of school, changes may be made if a course was added to a student’s schedule but the student was not consulted about the course change; or if a student’s schedule does not include enough five-credit courses to ensure continued athletic eligibility.)

Non-exceptions

- The student registered for a course even though a teacher or curriculum director had recommended the student for a course at a different ability-level.
- The student requests a lateral change, i.e., a change to a different teacher of the same course.
- The student requests a change of course or teacher when he or she earns a failing grade for a quarter, is in the process of earning a failing grade for a quarter, or is not earning the grade that the student anticipated.
- The student perceives a personality conflict with the teacher, or the parent perceives a personality conflict with the teacher.

Discretionary Exception

- The student registered for a course even though a teacher or curriculum director had recommended the student for a course at a different ability-level. (Under most circumstances, the schedule change would not be allowed. However, a unique set of circumstances could justify the schedule change, but only in cases where the guidance counselor, director of guidance, curriculum director, assistant principal and headmaster agree that the change is necessary.)

CLASSIFICATIONS OF STUDENTS

The system of course credits is based on the number of days the course meets during the six-day cycle, as well as on the length of the course (single semester or full year). Students are to be scheduled for 36 periods of academics (i.e., six periods per day over the course of a six-day cycle).

A student’s homeroom assignment is determined by student classification (freshman, sophomore, junior, and senior). To be promoted to the next class at Medford High School, a student must have secured a minimum number of credits:

Sophomore Status:	Minimum of 26 credits.
Junior Status:	Minimum of 54 credits.
Senior Status:	Minimum of 80 credits.

The following Promotion Policy adds other specific requirements but does not lessen the above requirements.

PROMOTION POLICY FOR MIDDLE AND HIGH SCHOOL STUDENTS³

The promotion policy amends and strengthens the existing promotion policy (above) by requiring students who fail mathematics and English to make the subject up in summer school in order to be promoted. Students may be promoted if they fail one subject, as is the current policy; however, the subject they fail cannot be mathematics or English. Exempted from this policy are students in Grades 11 and 12 who have passed MCAS. Specifics of the policy for the various grade levels are as follows:

³ This policy was approved by the Medford School Committee in September 2004. See Summer School section on the next page.

Students in Grades 6-10

In addition to existing promotion requirements, students must pass **both English and mathematics at each grade level** in order to be promoted to the next grade level. Students who fail mathematics or English must make up the subject in summer school and achieve a passing grade of C- or better if they wish to be promoted to the next grade level. There will be an appeals process for students who do not pass the summer school program.

Students in Grades 11-12

Students in Grades 11 and 12 who have passed MCAS are exempt from the promotion policy guidelines (related to mathematics and English). These students however, must meet the high school requirements for credits in mathematics and English for graduation. For example an eleventh grade student who has passed MCAS in mathematics and fails his/her mathematics course is promoted and will graduate on the condition that at the end of grade 12 all the required graduation credits for mathematics have been met.

Students in grades 11 and 12 who have not passed MCAS and fail a mathematics or English course must make up the course in summer school or, in the case of a junior, in their senior year. These students must also meet all high school requirements for graduation. For example, a student who fails Grade 11 mathematics and has not yet passed MCAS is required to make up the specific failed mathematics course or its equivalent in a summer program or in his/her senior year.

REQUIREMENTS FOR GRADUATION

The total number of credits required for eligibility for a Medford High School Diploma is 112, beginning with the class of 2002. Those 112 credits include, but are not limited to, the following:

- | | |
|---|---------------|
| A. Four years of English | Take and Pass |
| B. Four years of Wellness | Take and Pass |
| C. Four years of Mathematics (including Geometry and Algebra II) ⁴ | Take and Pass |
| D. Three years of Science (including Biology and Chemistry) | Take and Pass |
| E. Three years of Social Studies to include World History I, World History II (or Advanced Placement European History) and U. S. History ⁵ | Take and Pass |
| F. Three years of Foreign Language for college prep students | Take and Pass |
| G. One course in Fine Arts or Music | Take and Pass |
| H. Four years of community Service (60 hours required, 15 per year) | |
| I. Proficient scores on the English Language Arts and Mathematics MCAS tests ⁶ | |
| J. Passing Score on the Science and Technology MCAS test. | |

ACADEMIC ELIGIBILITY FOR ATHLETICS

In choosing courses for the coming school year, students should consider the school's academic requirements for athletic eligibility. To be eligible at the start of the 2015-2016 school year, students must have final passing grades from the 2014-2015 school year in the equivalent of four traditional, yearlong, major English courses. To be eligible for the second marking period, students must satisfy the academic standard in the equivalent of four traditional, year-long, major English courses during the first marking period. It is at this point in the year that the academic eligibility is certified only on the previous marking period and not cumulatively. Only fall eligibility remains cumulative. In addition, to be academically eligible for athletics during a specific marking period, students need to be enrolled at that time in the equivalent of four traditional, yearlong, major English courses.

At Medford High School, any five-credit course is considered to be the equivalent of a traditional, yearlong, major English course. (Although sometimes Independent Study courses can be scheduled for five-credits, they do not satisfy the eligibility requirement.) For special needs students, the equivalent of four traditional, yearlong,

⁴ Beginning with the Class of 2015, students will need to take and pass 4 years of mathematics to include at least one course beyond Algebra 2.

⁵ Beginning with the Class of 2003, the graduation requirement in Social Studies will include World History I, World History II, and U. S. History.

⁶ Beginning with the Class of 2010. See Department of Education for more details.

major English courses is any combination of twenty credits in academic courses that are required by their Individual Education Plans.

SUMMER SCHOOL

Only students who earn a final grade of "E" (50-59%) are eligible to attend summer school. Students who earn a final grade of "F" (0-49%) are not eligible to attend summer school and must repeat applicable courses during the regular school day during the regular school year. The Headmaster will consider appeals based on extenuating circumstances. (See the Medford High School Student Handbook for more information about Summer School policies and regulations.)

RANK IN CLASS

The standing of each pupil in his or her class is determined annually on the basis of a quality-point-weighted system. Rank-In-Class is one of the criteria that schools and colleges request of high school students seeking admission.⁷

QUALIFICATIONS FOR COLLEGE ADMISSION

College admissions officers consider a variety of criteria in screening college applicants: a good scholastic record, entrance examinations, academic rank-in-class, high school certification, and the recommendations of guidance counselors, teachers and administrators. Most colleges require the applicant to take the Scholastic Assessment Test (SAT I Reasoning Test) given by the College Entrance Examination Board; many colleges require three of the SAT II Subject Tests as well. Students should consult college catalogues for specific information concerning admission requirements.

POLICY NOTIFICATION

It is the policy of Medford High School and the Vocational-Technical High School that no student shall be excluded from or discriminated against in admission to educational programs and activities or in obtaining the advantages and privileges of study because of race, color, sex, religion, national origin, handicap or sexual orientation. Inquiries regarding the above may be made to the Headmaster or Vocational Director at 489 Winthrop Street, Medford, Massachusetts 02155 (393-2301) or the Director of the Office for Civil Rights, Department of Education, Washington, DC.

All programs are subject to change with appropriate notification. All programs are subject to the approval of the Medford School Committee and to budgetary considerations.

⁷ The method of tabulating class rank at Medford High School is published in the Medford High School Student Handbook, which includes limitations that apply to transfer students. Also published in the Student Handbook is information about how students may request that certain courses not be included in the calculation of class rank.

MEDFORD HIGH SCHOOL

CURRICULAR OFFERINGS*

Grade 9

REQUIRED COURSES (27 credits**)

Courses	Periods	Credits	Duration
English	6	5	Full Year
World History I	6	5	Full Year
Algebra 1	6	5	Full Year
Science	6	5	Full Year
Foreign Language	5	5	Full Year
Physical Education/Health	2	2	Full Year

ELECTIVE COURSES (4 credits)

Grade 10

REQUIRED COURSES (27 credits**)

Courses	Periods	Credits	Duration
English	6	5	Full Year
World History II (or AP Eur. Hist.)	6	5	Full Year
Geometry	6	5	Full Year
Science	6	5	Full Year
Foreign Language	5	5	Full Year
Physical Education/Health	2	2	Full Year

ELECTIVE COURSES (4 credits)

Grade 11

REQUIRED COURSES (27 credits**)

Courses	Periods	Credits	Duration
English	6	5	Full Year
U. S. History	6	5	Full Year
Algebra 2	6	5	Full Year
Science	6	5	Full Year
Foreign Language	5	5	Full Year
Health/Wellness/PE	2	2	Full Year

ELECTIVE COURSES (4 credits)

Grade 12

REQUIRED COURSES (12 credits**)

Courses	Periods	Credits	Duration
English	6	5	Full Year
Mathematics	6	5	Full Year
Health/Wellness/PE	2	2	Full Year

ELECTIVE COURSES (19 credits)

* See the Mathematics and Science sections of this handbook for more information about updated graduation requirements.

** Ninth and tenth graders who have been determined to be at risk of failing an MCAS test (or who failed that test as eighth graders) will be required to enroll in the appropriate MCAS Review course during the school day or (where available) take a similar course after school or on the weekend. Eleventh graders who have been determined to be at risk of having failed an MCAS test during their sophomore year will be required to take the appropriate MCAS Review course during the school day. Twelfth graders who have not yet passed an MCAS test will be required to take the MCAS Review course during the school day.

MEDFORD HIGH SCHOOL

ACADEMIC DEPARTMENTS

ART DEPARTMENT

The Art Department offers a wide variety of full-year courses designed to meet the needs of high school students. Those who are planning advanced studies in art, as well as those who are interested in art as a source of income, personal development or academic enrichment, will find educational opportunities available to them. Instruction in all courses builds solid technical skills on a foundation of the principles of design. Students may sample an art discipline through an introductory level class, or explore a medium in depth through advanced level courses. Students who complete a program of advanced level classes will produce the high quality work demanded for admission to most art schools and universities. All students must take and pass a Fine Arts course for graduation.

ADVANCED PLACEMENT STUDIO ART (Grades 11 and 12)

Advanced Placement Studio Art is an intensive course that focuses on art production and is based upon the requirements determined by the Advanced Placement Program of the College Board. The course is not based on a written examination; instead, students submit portfolios for evaluation in early May. After that students curate, prepare, and hang an exhibition of their work in a group show at the high school.

Students must choose one of the following AP Studio Art Courses:

1. Drawing Portfolio
2. 2-D Design Portfolio
3. 3-D Design Portfolio

Course requirements include an after-school seminar held monthly to allow students an opportunity to talk to artists, critique their work as a group, visit galleries, museums and other studios.

A list of requirements for each of the above courses can be found on line at:

<https://apstudent.collegeboard.org/apcourse>

Advanced Placement--5 Credits Total -- 6 Periods Total per Cycle -- Full Year

Prerequisite: A minimum of one year of previous studio experience and teacher permission

COMPREHENSIVE ART I (Grades 9-12)

The course is designed for students who are interested in learning more about traditional materials (pencil, pen and ink, watercolor, oil pastels, pastels, acrylic paint, and colored pencil). Areas of concentration are drawing, painting, and printmaking. Students will learn techniques, tools, and applications that will enable them to develop a body of work that expresses their unique responses to open ended, creative projects. It encourages experimentation balanced with the more guided development of technical skills with specific art materials. The course also offers exposure to art history and how to understand and discuss works of art that you may have never seen before.

Standard -- 4 Credits -- 4 Periods per Cycle -- Full Year

COMPREHENSIVE ART II (Grades 10-12)

This is an in depth continuation of Comprehensive Art I. Students will expand their knowledge about art making with more emphasis on individual expression and creative approach. In addition to improving their drawing and design skills, students will create art requiring personal interpretation and exploration. Assignments are designed to address art themes and topics through drawing, painting (acrylic and oil),

printmaking (silk screen and intaglio), collage, design, and mixed media. The art experiences in Comprehensive Art II have both fine and commercial art applications

Standard -- 4 Credits -- 4 Periods per Cycle -- Full Year

Prerequisite: Comprehensive Art I

COMPREHENSIVE ART III (Grades 11-12)

This course is for students who have taken Comprehensive Art II and who have identified art as an area in which they have strength and abundant interest. Some students taking this course are beginning a process for developing an art portfolio for art school and/or college admission. A wide range of two-dimensional art materials will be explored in a structured studio setting. Artistic independence will be encouraged with opportunities to visit museums and galleries and Artist Open Studios.

Standard -- 4 Credits -- 4 Periods per Cycle -- Full Year

Prerequisite: Comprehensive Art II

COMPREHENSIVE ART IV (Grade 12)

The production and preparation of artwork for the student portfolio is the primary involvement for many Comprehensive Art IV students in the first semester. This complements the work begun in Comprehensive Art III. The emphasis for each project is on the exploration of ideas and experimentation with art materials. The course includes visits to museums and galleries, and Artist Open Studios.

Standard -- 4 Credits -- 4 Periods per Cycle -- Full Year

Prerequisite: Comprehensive Art III

CERAMICS I (Grades 9-12)

Ceramics uses the medium of clay to create work that is both functional and sculptural. All methods of hand-building are taught in-depth. Instruction is offered in a wide variety of ceramic painting techniques using both glazes and underglazes. Projects will focus on design, visual symbolism, and imagination. Students will be asked to reflect on their values and modern world through the construction of their projects.

Standard – 4 Credits – 4 Periods per Cycle – Full Year

CERAMICS II (Grades 10-12)

Ceramics II is for students who have a serious interest in creating functional and sculptural work out of clay. Students will develop and expand the technical skills learned in Ceramics I as they create work that reflects issues of personal and societal importance. The elements and principles of design will be stressed in all projects. Students enrolled in Ceramics II will also work with the human figure and the potter's wheel.

Standard – 4 Credits – 4 Periods per Cycle – Full Year

Prerequisite: A grade of “B-” in Ceramics I or teacher recommendation

CERAMICS III (Grades 11-12)

Ceramics III is an independent study class for students who have a serious interest in Ceramics. Ceramic III students will identify a Ceramic genre they wish to explore in depth, either functional or sculptural, and then create a portfolio quality body of work that demonstrates mastery of technique, breadth of ideas, and development of design concepts. A portfolio of work meeting requirements for college admission will result from this class.

Standard – 4 Credits – 4 Periods per Cycle – Full Year

Prerequisite: Permission only, grade A- or better in Ceramics II

FASHION I (Grades 9-12)

Students in this course will learn to illustrate the fashion figure, clothing and accessories using the techniques practiced today in the fashion industry. The class will explore past, current and personal fashion concepts to understand the progress of fashion throughout history. Students will learn fashion design skills ranging from basic textile identification, pattern making, drawing and illustration, hand and machine sewing, to embellishing projects. Both women's wear and men's wear will be examined.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

SCULPTURE I (Grades 9-12)

This course is an investigation of creating form in three dimensions, with an emphasis on experimentation. The class is designed to challenge students to take artistic risks in a variety of media. Students will have the opportunity to sculpt and build imaginatively, developing expression and skill. They will gain a working knowledge of materials and processes, while exploring significant social, political, historic and personal issues through the voice of sculpture.

Standard – 4 Credits – 4 Periods per Cycle – Full Year

ENGLISH LANGUAGE ARTS DEPARTMENT

The English Language Arts Department at Medford High School provides continuing opportunities for each student to develop effective writing, reading, communication and grammar skills necessary for post-secondary endeavors. Although the emphasis placed on specific skills varies for each grade and level, the total program provides continuity in the student's educational program over four years. The English Language Arts curriculum follows specific guidelines that equip students with content knowledge and skills. These include the understanding and development of knowledge and skills leading to students' ability to:

- use informational texts and multimedia to foster strong content knowledge
- write persuasive, narrative and descriptive essays
- demonstrate inquisition and presentation skills through research projects
- think and use language through interactive learning
- analyze and synthesize material that fosters a deep understanding and appreciation for texts
- comprehend textual understanding of literary heritage, literary movements and cultural perspectives
- know the many uses of literature as seen through social commentary texts
- recognize and use all genres of literature
- comprehend and critique social media, the arts and text
- read and comprehend a variety of complex literary and informational texts
- respond both written and orally to the varying demands of audience, task, purpose, and discipline including strategic use of digital media
- develop and use speaking and listening skills to engage in collaborative and productive discussions

Every student must take and pass English 9, 10, 11 and 12. A “double” English (e.g., English 11 and additional credits in other English electives) is strongly recommended for all Level II, Level III, and Level IV students in Grades 10, 11 and 12. A student cannot progress to another English course without first fulfilling the prerequisites for that course; therefore, two regular English courses (e.g., English 10 and English 11) may not be taken simultaneously.

In addition, a summer reading requirement exists for all students entering Standard, Honors and Advanced Placement courses in Grades 9 through 12. Titles are assigned by grade and students are assessed in early September. Therefore, completion of required summer reading is critical.

Five-Credit Courses

ENGLISH 9: LITERARY EXPLORATION I

This course enhances the ninth grade students' literary experience by building on their knowledge of literary and informational reading; persuasive, narrative and descriptive writing; and speaking, listening, and grammatical techniques. Throughout the year, students are provided with continued opportunities for developing these skills. The study of literature focuses on analysis of the short story, novel, and poetry. Required reading includes selections from Shakespeare.

Standard –5 Credits – 6 Periods per Cycle – Full Year

Honors –5 Credits – 6 Periods per Cycle – Full Year

Prerequisite for Standard: Passing grade in English 8

Prerequisite for Honors: Average grade of “A-” in English 8

ENGLISH 10: LITERARY EXPLORATION II

Building on the ninth grade literary exploration course, this course concentrates on themes that include love, heroism, and rites of passage. Students study the roots of the English language as well as literature from Anglo-Saxon epic poetry and Shakespeare’s Middle English to modern-day short fiction. Instruction spans the reading of ancient myths and legends to the modern novel. Through class discussion, literary and informational reading, oral presentations, informal essays, critical essays, and independent research, students explore the major themes that the authors themselves explored. From this exposure, students develop higher critical and analytical reading and thinking skills in order to evaluate data and respond appropriately. In addition, all other communication skills are included. Specific titles, including the works of Shakespeare, are designated as required reading.

Standard –5 Credits – 6 Periods per Cycle – Full Year

Honors –5 Credits – 6 Periods per Cycle – Full Year

Prerequisite for Standard: Passing grade in English 9

Prerequisite for Honors: Average grade of “B-” in Honors English 11 OR
Average grade of A- in Standard English 11

ENGLISH 11: AMERICAN LITERATURE

With American literature as the focus of study, this course enables students to develop a deeper knowledge and greater respect for the American heritage including its history, its complexity and its literary contributions. Thematic concepts such as the Puritan conscience, the American search for identity and the American ideal are studied through representative writers including Jonathan Edwards, Ralph Waldo Emerson, Mark Twain, and Ernest Hemingway. Persuasive, analytical and narrative writing in the form of letters, essays and research comprise the principal amount of writing in English 11. Specific titles, including the works of Shakespeare, are designated as required reading.

Standard –5 Credits – 6 Periods per Cycle – Full Year

Honors –5 Credits – 6 Periods per Cycle – Full Year

Prerequisite for Standard: Passing grade in English 10

Prerequisite for Honors: Average grade of “B-” in Honors English 11 OR
Average grade of A- in Standard English 11

ADVANCED PLACEMENT ENGLISH 11: ENGLISH LANGUAGE AND COMPOSITION

This writing-intensive course includes the study of style, structure, rhetorical devices, and modes of discourse in conjunction with a close examination of American literature. Students should be avid readers and writers, eager to unlock the mysteries of poetry and prose from Emerson to Hemingway and beyond. Course requirements include an after-school seminar held each week for additional course work and for timed writings. Designed to perfect students’ critical writing skills in preparation for the Advanced Placement examination in English Language and Composition, this course is also a prerequisite for Advanced Placement World Literature. This course is equivalent to the first-year English course in college. Students who desire Advanced Placement credit should take the national Advanced Placement examination in May.

Advanced Placement – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: Average grade of “A-” in Honors English 10

ENGLISH 12: WORLD LITERATURE

This course explores the roots of literary tradition from a world literature perspective. A survey of world literature from the fourteenth through the twentieth centuries affords students the opportunity to challenge the thinking of the great minds of Western Civilization. Discussions are based on textual analysis and re-

lated material. The focus for the research paper originates from course readings. Specific titles, including the works of Shakespeare, are designated as required reading.

Basic – 5 Credits – 6 Periods per Cycle – Full Year

Standard – 5 Credits – 6 Periods per Cycle – Full Year

Honors – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite for Standard: Passing grade in English 11

Prerequisite for Honors: Average grade of “B-” in Honors English 11 OR
Average grade of A- in Standard English 11

ADVANCED PLACEMENT ENGLISH 12: ENGLISH LITERATURE AND COMPOSITION

This course includes a study of writing style, the structure and variety of sentences, diction, rhetorical strategies, modes of discourse, and appropriate relationships among author, audience and subject. Students read various examples of world literature from several genres and periods. In addition to increasing their ability to analyze an individual literary work in terms of character, language, setting, and themes, students evaluate structure, meaning, value and the relationship of the work to contemporary experience, as well as to the time in which the work was written. This course is equivalent to the first-year English course in college. Students who desire Advanced Placement credit should take the national Advanced Placement examination in May.

Advanced Placement – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: Average grade of “A-” in Honors English OR
average grade of “B-” in Advanced Placement English 11

Two-Credit and One-Credit Courses

BOOK CLUB (Grades 9/10 and 11/12)

This course provides students with an opportunity to select books of interest, read alone and engage in critical discussions with peers. With this course, students can increase their reading fluency, oral and written communication skills, active reading skills and love for literature. This course also supports the district literacy program and promotes the principles of Silent Sustained Reading (SSR), which research indicates is essential to creating life-long readers.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

Requirement: Deposit of \$25 required for E-reader

EXPLORING THE GENRES OF WRITING – ONLINE COURSE

This online course exposes students to the different genres of writing. Students are required to complete reading and writing assignments via Moodle and submit these assignments to the teacher. This course allows students to understand how writing styles differ and to analyze why people write for varied purposes. It also provides students with skills needed for online coursework.

Standard – 2 Credits – 2 Period per Cycle – Full Year

FACING HISTORY AND OURSELVES: THE INDIVIDUAL AND SOCIETY

This elective delves into the nationally acclaimed *Facing History and Ourselves* curriculum and its scope and sequence regarding the individual and society and will focus specifically on the following questions:

- How is our identity formed?
- How do our attitudes and beliefs influence our thinking? How does our thinking affect our actions?
- How can we keep our individuality and still be part of a group?

- How does our tendency to see in terms of “us” as unique but “them” as members of groups affect our behavior as well as our attitudes? Do “we” welcome or fear “them”? When does fear turn to hate?

Standard – 2 Credits – 2 Period per Cycle – Full Year

MCAS ENGLISH REVIEW

This course not only offers students an intensive review of the learning standards in the *Massachusetts English Language Arts Framework*, but also helps them to understand and use strategies in preparation for the English Language Arts MCAS Examination. Ninth and tenth graders who have been determined to be at risk of failing the English Language Arts MCAS Examination (or who failed that test as eighth graders) are required to enroll in MCAS English Review during the school day or take a similar course after school or on the weekend.

Standard – 2 Credits– 2 Periods per Cycle – Full Year

MYTHOLOGY (Grades 9-12)

This course offers students specific knowledge in mythology. Remarkably suited to cultural diversity, mythology parallels the study of classical literature, as well as Greek, Latin, and ancient history.

Standard –2 Credits – 2 Periods per Cycle – Full Year

PHILOSOPHY FOR CRITICAL THINKING AND ETHICAL LIVING

This course is an introduction to the philosophical study of morality. In addition to providing familiarity with the writings of major philosophers and exploring moral philosophy’s primary questions, this course is also designed to help students develop their abilities to read, explicate, analyze, and evaluate philosophical literature as well as analyze and write critically on ethical issues. This course is highly recommended for students interested in participating in events for the MHS Ethics Bowl Team in conjunction with the Tufts University Department of Philosophy.

Standard –2 Credits – 2 Periods per Cycle – Full Year

VERBAL SAT PREP (Grades 10 - 12)

This course helps students master the vocabulary and review the verbal reasoning skills tested on the SAT I Reasoning Test and Preliminary Scholastic Assessment Test (PSAT). This course also includes some of the grammar, usage and writing skills tested on the SAT II Writing Test.

Standard –2 Credits – 2 Periods per Cycle – Full Year

WRITING WORKSHOP (Grade 9- 12)

Writing Workshop offers students the opportunity to improve their writing skills through extensive and intensive concentration on the craft of writing. The workshop atmosphere, which emphasizes small-group work and individual assignments, provides instruction n the process of pre-writing, editing, and revision. The student’s own experiences and background provide material for most writing. Word processors will be utilized to improve both writing and revision skills (although prior computer experience is not necessary).

Standard – 2 Credits - 2- Periods per Cycle – Full year

ENGLISH LANGUAGE LEARNERS DEPARTMENT

The English Language Learners (ELL) Department provides full- or part-day instruction, counseling, and placement of students who need to learn English to a level which allows them to participate fully in the academic and social life of the school. The department offers a full range of English Language Development (ELL LA) courses, as well as sheltered instruction in core academic areas.

ELL – LITERACY (Grades 9 – 12) –

This course is for students who have had limited educational experiences in their country of origin. Students will learn basic literacy skills that apply to Language Arts, Social Studies and Science. Classes meet one period per day.

Standard – 5 credits – 6 periods per cycle – full year

ELL LA 1 – NEWCOMERS (Grades 9 – 12)

This course is for students who have recently arrived in this country and have had educational opportunities in their country of origin. Students will learn social and academic English, and will acquire some understanding of American culture. There will be a focus on vocabulary, grammar, receptive language, oral communication, beginning reading and writing, and study skills.

Standard – 10 credits – 12 periods per cycle – full year

ELL LA 2 – LOW INTERMEDIATE (Grades 9 – 12)

This course is for students who are progressing in their knowledge of English but are still emerging in academic and social language. Emphasis is on speaking, understanding, reading and writing for social and academic settings. The curriculum is a continuation of the Newcomers class with increasingly complex demands. Classes meet two periods per day.

Standard – 10 credits – 12 periods per cycle – full year

ELL LA 3 – HIGH INTERMEDIATE (Grades 9 – 12)

This course is for students who understand most conversational English, and some academic language required for academic reading, class explanations, and lectures spoken at a native pace. Further work in grammar, idioms, vocabulary acquisition, reading comprehension, and writing skills is needed. Classes meet two periods per day.

Standard – 10 credits – 12 periods per cycle – full year

ELL LA 4 – ADVANCED (Grades 9 – 12)

This course is for students who are close to exit level. Advanced level students will study similar topics to a mainstream English class, but with teaching practices that accommodate the needs of ELL students specifically. Listening, speaking, reading and writing skills are emphasized. This is the final course in the ELL sequence. Classes meet one period per day.

Standard – 5 credits – 6 periods per cycle – full year

ELL CONTENT AREA COURSES (Grades 9 – 12)

ELL and SEI Core Academic classes are offered in Algebra I, Algebra II, Geometry, Advanced Algebra and Trigonometry, World History I, World History II, United States History, Biology, and Chemistry. ELL classes are for ELL Newcomers, and designated SEI classes are for ELL students who have achieved some understanding of academic English. These classes are taught using techniques appropriate for ELL students, including visual and language supports. The curriculum follows the curriculum of the equivalent mainstream classes. All classes meet one period per day.

Standard – 5 credits – 6 periods per cycle – full year

ELL SUPPORT CLASSES (Grades 9 – 12)

Support Mini Classes will be offered in ELL Language Arts, Math, Science, Social Studies and Assessment and College Preparation. The main focus of these courses will be to provide support to formerly limited proficient students who have recently transitioned to mainstream classes. Some current ELL students may also be enrolled in these courses if appropriate.

Standard – 2 credits – 2 periods per cycle – full year

FOREIGN LANGUAGE DEPARTMENT

Five-Credit Courses

FRENCH I, ITALIAN I, SPANISH I (Grades 9-12)

This introductory course is designed to cover the development of the fundamental skills necessary to build a strong foundation for further foreign language learning. The focus will be on the four skills in foreign language learning: listening, reading, speaking, and writing with an emphasis on oral skills. Students are also introduced to the culture of the country/countries where the language is spoken. It is intended for students who have no previous background in the language, or for those who need a thorough review before proceeding to the next level of the language.

Standard - 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: None

FRENCH II, ITALIAN II, SPANISH II (Grades 9-12)

Instruction continues to develop language abilities acquired in the first level. Communication continues to be the focus improving competence of the four skills: listening, reading, speaking, and writing. Students will be able to express and articulate expressions in the past tense and will gain understanding of the products, practices, and perspectives of the culture(s) studied.

Standard - 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: A passing grade in first-year language study at the high school or a minimum grade of “C+” from 8th grade language study

HONORS FRENCH II, HONORS ITALIAN II, HONORS SPANISH II ((Grades 9-12)

Instruction continues to develop higher proficiency in reading, writing, listening, and speaking skills. Special emphasis is placed on the development of oral skills focusing on real life situations. Listening skills are sharpened through the use of films and audio resources. Further cultural topics are discussed. This course is conducted almost exclusively in the target language requiring students to have a strong and articulated knowledge and foundation in the target language.

Honors - 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: A grade of “A-” or higher in first-year language study at the high school or a grade of “A” from 8th grade language study

FRENCH III, ITALIAN III, SPANISH III (Grades 9-12)

This course provides a strong review of previously learned language structures. It continues to develop communication skills and improve fluency of the target language through a variety of activities. Students acquire more facts about the culture of the country/countries of the language.

Standard - 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: A passing grade in second-year language study

HONORS FRENCH III, HONORS ITALIAN III, HONORS SPANISH III (Grades 10 - 12)

Students continue to build upon previously learned language structures through authentic literature, films, art, and cultural text. Emphasis is placed on composition and reading comprehension. Students will also gain greater fluency in speaking, as they learn to communicate in culturally appropriate ways.

Honors - 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: A grade of “B-” or higher in the Level II Honors class of the target language

FRENCH IV, ITALIAN IV, SPANISH IV (Grades 11-12)

The course continues with the study of the language and culture of the countries involved by means of the four language skills of speaking, writing, reading and listening. Students will advance their abilities to speak, read, write, and listen by writing simple compositions and letters, reading a variety of texts, listening to authentic material, and speaking in everyday situations.

Standard - 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: A grade of “C” or higher in the Level III Standard course of the target language.

HONORS FRENCH IV, HONORS ITALIAN IV, HONORS SPANISH IV (Grades 10 - 12)

This is an advanced, proficiency-based course that is taught exclusively in the target language. Students will continue to enhance their oral communication, linguistic skills and knowledge of literature and culture of the target language. Students who take this course should be motivated to become fluent in the target language.

Honors - 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: A grade of “B-” or higher in the Level III Honors class of the target language

STANDARD SPANISH V (Grades 11 - 12)

This course is taught exclusively in Spanish and students are expected to interact with their teacher and peers using the language. It is an alternative to the AP course for students who have successfully completed four years of high school Spanish and wish to deepen their fluency and knowledge of the Spanish language. Topics of study include materials from Hispanic Cultures. Students will enhance their oral and written proficiency aiming towards fluency. Advanced cultural topics are studied through literary works and films.

Standard - 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: A grade of “B-” or higher in Spanish IV Honors
A grade of “A” in Spanish IV Standard

ADVANCED PLACEMENT FRENCH LANGUAGE (Grade 12)

ADVANCED PLACEMENT ITALIAN LANGUAGE (Grade 12)

ADVANCED PLACEMENT SPANISH LANGUAGE (Grade 11, 12)

The AP courses prepare students for the Advanced Placement examinations in the target language. In addition to intensive speaking, reading, and writing practice necessary for the AP exam in the language, students will read newspaper articles, magazine articles and authentic literary works. This course is taught solely in the target language. Fluency in the language is the ultimate goal by the end of the year.

Advanced Placement - 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: A grade of “A-” or higher in the Level IV Honors class of the target language

Two-Credit Courses

HISTORY OF ITALIAN OPERA

Students in this course will become familiar with Italian composers such as Rossini, Bellini, Donizetti, Verdi, Mascagni, Leoncavallo, and Puccini as they explore the history of Italian Opera. They will be able to recognize some famous arias and associate each to its Opera and composer.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

PRE-COLUMBIAN PEOPLE: TAINOS, MAYANS, AZTECS, AND INCAS

This course will present an overview of the pre-Columbian people of the Caribbean, México, Perú and their legacy. It will allow the student to explore the vast region through a variety of perspectives: art, geography, history music, politics, and religion. This course will be conducted in English.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

THEATER IN THE SPANISH SPEAKING WORLD

This course will focus on the history of Theater in Spanish speaking countries through selected plays from Spanish and Latin-American literature with emphasis on vocal strategies, body language, and staging. The course will be conducted in English.

Standard –2 Credits – 2 Periods per Cycle – Full Year

LATIN AMERICAN MUSIC/DANCE

Students will be introduced to the development of music/dance throughout history, with a focus on the fusion of European, African, and Indigenous cultures. Dances include the Salsa, Bachata, Samba, Merengue, Cha-Cha, and more.

Standard –2 Credits – 2 Periods per Cycle – Full Year

CONTEMPORARY ISSUES IN LATIN AMERICA AND SPAIN

This course will be conducted in a seminar format with an emphasis on the self-directed learner. Current events will be examined in historical context from the Latin American and Spanish perspective.

Standard –2 Credits – 2 Periods per Cycle – Full Year

ITALIAN CINEMA

Through cinema the course will explore the culture, society, history, and politics of Italy. Students will examine filmmakers, genres, periods, and movements. The course is conducted in English.

Standard –2 Credits – 2 Periods per Cycle – Full Year

CULTURAL FOODS OF ITALY

In this course, students will explore the regional foods of Italy and discover the many distinct culinary traditions. Students will take a virtual tour of the Italian peninsula from the Alps to the islands of Sicily and Sardinia studying the relationship of food traditions to geography, climate, and history. Students will learn about the science behind curing meats, aging cheese, and winemaking.

Standard –2 Credits – 2 Periods per Cycle – Full Year

CULTURE OF THE SPANISH-SPEAKING WORLD: MUSIC, DANCE, AND FESTIVALS

The course explores the cultural diversity of the Spanish-speaking world with a special focus on music, dance, and festivals. Students will also examine the context of the geographic locations as well as the historical background of the people from whom these cultures have evolved as well as the impact of the Latin music in the USA.

Standard –2 Credits – 2 Periods per Cycle – Full Year

HEALTH DEPARTMENT

Students are required to complete two complete years (four semesters) of health education in order to meet graduation requirements. Students alternate health education with physical education during each of their four years at Medford High School.

Freshman – Introduction to Health

This course is designed to introduce students to personal health concepts. Topics covered will include: sexuality education, positive body image, proper social media use, disease prevention, and character development

Standard –1 Credits – 2 Periods per Cycle – Half Year

Sophomore – Healthy Decision Making

This course introduces the student to healthy decision making. Topics covered include: How to deal with peer pressure, refusal skills, communication skills, drugs, alcohol & tobacco education, healthy relationships, basic nutrition and fitness.

Standard –1 Credits – 2 Periods per Cycle – Half Year

Junior – Healthy Lifestyles

This course provides students with the tools needed to live a healthy lifestyle. Topics covered include: Stress management, goal setting, advanced nutrition, and consumer health.

Standard –1 Credits – 2 Periods per Cycle – Half Year

Senior – Transitioning From Adolescence into Adulthood

This course provides students with the skills necessary for the transition from adolescence to adulthood. Topics covered include: Sexuality, violence, conflict resolution, self-advocacy, accessing health & community health.

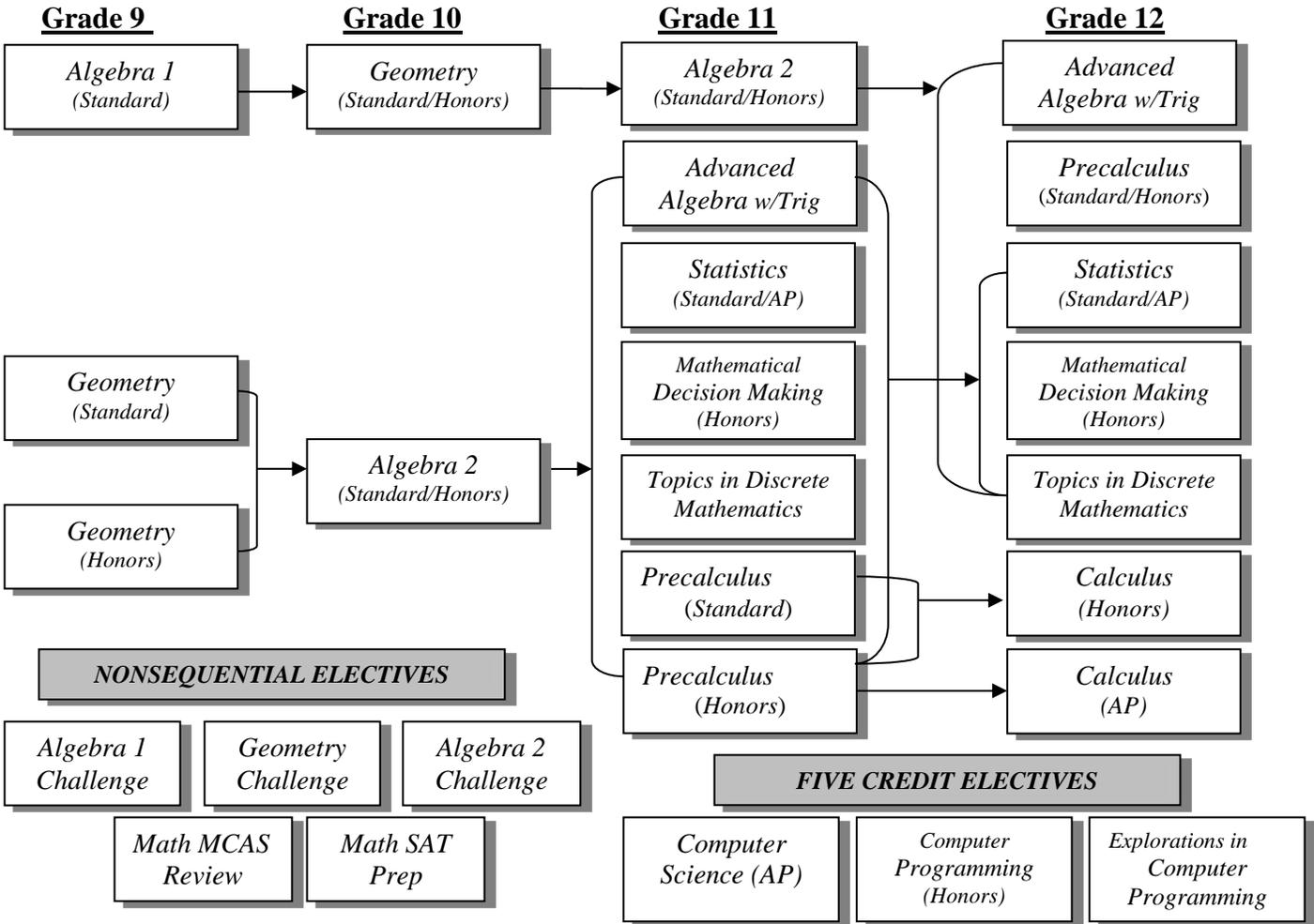
Standard –1 Credits – 2 Periods per Cycle – Half Year

MATHEMATICS DEPARTMENT

The Mathematics Department offers a core mathematics program that is rigorous in content, high in expectations and accessible to all students. The curriculum is reflective of the standards articulated by the *Massachusetts Curriculum Framework for Mathematics*, the *Common Core State Standards* for mathematics education, the National Council of Teachers of Mathematics, and the Massachusetts Comprehensive Assessment System. Students will achieve standards of practice, content and mathematical literacy through problem solving, reasoning, communication, representation, and making connections. All students are required to take and pass four years of mathematics to include a course beyond Algebra 2. The recommended course sequence is Algebra 1/Geometry/Algebra 2 followed by a senior elective. Students who successfully complete Algebra 1 in grade eight can elect to take Geometry in grade nine.

Graphing calculators are essential tools for high school mathematics learning. While TI-83+ and TI-84+ graphing calculators are available for in class use, students are strongly encouraged to own graphing calculators to enhance understanding, aid in homework, and for use during standardized testing such as MCAS and SAT.

MATHEMATICS SEQUENCE CHART



Five-Credit Courses

ALGEBRA 1 (Grade 9)

This course in algebra provides a strong algebraic foundation for all subsequent mathematics courses. Students will develop mature understanding of algebraic concepts and procedures through communication, representation, reasoning, making connections, problem-solving, and technology integration. Focus is on a deep understanding of linear and exponential relationships; interpretation, comparison and contrast of functions to include linear, quadratic and exponential models; extension of the laws of exponents to include square and cube roots; and application of regression techniques to analyze linear models.

Standard - 5 Credits – 6 Periods per Cycle – Full Year

Strongly Recommended: Graphing Calculator

Prerequisite: Passing grade 8 mathematics or grade 8 Algebra

GEOMETRY (Grades 9-10)

This course extends the study of geometry by emphasizing precision and developing reasoning and proof. Students will demonstrate understanding using geometric models, constructions, algebraic reasoning and trigonometry. The students develop mathematical language as they investigate problems, make and test conjectures, draw conclusions, and describe results. The course focuses on proving congruence and demonstrating similarity through transformations and proportional reasoning; deriving and using equations of conic sections in the coordinate plane; explaining and using volume formulas to solve problems; as well as understanding and applying the rules of probability to make decisions.

Standard - 5 Credits – 6 Periods per Cycle – Full Year

Strongly Recommended: Graphing Calculator

Prerequisite: Passing grade in Algebra 1

HONORS GEOMETRY (Grades 9-10)

Students are provided a rigorous study of the relationships, properties and measurements of geometric figures. Students will demonstrate a high level of abstract and quantitative reasoning as they communicate understanding. This course extends the study of geometry by tending to precision and developing proofs. Students will demonstrate depth of understanding using geometric models, constructions, algebraic reasoning and trigonometry. The students develop mathematical language as they investigate problems, make and test conjectures, draw conclusions, and describe results. The course focuses on proving congruence and demonstrating similarity through transformations and proportional reasoning; writing formal arguments; deriving and using equations of conic sections in the coordinate plane; explaining and using volume formulas to solve problems; as well as understanding and applying the rules of probability to make decisions.

Honors - 5 Credits – 6 Periods per Cycle – Full Year

Strongly Recommended: Graphing Calculator

Prerequisite: A grade of “A-” or better in Algebra 1

ALGEBRA 2 (Grades 10-11)

This course emphasizes the study of functions including linear, quadratic, exponential, logarithmic, polynomial, rational, and radical functions, their properties, and graphs. The students will understand the relationship between the arithmetic of rational numbers and that of rational expressions; extend their understanding of trigonometric ratios as they graph periodic functions; and identify the appropriate function to model a situation. Students will also use statistical models to interpret data, make inferences and justify conclusions.

Standard - 5 Credits – 6 Periods per Cycle – Full Year

Strongly Recommended: Graphing Calculator

Prerequisite: A passing grade in Geometry

HONORS ALGEBRA 2 (Grades 10-11)

This course provides rigorous preparation for Precalculus through the investigation of challenging problems and discussions that develop understanding of algebraic concepts. Emphasis is given to the study of linear, quadratic, exponential, logarithmic, polynomial, rational, and radical functions, their properties, and graphs. Students will develop understanding of algebraic concepts and procedures through communication, representation, reasoning, making connections, problem solving, and technological representation. The students will understand the relationship between the arithmetic of rational numbers and that of rational expressions; extend their understanding of trigonometric ratios as they graph periodic functions; and identify the appropriate function to model a situation. They will represent and solve problems with vector and matrix quantities. Students will also use statistical models to interpret data, make inferences and justify conclusions.

Honors - 5 Credits – 6 Periods per Cycle – Full Year

Strongly Recommended: Graphing Calculator

Prerequisite: A grade of “A-” or better in Standard Geometry, “B-” or better in Honors Geometry

TOPICS IN DISCRETE MATHEMATICS (Grades 11-12)

This course provides students the opportunity to study a variety of topics in the field of Discrete Mathematics. Students will use discrete models to interpret data, make inferences, and solve problems that answer questions to real situations. They will determine “reasonableness” and evaluate mathematical representations of real-world situations. Students will represent and model with vector quantities; use matrices in applications and modeling to analyze situations and make decisions. Topics include graph theory, combinatorics, linear programming, arithmetic & geometric growth, statistical modeling, iteration and recursion, voting theory, fair division, symmetry & tessellations, finance, and more.

Standard – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: Passing grade in Algebra 2.

MATHEMATICAL DECISION MAKING (Grades 11-12)

This course provides students the opportunity to apply mathematics as they model a range of situations to solve problems involving the use of algebra, geometry, and trigonometry in diverse areas such as statistics and financial mathematics. The course is highly participatory in nature as students learn in a cooperative environment where they engage in discussion and make presentations. Students will extend and learn new content as they attain independent learning and research skills needed post high school.

Honors– 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: A grade of “A-” or better in Standard Algebra 2 or department approval, “B-” or better in Honors Algebra 2

STATISTICS THROUGH APPLICATION (Grades 11 and 12)

This course provides students with an introduction to important topics in statistics by focusing on statistical thinking behind data collection and analysis. It helps students be more discerning consumers of statistics, teaching them to interpret the numbers in surveys, election polls, and medical studies. Topics include sampling, surveys, experimental design, organizing data, distributions, probability, and reference.

Standard – 5 Credits – 6 Periods per Cycle – Full Year

Strongly Recommended: Graphing Calculator

Prerequisite: A passing grade in Algebra 2

ADVANCED PLACEMENT STATISTICS (Grades 11 and 12)

This course is equivalent to a first-semester college course in statistics. Students are exposed to four broad conceptual themes: exploring data by describing patterns and departures from patterns; sampling and experimenta-

tion whereby students plan and conduct studies; anticipating patterns using probability and simulation to explore random phenomena; and statistical inference through estimation of population parameters and testing hypotheses. Processes used include problem solving, reasoning, communication, representation, connections, and technology integration. *Students electing this course are expected to take the Advance Placement Examination in May* and, depending on the results, may be granted credit and/or appropriate placement by a participating college.

Advanced Placement – 5 Credits – 6 Periods per Cycle – Full Year

Requirement: Graphing Calculator

Prerequisite: A grade of "A-" or better in Standard Algebra 2 or department approval, "B-" or better in Honors Algebra 2.

ADVANCED ALGEBRA AND TRIGONOMETRY (Grade 11-12)

This course is an alternative to Precalculus. *Students electing this course may not take Precalculus as a later course.* This course revisits topics commonly found on the SAT as well as new content. It provides students with a strong foundation for more advanced work in connection with algebraic functions, their relationships, properties and graphs, and places an emphasis on the study of trigonometry, matrices, and networks. Students will develop understanding of these algebraic concepts and procedures through communication, representation, reasoning, making connections, problem solving, and technology representation.

Standard - 5 Credits – 6 Periods per Cycle – Full Year

Strongly Recommended: Graphing Calculator

Prerequisite: A passing grade in Algebra 2

PRECALCULUS (Grades 11 and 12)

Through problem solving, reasoning, communication, representation, and connections, this course reviews linear, quadratic, exponential, polynomial, and logarithmic functions with a thorough treatment of trigonometric functions. Additional topics include complex numbers, mathematical induction, sequences and series, data distributions, and probability topics. The concepts of vectors and conic sections will be introduced.

Standard - 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: A grade of "B-" or better in Algebra 2 or "C" in Honors Algebra 2

Strongly Recommended: Graphing Calculator

HONORS PRECALCULUS (Grades 11 and 12)

Through problem solving, reasoning, communication, representation, and connections, this course presents a comprehensive study of elementary functions with a thorough treatment of trigonometric, logarithmic, and exponential functions. There will be additional study around complex numbers and conic sections with introductions to vectors, sequences and series, polar coordinates, data distributions and probability topics.

Honors - 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: A grade of "A-" or better in Standard Algebra 2, "B" or better in Honors Algebra 2

Strongly Recommended: Graphing Calculator

HONORS CALCULUS (Grades 11 and 12)

This course provides an introduction to many of the concepts found in a first-year college course in calculus and is designed for students who are not planning on taking the AP Calculus exam. A theoretical foundation is laid through the treatment of limits and continuity. Emphasis is placed upon problem solving, reasoning, communication, connections, and representations, and an understanding of the underlying principles of the calculus rather than on memorizing formulas. Other topics include derivatives, integration, sequences, curves, and vectors.

Honors - 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: A grade of "B-" or better in Standard Precalculus or "C-" or better in Honors Precalculus

Requirement: Graphing Calculator

ADVANCED PLACEMENT CALCULUS (Grades 11 and 12)

This course is equivalent to a first-year college course in calculus. A theoretical foundation is laid through a treatment of functions, graphs, and limits; derivatives; and integrals. Emphasis is placed upon an understanding of the underlying principles of calculus rather than on memorizing formulas. Processes used include problem solving, reasoning, communication, representation, connections, and technology integration. *Students electing this course are expected to take the Advance Placement Examination in May* and, depending on the results, may be granted credit and/or appropriate placement by a participating college.

Advanced Placement - 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: A grade of “B+” or better in Honors Precalculus

Requirement: Graphing Calculator

EXPLORATIONS IN COMPUTER PROGRAMMING (Grades 11-12)

This course provides an introduction to the development of computer programming techniques using several programming languages including Scratch and Python. Students are given the opportunity to analyze problem descriptions and design programming solutions using common problem-solving techniques. Additionally students will locate and correct errors in programs and create appropriate program documentation. This course is designed for students with no previous programming experience. A majority of the class time will be spent in hands-on lab activities. This is an elective course and does not satisfy the fourth year mathematics requirement.

Standard – 5 Credits – 6 periods per Cycle – Full Year

Prerequisite: A passing grade in Algebra 2

HONORS COMPUTER PROGRAMMING (Grades 11-12)

This course provides students with a hands-on investigation of the object-oriented programming language, C++. Students will develop an understanding of the syntax of C++, program design, and programming algorithms through communication, representation, reasoning, making connections, and problem-solving using related software. Topics and procedures include loops, strings, arrays, and various searching and sorting techniques. Programming projects will be analyzed, interpreted, evaluated, and logically coded in C++ to reinforce the understanding of the mathematics topics explored. Effective communication of programming techniques and understanding of the completed project coding will be stressed. This is an elective course and does not satisfy the fourth year mathematics requirement.

Honors – 5 Credits – 6 periods per Cycle – Full Year

Prerequisite: Grade of “C” or better in Honors Algebra 2 or “B” or better in Standard Algebra 2.

ADVANCED PLACEMENT COMPUTER SCIENCE (Grades 11-12)

This course provides students with the equivalent of a first semester college level course in computer science. Emphasis is placed on object-oriented programming methodology with a concentration on problem solving and algorithm development. It also includes the study of data structures, design and abstraction. Students are expected to become proficient in programming in Java as well as read and understand a large program consisting of several classes and interacting objects. Programming assignments and projects will be in alignment with the *College Board’s* required program of studies and students will need access to a computer. Homework will be assigned regularly. *Students electing this course are expected to take the Advance Placement Examination in May* and, depending on the results, may be granted credit and/or appropriate placement by a participating college. This is an elective course and does not satisfy the fourth year mathematics requirement.

Advanced Placement – 5 Credits – 6 periods per Cycle – Full Year

Prerequisite: Grade of “B-” or better in Honors Algebra 2 or “B+” or better in Standard Algebra 2.

Mini-Courses

MATH SAT PREP (Grades 10 - 12)

This course provides students with an opportunity to review the mathematics concepts of Algebra 1, Geometry, and some Algebra 2 in preparation for the SAT 1 Reasoning Test and the Preliminary Scholastic Assessment Test (PSAT).

Standard – 2 Credits – 2 Periods per Cycle – Full Year

MCAS MATH REVIEW (Grade 10)

This course provides students with an opportunity to review mathematics concepts and skills in context, as well as in the types of questions that students will encounter on the Grade 10 MCAS examination. This course is required for students who, as eighth graders, failed the MCAS test in Mathematics. It is not considered as one of the courses in the 4-year requirement for graduation.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

Strongly Recommended: Graphing Calculator

MCAS MATH REVIEW (Grades 11-12)

This course provides students with an opportunity to review mathematics concepts and skills in context, as well as in the types of questions that students will encounter on the MCAS Retest and/or MCAS EPP examinations. This course is required for students who, as tenth graders, failed the MCAS test in Mathematics or are currently on an Educational Proficiency Plan. It is not considered as one of the courses in the 4-year requirement for graduation.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

Strongly Recommended: Graphing Calculator

ALGEBRA 1 CHALLENGE (Grade 9)

This course is designed to support students who are simultaneously enrolled in an Algebra 1 course, and is open to students based on teacher and department recommendation only. It is not considered as one of the courses in the 4-year requirement for graduation.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

Strongly Recommended: Graphing Calculator

GEOMETRY CHALLENGE (Grade 10)

This course is designed to support students who are simultaneously enrolled in a Geometry course, and is open to students based on teacher and department recommendation only. It is not considered as one of the courses in the 4-year requirement for graduation.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

ALGEBRA 2 CHALLENGE (Grade 11)

This course is designed to support students who are simultaneously enrolled in an Algebra 2 course, and is open to students based on teacher and department recommendation only. It is not considered as one of the courses in the 4-year requirement for graduation.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

Strongly Recommended: Graphing Calculator

MEDIA and TECHNOLOGY DEPARTMENT

INTRODUCTION TO COMPUTER SCIENCE AND SOCIETY (Grades 9-12)

This is an introductory course to Computer Science and its impact on society. Students will focus on real-world computing problems and address social and ethical issues while building foundational computer science knowledge. Topics covered include Human Computer Interaction, Problem Solving, Web Design, Introduction to Programming and Computing and Data Analysis. Students will learn the basics of computational practices of algorithm development, problem solving and programming within the context real-world problems. The class will utilize software and programming languages including html, Javascript, Scratch, Adobe Photoshop, Google Docs, Forms, and Drive, Wordpress and Social Media.

Standard - 2 Credits - 2 Periods per Cycle - Full Year

COMPUTER SCIENCE AND SOCIETY (Grades 9-12)

Students will collaborate with their peers and engage in several in-depth projects to demonstrate the real-world applications of computing. Topics covered include Human Computer Interaction, Problem Solving, Web Design, Introduction to Programming, Computing and Data Analysis and Robotics. Students will develop their skills in computational practices of algorithm development, problem solving and programming within the context real-world problems. The class will utilize software and programming languages including html and css, Javascript, jquery, Scratch, Adobe Photoshop, Flash, Google Docs, Forms, and Drive, Wordpress and Social Media.

Standard - 4 Credits - 4 Periods per Cycle - Full Year

WEB DESIGN (Grades 10-12)

This class is for eager students who want to learn how to create, design, and update websites. Students will learn the basics for building a website from scratch, including HTML and CSS coding, as well as discover free or inexpensive web-based applications to build a fantastic site. Projects could include developing a website on a topic of a student's choice or a school-related assignment, designing graphics, and using web-based applications to enhance a website and make it more interactive. In this course students will have an opportunity to be creative while further developing their critical thinking, communications, and organizational skills.

Standard - 4 Credits – 4 Periods per Cycle – Full year

MEDIA LITERACY (Grades 9-12)

In Media Literacy students are expected to assess media from an objective point of view while looking at their own attitudes and behaviors to determine how they are affected by media influences. Students will participate in instructional activities that require them to analyze and evaluate the influence of media. This will include television programs, newspapers, magazines, movies and websites.

Standard – 2 Credits – 2 Periods per Cycle - Full year

MUSIC DEPARTMENT

The Music Department offers courses designed to meet the needs of high school students. Students who are planning careers in music or who are interested in acquiring the skills and benefits music study provides will find educational opportunities available to them. All students must take and pass a Fine Arts course for graduation.

BAND (Grades 9-12)

This course is designed for students who play a band instrument. All students must attend one weekly nighttime rehearsal and must participate in ALL Medford High School football games, parades, (Patriots' Day, Memorial Day), graduation, competitions, concerts, and band activities that occur after school hours as outlined in the MHS Band Handbook.

Standard - 4 Credits – 4 Periods per Cycle – Full Year

CHORUS (Grades 9-12)

This course is open to boys and girls who enjoy singing. The chorus will study and sing a variety of music from past to present. Attendance at concerts, rehearsals, and musical activities that meet after hours is required. In addition, all Chorus students must attend one weekly after-school rehearsal.

Standard - 4 Credits – 4 Periods per Cycle – Full Year

ORCHESTRA (Grades 9-12)

This course is for those students who have had previous experiences and lessons in violin, viola, cello and bass violin. No beginners are eligible without prior permission of the orchestra director. Wind and percussion players are to be admitted only after taking and passing an audition. Attendance at rehearsals, programs, concerts, and musical activities after school hours is required. All Orchestra students must attend one weekly nighttime rehearsal.

Standard - 4 Credits – 4 Periods per Cycle – Full Year

GUITAR 1 (Grades 9-12)

Guitar class is designed for the beginning guitar student who has never played an instrument before, never played guitar before, and/or wants to learn how to read music. Students will learn how to read both standard notation and TAB notation. They will also learn chords, a variety of guitar riffs and techniques, and gain a basic understanding of improvisation. *Students will be allowed to use school-owned acoustic guitars during class. However, students are strongly encouraged to own their own acoustic guitar at home for practicing.

Standard – 2 credits – 2 Periods per Cycle – Full year

GUITAR II (Grades 9-12)

Guitar II class is designed for the intermediate to advanced guitar student. The primary objective is to build on the foundation gained in Guitar I. This class will be primarily performance based, utilizing Guitar I skills towards arrangements for guitar. Both standard and TAB notation will be expanded. *Students will be allowed to use school-owned acoustic guitars during class. However, students are strongly encouraged to own their own acoustic guitar at home for practicing.

Standard – 2 credits – 2 Periods per Cycle – Full year

Prerequisite: Completion of Guitar I or by audition

MUSIC APPRECIATION (Grades 9-12)

Music Appreciation class will give students a basic understanding of reading and writing music, the various purposes of music in our lives, and the characteristics of various musical styles. Students will explore music through listening, analyzing, creating, and applying musical concepts.

Standard – 2 credits – 2 Periods per Cycle – Full year

PERCUSSION I (Grades 9-12)

Percussion I class will introduce students to reading and writing rhythms and applying them to percussion instruments. Students will learn basic skills as they apply to snare drum and other pitched and non-pitched instruments. The class will give students the opportunity to perform and practice independently, as well as with an ensemble.

Standard – 2 credits – 2 Periods per Cycle – Full year

PERCUSSION II (Grades 9-12)

Percussion II is designed for the intermediate to advanced percussionist. The class will utilize skills and knowledge obtained from the Percussion I class in learning and performing more complex rhythms and compositions.

Standard – 2 credits – 2 Periods per Cycle – Full year

Prerequisite: Completion of Percussion I or by audition

MVTHS CTE OFFERINGS

At MVTHS we create a positive learning community that prepares students for personal and professional success in an internationally competitive society through a fusion of rigorous career, technical, and academic skills.

CTE EXPLORATORY PROGRAM (Grade 9)

The exploratory program at MVTHS is full year course and is designed to allow students to make informed decisions in choosing a CTE area which they wish to pursue in grades 10, 11, & 12. The exploratory program provides students with experiences in career awareness by giving them an orientation to their top 8 CTE programs. During the first two quarters of the school year, grade 9 students rotate through the CTE programs. In addition students will be required to keep an Exploratory binder, which will contain writing assignments reflecting the students' experience in the CTE programs, as well as grade reports. All students are evaluated consistency in all CTE programs. At the end of the exploratory program, grade 9 students will choose their permanent CTE program for quarters 3 & 4 and for grades 10, 11, & 12.

The following CTE programs are offered at MVTHS; Automotive Collision & Repair, Automotive Technology, Biotechnology/Environmental Science, Business Technology & Marketing, Carpentry, Construction Craft Laborers, Cosmetology, Culinary Arts & Hospitality Management, Early Childhood Education, Electrical, Graphic Arts & Design & Visual Communications, Health Assisting, HVAC & Metal Fabrication, and Robotics, Automation & Engineering

Standard - 5 Credits - 6 Periods per Cycle - Full Year

EXPLORING CHILDHOOD I⁸ (Grades 11 and 12)

This course teaches high school students how a child develops mentally, physically, socially and emotionally. Students are taught early childcare theory and receive hands-on training by working in an accredited preschool with the opportunity to develop and implement an age-appropriate, theme-based curriculum.

Standard - 5 Credits – 6 Periods per Cycle – Full Year

EXPLORING CHILDHOOD II⁹ (Grade 12)

Students must complete Exploring Childhood I to be accepted into this program. This class consists of five labs per cycle, giving the student additional hands-on training in various preschool settings. Weekly observation journals are required. After completing Exploring Childhood I and II, students are eligible for certification as preschool teachers from the Early Education and Care Office, formerly the Office of Child Care Services.

Standard - 5 Credits – 6 Periods per Cycle – Full Year

⁸ Students will earn a letter grade in Exploring Childhood I. Please note that students do not receive community service credit for service done during the school day.

⁹ Students will earn a letter grade in Exploring Childhood II. Please note that students do not receive community service credit for service done during the school day.

PHYSICAL EDUCATION DEPARTMENT

The comprehensive goals of the Physical Education Program are to emphasize the mental, emotional and social aspects of living, as well as the physical development aspects necessary for a satisfying and active life. The program emphasizes the relationship of physical activity to the physical, mental, social and emotional maturity of the students. Both present and future physical and recreational needs of students are met through: (1) participation in a wide variety of physical activities that will lead to the development of coordination, strength, skills and endurance; (2) participation in a variety of physical activities that have continuing lifetime values; and (3) experiences designed to develop knowledge, understanding, and attitudes that result in desirable practices necessary to maintain physical, social, emotional and mental health.

Students are required to complete two years of Physical Education during their four years at Medford High School. This includes freshman physical education, sophomore physical education and four electives.

Students in Physical Education or Fitness classes are expected to change prior to each class and participate to the best of their ability. Grades are determined through attendance, proper attire, assessments and participation.

Student athletes must participate in their scheduled Physical Education class in order to participate in an athletic practice, competition or game that day.

PHYSICAL EDUCATION – Adaptive (Grades 9-12)

This program presently includes those students whose Individual Education Plans require that they not be mainstreamed into the regular Physical Education program. Arrangements for enrollment are made through the Special Education and Physical Education Offices.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

FRESHMEN PHYSICAL EDUCATION- INTRO TO FITNESS

This course is designed to introduce the student to basic fitness components, exercises and testing. Students will learn about their own fitness level through a variety of fitness tests. Students will also learn how to improve their own fitness levels through heart rate monitoring and circuit training exercises. As part of this class students will also have a basic orientation to the fitness center.

Standard –1 Credit – 2 Periods per Cycle – Half Year

SOPHOMORE PHYSICAL EDUCATION- FOUNDATION OF FITNESS

This course is designed to introduce the student to the principles of fitness. Emphasis is on the scientific basis for setting up and engaging in personalized physical fitness programs. Students will learn basic anatomy, cardiovascular exercise routines and the proper form for strength & flexibility exercises for each muscle group. Upon completion, students should be able to set up and implement an individualized physical fitness program.

Standard –1 Credit – 2 Periods per Cycle – Half Year

JUNIOR & SENIOR PHYSICAL EDUCATION- STUDENTS' CHOICE

Students must choose 2 electives per year (1.0 credit total). See below:

DANCE IN ACTION

This class is for beginning to advanced students - no experience is necessary. This student-centered class will explore many different styles of dance including: Merengue, Salsa, Cumbia, Reggatone, multicultural folk as well as other forms. The class will have the opportunity to create original choreography and perform in an informal presentation at the end of the semester. This course is offered to all students.

Standard –0.5 Credit – 2 Periods per Cycle – Quarter Year

FIRST AID & CPR

Students will learn how to recognize and treat life-threatening emergencies, including cardiac arrest and choking for adult, child and infant victims. Students also learn to recognize the warning signs of heart attack and stroke in adults and breathing difficulties in children and basic first aid. Successful completion of this class will result in American Red Cross certification.

Standard –0.5 Credit – 2 Periods per Cycle – Quarter Year

FITNESS WALKING/HIKING

This course introduces the student to a variety of walking workouts. Emphasis is on stretching, walking form, proper clothing, fluid needs, and injury prevention. Upon completion, students should be able to participate in a recreational walking program.

Standard –0.5 Credit – 2 Periods per Cycle – Quarter Year

GET FIT

This course will include a variety of fitness activities such as step aerobics, circuit training, pilates, yoga, walking, jogging and core strengthening. Classes consist of a warm-up, cardio training, cool down and stretching, as well as muscle conditioning exercises. Nutrition and weight-control concepts may also be discussed.

Standard –0.5 Credit – 2 Periods per Cycle – Quarter Year

LIFETIME ACTIVITIES

This course provides diverse offerings to meet the individual needs of all students and to develop competency in individual and dual activities. Improved fitness is a goal through a variety of activities. Activities may include: golf, pickle ball, snowshoeing, ultimate frisbee, badminton, tennis, bocci and volleyball.

Standard –0.5 Credit – 2 Periods per Cycle – Quarter Year

OUTDOOR PURSUITS

This course introduces the student to outdoor activities including: snowshoeing. PROJECT WILD/PROJECT EAGLE & hiking.

Standard –0.5 Credit – 2 Periods per Cycle – Quarter Year

PERSONAL & GROUP AWARENESS

Individual and group activities in a problem-oriented approach which requires students to address issues of leadership, decision-making, commitment, fear, risk-taking, stress, and compassion. These activities help to build self-confidence, self-esteem, group support, initiative and responsibility

Standard –0.5 Credit – 2 Periods per Cycle – Quarter Year

NET GAMES

This course provides diverse offerings to meet the individual needs of all students and to develop competency in individual and dual activities. Improved fitness is a goal through a variety of activities. Activities may include: pickle ball, badminton, and volleyball.

Standard –0.5 Credit – 2 Periods per Cycle – Quarter Year

TEAM SPORTS

Instruction and games for the individual who enjoys cooperative and a competitive physical environment. Among the activities are basketball, floor hockey, team handball, and volleyball. This course may also include coaching techniques, sports management and officiating.

Standard –0.5 Credit – 2 Periods per Cycle – Quarter Year

TEAM SPORTS II

Instruction and games for the individual who enjoys cooperative and a competitive physical environment. Among the activities are flag football, soccer, and whiffle ball. This course may also include coaching techniques, sports management and officiating.

Standard –0.5 Credit – 2 Periods per Cycle – Quarter Year

WELLNESS ACTIVITIES

Learn how to enhance your health and sense of well-being. Students will learn about each dimension of wellness: Physical, social, emotional, spiritual, environmental, intellectual & occupational. Activities may include relaxation techniques, yoga, meditation, stress management knowledge concepts, resistance training and partner and

group activities.

Standard – 0.5 Credit – 2 Periods per Cycle – Quarter Year

YOGA

This course is designed to introduce students to the basic postures, breathing techniques, and relaxation methods of yoga. Students will begin to experience the benefits of stretching, moving, and breathing freely as they relieve built up stress and learn to relax.

Standard – 0.5 Credit – 2 Periods per Cycle – Quarter Year

ELECTIVE for 11th or 12th graders

ADVANCED FITNESS

This course is designed for the student who has already completed Introduction to Fitness and Foundations of Fitness classes. Students will learn advanced fitness exercises, a variety of workouts, and nutritional guidelines.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

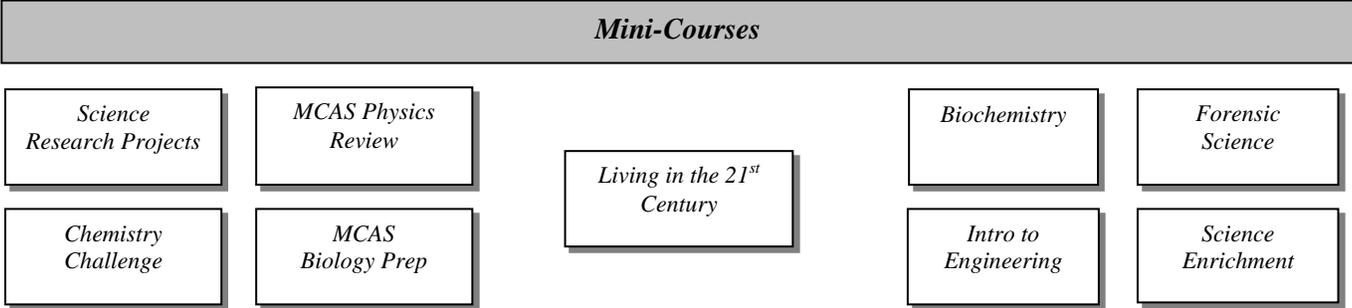
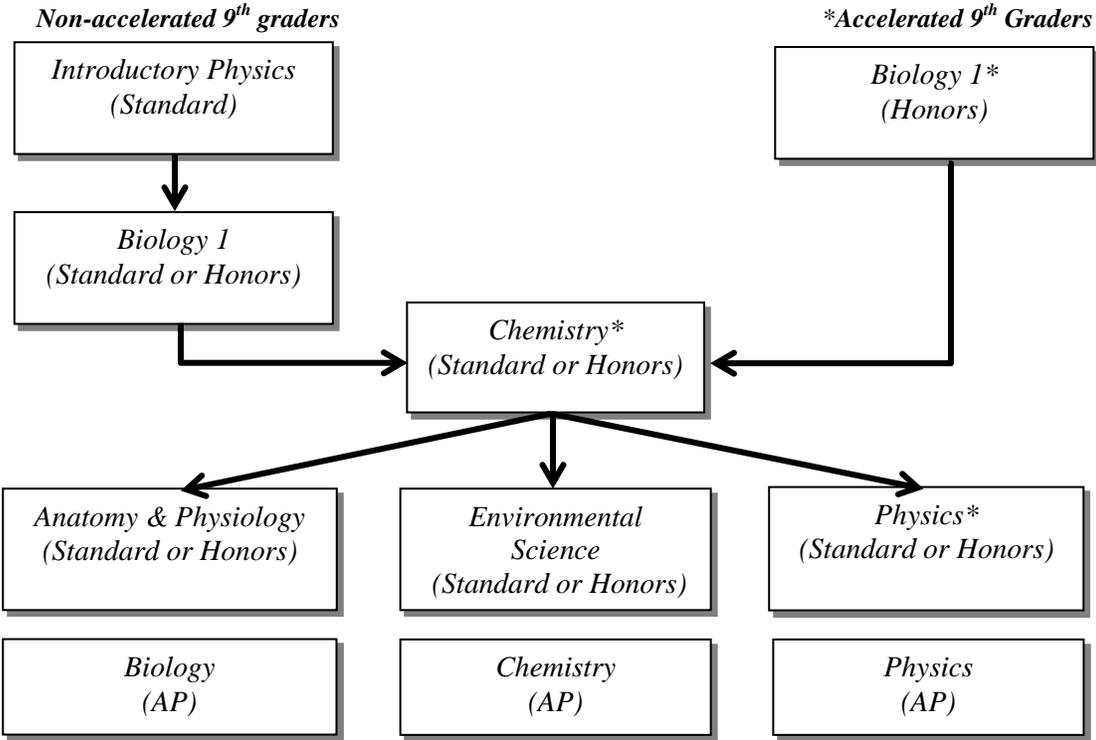
Prerequisite: Introduction to Fitness & Foundations of Fitness

SCIENCE DEPARTMENT

A scientific education is designed to develop in the student an appreciation of the joy, excitement, and intellectual awareness of our biological, physical, technological, and chemical environment. Balanced with the study of the arts and humanities, students will be able to achieve a wider understanding of their complex world. A person literate in science will be able to understand science concepts and process skills in making decisions related to scientific issues that affect society. The science curriculum supports students' interests in different career paths. The expectation is that all students will complete a course in each of the three main domains of science as they pursue their 3-course graduation requirement: physics, biology, and chemistry. This is also the recommendation of national, state, and local science organizations and many colleges and universities. After exploring these various sciences, students have the opportunity to select one of these areas for further study or another area of science such as anatomy and physiology or environmental science.

SCIENCE SEQUENCE CHART 2015-2016

THREE LAB-BASED SCIENCE COURSES ARE REQUIRED FOR GRADUATION



Five and Six-Credit Courses

INTRODUCTORY PHYSICS (Grade 9)

The Introductory Physics course helps students recognize the nature and scope of physics and its relationship to other sciences. Students will learn about basic topics such as motion, forces, energy, momentum, heat and heat transfer, waves, electricity, and magnetism. Students will be engaged in scientific inquiry, investigations, and labs so that they develop a conceptual understanding and basic scientific skills.

Standard – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: Passing grade in grade 8 integrated science

BIOLOGY I (Grade 10)

This course emphasizes inquiry and lab-based experiences to explore the fundamental principles of living things. Students learn about the diversity of living organisms and their relationship to the environment. They encounter standards in the areas of *The Chemistry of Life, Cell Biology, Genetics, Anatomy and Physiology, Evolution and Biodiversity, and Ecology*. In classes where dissection is used as an instructional activity, students will be presented with alternatives as described in the district's Dissection Policy.

Standard – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: Passing grade in Introductory Physics

HONORS BIOLOGY I (Grade 9 and 10)

This is a course for students selected by the Science Department for acceleration in Grade 9. Strong mathematical and reading abilities are essential. This rigorous course emphasizes inquiry, research, and lab-based experiences to explore the fundamental principles of living things and examine systems from the molecular level through cell biology and genetics, to the tissue and organ level in vertebrate anatomy and physiology, and at the level of organisms and populations through ecology. Students encounter standards in the areas of *The Chemistry of Life, Cell Biology, Genetics, Anatomy and Physiology, Evolution and Biodiversity, and Ecology*. In classes where dissection is used as an instructional activity, students will be presented with alternatives as described in the district's Dissection Policy.

Honors – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: A grade of "A-" or better in grade 8 science, qualifying score on the science placement exam in grade 8; a grade of "A-" or better in Introductory Physics.

CHEMISTRY I (Grade 10-12)

This course focuses on the interaction of matter through chemical reactions. Properties and states of matter, atomic structures, chemical formulas, bonding, chemical reactions, energy, gas laws, survey of materials, solutions, acids/bases, and organic, nuclear and equilibrium chemistry are some of the topics covered. Laboratory experimentation is an essential feature of the course.

Standard – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: Passing grade in Biology.

Strongly Recommended: Scientific or Graphing Calculator

HONORS CHEMISTRY I (Grades 10 & 11)

This is a course primarily for students selected by the Science Department for acceleration in Grade 10. Strong mathematical and reading abilities are essential. This course uses inquiry and lab-based experiences to explore the properties of matter and how these properties help to organize elements on the periodic table. Students develop an understanding of the structure of the atom and of chemical reactions, including the involvement of energy and sub-atomic particles to better understand the nature of chemical changes. They learn about chemical reactions (e.g. oxidation-reduction, combustion, decomposition), and gain an understanding of acids and bases and rates of reaction. By calculating stoichiometry problems and molar concentrations, students strengthen proportionality and other mathematical skills. They will encounter other standards in the areas of Properties of Matter; Atomic Structure and Nuclear Chemistry; Periodicity; Chemical Bonding; Chemical Reactions and Stoichi-

ometry; States of Matter, Kinetic Theory, and Thermochemistry; Solutions, Rates of Reactions, and Equilibrium; and Acids, Bases, and Reduction-Oxidation Reactions.

Honors – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: A grades of “B-” or better in Honors Biology or “A-” or better in Standard Biology.

Strongly Recommended: Scientific or Graphing Calculator

ANATOMY AND PHYSIOLOGY (Grades 11 and 12)

This course studies the structure and function of the human body and the mechanisms for maintaining homeostasis within it. It includes the study of cells, tissues and the integumentary, skeletal, muscular and nervous systems. It also includes the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems, and the concepts of development, metabolism, fluid and electrolyte balance, and acid-base balance. This course uses dissection as an instructional activity. Students will be presented with alternatives as described in the district’s Dissection Policy.

Standard – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: Passing grade in Biology and Chemistry

HONORS ANATOMY AND PHYSIOLOGY (Grades 11 and 12)

This course has been designed to meet the needs of those students who must acquire a firm grounding in human anatomy and physiology in order to prepare for medical, nursing or paramedical careers. Students will investigate the structure and function of the human body with an emphasis on laboratory work. This course studies the structure and function of the human body and the mechanisms for maintaining homeostasis within it. It includes the study of cells, tissues and the integumentary, skeletal, muscular and nervous systems. It also includes the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems, and the concepts of development, metabolism, fluid and electrolyte balance, and acid-base balance. This course uses dissection as an instructional activity. Students will be presented with alternatives as described in the district’s Dissection Policy.

Honors – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: Grades of “B-” or better in Honors Biology and Honors Chemistry or “A-” or better in Standard Biology and Standard Chemistry

PHYSICS I (Grades 11 and 12)

This course will give students a coherent view of Physics with a strong foundation in Newtonian mechanics, electricity/magnetism, waves and light. Emphasis is placed on understanding the basic laws and concepts of Physics. The major topics of the course are mechanics, electricity/magnetism, waves and optics. Experimentation, classroom demonstrations and problem-solving applications are used to accomplish the goals outlined above.

Standard – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: Passing grades in Biology & Chemistry.

Strongly Recommended: Scientific or Graphing Calculator

HONORS PHYSICS I (Grades 11 and 12)

This course will give students a coherent view of Physics with a strong foundation in Newtonian mechanics, electricity/magnetism, waves and light. The course goes beyond a conceptual understanding of basic laws and concepts including in-depth study, discussion, and application with reliance on strong mathematical understanding. The curriculum is taught at faster pace than the standard level to accommodate the rigor and breadth of an honors level course.

Standard – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: Grades of “B-” or better in Honors Chemistry or “A-” or better in Standard Chemistry.

Strongly Recommended: Scientific or Graphing Calculator

ADVANCED PLACEMENT BIOLOGY II (Grades 11-12)

This course is designed to be the equivalent of a college introductory biology course. Students are expected to

take the Advanced Placement Exam in May and, depending on the results, may be granted credit and/or appropriate placement by a participating college. The topics for this laboratory course include biochemistry, cellular studies, genetics, evolution, biodiversity and population dynamics.

Advanced Placement – 6 Credits – 7 Periods per Cycle – Full Year

Prerequisite: A grade of “A-” or better in Honors Biology and Honors Chemistry

Strongly Recommended: Basic four-function calculator

ADVANCED PLACEMENT CHEMISTRY II (Grades 11 and 12)

This course is a cooperative educational endeavor of the College Board, which permits students to pursue a college level course while still in high school. Students are expected to take the Advanced Placement Examination in May and, depending on the results, may be granted credit and/or appropriate placement by a participating college. The topics for this laboratory course include atomic and molecular theory, stoichiometry, phases of matter, solutions, equilibrium, and thermodynamics.

Advanced Placement – 6 Credits – 7 Periods per Cycle – Full Year

Prerequisite: A grade of “A-” or better in Honors Biology & Honors Chemistry.

Strongly Recommended: Scientific or Graphing Calculator

ADVANCED PLACEMENT PHYSICS II (Grade 12)

This course is equivalent to a first year of college Physics for students with high mathematical ability and is designed with the expectation that students have been exposed to a full year of Physics I. The topics covered are mechanics and electricity/magnetism, with equal emphasis on each. Additional topics may include waves, optics, thermodynamics and relativity. Methods of the calculus are used whenever appropriate. Students must have taken or concurrently enroll in Calculus. Students are expected to take the Advanced Placement Exam in May and, depending on the results, may be granted credit and/or appropriate placement by a participating college.

Advanced Placement – 6 Credits – 7 Periods per Cycle – Full Year

Prerequisite: A grade of “A-” or better in Honors Chemistry & Honors Physics.

Requirement: TI-83+ or TI-84+ Graphing Calculator.

ENVIRONMENTAL SCIENCE (Grades 11 and 12)

This course enables students to develop an understanding of the natural environment and the environmental problems the world faces. Students will investigate, through inquiry, labs, project work, presentations, and field experiences, topics such as: fundamental ecological principles, natural resources, air and water pollution, global climate change, hazardous and solid waste, alternative energy resources, soil, deforestation, biodiversity and endangered species, and their ecological, economical and human health impacts. Particular emphasis will be placed on local environments so students develop a basic understanding of ecology as a basis for making ethical decisions and career choices. An independent science fair research project is required. The students are responsible for overseeing the recycling program at MHS and participating in the annual Earth Week celebration. This course has a required online component that enhances the concepts taught in class.

Standard – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: A passing grade in Biology and Chemistry

HONORS ENVIRONMENTAL SCIENCE (Grades 11 and 12)

The course explores the role which humans play in causing environmental change and the underlying values and ethical judgments involved in making choices. Students will investigate, through inquiry, labs, independent research, project work, presentations, and community service, topics such as: fundamental ecological principles, environmental history, human overpopulation, food and agricultural resources, air and water pollution, global climate change, ozone depletion, acid rain, hazardous and solid waste, alternative energy resources, soil, deforestation, over fishing, biodiversity and endangered species, and their ecological, economical and human health impacts. An independent science fair research project is required. Students are also responsible for overseeing the recycling program at MHS and participating in the annual Earth Week celebration. This course has a required online component that further enhances the concepts taught in class.

Honors – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: Grades of “B-” or better in Honors Biology and Honors Chemistry or “A-” or better in Standard Biology and Standard Chemistry

Two-Credit Courses

SCIENCE FAIR PROJECTS (Grades 9-12)

This course is designed to provide students with challenging opportunities to conduct experimental science research that leads to an exhibit in the annual Science Fair. Students will have assistance with selecting topics, gathering data and materials, analyzing results, and preparing a Science Fair display.

Standard – 2 Credits – 2 Periods per Cycle – Full Year (recommended for grades 9-10, but open to 9-12)

Standard – 1 credit – 1 Period per Cycle – Full Year (recommended for grades 11-12)

Prerequisite: Commitment to developing a project for the annual Science Fair and solid grades in previous science course work.

SCIENCE ENRICHMENT (Grades 9-12)

This course is designed to provide students with an opportunity to explore topics in modern physical and geospatial sciences, citizenship for the environment, scientific journalism and multimedia, and to introduce frameworks for bioethical issues and scientific argumentation. Students will be exposed to material in a variety of formats, which includes the use of technology as well as an emphasis on 21st century college and career readiness learning expectations.

Standard - 2 Credits – 2 Periods per Cycle - Full Year (recommended for grades 10-11, but open to 9-12)

BIOCHEMISTRY (Grades 11-12)

Biochemistry uses chemistry to describe biological systems. This course uses the basic foundations taught in Chemistry and Biology to better understand how the human body functions on both the molecular and systemic level. Additionally, this course explores the effects of pharmaceuticals, toxins, diseases and disorders on biological systems at the chemical level.

Standard - 2 Credits – 2 Periods per Cycle – Full Year

Prerequisite: A passing grade in Biology and Chemistry

INTRODUCTION TO ENGINEERING (Grades 11 and 12)

Students will discuss and work on engineering projects related to the design process and the construction of model bridges and vehicles.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

Prerequisite: A passing grade in Chemistry and Geometry

FORENSIC SCIENCE (Grades 11-12)

This course focuses on the analysis of evidence collection, the decomposition process, crime scenes, skeletal remains, toxicology, and document validity. Case studies and crime scenarios help students understand the implications and complicated issues that are emerging as the science of forensics continues to develop.

Standard – 2 Credits – 2 Periods per Cycle – Year

Prerequisite: A passing grade in Biology and Chemistry

MCAS PHYSICS REVIEW (Grade 9)

This course is designed for students who had a Failing performance level result on a previous MCAS exam or are interested in receiving additional support in preparation for the exam. It will provide students with additional preparation for the Grade 9 Introductory Physics MCAS exam. Students will review key concepts and skills from an Introductory Physics course and will have additional practice with Grade 9 Introductory Physics multiple-choice and open response MCAS questions.

Standard – 2 Credits – 2 Periods per Cycle – Year

MCAS BIOLOGY PREP (Grades 10-11)

This course is designed for students who had a Failing performance level result on a previous MCAS exam or are interested in receiving additional support in preparation for the exam. It will provide students with additional preparation for the Grade 10 Biology MCAS exam or Grades 11-12 Biology MCAS mid-year exam. Students will review key concepts and skills from a Biology course and will have additional practice with Biology multiple-choice and open response MCAS questions.

Standard – 2 Credits – 2 Periods per Cycle – Year

CHEMISTRY CHALLENGE (Grades 11-12)

This course is designed to support students who are simultaneously enrolled in a Standard Chemistry course, and is open to students based on teacher or department recommendation only.

Standard – 2 Credits– 2 Periods per Cycle – Year

SOCIAL STUDIES DEPARTMENT

Students need to successfully complete three years of History and Social Studies instruction in order to be eligible for graduation. To comply with the August 2003 *Massachusetts History and Social Studies Framework*, all students must take a two-year sequence in world history starting with their freshman year. As juniors, all students are required to take United States History. Seniors have the choice of several courses but must first ensure that they have passed all of their requirements.

Five-Credit Courses

WORLD HISTORY I (Grade 9)

Students in Grade 9 will study the history and geography of the civilizations and nations that occurred in Europe, Africa, and the Americas and Asia from the fall of the Roman Empire to the beginning of the modern era (500 A.D. to 1815). Focus will be placed on the history and geography of great civilizations that were developing concurrently throughout the world during medieval and early modern times. Students will examine the growing economic interaction within and between civilizations, as well as the exchange of ideas, beliefs, technologies, commodities and cultures.

Standard – 5 Credits – 6 Periods per Cycle – Full Year

Honors – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite for Standard: Passing grade in United States History I (Grade 8)

Prerequisite for Honors: Average grade of “A-” in United States History I (Grade 8)

Requirement for Honors: Summer reading project due by the first day of school

WORLD HISTORY II (Grade 10)

The course will begin with a study of the evolutions and revolutions of European nation states and then continue with a study of European nationalism and imperialism, the emergence of modern China and Japan, the dawn of the 20th century, the turmoil that led to WWI, the Russian Revolution, and the Great Depression. Also included will be the rise of fascism, WWII, the Cold War, the Revolution of Rising Expectations, and the changing scientific, economic, social, cultural, and political events that are shaping the 21st century. Current events will also be looked at and incorporated into the course. Students will be able to put historical events in proper perspective and apply concepts and themes from all the Social Sciences in order to make sense of the world in which they live.

Standard – 5 Credits – 6 Periods per Cycle – Full Year

Honors – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite for Standard: Passing grade in World History I

Prerequisite for Honors: Average grade of “B-” in Honors World History I OR

Average grade of “A-” in Standard World History I

Requirement for Honors: Summer reading project due by the first day of school

UNITED STATES HISTORY (Grade 11)

This course is required for graduation and conforms to the outline provided by the Massachusetts History and Social Science Framework. Students in Grade 11 will study the major turning points in American History in the 20th century. After a brief review of the causes, events and results of the Civil War and Reconstruction, this course will examine the rise of Industrial America and the labor movement, immigration and the shift in population to the cities, along with the changing ethnic composition of America. Also included will be the position of the United States in a changing and hostile world of the 20th century, adjustments brought on by the Great Depression and the New Deal, the Civil Rights struggle and achievements, the Vietnam War and the changing scientific, cultural, economic, and political developments of the late 20th century. Students will have the opportunity to discuss major events and elements of the Cold War. In addition to the treatment of all core knowledge topics, the course will begin with a featured examination of the Constitution, our governmental system of checks and balances, assorted case studies, as well as the rights and responsibilities of citizenship.

Standard – 5 Credits – 6 Periods per Cycle – Full Year

Honors – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite for Standard: Passing grade in World History II

Prerequisite for Honors: Average grade of “B-” in Honors World History II OR

Average grade of “A-“ in Standard World History II

Requirement for Honors: Summer reading project due by the first day of school

UNITED STATES GOVERNMENT AND LAW (Grade 12)

The primary purpose of this course is to develop an understanding of the roles that government and law play in daily American life. It is intended to promote informed, responsible, and active citizenship among students. The course will examine the underlying principals upon which the United States Government was founded. A study of the United States Constitution will be undertaken to provide the contextual background for review and discussion of various historical events and issues. The course expands on the review of issues featured in the grade 11 United States History course to include topics such as: judicial review, civic responsibility, federalism, political parties, and civil, criminal, and constitutional law. Content coverage will have an emphasis on making connections to the student’s world through the study of contemporary American social, political, and legal issues.

Standard – 5 Credits – 6 Periods per Cycle – Full Year

Honors – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite for Standard: Passing grade in United States History

Prerequisite for Honors: Average grade of “B-” in Honors United States History OR

Average grade of “A-“ in Standard United States History II

Requirement for Honors: Summer reading project due by the first day of school

PSYCHOLOGY (Grade 12)

This yearlong course is designed to provide students with an overview of historical and contemporary theory and practice in the study of human behavior. As such, students will engage in experimentation, projects, discussion and debate. Units of study include learning and motivation, sensation and perception, emotional, behavioral, social and moral development, abnormal behavior and social psychology. Students will also enjoy learning about their own personality, development and learning style.

Standard – 5 Credits – 6 Periods per Cycle – Full Year

Honors – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite for Honors: Average grade of “B-” in Honors United States History OR

Average grade of “A-“ in Standard United States History II

Requirement for Honors: Summer reading project due by the first day of school

BASIC FINANCE: PERSONAL AND BUSINESS (Grade 11 and 12)

Basic Finance provides students with an understanding and practical knowledge necessary to meet the challenges of contemporary financial issues. The curriculum will include personal financial planning, career exploration/planning, money management, consumer issues, banking, investments, taxes, insurance, and business finance.

Standard – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite for Standard: Passing grade in United States History

ECONOMICS (Grade 12)

This honors course is designed for highly motivated seniors wishing to gain an overview of economics as presented in the Massachusetts Social Studies Curriculum Frameworks. Students will gain knowledge in a wide range of topics including workers, wages and employment in the modern economy, international trade and monetary policy, supply and demand, economic growth, productivity and living standards, GDP and unemployment and the role of the Federal Reserve. The course will also feature enrichment activities and simulations based on the College Board syllabus. Students will have the option to take the AP exam

Honors – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite for Honors: Average grade of “B-” in Honors United States History OR
Average grade of “A-” in Standard United States History I
Requirement for Honors: Summer reading project due by the first day of school

Advanced Placement Courses

ADVANCED PLACEMENT EUROPEAN HISTORY (Grade 10)

The Advanced Placement European History course examines the development of European History from 1300 to the present day. The class follows a standardized curriculum established by the College Board and can be taken in lieu of World History II. Students electing this course are expected to take the Advanced Placement examination in May and, depending on the results may be granted credit and/or appropriate placement by a participating college.

Advanced Placement – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: Average grade of “A-” in Honors World History I

Requirement: Summer reading project due by the first day of school

ADVANCED PLACEMENT UNITED STATES HISTORY (Grade 11)

This Advanced Placement course follows a standardized curriculum established by the College Board and can be taken in lieu of United States History. Students electing this course are expected to take the Advanced Placement examination in May and, depending on the results may be granted credit and/or appropriate placement by a participating college.

Advanced Placement – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: Average grade of “A-” in Honors World History II OR

Average grade of “B-” in Advanced Placement European History

Requirement: Summer reading project due by the first day of school

ADVANCED PLACEMENT COMPARATIVE GOVERNMENT (Grade 12)

This Advanced Placement course follows a standardized curriculum established by the College Board. Students electing this course are expected to take the Advanced Placement examination in May and, depending on the results may be granted credit and/or appropriate placement by a participating college. Students taking this course will participate in *Project EPIIC* (Education for Public Inquiry and International Citizenship), a program that requires students to do research in preparation for a simulation at Tufts University in the spring.

Advanced Placement – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: Average grade of “A-” in Honors World History II or Honors United States History OR

Average grade of “B-” in AP United States History or AP European History

Requirement: Summer reading project due by the first day of school

ADVANCED PLACEMENT PSYCHOLOGY (Grade 12)

This elective course is for highly motivated Medford High School seniors who are interested in taking the Psychology Advanced Placement examination in May. This course will follow the curriculum established by the AP College Board, which will include the content areas: history of psychology, research methods, biology of behavior, sensation and perception, consciousness, learning, gender, cognition, motivation and emotion, developmental psychology, personality, stress and health, abnormal psychology, social psychology and mental health.

Advanced Placement – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: Average grade of “A-” in Honors United States History

Requirement: Summer reading project due by the first day of school

ADVANCED PLACEMENT UNITED STATES GOVERNMENT AND POLITICS (Grade 12)

This Advanced Placement course follows a standardized curriculum established by the College Board. Students electing this course are expected to take the Advanced Placement examination in May and, depending on the

results may be granted credit and/or appropriate placement by a participating college. The course provides an analytical perspective on government and politics in the United States with a specific focus on the following: the constitutional underpinnings of U.S. government; political beliefs and behaviors; political parties, interest groups, and mass media; institutions of national government: the Congress, the presidency, the bureaucracy, and the federal courts; public policy; and civil rights and civil liberties. Students will study general concepts used to interpret U.S. politics and will analyze constitutional principles through specific case studies.

Advanced Placement – 5 Credits – 6 Periods per Cycle – Full Year

Prerequisite: Average grade of “A-” in Honors World History II OR

Average grade of “B-” in AP United States History or Advanced Placement European History

Requirement: Summer reading project due by the first day of school

Two-Credit Course

AMERICAN POP CULTURE HISTORY: A STUDY OF THE UNITED STATES SINCE WORLD WAR (GRADES 11 – 12)

Understanding the history of the United States in the post-World War II world can be difficult without learning about popular culture. Some view pop culture as trivial or unimportant, but it can tell us much about the political, economic and social factors that have shaped the history of the United States over the last 60 years. In this class students will gain an appreciation for American culture and history while examining examples of film, movies, television, art, literature, music and more. This course is open to grades 11 & 12 students.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

CIVICS

This class provides a background for the understanding of United States citizenship and the foundations and operation of American government. Students will apply this understanding the understanding of Constitutional principles to current event topics relevant to the nation.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

CIVIL RIGHTS MOVEMENT OF THE 20TH CENTURY (Grades 11-12)

The civil rights movement was one of the most significant sources of social change in the United States during the 20th Century. Calls for freedom, respect, dignity, and equality under the law fueled the movement and forced national, state, and local governments to respond. In this course, students will learn about the rich historical background of the movement and will analyze the political and social dynamics of change of the period with a focus on the 1954-1985 time-period. Students will explore the movement from many perspectives using, where possible, first-hand accounts from the people who lived during this important era in United States history.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

CONTEMPORARY ISSUES (Grades 9-12)

This course is conducted in a seminar format with a major emphasis on the self-directed learner. Students will be expected to apply what they have learned from earlier social studies courses (both in content and in skills) to an examination of the major issues, events, and personalities of the United States and the world. Topics studied will include, but not be limited to, population, immigration, affirmative action, terrorism, global economic competition, pollution, campaign finance reform and election analysis.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

CONTEMPORARY ISSUES – ONLINE COURSE (Grades 9-12)

This course is conducted in an online format with a major emphasis on the self-directed learner. Students will be expected to apply what they have learned from earlier social studies courses to an examination of the major issues, events, and personalities of the United States and the world. Topics studied will include, but not be limited to, population, immigration, affirmative action, terrorism, global economic competition, pollution, campaign

finance reform and election analysis. Students will access course material online and will communicate with the teacher on a regular basis through the MOODLE online learning management system.

Standard – 2 Credits – Full Year

COURT IN THE CLASSROOM

Court in the Classroom is an elective course that introduces students to our Massachusetts legal system, and allows them to engage in critical thinking to conduct real trials. Students will collaborate to analyze evidence and witness testimony, construct legal arguments, develop opening and closing statements, and direct cross examination questioning. While this class would be an excellent addition to college applications and resumes, students will also develop strong critical thinking and public speaking skills. Students will also have an opportunity to participate in the statewide Mock Trial after-school club where they will compete against other schools in official trials managed by the Massachusetts Bar Association.

Standard – 2 Credits – Full Year

FACING HISTORY AND OURSELVES: THE INDIVIDUAL AND SOCIETY

This elective delves into the nationally acclaimed *Facing History and Ourselves* curriculum and its scope and sequence regarding the individual and society and will focus specifically on the following questions:

- How is our identity formed?
- How do our attitudes and beliefs influence our thinking? How does our thinking affect our actions?
- How can we keep our individuality and still be part of a group?
- How does our tendency to see in terms of “us” as unique but “them” as members of groups affect our behavior as well as our attitudes? Do “we” welcome or fear “them”? When does fear turn to hate?

Standard – 2 Credits – 2 Period per Cycle – Full Year

THE HISTORY AND PRACTICE OF ART AND INNOVATION (GRADES 11-12)

This course approaches the History of Art as a study of how people have creatively and innovatively responded to the changing conditions of their world. Whether it is Leonardo Da’Vinci responding to the market demands of Renaissance Italy by incorporating the humanistic focus of ancient Roman art, or it is Steve Jobs meeting the demands of the 21st century technology industry by drawing from the clean simplicity of German design in the 1960s, great artists have always been able to apply knowledge of the past in ways that meet the market demands of their world. The course serves as an interdisciplinary bridge for students to synthesize their learning from art, history, science and mathematics as they study how advances in each discipline affected the cultural production of their time. The class includes a studio art component and is project-based - requiring students to work in teams to predict and create artwork that responds to the conditions of different case studies from world history.

Standard – 2 Credits – 2 Periods per Cycle – Full Year

SPECIAL EDUCATION DEPARTMENT

The Special Education Department is available to all students that may need assistance. The services provided can include evaluations and/or delivery of direct services. Services can include monitoring in the mainstream setting, inclusion opportunities, adjustment counseling, Therapeutic Learning Program, ACCESS life skills program, resource room assignments, combination of above services; or individual service delivery as recommended by the special education team.

All students regardless of learning challenges have access to the Medford High School's curriculum. Students with diverse learning styles are evaluated and identified as eligible by the Department of Special Education. Each student's team recommends any and all accommodations or schedule adjustments. The purpose of these recommendations is to maximize student success. Listed below are the current offerings for Medford High School and Medford Vocational Technical High School.

CURTIS TUFTS HIGH SCHOOL

This 502.4i program was created in 1981. The program was created in response to a need to keep vulnerable at risk students in their community. This effective program addresses the needs of students that share a number of high-risk, social emotional and acting-out behaviors. This comprehensive program is staffed by 7 full-time special education certified members that include a program director, 4 teachers and two adjustment counselors and paraprofessionals. The program has the support of agencies that include but are not limited to: CSA Eliot Services, Department of Children and Family Services, the Departmental of Mental Health Services and the Department of Youth Services. The program addresses the social, emotional, and academic needs of all students attending. This is accomplished through creative programming, carefully planned activities, individual, group and family counseling, vocational education work-study program, behavior modification, parental support group, outreach, community involvement, competitive inter-league sports, and liaisons with various universities and corporations. Teams monitor effective alternative strategies that address student, family and school priorities.

HIGH SCHOOL ACCESS PROGRAM

This program has expanded in order to address the needs of the more severe educationally and physically challenged high-school-aged student. The ACCESS Program is primarily dealing with the more cognitively and physically challenged youth. This program is serviced by a number of certified personnel including two full-time teachers, three full-time instructional aides, behavior specialist, adjustment counselor, career counselor/job coach, occupational therapist, physical therapist, speech and language therapist, and other related services providers. Students have the opportunity to experience a multitude of activities throughout the day. These include academics and life skill activities within the multifaceted classroom facility, as well as at various locations of the High School and Vocational School. Students also travel to various work sites within the Medford community. There is also an extended-day as well as a summer component built into the program.

HIGH SCHOOL AND VOCATIONAL SCHOOL LEARNING GROUP PROGRAM

This program offers sound and appropriate academics for the group of Learning Disabled students assigned to it. Various accommodations and teaching strategies are used by the full-time teachers and instructional aides to meet the IEP Goals and Objectives. These students also attend appropriate mainstream opportunities. Students can be assigned to work sites within the school or at job sites outside of school. Counseling and behaviors are addressed on an ongoing basis by the school adjustment counselor, guidance counselor or behavior specialist. This class was created to meet the needs of a specific target population identified by the sending TEAMS. It was implemented in order to address the needs of students that were identified as learning disabled in the area of expressive or receptive language. At the same time these students had expressed an interest in Vocational Education. The students attend self-contained classrooms for their major academics and related vocational topics and

can travel into various Shops in order to experience the vocational sites offered at our Vocational/Technical High School.

HIGH SCHOOL THERAPEUTIC LEARNING PROGRAM

This program offers the group of students assigned to it academic, emotional and vocational exploration opportunities. Counseling services are provided for students and their families by the guidance and school adjustment counselors assigned to the program. Students attend classes within the confines of the program or in the mainstream setting as outlined by IEPs. Parent/guardian involvement is an important component of the program. The Therapeutic Learning program is an effective intervention that offers the least restrictive setting for those students who require closer supervision and support within the confines of a large school setting.

HIGH SCHOOL AND VOCATIONAL SCHOOL RESOURCE CLASSES

Major subjects are taught by certified special education teachers to those students that TEAMs have determined (through the IEP) require a more restrictive environment, modifications and specialized instruction that cannot be delivered within the mainstream settings. Classes are offered in English, Mathematics, Reading, Social Studies, and Science.

INDIVIDUAL HOME/HOSPITAL INSTRUCTION

TEAMs may determine the need for individualized instruction when other options are not deemed appropriate. Medical conditions require a physician's request for home/hospital tutorials before they can be implemented.