

Melrose High School

Program of Studies
2011 - 2012

*Academics, Arts, & Technology
For the 21st Century*

Melrose High School

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Melrose, Massachusetts 02176

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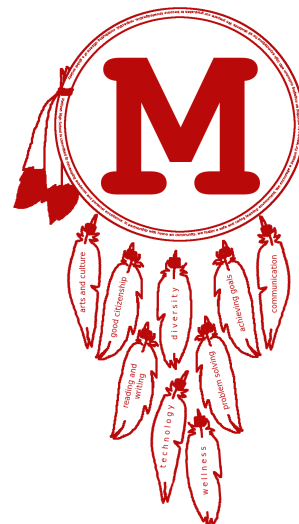
What do the words,

Respect

Education

Determination

mean to us?



2011 - 2012 Program of Studies

Dear Students and Parents:

The Program of Studies of Melrose High School is designed to produce the best educational opportunities possible for all of our students. Toward this end, the curriculum and the co-curricular program are subject to on-going review and revision to meet the ever-changing needs of the student body and the community at large.

This booklet has been prepared to assist students and parents in planning a course of studies appropriate to your needs and interests. You are urged to consult with the professional staff for further clarification of course objectives.

The Guidance Department, Department Chairs, and teachers will provide you with information regarding course sequence and other matters pertinent to your individual goals. It is imperative that you review the minimum requirements and course prerequisites and, if necessary, consult with Guidance and Department Chairs prior to enrolling in courses. Your choice of courses is an important decision and should not be taken lightly. **Once you have made your decisions, you will be committed to those courses for the 2012-2013 school year.**

Best wishes for every success in the program you elect.

Sincerely,

Joseph P. Dillon
Principal

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Melrose High School Mission Statement

Melrose High School is committed to developing academic and personal excellence. In partnership with home and community, we foster a safe and caring learning environment. We encourage a passion for learning by providing an engaging curriculum with high expectations for all students. We prepare our graduates to become knowledgeable, respectful, contributing citizens of a global society.

H

LEARNING EXPECTATIONS:

1. Write effectively using standard English.
2. Demonstrate the ability to read effectively.
3. Demonstrate the ability to communicate effectively.
4. Demonstrate the ability to use technology responsibly and effectively.
5. Demonstrate the ability to problem solve effectively.
6. Demonstrate an understanding of arts and culture.
7. Demonstrate an understanding of behaviors that promote wellness.
8. Demonstrate good citizenship.
9. Demonstrate the ability to plan and set goals.
10. Demonstrate an understanding of tolerance and diversity and respect for themselves, others, and their school.

S



Graduation Requirements

In order to participate in graduation, students must meet all graduation requirements listed below. Students are required to carry a credit load of 7 credits for each of their four years in high school.

<u>Subject Area</u>	<u>Credits</u>
English	4.0
Mathematics	3.0
Science	3.0
Social Studies: Including US History	3.0
Fine/Applied Arts (Art, Music, Theatre Arts, Business & Technology, Family & Consumer Science	2.0
Foreign Languages	2.0
Wellness (Physical Education & Health)	2.0
Electives	5.0
Total	24.0

All students are required to pass the MCAS test in the areas specified by the Commonwealth of Massachusetts in order to receive a diploma. In addition, students will be required to show proficiency in the subject areas on the MCAS either through exam score or through an Educational Proficiency Plan (EPP).

Community Service is required of all students in order to graduate. Twelve (12) hours are required for each year a student is in attendance at Melrose High School.

Administrative waivers may be granted at the discretion of the building principal.

Grading & Midyear/Final Exams

Grades are issued four times during the school year. In all full year courses, the final year's average will be the average of the two semesters. Semester averages are a combination of the two quarter grades and the grade received for either the midyear or final exam given in that semester.

Midyear and final exams are given in all courses. These exams count as 10% of the respective semester grade. The average of the first and second quarter grades will count 90% in determining the first semester average. Similarly, the second semester average will include the average of third and fourth quarter grades at 90% and the final exam at 10%. The average for the entire year will be the average of both semesters.

Senior Internship Program

An approved senior internship allows students to be released from some or all of their classes in order to pursue an alternative education experience or to investigate a possible career. The program will be graded and credit awarded for successful completion of the outlined responsibilities and obligations. All senior paper requirements must still be met in accordance with the individual English teacher's prescribed deadlines. Students enrolled in two or more AP courses are not eligible for the internship program. Students enrolled in Band, Chorus or Orchestra must attend A period class through their performance date.

There are two types of senior internships.

1. **Career Exploration:** A senior can offer on-the-job assistance in return for expert supervision, exploring professional fields such as veterinary science, auto mechanics, social work, business, art, teaching, engineering, or medicine. Interns will not receive monetary compensation for work completed during school hours.
2. **Volunteer Program:** Students may gain experience with professions that serve the public by volunteering in hospitals, nursing homes, or other community agencies.

Eligibility to participate in the program is based on the following requirements:

- C average for their senior year in each subject area
- Completion of all senior year requirements
- Teacher approval
- Parent /Guardian approval
- 95% attendance rate

Acceptance to this program is at the discretion of the Administration.

Summer School Policy

Summer school is required of all students who fail any full year academic course. All makeup of courses must be completed through the Melrose Summer School. Students **will not** be allowed to double up on courses during the regular school year. Upon written request, exceptions to this rule may be granted by the Principal.

Developmental Guidance Services

Mission:

The Melrose High School Guidance Department is dedicated to fostering the growth of our students as individuals in a safe and caring environment. Our goal is to assist students thoroughly in the development of academic and personal excellence, in making healthy school and community connections, with in-depth exploration of college and career opportunities, and in preparing students to become respectful and contributing citizens. The Social Expectations for Student Learning addressed by guidance services include the ability to demonstrate good citizenship, the ability to plan and set goals, the ability to understand diversity, and the ability to exercise tolerance and respect for themselves, others, and their school.

Services:

- Academic planning and course selection guidance
- College and career exploration and guidance
- Monitoring of academic progress
- Motivating students to develop the skills to plan and implement goals
- Scheduling maintenance

- Orientation for new students
- Personal and emotional counseling
- Crisis intervention counseling
- Consultation with parents, teachers and students
- On-the-Spot Admissions with area colleges and universities

The role of the guidance counselor at Melrose High School is to be a strong advocate for each of his or her students. It is our responsibility to help students increase their knowledge about post-high school opportunities, and to help them make the important connection between their high school record and the specific options that will be available to them upon graduation from high school. It is the counselor’s responsibility to have high expectations for all students, and to challenge them accordingly by guiding them to take courses that are appropriate for their goals and interests. We also strongly encourage all students to become involved in extracurricular activities through which they can make important social and community connections and through which they can grow in ways that go beyond the classroom.

The guidance department actively works to make the guidance office a welcoming place where students can easily access information and work closely with their individual counselors. We work with students to guide them through the process of course selection and individual programming.

Appointments:

The guidance office is open from 7:30 a.m. to 3:30 p.m. daily. Students are encouraged to make appointments ahead of time. Parents are encouraged to call, send an email, or schedule an appointment ahead of time if they want to speak with their child’s counselor in person. The main number for the guidance office is 781-979-2208. Counselors are also available at the Fall Open House, as well as at each Parent / Teacher Night.

Counselor Assignments:

Students are assigned alphabetically to counselors at the beginning of their freshman year. Every effort is made to ensure that this arrangement remains consistent throughout each of their four years; at times, however, due to various extenuating circumstances, this is not possible. Therefore, specific counselor assignments are not guaranteed for four years.

Guidance Department

Mr. John Buxton (Director)	781-462-3239	jbuxton@melrose.mec.edu
Mr. Joseph Parrillo	781-462-3233	jparrillo@melrose.mec.edu
Ms. Francesca LoGrasso	781-462-3237	flograsso@melrose.mec.edu
Ms. Jennifer Shackelford	781-462-3236	jshackelford@melrose.mec.edu
Mr. Jeffrey Bolduc	781-462-3234	jbolduc@melrose.mec.edu
Mrs. Connie O’Connor (Secretary)	781-979-2208	coconnor@melrose.mec.edu
Mrs. Janice Seelley (Secretary)	781-979-2210	jseelley@melrose.mec.edu
Dr. Mary Elizabeth Ford (School Psychologist)	781-462-3238	mford@melrose.mec.edu

College Planning and Preparation:

Each student is encouraged to plan a course of study that is both challenging and rigorous. Counselors encourage students to take strong academic courses whenever possible. As a general guideline for college preparation in academic courses, we recommend the following:

English – 4 years (mandatory)

Mathematics – 4 years (Algebra II, Geometry, Pre-Calculus, Calculus or Applied Finite Math)

Social Studies – 3-4 years (United States History II is mandatory)

Science – 3-4 years (including at least two lab courses, 3 if possible: Biology, Chemistry, Physics, Environmental Science, Anatomy / Physiology)

Foreign Language – 3-4 years

Students with strong interest and aptitude in language may consider adding an additional language beginning in sophomore or junior year; all students with the aptitude for language are encouraged to follow the entire sequence of their chosen language.

All students should take the initiative to meet with their counselor to discuss their individual interests, aptitude and plan for course sequence. It is never too early for a high school student to begin this process.

Helpful Links:

It is never too soon for a high school student to begin to familiarize him or herself with the college application process. The input of parents is very important in this process. We suggest the following web links as good places to start:

www.collegeboard.com

www.massmentor.edu

www.profileonline.collegeboard.com

www.petersons.com

www.act.org

www.fafsa.ed.gov

www.mefa.org

Rank-in-Class and Grade Point Average

As a vast majority of colleges and universities use rank-in-class as a criterion for acceptance, and prefer it to be weighted, MHS uses a weighted rank-in-class. Rank-in-class is determined using final grades in the five major disciplines (English, Math, Science, Social Studies, and Foreign Language). All courses in those disciplines assigned a designation AP, Honors, CP1 and CP2 are used in class rank calculations. Students must carry four full credit weighted courses each year to be ranked. Grades from all four years are used to calculate grade point average (GPA) and rank-in-class.

Grades & Weights

<u>Letter Grade</u>	<u>Numerical Equivalent</u>	<u>Advanced Placement</u>	<u>Honors</u>	<u>College Prep 1 & 2</u>
A+	100-97	5.33	4.83	4.33
A	96-93	5.00	4.50	4.00
A-	92-90	4.67	4.17	3.67
B+	89-87	4.34	3.84	3.34
B	86-83	4.00	3.50	3.00
B-	82-80	3.67	3.17	2.67
C+	79-77	3.34	2.84	2.34
C	76-73	3.00	2.50	2.00
C-	72-70	2.67	2.17	1.67
D+	69-67	2.34	1.84	1.34
D	66-63	2.00	1.50	1.00
D-	62-60	1.67	1.17	.67
F	<60			

Admissions Standards for the Massachusetts State Colleges and Universities:

For freshmen applicants, the admissions standards for state colleges and universities have two main parts: the completion of sixteen required academic courses and a minimum grade point average earned in college preparatory classes completed at the time of the student's application. It is important to know that no applicant with a high school GPA below 2.00 may be admitted to a Massachusetts state college or university. For more important information on these requirements, please visit the Massachusetts Board of Higher Education website at www.mass.edu. The following sliding scales highlight the requirements:

For Freshmen Applicants to UMASS:

Weighted HS GPA:	Combined SAT Critical Reading / Math Must Equal or Exceed:	Composite ACT Score Must Equal or Exceed:
2.51-2.99	950	20
2.41-2.50	990	21
2.31-2.40	1030	22
2.21- 2.30	1070	23
2.11-2.20	1110	24
2.00-2.10	1150	25

For Freshmen Applicants to a State College:

Weighted HS GPA:	Combined SAT Critical Reading / Math Must Equal or Exceed:	Composite ACT Score Must Equal or Exceed:
2.51 – 2.99	920	19
2.41 – 2.50	960	20
2.31 -- 2.40	1000	21
2.21- 2.30	1040	22
2.11 – 2.20	1080	23
2.00 - 2.10	1120	24

Massachusetts Comprehensive Assessment System

The **Massachusetts Comprehensive Assessment System (MCAS)** was implemented in response to the Education Reform Law of 1993, which required that MCAS be designed to measure performance based on the learning standards in the Massachusetts Curriculum Frameworks. MCAS serves as a basis of accountability for students, schools and districts (www.mcas@doe.mass.edu).

MCAS Graduation Requirements by Grade:

All students must meet state proficiency standard in:

**English Language Arts
Mathematics
Science and Technology/Engineering**

Beginning with the class of 2010, all students that score in the “Needs Improvement” range on an MCAS English and Math (scores between 220 and 238) will be required to complete an Educational Proficiency Plan (EPP) in order to satisfy state proficiency requirements.

Melrose High School

COURSE LEVEL DESCRIPTIONS

Note: Students can change levels within a content area based on their progress, teacher recommendation, and interest.

Advanced Placement

This nationally based program, structured by the College Board, is a cooperative effort on the part of high schools and colleges. Advanced Placement courses are available in some content areas. These classes provide students with an opportunity to take college-level courses while enrolled in high school. The College Board's standardized exams are administered at the high school in May. Students who receive a qualifying score and whose chosen college participates with AP may receive college credit and/or advanced standing at their college.

Honors Level

These courses are available to the student who has demonstrated superior mastery of prerequisite skills and concepts in a specific content area. Ideally, the student will enroll because of a genuine intellectual curiosity for the subject studied. The content of the course and its pace are rigorous. The student grasps abstract concepts, readily accepts challenging material, and builds upon prior knowledge by connecting new learning with previously studied topics within the content area of study and across disciplines. The students must be focused, self-directed, and independently able to handle multiple assignments simultaneously and prioritize and manage his/her time to meet deadlines consistently.

CPI (College Preparatory)

These courses are available to the student who has demonstrated average to above average mastery and performs at or above grade-level in the skills needed for a specific content area. As the teacher presents new concepts, the student is able to apply the concepts taught independently. Pacing of new material is appropriate so that the student has time to practice new skills and build on previously learned material. The student can plan and follow through on daily assignments and long-range projects.

CP II (College Preparatory)

These courses are available to the student who may need additional support to perform at grade-level in the academic area. This support may include organizational and study skills as needed. While the student may have difficulty applying concepts and may need additional time to connect ideas, the course is paced to provide students with the core content and basic concepts included in that course at any of the above levels.

Course Scheduling

Appropriate course selection and placement decisions help ensure a successful high school experience and help to avoid disruptions to a student's schedule during the school year. The teachers making recommendations are familiar with each student's interests, abilities and work habits, as well as the content and expectations of the high school curriculum. The criteria established to determine placement in core academic subjects (please see below) are designed to assist in the appropriate placement of students. When a student does not meet the prerequisites for taking a desired course, the student is obligated to take the course recommended by the teacher.

While the Guidance Department makes every effort to honor elective courses preferences, due to space limitations and scheduling constraints we cannot guarantee elective choices.

Schedule Changes

Schedule changes can only be made for sound educational reasons. All students must carry seven credits. Early planning and awareness of the scheduling guidelines should be helpful. The following factors will not be used as justification for schedule change consideration:

- Student or parent preference for a particular teacher;
- Student or parent preference for a class with specific students in it;
- Student or parent preference for class at a particular time of the day, with the exception of those receiving permission from the Principal for unusual circumstances.

When a level change is requested in a core subject, the sending teacher, the receiving teacher, and the department chair must all approve this change. When students change course levels in the same subject, grades for the work completed will be determined by the sending and receiving teachers. Level changes will be taken into consideration when determining average for the year.

All course or level changes during the school year require the following:

- A written student request (form is available in guidance);
- Parental and administration permission, with counselor consultation.

To minimize educational disruption, it may not be feasible to change a course or level if the student's total schedule is to be disrupted in the process. Under no circumstances will *elective* course changes be permitted after the beginning of the school year.

Override Policy

In those instances where students or parents do not agree with the course level recommendation by the teacher, they may request an override of the teacher recommendation. If the override is granted, the student is allowed to take the desired course with the understanding that the student will remain in that course for the duration of the course. It is also understood the parent (s) / guardian (s) will make sure the student is prepared for the desired or requested course.

There are two steps before an override can move forward. First, a conversation with the recommending teacher is required. Second, a conversation with the appropriate department chair is required. When both of these steps are completed, your child's placement will be reviewed by the appropriate department chair. The department chair will discuss the request with you and if the decision is made to override the teacher's recommendation, the Limited Parental Override Form (see draft) will be completed and forwarded to the Guidance Department for the change to be made.

Add/Drop Policy

A student may withdraw from a course with no penalty and no record of his/her presence in the course if he/she does so within the time periods listed below:

- **full-year course** **first 4 weeks**
- **semester course** **first 2 weeks**

Students may not enter a full-year course in a different subject after four weeks of the course have elapsed. Students may not enter a semester course after two weeks of the course have elapsed.



**MELROSE HIGH SCHOOL
LIMITED PARENTAL OVERRIDE POLICY**

Dear Parent/Guardian:

Appropriate course selection and placement decisions help ensure a successful high school experience and help to avoid disruptions to a student’s schedule during the school year. The teachers making recommendations are familiar with each student’s interest, abilities and work habits, as well as the content and expectations of the high school curriculum. The criteria established to determine placement (*please see reverse side for details*) are designed to assist in the appropriate placement of students. When a student does not meet the prerequisites for taking a desired course, the student is obligated to take the course recommended by the teacher. If you wish to override the recommendation of your son/daughter’s teacher in selecting a course for next year, please complete the form below.

Student’s Name: _____

Year of Graduation: _____ Counselor: _____

Course name and number recommended by the teacher:

_____ # _____

Course name and number requested by the parent/guardian:

_____ # _____

In those instances where parents request an override of the teacher recommendation, and an override is granted, the student is allowed to take the desired course with the understanding that the student will remain in that course for the duration of the course. It is also understood the parent/guardian will make sure that the student is prepared for the desired or requested course.

There are two steps before a change can move forward. First, a conversation with the recommending teacher is required. Second, a conversation with the appropriate department chair is required. When both of these steps are completed, your child’s placement will be reviewed by the department chair. The department chair will discuss the request with you and if the decision is made to override the teacher’s recommendation, this form will be forwarded to the Guidance Department for the change to be made.

Teacher’s signature: _____ **Date:** _____
(indicates the department chair has had a conversation with the recommending teacher and the parent/guardian)

“We understand the Melrose High School Override Policy as stated above and wish to continue with the override of the departmental recommendation.”

Parent/Guardian’s Signature: _____ **Date:** _____

Cc: Student, Parent, department chair, Counselor
Revised 12/7/09

**Melrose High School
Placement Criteria for 9th Grade
Honors Level**

ENGLISH

Must meet 5 or 6 of the following:

Average grade of “A” for terms 1 and 2 in Grade 8 English
A 90% or better score on the beginning of the year assessment
A 90% or better score on the mid-year assessment
Advanced score on the 7th grade MCAS ELA
Excellent work habits (effort, homework completion, study habits)
Advanced score on spring placement essay

MATH

Must meet 3 or 4 of the following:

Grade of “B+” or better for terms 1 and 2 in Grade 8 Advanced Algebra I
An 85% or better score on the mid-year placement test
Advanced or High Proficient score (**250 or above**) on 7th grade MCAS Math
Teacher recommendation (effort, homework completion, study habits)

SCIENCE

Minimum grade of “A-“ for terms 1 and 2 in Grade 8 Science
An 85% or better score on the mid-year assessment
Teacher recommendation (effort, homework completion, study habits)

SOCIAL STUDIES

Average grade of “A” for terms 1 and 2 in Grade 8 World History I
Advanced score on the spring placement essay
Teacher recommendation (effort, homework completion, study habits)

FOREIGN LANGUAGE

Average grade of “A-“ or better for terms 1 and 2 in Grade 8 course
Grade of A- or better on the mid-year assessment
Excellent work habits (efforts, homework completion, participation, and study habits)

Criteria to Move to a Higher Level for 10th, 11th and 12th Grades

ENGLISH

Average grade of “A” for trimester 1 and Progress Report trimester 2 in Grade 8 English
Average grade of A- on Beginning of the Year and Mid-Year Assessments
Average grade of 3.5 on Open Responses / Core Assignments in current course
Advanced performance on the 8th or 10th grade MCAS.
Teacher recommendation (superlative work habits, homework, participation)

MATH

Grade of B+ or better in prerequisite honors course
An 85% or better on the Mid-year assessment in the prerequisite course
Teacher recommendation

Note: for placement into 10th grade honors the most recent MCAS test must be 250 or better on the placement test taken in February of 10th grade.

SCIENCE

Minimum grade of A- for terms 1 and 2 in current course
Average grade of A- on beginning of the year assessment and mid-year assessment
Average grade of 3.5 on Open Responses / Core Assignments in current course
Teacher recommendation (superlative work habits, homework, participation)

SOCIAL STUDIES

Average grade of A for terms 1 and 2 in current course (A+ required to move CP to AP)
Teacher recommendation (superlative work habits, homework, participation)

FOREIGN LANGUAGE

Average grade of A- for terms 1 and 2 in current course
Average grade of A- on the mid-year assessment
Average grade of 3.5 on Open Responses / Core Assignments in current course
Teacher recommendation (superlative work habits, homework, participation)

Note: In order to move up from a CP to Honors the student must take both the final exam in the current course and pass the exam in the equivalent Honors course with a minimum grade of C.

English

The English curriculum is based on the communication skills of reading, writing, speaking, viewing, listening, and presenting. Specifically, the curriculum provides instruction in the different modes of written and oral expression, analytical reading, vocabulary, grammar/usage, and media study. There is a strong departmental philosophy that views writing as an important thinking and discovery skill, and composition is therefore incorporated into all required English courses and electives to provide a rich variety of writing experiences. Furthermore, the curriculum provides for an equally meaningful experience with great literature of the past and present.

All students must take English throughout their four years of high school, accumulating a minimum of four credits in order to graduate. Consequently, nearly all courses have open admission so students may select courses that suit their needs, abilities, and achievement. A student in any honors level class will have his or her status reviewed each quarter to ensure ongoing progress and proper placement. Enrollment in Advanced Placement English culminates in the taking of the AP Examination in May.

As four full credits of English are necessary for graduation, all failed non-elective English courses must be made up. Students will not be allowed to take two non-elective (i.e. required) English classes within the same school year.

Homework assignments are designed to reinforce ideas presented in class; to provide practice of vocabulary, usage, and composition skills; and to provide time for reflective thinking (e.g., synthesis of reading done for class, planning/writing essays). The time expectations for homework assignments vary according to the level of instruction, and the specific assignment.

All of the English Department course offerings reflect the ten Academic Expectations adopted by Melrose High School. However, those expectations that are stressed in each course are enumerated.

There will be a \$12.00 fee per student per year for the purchase of workbooks.

Senior Paper Requirement

To gain final credit, a senior must successfully complete and receive a passing grade on a Senior Research Paper under the direction of his or her Senior English teacher. Failure to earn a passing grade on the Senior Research Paper results in failure of the course and mandatory enrollment in summer school, and may jeopardize graduation. The senior thesis is equivalent to forty hours of time and learning.

Summer Reading Requirement

Reading during the summer months is an expected and important part of the English Program. Each English course requires specific reading to prepare the student for course content and goals. The English Department assigns one or more novels, short stories, or plays in June and follows up with a departmental assessment in September.

Writing Portfolio

Each year, the English Department collects at least three pieces of writing representing varying modes from each student. This writing becomes part of the student's permanent writing folder which includes writing samples from all grades, K-12. An annual student reflection on personal writing achievements and challenges is added to the permanent writing folder as well. Seniors may access this folder for papers to review for college application needs and will receive this folder before graduation.

English I

Students will be able to:

- I. Write compositions that reflect knowledge of formal written English, including appropriate ideas, organization, voice, word choice, and sentence fluency.
- II. Read age and grade level appropriate fiction and non-fiction for comprehension and analysis.
- III. Successfully complete five paragraph essays using standard written English.
- IV. Present a monologue that is selected from the literature studied in grade nine.
- V. Write a literary analysis using the support of primary sources.

121 English 1 CP 1 Credit Grade 9

This course emphasizes essential areas of study -- grammar (usage and punctuation), composition, oral presentation, vocabulary, and literature. Course content may include reading mythology, *Julius Caesar*, *Lord of the Flies*, *Animal Farm*, *The House on Mango Street*, *The Pearl* and selections from the Prentice-Hall anthology, and studying word/language problems related to both the MCAS and SAT exams. MHS Learning Expectations: 1, 2, 3, 4

115 English 1 H 1 Credit Grade 9

This course includes a wide experience in literature, intensive vocabulary study, oral presentations, a strong emphasis on composition, and a complex study of grammar and syntax. Course content may include Hamilton's *Mythology*, poetry, *Julius Caesar*, *The Pearl*, *Lord of the Flies*, *Animal Farm*, *The House on Mango Street*, selections from the Prentice-Hall anthology, and studying word/language problems related to both the MCAS and SAT Exams. MHS Learning Expectations: 1, 2, 3, 4

English 2

Students will be able to:

- I. Write compositions that reflect knowledge of formal written English, including appropriate ideas, organization, voice, word choice, and sentence fluency.
- II. Read age and grade level appropriate fiction and non-fiction for comprehension and analysis.
- III. Write a seven to nine paragraph essay, using pertinent examples to support their points, in response to a prompt concerning a work of literature they have read.
- IV. Complete a short research paper, using MLA style, examining the social and cultural background of either Harper Lee's *To Kill a Mockingbird* or Eli Wiesel's *Night*.
- V. Present a monologue based on a work of literature they have read in tenth grade.

122 English 2 CP 1 Credit Grade 10

This course emphasizes preparation for the MCAS exam by building skills in critical thinking, reading comprehension, and the writing process. Literary works studied may include *The Catcher in the Rye*, *A Separate Peace*, *Our Town*, *To Kill a Mockingbird*, *Early Autumn*, *Night*, and *The Merchant of Venice* or *Romeo and Juliet*. Grammar exercises, PSAT, SAT and MCAS related literature is used in the writing exercises and literature analysis as preparation for standardized exams. MHS Learning Expectations: 1, 2, 3, 4

116 English 2 H 1 Credit Grade 10

This course emphasizes preparation for the MCAS exam through building skills in critical thinking, reading comprehension, and the writing process. Literary works studied may include *The Catcher in the Rye*, *A Separate Peace*, *Our Town*, *To Kill a Mockingbird*, *Night*, *The Merchant of Venice*, and *Romeo and Juliet*. Grammar exercises, PSAT, SAT and MCAS related literature is used in writing exercises and literature analysis as preparation for standardized exams. MHS Learning Expectations: 1, 2, 3, 4

English 3

Students will be able to:

- I. Write compositions that reflect knowledge of formal written English, including appropriate ideas, organization, voice, word choice, and sentence fluency.
- II. Read age and grade level appropriate fiction and non-fiction for comprehension and analysis.
- III. Complete an autobiographical essay that compares and contrasts their present and former selves.
- IV. Write a convincing, well-organized persuasive essay exploring some issues of interest or importance and incorporating pertinent details and examples.
- V. Complete a short research paper using MLA style that examines some aspects of the American Dream and incorporates some examples of the literature studied in eleventh grade.

123 English 3 CP 1 Credit Grade 11

This course concentrates on the writing of structured expository and persuasive papers and on the critical reading of essays, poems, speeches, short stories, and novels from American literature. *The Elements of Style* is used as reference for writing exercises and grammar study. Literature may include *Macbeth*, *The Crucible*, *The Adventures of Huckleberry Finn*, *A Farewell To Arms*, *The Great Gatsby*, *A Raisin in the Sun*, and *Of Mice and Men*. PSAT and SAT exercises will be used as preparation for standardized exams. MHS Learning Expectations: 1, 2, 3, 4

117 English 3 H 1 Credit Grade 11

This course concentrates on the writing of structured expository and persuasive papers and on the critical reading of essays, poems, speeches, short stories and novels from American literature. *The Elements of Style* is used as reference for writing and grammar study. Literature may include *Macbeth*, *The Scarlet Letter*, *The Crucible*, *The Adventures of Huckleberry Finn*, *Of Mice and Men*, *A Raisin in the Sun*, *A Farewell To Arms*, and *The Great Gatsby*. PSAT and SAT exercises will be used as preparations for standardized exams. MHS Learning Expectations: 1, 2, 3, 4

103 Advanced Placement English 3 AP 1 Credit Grade 11

This course emphasizes the skilled reading of prose, especially non-fiction, written in a variety of periods, disciplines, and rhetorical contexts. Students will become more adept writers who can compose for a variety of purposes and audiences. This course is directed towards students who desire advanced placement in college and requires students to take the Advanced Placement English Language and Composition Examination in the spring. MHS Learning Expectations: 1, 2, 3, 4

English 4

Students will be able to:

- I. Write compositions that reflect knowledge of formal written English, including appropriate ideas, organization, voice, word choice, and sentence fluency.
- II. Read age and grade appropriate level fiction and non-fiction for comprehension and analysis.
- III. Complete a personal essay appropriate for submission with a college application.
- IV. Complete a formal research paper, using MLA style, investigating some aspect of the literature studied in this course. This paper is a graduation requirement.
- V. Prepare an oral presentation in the style of a boast, focusing on the concept of heroes and heroism reflected in *Beowulf*.

124 English 4 CP 1 Credit Grade 12

This course emphasizes the refinement of critical reading skills through analysis of works including *Brave New World* or *1984*, *Oedipus Rex*, *Ethan Frome*, *One Flew over the Cuckoo's Nest*, *Death of a Salesman*, and *Hamlet*. Students will review and apply proper grammar and usage from *The Elements of Style* and study word and language problems related to the SAT exam. This course includes completion of a formal research paper. MHS Learning Expectations: 1, 2, 3, 4

118 English 4 H 1 Credit Grade 12

This course emphasizes critical reading skills and applies proper principles of grammar and usage from *The Elements of Style*. Students read and analyze works including *Hamlet*, *Oedipus Rex*, *Death of a Salesman*, *Pride and Prejudice*, *Ethan Frome*, and *Brave New World or 1984*; and study word and language problems related to the SAT. This course also includes the writing of a formal research paper. MHS Learning Expectations: 1, 2, 3, 4

104 Advanced Placement English 4 AP 1 Credit Grade 12

This course emphasizes critical and analytical thinking, both of which will be exhibited through writing and thoughtful class discussion of literature. Students will read extensively across a wide array of genres, including novels, plays, poetry, and short stories. The course is directed towards students who desire advanced placement in college and requires the students to take the Advanced Placement English Literature Examination in the spring. MHS Learning Expectations: 1, 2, 3, 4

English as a Second Language

Students will be able to:

- I. Improve their understanding of the written English language.**
- II. Improve their understanding of the spoken English language.**
- III. Acquire the skills needed to enable them to read and write at grade level.**
- IV. Complete teacher-generated assignments that focus on specific areas of mastery individual to each student.**
- V. Achieve the fluency necessary to reach their academic potential in other areas of instruction.**

160 English as a Second Language PD 1 Credit Grade 9,10,11,12

Students who are English language learners must take this course in conjunction with an English class. In this small group class, students have an opportunity to hone their skills in speaking and writing English with the help of a trained ELL teacher. *Prerequisite: Recommendation of counselor.* MHS Learning Expectations: 1, 2, 3, 4

English 9/10

Students will be able to:

- I. Write compositions that reflect knowledge of formal written English, including appropriate ideas, organization, voice, word choice, and sentence fluency.**
- II. Read age appropriate level fiction and non-fiction for comprehension and analysis.**
- III. Successfully complete MCAS style essays using standard written English.**
- IV. Present a monologue that is selected from the literature studied in grades nine and ten.**
- V. Complete a research assignment, using MLA style, examining some aspect of literature they read in class.**

161 English 9/10 CP 1 credit Grade 9, 10

This course will emphasize essential areas of study – grammar (usage and punctuation), composition, oral presentation, vocabulary, and literature. Course content will include reading (9th) mythology, *Julius Caesar*, *Lord of the Flies*, and *The Pearl*, and (10th) *Romeo and Juliet*, *The Catcher in the Rye*, *To Kill a Mockingbird*, and *Night*. This course emphasizes preparation for the MCAS exam by building skills in critical thinking, reading comprehension and the writing process. Grammar exercises, PSAT, SAT and MCAS related literature is used in the writing exercises and literature analysis as a preparation for standardized exams. This course is taught with the understanding that students may require individualized instruction to acquire the skills to be successful. MHS Learning Expectations: 1, 2, 3, 4

English 11/12

Students will be able to:

- I. Write compositions that reflect knowledge of formal written English, including appropriate ideas, organization, voice, word choice, and sentence fluency.
- II. Read age appropriate level fiction and non-fiction for comprehension and analysis.
- III. Successfully complete MCAS style essays using standard written English.
- IV. Complete a personal essay appropriate for submission with a college application.
- V. Complete a research assignment, using MLA style, examining some aspect of literature they read in class.

164 English 11/12

CP 1 credit

Grade 11, 12

This course concentrates on writing structured expository and persuasive papers and on the critical reading and analysis of works including (11th) *Macbeth*, *Of Mice and Men*, *The Great Gatsby*, and (12th) *Hamlet*, *Death of a Salesman*, and *Ethan Frome*. *The Elements of Style* is used as reference for writing exercises and grammar study. Students who are taking this course also focus on the writing skills necessary to master the MCAS exam. PSAT and SAT exercises will be used as preparation for standardized exams. This course includes the completion of a formal research paper. This course is taught with the understanding that students may require individualized instruction to acquire the skills to be successful. MHS Learning Expectations: 1, 2, 3, 4

English Electives

Creative Writing

Students will be able to:

- I. Complete a daily journal of writing responses and personal observation.
- II. Write creatively in a number of forms and genres.
- III. Study and learn through reading examples and responding to writing prompts.
- IV. Write at least four pieces each semester that will be added to their permanent writing folder.
- V. Share and edit their work in a workshop format throughout the year to improve their writing and editing skills.

139 Creative Writing

CP

1 Credit

Grade 9, 10, 11, 12

This course is designed to meet the needs of those students who desire to write in any number of expressive modes. The course content will include developing a creative voice in addition to studying short readings by a wide range of authors. The structure of the course will provide support and direction in creative writing, as well as an introduction to the workshop and editing process. Students will be required to submit writing for consideration and possible publication in the school's literary magazine, *The Thistle*, as well as other contests and publications. MHS Learning Expectations: 1, 2, 3, 4, 6

Media Literacy/Speech

Students will be able to:

- I. Examine print and electronic media from past to present.
- II. Explore and understand the concept of mass media and mass communication.
- III. Examine realistic and unrealistic stereotypes and bias in various forms of media.
- IV. Understand and articulate the strategy behind advertising campaigns.
- V. Identify various genres presented in film and television.

148 Media Literacy

CP

1 Credit

Grade 10, 11, 12

In this course, students will analyze various forms and facets of media and how the media has an impact on individuals and society. Students will also view media as a reflection of the culture and determine the accuracy of that representation. MHS Learning Expectations: 1, 2, 3, 4

Journalism

Students will be able to:

- I. Develop and improve their ability to assess the news.
- II. Learn the fundamentals of proofreading, editing, interviewing and numerous other skills one must hone to become a competent journalist.
- III. Choose their own topics and meet deadlines while working collaboratively as part of a publication staff.
- IV. Learn layout and design techniques using Quark Xpress 7.0.
- V. Evaluate and critique their own publication, as well as professional publications, in order to improve their work.

152 Introduction to Journalism **H** **1 Credit** **Grade 10, 11, 12**

Students will learn journalistic writing skills and gain experience writing various types of articles: news, feature, arts and entertainment, opinion, and sports. Students will take part in school and community publications. This course is designed for both students who have little or no knowledge in journalism, as well as those who have interest and experience in journalistic media. Prerequisite: Approval of application. MHS Learning Expectations: 1, 2, 3, 4, 5

156 Advanced Journalism **H** **1 credit** **Grades 11, 12**

This course is designed for students who have completed Introductions to Journalism. Students will polish their skills for this specific type of writing and will take part in every aspect of the school publication, *The Imprint*, including writing, editing, layout, artwork, photography, advertising, and business management. Prerequisite: Introduction to Journalism 152 and recommendation of the Journalism teacher. MHS Learning Expectations: 1, 2, 3, 4, 5

Theatre Arts

Students will be able to:

- I. Recite and interpret a wide variety of monologues, both classical and modern.**
- II. Collaborate with their peers to perform scenes.**
- III. Learn the skills to create fully developed characters.**
- IV. Understand and apply the specific vocabulary associated with the stage.**
- V. View and critique professional theatrical productions.**

159 Theatre Arts **CP** **1 Credit** **Grade 9, 10, 11, 12**

This elective combines an introduction to elementary acting techniques with a study of theatre history. Curriculum goals include specific understandings of the actor, the stage, and the audience. Oral and written assessment complements the study and interpretation of theatrical productions. MHS Learning Expectations: 1, 2, 3, 6

Yearbook

Students will be able to:

- I. Design a well-organized story of a school year using pictures.**
- II. Creatively use words to support the yearbook theme in an appropriate way.**
- III. Develop photography skills that will allow them to capture the essence of the academic and athletic environments in the school.**
- IV. Build communication with each other, (MHS) teachers and staff, (MHS) students and parents, Jostens, Inc. and Lifetouch Inc., through various correspondence including email, telephone, and personal meetings.**
- V. Learn to develop and design pages to be used in different sections of the yearbook.**

973 Yearbook **CP** **1 Credit** **Grade 11, 12**

The yearbook captures the story of one school year in a responsible and creative way. This course will provide opportunities for yearbook staff members to learn and develop skills in writing, design, photography, organization, communication, management, and leadership. Students in this class will comprise the editorial staff of the yearbook. Additionally, class members will be responsible for attending after school and evening meetings when necessary. *Prerequisite: Recommendation of the Yearbook teacher and approval of application.* MHS Learning Expectations: 1, 2, 3, 9

Mathematics

The Mathematics program at Melrose is focused on helping students develop essential skills and concepts towards refining the perspectives through which they understand their worlds. The program emphasizes instruction that meets the needs of individual students, while allowing flexibility to move between learning levels as the student's mathematical proficiency changes. Three years of mathematics are required for graduation; however, many higher education institutions require students to have taken four mathematics courses in high school.

Students are expected to engage in their math classes through participation, class activities, and the completion of homework. Homework is intended for students to practice the skills they learn in class in order to further build on their understanding of mathematics concepts. The courses offered in the Mathematics department reflect the following Melrose High School academic expectations: (1) writing effectively using standard English; (2) reading effectively; (3) communicating effectively; (4) using technology responsibly and effectively; and (5) problem solving.

Note: Unless otherwise specified, scientific calculators are required for all courses in the department.

The following are sample course sequences within the mathematics program. Alternate sequences may be created to meet individual student needs. Note that Concepts of Algebra III and Algebra III are courses that will be phased out within the next one to two years, and, thus, when possible, are not included in the sequences below. However, they continue to be offered within our program.

Honors: Geometry Honors, 216 (Grade 9) → Algebra II Honors, 215 (Grade 10) → Pre-Calculus Honors, 217 (Grade 11) → Calculus Honors, 214 (Grade 12); AP Calculus AB, 204 (Grade 12); or AP Calculus BC, 205 (Grade 12)

College Prep 1: Geometry, 222 (Grade 9) → Algebra II, 228 (Grade 10) → Pre-Calculus, 224 (Grade 11) → Applied Calculus, 265 (Grade 12); or Math Models with Applications, 234 (Grade 12)

College Prep 1: Intermediate Algebra, 221 (Grade 9) → Geometry, 222 (Grade 10) → Algebra II, 228 (Grade 11) → Pre-Calculus, 224 (Grade 12); or Math Models with Applications, 234 (Grade 12)

College Prep 2: Concepts of Algebra I, 226 (Grade 9) → Concepts of Geometry, 236 (Grade 10) → Concepts of Algebra II, 246 (Grade 11) → Consumer Mathematics, 255 (Grade 12); or Math Models with Applications, 234 (Grade 12)

College Prep 2: Math 9, 291 (Grade 9) → Math 10, 276 (Grade 10) → Concepts of Algebra II, 246 (Grade 11); or Concepts of Geometry, 236 (Grade 11) → Consumer Mathematics, 255 (Grade 12); or Concepts of Algebra III (Grade 12)

Algebra I

Students will be able to:

- I. Interpret the structure of algebraic expressions and manipulate them when needed.
- II. Move between different representations of linear functions, including verbal descriptions, equations, tables, and graphs.
- III. Perform arithmetic operations on polynomials.
- IV. Solve equations and explain reasoning behind processes used.
- V. Solve equations and inequalities in one variable.
- VI. Solve systems of equations and interpret solutions.
- VII. Represent and solve equations and inequalities using graphs.

291 Math 9 CP2 Grade 9

This course is for selected students who had small group math in the 8th grade and required additional work on basic skills. Students will be introduced to Pre-Algebra topics as well as Algebra and Geometry. MHS Learning Expectations: 2, 4, 5.

226 Concepts of Algebra I CP2 1 Credit Grades 9, 10

This course will introduce students to essential topics in algebra, including: solving simple equations; graphing equations of lines; writing equations of lines from their graphs, verbal descriptions, or tables; and working with applications of linear functions. Completion of this course will help students in their achievement on the math portion of the 10th grade standardized test (MCAS). MHS Learning Expectations: 2, 4, 5.

221 Intermediate Algebra CPI 1 Credit Grades 9, 10

This course is for students who wish to strengthen their algebraic skills before enrolling in a Geometry or Algebra II course. Students will continue to learn algebraic concepts and skills by: using linear equations to model phenomena, learning and using mathematical notation of functions, working with algebraic patterns, solving equations and inequalities, and beginning work with second degree polynomials. *Prerequisite: Algebra I.* MHS Learning Expectations: 1, 2, 4, 5.

Geometry

Students will be able to:

- I. Work with transformations of the plane and examine the concept of invariance of geometric properties.**
- II. Understand similarity and congruence of geometric figures.**
- III. Identify characteristics of circles; work with chords, arcs, tangents, and special angles in circles along with the relationships between their essential parts.**
- IV. Understand relationships between two- and three- dimensional objects.**
- V. Apply geometric concepts in modeling problems.**

236 Concepts of Geometry CP2 1 Credit Grades 9, 10

This course emphasizes mathematical thinking processes that develop from the exploration of geometric relationships. Such processes include finding and testing patterns, making conjectures, communicating mathematically, and making connections between mathematical ideas. Elements of lines, planes, and geometric figures will be studied as students analyze simple geometric shapes. The approach to a problem, rather than its solution, will be stressed. *Prerequisite: Algebra I.* MHS Learning Expectations: 2, 3, 4, 5.

222 Geometry CP1 1 Credit Grades 9, 10

Emphasis is placed on the study of a select list of theorems and their applications to original problems. Theorems are studied and used in the construction of informal logical arguments and formal proofs. Topics considered include similarity and congruence of geometric figures, parallel lines and their properties, the circle and its properties, areas of plane figures, the Pythagorean Theorem, and the use of a compass and straight-edge in the construction of geometric figures. *Prerequisite: Algebra I.* MHS Learning Expectations: 2, 3, 4, 5.

216 Geometry H 1 Credit Grades 9, 10

In this course, accuracy in the statement and use of definitions, theorems, and postulates towards constructing formal proofs is emphasized, while concepts in solid geometry are integrated with those of plane geometry. Topics central to the course include: circles, properties of two- and three- dimensional figures, congruence and similarity, and coordinate geometry. *Prerequisite: Algebra I.* MHS Learning Expectations: 1, 2, 3, 4, 5.

Algebra II

Students will be able to:

- I. Understand how to represent mathematically the dependence of one changing quantity on another.
- II. Work with systems of linear equations and inequalities, while applying these concepts to the solution of linear programming problems.
- III. Understand differences between linear and non-linear functions in terms of their rates of change.
- IV. Use function notation and function operations while continuing to learn about linear, exponential, logarithmic, and polynomial functions.
- V. Represent and solve quadratic functions and interpret the solutions geometrically.
- VI. As a result of working with quadratic functions, manipulate and simplify radical expressions.
- VII. Determine the need for extending the number system; perform operations with complex numbers.
- VIII. Model real-world and mathematical situations using functions.
- IX. Define the six basic trigonometric functions using ratios of right triangles.

276 Math 10

CP2

Grade 10

This course continues strengthening student's readiness for the 10th grade MCAS test. Emphasis is also placed on getting the students prepared for Algebra, Geometry, or Math Analysis during their next two years of high school. *Prerequisite:* Math 9. MHS Learning Expectations: 2, 4, 5.

246 Concepts of Algebra II

CP2

1 Credit

Grades 10, 11

This course begins with a review of Algebra I and continues with a detailed study of functions that exhibit non-constant rates of change. Specifically, students work with various representations of quadratic, other polynomial, and exponential functions, moving between their graphs and equations. Students also explore the use of functions in modeling situations. *Prerequisites:* Algebra I, Geometry. MHS Learning Expectations: 2, 4, and 5.

228 Algebra II

CP1

1 Credit

Grades 10, 11

This course builds on and integrates topics studied in Algebra I and Geometry. Topics include: the study of quadratic functions, exponential and logarithmic functions as inverses of one another, systems of equations, and extensive work with the theory of functions. *Prerequisites:* Algebra I, Geometry. MHS Learning Expectations: 2, 3, 4, 5.

215 Algebra II

H

1 Credit

Grades 10, 11

This course prepares students for the study of pre-calculus and calculus in the honors program. Course content and skills include: representation of functions, work with rational and radical expressions, solution of systems of equations, applications of exponential and logarithmic functions, complex numbers, symbolic manipulation of quadratic functions, representation of conic sections, and problem solving in the context of the topics studied. Emphasis is placed on student discovery. A graphing calculator is recommended. *Prerequisites:* Algebra I, Geometry. MHS Learning Expectations: 1, 2, 3, 4, 5.

Algebra III (previously Math Analysis)

Students will be able to:

- I. Determine relationships between polynomial functions, their graphs, and solutions.
- II. Solve quadratic functions using various methods and interpret the solutions in the context of real-world problems.
- III. Solve systems of equations and inequalities algebraically and geometrically.
- IV. Graph and transform linear, quadratic, exponential, and other polynomial functions.
- V. Perform operations with the set of complex numbers.
- VI. Model real-world and mathematical situations using functions.
- VII. Define the six basic trigonometric functions using ratios of right triangles; solve applied problems involving right triangle trigonometry.

230 Concepts of Algebra III **CP 2** **1 Credit** **Grades 11, 12**

This course is for students who have completed Concepts of Algebra II and Concepts of Geometry and wish to strengthen their algebraic skills in preparation for college-level mathematics coursework. This course will cover the topics in Algebra III course 229, but at a more moderate rate. A graphing calculator is recommended. **Prerequisites:** *Geometry, Algebra II*. MHS Learning Expectations: 2, 3, 4, 5.

229 Algebra III **CP1** **1 Credit** **Grades 11, 12**

This course is designed for students who have completed Algebra II but need to strengthen their algebra skills before taking Pre-Calculus or college-level mathematics courses. Students will extend their level of mathematical skills and reasoning beyond the topics covered in Algebra II. Topics include functions (linear, quadratic, polynomial, exponential, logarithmic, etc.), basic trigonometry, and representation of conic sections, and work with complex numbers. A graphing calculator is recommended. **Prerequisites:** *Algebra II, Geometry*. MHS Learning Expectations: 1, 2, 4, 5.

Pre-Calculus

Students will be able to:

- I. Move flexibly among different representations of functions.**
- II. Graph polynomial functions by examining end behavior, intercepts, and multiplicities.**
- III. Graph exponential and logarithmic functions and understand the inverse relationship between the two families of functions.**
- IV. Build on right triangle trigonometry by exploring trigonometric relationships attained from inscribing right triangles in the unit circle.**
- V. Graph trigonometric functions from transformations of the parent sinusoidal equation.**
- VI. Solve applied problems in trigonometry using the Law of Sines or the Law of Cosines.**
- VII. Develop ideas in analytic geometry through the study of conic sections.**
- VIII. Understand and apply introductory concepts in differential calculus.**

224 Pre-Calculus **CP1** **1 Credit** **Grades 11, 12**

This course is an extension of Algebra II concepts with emphasis on functions, trigonometry, analytic geometry (conic sections), limits, and introductory calculus concepts. The course is designed to prepare students for enrollment in Calculus, either in high school or college. In addition to the concepts outlined above, the course will also develop students' problem solving and critical thinking skills. A graphing calculator is required. **Prerequisite:** *Algebra II or Algebra III*. MHS Learning Expectations: 2, 3, 4, 5.

217 Pre-Calculus **H** **1 Credit** **Grades 10, 11, 12**

Pre-calculus continues the formal study of the functions begun in Algebra I and Algebra II. Students focus on mathematical modeling and problem solving involving data analysis, trigonometric and circular functions, their inverses, complex numbers, and conics. Topics in discrete mathematics include proofs by mathematical induction, the use of the Binomial Theorem, as well as sequences and series. After a thorough study of these concepts, students will begin to work with the fundamentals of differential calculus. A graphing calculator is required. **Prerequisite:** *Algebra II*. MHS Learning Expectations: 1, 2, 3, 4, 5.

Calculus

Students will be able to:

- I. Find limiting values of functions, including infinite limits and limits at infinity.
- II. Understand the need for continuity of functions in the study of Calculus.
- III. Interpret the derivative as instantaneous rate of change.
- IV. Work with applications of the derivative in solving related rates problems, creating sophisticated graphs of functions, and in optimization.
- V. Interpret integrals as area accumulations.
- VI. Define the definite integral as the limit of a Riemann sum.
- VII. Understand and apply the Fundamental Theorem of Calculus.
- VIII. Develop and apply techniques of integration.
- IX. Use graphing calculators or other technology to support the understanding and application of integration and differentiation.

265 Applied Calculus CPI 1 Credit Grade 12

This course begins with a review of pre-calculus concepts in order to strengthen students' understanding of functions in preparation for the processes of differentiation and integration. Calculus concepts explored include: limits and continuity, the definition of the derivative, techniques of differentiation, applications of the derivative, and integration. Emphasis is placed on the exploration of real-world calculus applications. The course progresses at a comfortable rate as students are exposed to the basic concepts behind the calculus. A graphing calculator is recommended. **Prerequisite:** *Pre-Calculus*. MHS Learning Expectations: 2, 3, 4, and 5.

214 Calculus H 1 Credit Grades 11, 12

Concepts from differential and integral calculus are included in this course. Topics covered include: limits and continuity of functions, derivatives, definite and indefinite integrals, calculus of exponential and logarithmic functions, calculus of trigonometric and inverse trigonometric functions, and techniques of integration. A graphing calculator is required. **Prerequisite:** *Pre-Calculus*. MHS Learning Expectations: 1, 2, 3, 4, 5.

204 Advanced Placement Calculus AB AP 1 Credit Grades 11, 12

This course covers the syllabus for the Advanced Placement Calculus AB Examination of the College Board. Topics include: the review of functions and their representations, limits and continuity, the derivative and its applications, the definite integral, techniques and applications of integration, and the Fundamental Theorem of the Calculus. A graphing calculator is required. To receive credit for this course, the student must take the AP Calculus AB exam. **Prerequisites:** *Pre-Calculus and/or recommendation of the Department Chair and teacher*. MHS Learning Expectations: 1, 2, 3, 4, 5.

205 Advanced Placement Calculus BC AP 1 Credit Grade 12

This course covers the syllabus for the Advanced Placement Calculus BC Examination of the College Board. All of the topics from AP Calculus AB are covered with the following additional topics: advanced techniques of integration, calculus of parametric functions, velocity and acceleration vectors representing two-dimensional motion, sequences and series, and the epsilon/delta definition of limits. A graphing calculator is required. To receive credit for this course, the student must take the AP Calculus BC exam. **Prerequisites:** *Pre-Calculus and recommendation of the Department Chair*. MHS Learning Expectations: 1, 2, 3, 4, 5.

Math Models with Applications (previously Transition to College Algebra)

Students will be able to:

- I. Work with real-life applications of linear, quadratic, exponential, logarithmic, and trigonometric functions (e.g. the use of logarithmic scales to represent the intensity of sound or the strength/size of earthquakes).
- II. Solve systems and inequalities and interpret the solutions in applications (e.g. linear programming problems).
- III. Use trigonometry to solve both practical and theoretical exercises.
- IV. Explore practical applications of the conic sections.
- V. Use essential geometric concepts to explain phenomena; these may include work with fractals, geometric transformations and their representations with matrices, as well as the emergence of the golden ratio in nature and in architecture.
- VI. Describe data with appropriate displays and begin to analyze data using one-variable and two-variable statistics.

234 Math Models with Applications CP1 1 Credit Grade 12

This course reviews difficult concepts covered in previous algebra and geometry courses through applications. Topics in trigonometry, statistics, probability, advanced algebra and analytic geometry are included. Emphasis is placed on graphing techniques as well as the application of basic mathematical concepts to real-world problems. This course offers a good foundation for students planning further study in the social sciences, education, or other liberal arts disciplines after high school. *Prerequisite: Algebra II or Algebra III.* MHS Learning Expectations: 2, 4, 5

Consumer Mathematics

Students will be able to:

- I. Compute interest for all types of loans and read bank statements.
- II. Create a working budget and maintain a budget for planning an event.
- III. Maintain home budgets including costs for food, housing clothing, and home care.
- IV. Determine how the stock market can be used for investment purposes.
- V. Determine individual income tax by filling out the necessary forms.

255 Consumer Mathematics CP2 1 Credit Grades 11, 12

Students learn to apply computing skills to solve problems in everyday personal finances. Units covered include banking (mathematics concepts behind checking and savings accounts), credit cards, budgeting, job related finances, taxes, housing installment buying, household bills, insurance, financing a car, investments, and retirement. MHS Learning Expectations: 2, 4, 5.

To be offered 2012-2013:

Statistics

Topics in this course will include data description and beginning data analysis, probability, inferential statistics, normal and binomial distributions, sampling techniques, confidence intervals and hypotheses testing. Emphasis will be placed on applications of statistics to understand real-world problems in the sciences and social sciences.

Social Studies

The Social Studies curriculum is designed to help students develop knowledge, skills, and personal qualities through the study of history and the other social sciences. Our Social Studies courses are designed to complement the Massachusetts Common Core of Learning, which encourages independent thinking, inquiry, and the demonstration of personal, social, and civic responsibility. Our courses are also designed to meet the requirements of the History and Social Science Framework, which was approved by the State Department of Education in October, 2002.

Although most Social Studies courses offered to freshmen, sophomores, and juniors emphasize history, these courses also develop content knowledge in other areas of the social sciences. As required by the Social Studies Curriculum Framework, the study of the principles of geography, citizenship and government (commonly known as political science), and economics make up a major part of our history courses. Additionally, seniors are offered courses dealing with psychology, sociology, anthropology, government and law, and economics.

Social Studies courses at the college preparatory level are open to all students. Placement in an honors or Advanced Placement course requires that students meet stated prerequisites. These are listed for each appropriate course. During the school year it is expected that students in Advanced Placement courses will earn no less than a C in any quarter. Any grade less than C will result in a student being moved to a lower level.

All one-half credit courses in the Social Studies department are college preparatory and open to all students of the designated grade. One-half credit courses do not count toward the calculation of GPA and rank-in-class. This means that students taking Advanced Placement or honors courses can take any half-credit course without having it negatively impact their GPA or class rank. Half credit courses are offered to enrich a student's social studies experience and may not be used to replace a full credit course.

All Melrose High School students must successfully complete three full credit Social Studies courses, including U.S. History, in order to graduate.

World History II

Students will be able to:

- I. Understand how geography influences international relationships.
- II. Understand the major trends that helped shape society.
- III. Understand the role government played in the development of the Western World.
- IV. Understand what factors lead to conflict and how it affects society.
- V. Write effective argumentative essays.

322 World History II CP 1 Credit Grade 9

This course covers the world history of civilization from the late 18th century to the present. It covers the same topics as World History II H but at a pace and depth more appropriate for the college preparatory level of study. All courses offered by the Social Studies department reflect the Melrose High School Learning Expectations numbers: 3, 8, 10

307 World History II H 1 Credit Grade 9

This course covers the history of civilization from the late 18th century to the present. Topics include the rise of the nation state in Europe, the French Revolution, the Industrial Revolution, 19th century political reform in Western Europe, imperialism in Africa, Asia, and South America, World War I, the Great Depression, World War II, the Cold War, and the Russian and Chinese revolutions, as well as a look at the world at the beginning of the 21st Century. Emphasis will be placed on critical reading and writing, as well as the use of primary source documents. **Prerequisite:** See page on placement criteria at the beginning of the booklet. All courses offered by the Social Studies department reflect the Melrose High School Learning Expectations numbers: 3, 8, 10

United States History I

Students will be able to:

- I. Understand the reasons for exploration/colonization.
- II. Understand the growth and development of the “American”.
- III. Understand the political/philosophical components of the Declaration of Independence and Constitution.
- IV. Understand the causes of the Civil War.
- V. Write an effective argumentative essay.

323 United States History I CP 1 Credit Grade10

This course examines the creation and growth of the United States from 1763-1877. The course covers the same topics as honors U.S. History I, but at a pace and depth more appropriate for the college preparatory level of study. All courses offered by the Social Studies department reflect the Melrose High School Learning Expectations numbers: 3, 8, 10

312 United States History I H 1 Credit Grade 10

This course examines the creation and growth of the United States from 1763 to the rise of the Gilded Age. Topics include the American Revolution, Constitution, rise of political parties, early national period, manifest destiny, reform movement, the Age of Jackson, the Civil War and Reconstruction, the Old West, and the Gilded Age. The course will look to balance the growth of governmental power, with an examination of the rights and privileges of the average person. Emphasis will be placed on critical reading and writing, as well as the use of primary source documents. *Prerequisite: B or better in World History II H or A in World History II CP and departmental approval.* All courses offered by the Social Studies department reflect the Melrose High School Learning Expectations numbers: 3, 8, 10

US History II

Students will be able to:

- I. Understand the role of the federal government in the Industrial Revolution and Progressive movement.
- II. Understand the impact of the federal government on the economy since the 1930's.
- III. Understand the role of the United States as a world power since 1945.
- IV. Understand the balance between national security and individual rights in the modern world.
- V. Write an effective argumentative essay and term paper.

316 U.S. History CP 1 Credit Grade11

This course examines the United States from Imperialism to the present. This course covers the same topics as honors U.S. History, but at a pace and depth more appropriate for the college preparatory level of study. All courses offered by the Social Studies department reflect the Melrose High School Learning Expectations numbers: 3, 8, 10

315 U.S. History II**H 1 Credit****Grade 11**

This course examines the United States from Imperialism to the present. Topics include: Imperialism, the Progressive Era, World War I, the Great Depression, World War II, the Cold War, the Korean War, life in the 50's and 60's, Vietnam, America in the 1980's and 1990's, and our role in the 21st century including terrorism and its impact on America. Emphasis will be placed on critical reading and writing, as well as the use of primary source documents.

Prerequisite: *B or better in U.S. History I H or A in U.S. History I CP and department approval.* All courses offered by the Social Studies department reflect the Melrose High School Learning Expectations numbers: 3, 8, 10

305 Advanced Placement U.S. History**AP 1 Credit****Grade 11**

This course provides students with the analytic skills and factual knowledge necessary to deal critically with the study of U.S. history. It is designed to prepare students for intermediate and advanced college courses by making demands upon them equivalent to those made by full year college courses. Students will learn to assess historical materials and to weigh the evidence and interpretations presented in historical scholarship, developing the skills necessary to arrive at conclusions on the basis of an informed judgment, and to present reasons and evidence clearly and persuasively in essay format. Topics range from the Discovery of the New World to events in the 1990's. Students taking this course are required to take the AP U.S. History exam in May. **Prerequisite:** *A in U.S. History I H and department approval or A+ in U.S. History I CP and department approval.* All courses offered by the Social Studies department reflect the Melrose High School Learning Expectations numbers: 3, 8, 10

Anthropology / Sociology**Students will be able to:**

- I. Demonstrate an understanding of the various disciplines of Anthropology.**
- II. Explain the theories of evolution.**
- III. Demonstrate an understanding of culture, ethnocentrism, cultural diversity and cultural relativism.**
- IV. Gain greater insight and understanding of themselves through the social institutions around them.**
- V. Possess a more informed view of our multicultural society.**

314 Anthropology/Sociology**H 1 Credit****Grade 12**

This course involves a study of the principles of anthropology and sociology and will help students to understand the individual in relation to his or her culture. Students will focus on prehistoric human evolution in both the physical and cultural sense, Old World archaeology, and New World, pre-Columbian Native cultures. Students will also study contemporary American culture, its values, and taboos, and other cultures in order to observe the variety of ways in which people structure their institutions. Using the principles of sociology, the students will have the opportunity to pursue in-depth analyses of certain social problems, such as violence, prejudice, and poverty. **Prerequisite:** *B or better in US History H and AP or A in US History CP.* All courses offered by the Social Studies department reflect the Melrose High School Learning Expectations numbers: 3, 8, 10

Contemporary Legal Issues

Students will be able to:

- I. Understand the role law and the legal system play in society.
- II. Understand the major cases in U.S. History that impact modern society.
- III. Understand the role and function of the Bill of Rights in society.
- IV. Understand the role of the Supreme Court.
- V. Write an effective argumentative essay.

334 Contemporary Legal Issues CP 1 Credit Grade 12

This course is designed for students who would enjoy a general introduction to legal issues. It will cover many of the same topics as in the honors course, but at a pace and depth more appropriate to college preparatory level. All courses offered by the Social Studies department reflect the Melrose High School Learning Expectations numbers: 3, 8, 10

335 Contemporary Legal Issues H 1 Credit Grade 12

Information presented in this course is valuable to every citizen. Students will study the role the law and our judicial system play in one's life. Topics include criminal and juvenile law, consumer law, the Constitution, family law, negligence, and individual rights and responsibilities. Through the use of case studies, students will develop a better understanding of the law. Students will use analytic reasoning skills in dealing with current problems in society and the methods by which the legal community tries to resolve these issues. All courses offered by the Social Studies department reflect the Melrose High School Learning Expectations numbers: 3, 8, 10

Psychology

Students will be able to:

- I. Understand modern perspectives of the study of behavior.
- II. Understand the value and benefits of research.
- III. Understand and explain several of the various influences on behavior.
- IV. Understand ways to improve one's own behavior and promote wellness.
- V. Attain recognition and understanding of motivation and influences of others.

344 Psychology CP 1 Credit Grade 12

This course is designed for students who would enjoy a general introduction to the study of psychology. It will cover many of the same topics as in honors Psychology but at a pace and depth more appropriate to the college preparatory level. All courses offered by the Social Studies department reflect the Melrose High School Learning Expectations numbers: 3, 8, 10

343 Psychology H 1 Credit Grade 12

This course focuses both on the scientific basis of psychology and on its relevance to the student's own life. Methods, theories, and current issues in psychology are presented. Students take part in demonstrations and experiments, and are introduced to the case study approach. Major units include perceptions, learning, motivation, personality, and problems in behavior adjustment. *Prerequisite: B or better in US History H and AP or A in US History CP.* All courses offered by the Social Studies department reflect the Melrose High School Learning Expectations numbers: 3, 8, 10

Advanced Placement Psychology

Students will be able to:

- I. Understand modern and historical perspectives of psychology.
- II. Understand and demonstrate a variety of research methods, including their usefulness, strengths and limitations.
- III. Understand and explain biological, cognitive, and social influences on behavior.
- IV. Understand the complexities of psychological disorders and their treatment.
- V. Recognize patterns of learning, memory and motivation.

304 Advanced Placement Psychology

AP 1 Credit

Grade 12

This course is designed to provide students with analytic skills and factual knowledge to understand the social science called psychology. The course prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full year college courses. This course develops the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. Students taking this course are required to take the College Board AP Exam in Psychology in the spring of their senior year. **Prerequisite:** *B or better in AP U.S. History, A in U.S. History H and A+ in US History CP departmental approval.* All courses offered by the Social Studies department reflect the Melrose High School Learning Expectations numbers: 3, 8, 10

Social Studies Electives

Sports in Society

Students will be able to:

- I. Understand the business side of professional sports.
- II. Understand the role sports play in modern American culture.
- III. Understand common goals that make for success on the playing field and in life.
- IV. Write an effective argumentative essay.

386 Sports in Society

CP ½Credit

Grade 11

This course will cover the history of sports in America, the influence of sports on our society, changes in sports over the past century, legal issues as they relate to sports, and principles of coaching that lead to success in sports as well as life in general. This course is recommended for students who participate in sports, or who may be considering one of the many careers that are a part of the modern sports industry. Melrose High School Learning Expectations numbers: 3, 8, 10

History through Film

Students will be able to:

- I. Understand the role films play in educating the public on history.
- II. Understand how movies take creative “license” with the facts.
- III. Understand the unique role films play to put a “face” on the past.
- IV. Understand the importance that films play in modern society.
- V. Write an effective argumentative essay.

387 History through Film

CP ½ Credit

Grade 11 & 12

This course will involve the viewing and analysis of a number of films, or parts of films, that significantly represent events of history. Film can be a method for the study of history, and that is the goal of this course. Students will view films and participate in related research and study that will allow them to analyze and evaluate the historical accuracy, and in some cases the inaccuracy, portrayed in film. Participating in this course will afford students a unique opportunity to enriching their knowledge of history. This course is reserved for seniors who have successfully completed their 9th, 10th, and 11th grade history requirements. Examples of the types of films that may be covered include: Gettysburg, All Quiet on the Western Front, The Last Emperor, Citizen Kane, The Grapes of Wrath, and Gandhi. Melrose High School Learning Expectations numbers: 3, 8, 10

Economics

Students will be able to:

- I. Understand the three basic economic systems and their strengths and weaknesses.
- II. Understand the role supply and demand and competition play in a modern economy.
- III. Understand the role of government regulation in modern economic planning.
- IV. Understand the basic principles of personal finance.
- V. Understand the strength and weakness of the Social Security system.

354 Economics

H 1 Credit

Grade 12

The economic principles of supply and demand, the law of scarcity, growing international interdependence, and consumerism are the focus of this course. The course will also focus on how businesses operate, financial planning, political economics, and our economic future. Melrose High School Learning Expectations numbers: 3, 8, 10

Foreign Language

The Foreign Language program offers five languages: French, German, Italian, Latin, and Spanish. It provides language learning for students with academic, vocational, and career needs and interests. The program contains levels of instruction so that a student may progress at a pace compatible with his or her language aptitude and motivation.

The involvement of the United States in a world economy has increased the need for foreign language competence. Many occupations in business, industry, public service, and government prefer people with knowledge in more than one language. Therefore, the focus of this program is to develop proficiency in oral communication, reading, writing, and cultural understanding in order to prepare students for more advanced language study and to emphasize the usefulness of language skills.

The curriculum of the Foreign Language Department is completely aligned with both the Massachusetts Frameworks and the National Standards in Foreign Languages. It also reflects the academic expectations established by Melrose High School. Students are required to do written and oral assignments prescribed by the teacher and to review each day the material presented in class. Though each individual has a distinct pattern of learning behavior, the development of language skills requires disciplined learning, a positive attitude, and motivation to achieve proficiency. Instructional materials include print, videos, audio and software to complement each language program. The department also benefits from a multimedia laboratory and a vast selection of documentaries, culture videos and foreign language films. There is a \$15.00 fee per year for the purchase of workbooks that accompany our texts.

A student must earn a grade of "C-" or better in a course in order to proceed to the next year of study in any language. Students who received less than a "C-" may either repeat the course or make up deficiencies in summer school. Students cannot be enrolled in the same level of the same language more than twice. All first year students begin the study of the language at the College Preparatory level. At the end of the first Quarter, if the student excels and shows superior interest, the teacher may, with the permission of the Department Chair, give such a student Honor's credit. Any student wanting to go from the College Preparatory level to the Honors level MUST meet the criteria outlined on p 15.

Students who begin German, Italian or Spanish in grades 7 or 9 have the distinct advantage of participating in exchange programs abroad. Students of French may also participate in cultural tours of Quebec or France. Because the department strongly believes that education takes place in, as well as out, of the classroom, we sponsor co-curricular clubs in each language taught and we design cultural after-school activities that engage and motivate students.

In preparation for entering higher education, students of the upper level courses are encouraged to take the SAT II in the chosen language, as well as participate in the national contests offered by the professional organization of each language. Melrose is proud to have had both national and state winners of such contests. Furthermore, students who excel in the fifth year honors program in French, German, Italian, Latin or Spanish are encouraged, upon the teacher's recommendation, to take the Advanced Placement Test offered by the College Board.

French I

Students will be able to:

- I. Pronounce French words.**
- II. Conjugate regular, present tense verbs and some irregular verbs.**
- III. Introduce themselves and have a basic conversation.**
- IV. Write structurally appropriate sentences in French.**
- V. Recognize French-speaking countries and know key geographical elements of these countries.**

451 French I CP 1 Credit Grade 9,10,11,12

This is an introductory course designed for first year students who begin the study of French in High School and for students who studied French at the Middle School and would benefit from additional practice in the language. This course aims to develop basic proficiency in understanding, speaking, reading, and writing. The student will be introduced to the culture of France and other French speaking countries. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

French I H 1 Credit Grade 9,10,11,12

At the end of the first quarter, those students who are starting French with a strong background in foreign language, and are earning an A+, may apply to take French I for honors credit. Permission of the current instructor and the Chair of the Department of Foreign Languages is required. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

French II

Students will be able to:

- I. Express themselves (in writing and speaking) in the present and past tenses.**
- II. Maintain a short conversation on personal topics such as school, family and pastimes.**
- III. Write a basic paragraph or short essay in French.**
- IV. Read intermediate French text.**
- V. Relate fundamental differences between French-speaking countries and the USA.**

453 French II CP 1 Credit Grade 9,10,11,12

Students will acquire increased proficiency in listening comprehension, and in speaking, and will further the development of skills in reading, writing, and cultural understanding. Writing assignments, reading activities, and projects are included in the program. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

403 French II H 1 Credit Grade 9,10,11,12

The honors course in French II will allow students to develop their proficiency in listening comprehension, speaking, reading, writing and cultural understanding. Students will regularly complete supplementary reading and writing assignments throughout the year and will also be assigned one or more projects. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

French III

Students will be able to:

- I. Express themselves (in writing and speaking) in the present and past tenses.**
- II. Get around a city/order at a restaurant/ interact in an office by asking for and receiving information.**
- III. Write a short essay in French.**
- IV. Read intermediate French text.**
- V. Relate fundamental differences between French-speaking countries and the USA.**

455 French III CP 1 Credit Grade 10, 11, 12

This course aims to develop further proficiency in oral communication, reading, and writing. Included in the program are writing assignments and reading activities of increasing difficulty, as well as projects and cultural discussions. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

411 French III H 1 Credit Grade 10, 11, 12

This course focuses on increased proficiency in the skills acquired during the previous years in order to understand, speak, read and write French with greater accuracy. Supplementary readings and writing assignments of increasing difficulty are included in this course. Projects in French, related to grammatical and cultural topics, will be required. The course will be conducted primarily in the target language. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

French IV

Students will be able to:

- I. Express themselves (in writing and speaking) in the Indicative, Conditional, Subjunctive and imperative moods.
- II. Demonstrate practice of grammatical nuance in writing and speaking (object/relative/possessive demonstrative pronouns, etc.)
- III. Sustain a conversation on a wide range of themes.
- IV. Read French literature with appropriate aids.
- V. Research historical periods and personalities of the French-speaking world.

457 French IV CP 1Credit Grade 11, 12

This course will be conducted primarily in the target language. The course further reinforces the basic communication skills in listening, speaking, reading, and writing proficiency. The study of more complex grammatical topics and vocabulary will be integrated with the review of previously learned structures. Students will be involved in the study of cultural topics, the completion of relevant reading and writing activities, and projects. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

412 French IV H 1 Credit Grade 11, 12

Since students are expected to perform at a higher level of proficiency, the course is conducted almost entirely in French, with an emphasis on oral and written communication. Students will study more complex grammatical topics and will review previously learned structures. Current issues, cultural topics, short stories, plays and novels of increasing difficulty generate topics for writing and discussion. Outside projects are also required. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

French V

By the end of the year students will be able to:

- I. Express themselves (in writing and speaking) in all moods and tenses.
- II. Write a persuasive essay in French.
- III. Debate on a variety of topics in French, with little or no preparation.
- IV. Read French literature with ease.
- V. Discuss authors and cultural trends in the French-speaking world.

410 French V CP 1 Credit Grade 12

This course will be conducted almost entirely in French and will develop greater accuracy in a student's language skills. Students will be challenged to improve their writing and speaking ability. They will become better listeners and readers in the language and they will expand their cultural knowledge through research, class discussions, and contemporary readings. Some new structures will be learned, but emphasis will be placed on reinforcing previously learned concepts. Students will frequently be exposed to different media, such as French-language films, the Internet, documentaries and music to aid them in learning about French language and culture. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

415 French V H 1 Credit Grade 12

In this course, conducted entirely in French, communication skills are reinforced to enable the student to converse with advanced proficiency, read with ease, and express him or herself in written composition. The literary selections represent the works of many periods with emphasis on the writings of the 20th Century. Integrated in the program will be cultural topics on art, history, and civilization, as well as outside reading and reports on relevant contemporary issues. Though this is not an AP course, qualified students, willing to prepare themselves outside of class, are encouraged to take the French Language AP exam. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

French AP

Students will be able to:

- I. Perform all goals for French V in addition to following the curriculum set forth and approved by College Board.

419 French V

AP 1 Credit

Grade 12

This course, taught in conjunction with French V 415, follows the syllabus of French Advanced Placement Exam, and is designed to help students prepare to take the test. Students registered in this course must be willing to do substantial independent work and will be required to follow the teacher-directed curriculum separately from classroom studies. *Prerequisite: Permission of the Chair of the Department of Foreign Languages and the French instructor. This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

German I

Students will be able to:

- I. Pronounce German words.
- II. Conjugate regular, present tense verbs and some irregular verbs.
- III. Introduce themselves and have a basic conversation.
- IV. Write structurally appropriate sentences in German.
- V. Recognize German-speaking countries and know key geographical elements of these countries.

421 German I

CP 1 Credit

Grade 9,10,11,12

This course is designed for students who begin German in High School. It aims to develop basic proficiency in listening, speaking, reading, and writing, and to develop and understanding of German culture and civilization in the context of the 21st century. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

German I

H 1 Credit

Grade 9,10,11,12

At the end of the first quarter, those students who are starting German with a strong background in foreign language, and are earning an A+, may apply to take German for honors credit. Permission of the current instructor and the Chair of the Department of Foreign Languages is required. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

German II

Students will be able to:

- I. Express themselves (in writing and speaking) in the present and past tenses.
- II. Maintain a short conversation on personal topics such as school, family and pastimes.
- III. Write a basic paragraph or short essay in German.
- IV. Read intermediate German texts.
- V. Relate fundamental differences between German-speaking countries and the USA.

422 German II

CP 1 Credit

Grade 9,10,11,12

This course develops further proficiency in the basic skills of listening, speaking, reading, and writing. Various aspects of German culture and civilization are included in the program through interactive learning experiences and the use of video. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

420 German II H 1 Credit Grade 9,10,11,12

This course focuses on increased proficiency in the basic skills acquired during the previous years in order to understand, speak, read, and write German with greater Accuracy. Assignments and projects on the various aspects of German culture and contemporary life will be required in this course. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

German III

Students will be able to:

- I. Express themselves (in writing and speaking) in the present and past and future tenses.**
- II. Get around a city/order at a restaurant/ interact in an office by asking for and receiving information.**
- III. Write a short essay in German.**
- IV. Read authentic materials in German.**
- V. Discuss a variety of cultural topics in German, with some preparation.**

426 German III CP 1 Credit Grade 10, 11, 12

This course aims to reinforce the skills previously acquired in oral and written communications. Conducted in German, the course includes an introductory survey of contemporary German and reading selections which provide the basis for interactive learning activities.

428 German III H 1 Credit Grade 10, 11, 12

This course is conducted almost entirely in German with emphasis on oral communication and correct written expression. Current issues, short stories, plays, and novels of increasing difficulty generate topics of conversation and discussion. Outside projects will also be required in this program. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

German IV

Students will be able to:

- I. Express themselves (in writing and speaking) in the Indicative, Conditional, Subjunctive and imperative moods.**
- II. Demonstrate practice of grammatical nuance in writing and speaking (object/relative/ possessive demonstrative pronouns, etc.).**
- III. Sustain a conversation on a wide range of themes.**
- IV. Read German literature with appropriate aids.**
- V. Research historical periods and personalities on the German – speaking world.**

429 German IV H 1 Credit Grade 11, 12

This course is intensive and reinforces the skills acquired in the previous levels of study, with emphasis on oral and written expression. Outside projects are required. Discussion of current German issues provides an opportunity for increasing proficiency in comprehension and oral communication and furthering knowledge of the civilization and culture of the country. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

German V

By the end of the year students will be able to:

- I. Express themselves (in writing and speaking) in all moods and tenses.**
- II. Write a persuasive essay in German.**
- III. Debate on a variety of topics in German, with little or no preparation.**
- IV. Read German literature with ease.**
- V. Discuss authors and cultural trends in the German-speaking world.**

425 German V H 1 Credit Grade 12

Students will converse with ease, read freely, and express thoughts in written composition. The course will emphasize the writings of the 20th century. Cultural topics will be assigned on art, history, music, and the German way of life. Outside projects are integrated into the program through use of interactive technology. Though this is not an AP course, qualified students, willing to prepare themselves outside of class, are encouraged to take the German Language AP

German V

Students will be able to:

- I. Perform all goals for German V in addition to follow the curriculum set forth and approved by College Board.**

423 German V AP 1 Credit Grade 12

This course, taught in conjunction with German V (425), follows the syllabus of German Advanced Placement Exam, and is designed to help students prepare to take the test. Students registered in this course must be willing to do substantial independent work and will be required to follow the teacher-directed curriculum separately from classroom studies. *Prerequisite: Permission of the Chair of the Department of Foreign Languages and the German instructor. This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

Italian I

Students will be able to:

- I. Pronounce Italian words.**
- II. Conjugate regular, present tense verbs and some irregular verbs.**
- III. Introduce themselves and have a basic conversation.**
- IV. Write structurally appropriate sentences in Italian.**
- V. Recognize key geographical elements of this country.**

431 Italian I CP 1 Credit Grade 9,10,11,12

This course aims to develop basic language skills in listening, speaking, reading and writing Italian and to provide basic understanding of Italian culture and civilization. The approach is thematic and communicative. Oral proficiency is stressed from the very beginning. Students' assignments include research, simple writing and beginner readings. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

Italian I H 1 Credit Grade 9,10,11,12

At the end of **the first quarter**, those students who are starting Italian with a strong background in foreign language, and are earning an A+ may apply to take Italian I for honors credit. Permission of the current instructor and the Chair of the Department of Foreign Languages is required. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

Italian II

Students will be able to:

- I. Express themselves (in writing and speaking) in the present and past tenses.**
- II. Maintain a short conversation on personal topics such as school, family and pastimes.**
- III. Write a basic paragraph or short essay in Italian.**
- IV. Read intermediate Italian text.**
- V. Relate fundamental differences between Italy and the USA.**

432 Italian II CP 1 Credit Grade 9,10,11,12

This course is designed to increase proficiency in the basic skills acquired during the previous year in order to understand, speak, read, and write Italian with greater facility and accuracy. Reading assignments and discussions on the various aspects of Italian customs, culture, and civilization are included in the program. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

430 Italian II H 1 Credit Grade 9,10,11,12

This course is designed to increase the proficiency skills acquired during the previous year in order to understand, speak, read and write Italian with greater facility and accuracy. Supplementary readings and writing assignments will support classroom discussions. Projects on various aspects of culture and civilization will be integrated into the program. *This course reflects the Melrose High School Academic Expectations 3, 5, 6*

Italian III

Students will be able to:

- I. Express themselves (in writing and speaking) in the present and past and future tenses.**
- II. Get around a city/order at a restaurant/interact in an office by asking for and receiving information.**
- III. Write a short essay in Italian.**
- IV. Read authentic materials in Italian.**

433 Italian III CP 1 Credit Grade 10, 11, 12

This course further develops proficiency in oral communication, reading of selected materials of increasing difficulty, and practice in written expression. Reports and discussions are directed to contemporary topics of cultural significance, current events, and the different aspects of Italian civilization. Students will be expected to complete outside projects. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

416 Italian III H 1 Credit Grade 10, 11, 12

This course is designed to increase proficiency in the skills through required reading, writing, and oral presentations. Students will be encouraged to produce skits, interpret easy poems and make connections between Italian culture and their own world. There will be a complete review of the fundamentals of Italian grammar applied to a weekly written journal. The course will be conducted mainly in Italian. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

Italian IV

Students will be able to:

- I. Express themselves (in writing and speaking) in the Indicative, Conditional, Subjunctive, and Imperative moods.**
- II. Demonstrate practice of grammatical nuance in writing and speaking (object/relative/possessive demonstrative pronouns, etc.).**
- III. Sustain a conversation on a range of themes.**
- IV. Read Italian literature with appropriate aids.**
- V. Research historical periods and personalities of the Italian-speaking world.**

435 Italian IV CP 1 Credit Grade 11, 12

In this course, oral communication will be reinforced, and a complete review of grammatical principles will strengthen written expression. Students will write weekly compositions. Quarterly projects will be assigned to students to stimulate creativity and proficiency. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

417 Italian IV **H** **1 Credit** **Grade 11, 12**

Through development of oral proficiency, this course will further develop skills in written expression and reading comprehension. Historical research, contemporary literature, and current events will serve as a basis for classroom discussions and/or assignments. Students will write weekly compositions. Incorporated into the program will be outside projects, reports and independent study. The course will be conducted mainly in Italian. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

Italian V

By the end of the year students will be able to:

- I. Express themselves (in writing and speaking) in all moods and tenses.**
- II. Write a persuasive essay in Italian.**
- III. Debate on a variety of topics in Italian, with little or no preparation.**
- IV. Read Italian literature with ease.**
- V. Discuss authors and cultural trends in the Italian-speaking world.**

438 Italian V **H** **1 Credit** **Grade 12**

In this course, conducted entirely in Italian, a student will have the opportunity to use conversational skills with advanced proficiency, read with ease, and express him or herself in weekly written compositions. The literary selections represent the works of many periods with an emphasis on the writings of the 20th Century. Integrated in the program will be cultural topics on art, history, and civilization, as well as outside reading and reports on relevant contemporary issues. Though this is not an AP course, qualified students, willing to prepare themselves outside of class, are encouraged to take the Italian Language AP exam. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

Italian V

Students will be able to:

- I. Perform all goals for Italian V in addition to follow the curriculum set forth and approved by College Board.**

469 Italian V **AP** **1 Credit** **Grade 12**

This course, taught in conjunction with Italian V 438, follows the syllabus of the Italian Advanced Placement Exam, and is designed to help students prepare to take the test. Students registered in this course must be willing to do substantial independent work and will be required to follow the teacher-directed curriculum separately from classroom studies. **Prerequisite:** *Permission of the Chair of the Department of Foreign Languages and the Italian instructor*

At the end of Latin I, students will display an improved knowledge of English vocabulary and grammar, and can read Latin text that is appropriate in difficulty for the first year of study.

491 Latin I **CP** **1 Credit** **Grade 9,10,11,12**

The study of Latin helps students develop an awareness of the functions and structures of languages; it strengthens their English vocabulary, reading and writing, and critical and analytical skills. It also provides a background in ancient history, society, and government, as well as in Classical literature and philosophy. In the first year, students learn the fundamentals of Latin grammar and vocabulary, and develop fluency in reading and translating Latin. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6.*

Latin I **H** **1 Credit** **Grade 9, 10, 11, 12**

At the end of the first quarter, those students who are starting Latin with a strong background in foreign language, and are earning an A+ may apply to take Latin I for honors credit. Permission of the current instructor and the Chair of the Department of Foreign Languages is required. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

At the end of Latin II, students will have added to their knowledge of English vocabulary and grammar, and will be able to achieve higher verbal test scores as a result. They will also be able to read Latin texts of a difficulty that is commensurate with second-year Latin.

492 Latin II CP 1 Credit Grade 10, 11, 12

The content of the material previously studied will be reinforced by a thorough review. By reading challenging texts, by expanding knowledge of vocabulary, and by understanding grammar at a deeper level, students will significantly improve their ability to score well on the verbal sections of standardized college tests. Students will also discover Roman life and culture by reading and translating original works geared to their level of instruction. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

484 Latin II H 1 Credit Grade 10, 11, 12

The purpose of this course is to improve further the student's knowledge of vocabulary and grammar, in order to help the student become a better writer of English. By achieving the ability to read ancient Latin with good comprehension, the student will be better prepared to score well on the reading comprehension sections of English in standardized college tests. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

At the end of Latin III, students will have added to their knowledge of English vocabulary and grammar, and will be able to achieve higher verbal test scores as a result. They will also be able to read Latin texts of a difficulty that is commensurate with second-year study of Latin.

482 Latin III CP 1 Credit Grade 11, 12

In this course, students learn about Roman civilization while reading selections in Latin from the Cambridge Latin Course textbooks. The Cambridge Latin Course offers readings in Latin that carefully increase complexity, making Latin more accessible to students with a variety of learning aptitudes. The course also presents information on Latin grammar, interspersed with Latin readings that illustrate new grammatical concepts. The course presents extensive information on Roman civilization, both in Latin and in English. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

485 Latin III H 1 credit Grade 11, 12

In this course, students learn about Roman civilization while reading major works of prose and poetry from the Classical period. Authors vary from year to year, and may include poems by Catullus and Horace, selected passages from Vergil's *Aeneid* and Ovid's *Metamorphoses*, letters and speeches by Cicero, and selections from Caesar's *Commentaries on the Gallic War*. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

At the end of Latin IV, students will have added to their knowledge of English vocabulary and grammar, and will be able to achieve higher verbal test scores as a result. They will also be able to read Latin texts of a difficulty that is commensurate with fourth-year study of Latin.

494 Latin IV H 1 Credit Grade 12

This course continues to introduce students to more advanced Latin literature, and offers **the students texts** of greater complexity. In addition to increased power in grammar and vocabulary, students will also gain a greater understanding of the cultural influence of Rome on Western civilization. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

Latin AP

Students will be able to:

- I. Perform all goals for Latin IV, in addition to following the curriculum set forth and approved by College Board.**

495 Latin IV AP 1 Credit Grade 12

This course follows the syllabus of Advanced Placement Latin Literature, and is designed to help students prepare to take the AP Latin Literature Exam. Students registered in this course will read selections from Vergil's Aeneid **Prerequisite:** *Permission of the Chair of the Department of Foreign Languages and the Latin instructor. This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

Spanish I

Students will be able to:

- I. Pronounce Spanish words.**
- II. Conjugate regular, present tense verbs and some irregular verbs.**
- III. Introduce themselves and have a basic conversation.**
- IV. Write structurally appropriate sentences in Spanish.**
- V. Recognize Spanish-speaking countries and know key geographical elements of these countries.**

441 Spanish I CP 1 Credit Grade 9,10,11,12

This introductory course is designed for students who begin Spanish in High School. It will allow students to concentrate on developing basic skills in writing and reading. Listening comprehension and speaking skills will also be integrated as the course progresses. Students will gain insight into the various aspects of Hispanic culture and contemporary life.

Spanish I H 1 Credit Grade 9,10,11,12

At the end of the first quarter, those students who are starting Spanish with a strong background in foreign language, and are earning an A+ may apply to take Spanish I for honors credit. Permission of the current instructor and the Chair of the Department of Foreign Languages is required. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

Spanish II

Students will be able to:

- I. Express themselves (in writing and speaking) in the present and past tenses.**
- II. Maintain a short conversation on personal topics such as school, family and pastimes.**
- III. Write a basic paragraph or short essay in Spanish.**
- IV. Read intermediate Spanish texts.**
- V. Relate fundamental differences between Spanish-speaking countries and the USA.**

443 Spanish II CP 1 Credit Grade 9,10,11,12

Proficiency in the basic skills acquired in previous courses will be reinforced and expanded. Students will learn to develop complete thoughts, both orally and in writing. Various aspects of Hispanic culture will be integrated in this course. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

470 Spanish II H 1 Credit Grade 9,10,11,12

This course offers continuity of learning and further proficiency in listening comprehension, speaking, reading, writing and cultural understanding. Discussion in Spanish on the various aspects of Hispanic culture and contemporary life is an integral part of the program. **Prerequisite:** *A- or better in Spanish I CP or Grade 8 . This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

Spanish III

Students will be able to:

- I. Express themselves (in writing and speaking) in the present and past and future tenses.
- II. Get around a city/order at a restaurant/ interact in an office by asking for and receiving information.
- III. Write a short essay in Spanish.
- IV. Read authentic materials in Spanish.
- V. Discuss a variety of cultural topics in Spanish, with some preparation.

444 Spanish III CP 1 Credit Grade 10, 11, 12

The purpose of the course is to develop proficiency in oral, written, and spoken communication and cultural appreciation. There will be selected reading materials of increasing difficulty, oral discussion, and practice in written expression. Outside readings are included in the program. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

471 Spanish III H 1 Credit Grade 10, 11, 12

This course is conducted almost entirely in Spanish with emphasis on oral and written communication. Current issues, short stories, and reading selections of increasing difficulty provide topics for discussion. Outside projects are also included in this program. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

Spanish IV

Students will be able to:

- I. Express (in writing and speaking) in the Indicative, Conditional, Subjective and Imperative moods.
- II. Demonstrate practice of grammatical nuance in writing and speaking (object/relative/ possessive demonstrative pronouns, etc.).
- III. Sustain a conversation on a wide range of themes.
- IV. Research historical periods and personalities of the Spanish-speaking world.

447 Spanish IV CP 1 Credit Grade 11, 12

This course aims to increase proficiency in comprehension, oral communication, reading, and writing. Selections drawn from contemporary prose and current periodicals serve as a basis for oral discussion. Outside projects and reports are integrated in the program. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

475 Spanish IV H 1 Credit Grade 11, 12

Students at this level will be expected to converse freely, read with ease, and express themselves in written composition. Reading selections are chosen from Hispanic literature. Outside projects and reports on contemporary matters of relevant significance are included in the program. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

Spanish V

By the end of the year students will be able to:

- I. Express themselves (in writing and speaking) in all moods and tenses.
- II. Write a persuasive essay in Spanish.
- III. Debate on a variety of topics in Spanish, with little or no preparation.
- IV. Read Spanish literature with ease.
- V. Discuss authors and cultural trends in the Spanish-speaking world.

407 Spanish V CP 1 Credit Grade 12

In this course students will strengthen their speaking and writing proficiency. Various literary selections, both in Spanish and in translation, will serve as a basis for classroom activities. Students will have the opportunity to review and improve their understanding of grammar as well as their listening comprehension and speaking skills. Integrated in the program will be cultural topics on art and history as well as outside reading and reports on relevant contemporary issues. Students will also be exposed to different media, such as Spanish-language films, the Internet and music as they advance their knowledge of Spanish and Hispanic culture. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

449 Spanish V H 1Credit Grade12

In this course, conducted entirely in Spanish, students will be able to converse with advanced proficiency, read with ease, and express themselves in written composition. Literary selections from various periods, with emphasis on the writings of the 20th Century, will serve as the basis for classroom activities. Integrated in the program will be cultural topics on art, history, and civilization, as well as outside reading and reports on relevant contemporary issues. Though this is not an AP course, qualified students, willing to prepare themselves outside of class, are encouraged to take the Spanish Language AP exam. *This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

Spanish V

Students will be able to:

- I. Perform all goals for Spanish V in addition to follow the curriculum set forth and approved by College Board.**

405 Spanish 5 AP 1Credit Grade 12

This course, taught in conjunction with Spanish V 449, follows the syllabus of Spanish Advanced Placement Exam, and is designed to help students prepare to take the test. Students registered in this course must be willing to do substantial independent work and will be required to follow the teacher-directed curriculum separately from classroom studies. **Prerequisite:** *Permission of the Chair of the Department of Foreign Languages and the Spanish instructor. This course reflects the Melrose High School Academic Expectations: 3, 5, 6*

Science

The courses in Science serve two objectives: 1) to insure that those individuals who desire to pursue science-related studies and careers will be prepared with a good foundation necessary to continue further education and training and 2) to provide students with a challenging learning environment to attain a common core of knowledge, concepts, skills, analytical methods and strategies to become responsible citizens and successful problem solvers in a changing world. Students now have the additional requirement of passing a science MCAS test for graduation. All ninth graders will be expected to take this exam in the spring.

Three credits in Science are required for graduation, with a Science required in grade 9. College, technical schools, and schools of nursing, etc., have their own requirements. If you intend to study in a scientific-technical field, three years of science are highly recommended in grades 10-12.

Physical Science

Students will be able to:

- I. Understand the scientific method and the importance of accuracy in laboratory measurements.
- II. Understand frames of reference for motion studies and relativity.
- III. Understand Newton's Laws of motion and universal forces.
- IV. Understand the Law of Conservation of Matter and Energy and how it relates to forces and mechanical energy, chemical and thermal reactions.
- V. Gain an understanding of electricity, magnetism, and electromagnetic phenomena in electrical devices and electronics.
- VI. Understand wave properties of light and sound.

535 Insights to Physical Science CP2 1 Credit Grade 9

This survey co-taught course of physical science includes motion studies, forces, and descriptive studies of work and power. Energy and energy conversions, electricity, and magnetism are covered using labs and equipment to relate these concepts to 21st century problems. Chemical and physical properties of matter are studied through experiments, teacher demonstrations, and laboratory exercises. This course relies on principles of Pre-Algebra and Algebra I. **Prerequisite:** Teacher recommendation and Science and Special Education department approval. MHS Learning Expectations: 2, 3, 5

520 Physical Science CP1 1 Credit Grade 9

Physical Science emphasizes the role that basic physics and physical properties have in understanding our world. Learning is facilitated by laboratory experiments, worksheets, online assignments, podcasts and demonstrations. Topics include motion studies and calculations, Newton's Laws and Einstein, thermal energy and electromagnetism. Chemical and physical properties of matter are studied, helping to foster good laboratory technique and reporting. MHS Learning Expectations: 2, 3, 5

Life Science & Biology

Students will be able to:

- I. Identify and describe the seven characteristics of life, especially as they pertain to a specific organism.
- II. Recognize that living things are organized and interact at many levels (biochemistry, anatomy and physiology, population/community/ecosystem).
- III. Explain how species are perpetuated.
- IV. Discuss how energy and matter flow through an ecosystem.
- V. Explain the process of natural selection and its outcomes.

531 Life Science CP2 1 Credit Grade 10, 11

The co-taught course focuses on six basic themes: Evolution, Unity within Diversity, Use of Energy, Patterns of Change, Systems and Interactions, and the Nature of Scientific Inquiry. Each theme is studied using lecture, laboratory experiments, and reading assignments. Prerequisite: Teacher recommendation and Science and Special Education department approval. MHS Learning Expectations: 3, 8, 9

530 AP Biology

This is a **rigorous** course that is modeled after a college level Introductory Biology course. Biology 1 topics will be reviewed and expanded upon. Lab work is a significant part of the course, while current and past scientific research is a major focus of lectures. This is a broad, but in-depth look at Biology, and students should have a strong background in Biology and Chemistry. All students are required to complete a summer assignment. *Prerequisite: Teacher recommendation.*

522 Biology 1 CP1 1 Credit Grade 10, 11

The course focuses on six basic themes: Evolution, Unity within Diversity, Use of Energy, Patterns of Change, Systems and Interactions, and the Nature of Scientific Inquiry. Each theme is studied using lecture, laboratory experiments, and reading assignments. MHS Learning Expectations: 3, 8, 9

508 Biology 1 H 1 Credit Grade 9, 10

The course focuses on six basic themes: Evolution, Unity within Diversity, Use of Energy, Patterns of Change, Systems and Interactions, and the Nature of Scientific Inquiry. Each theme is studied using lecture, laboratory experiments, and reading assignments with a focus on independent learning and inquiry. *Prerequisite: An "A-" in Science with teacher recommendation and a placement exam.* MHS Learning Expectations: 1, 2, 3, 4

509 Biology 2 H 1 Credit Grade 11, 12

Biology 2 deals with living systems at the molecular, cellular, organism, and societal levels. These areas are explored in depth, with emphasis placed on knowledge of the research that has resulted in our present understanding of biology. This course incorporates lab experiences which help prepare students for career oriented courses in biotechnology, medicine and the environmental sciences. *Prerequisite: Biology 1 H or an "A" Biology 1 CP with department approval.* MHS Learning Expectations: 3, 8, 9

Environmental Science

Students will be able to:

- I. Understand ecological interactions between biotic and abiotic factors.
- II. Analyze human population dynamics and the effects of this on the planet.
- III. Appreciate the importance of responsible resource management (air, water, land).
- IV. Recognize the limits of nonrenewable energy and explore alternative methods to securing a sustainable future.
- V. Identify the effects that various types of pollution have on the planet.

502 Advanced Placement Environmental Science AP 1 Credit Grade 11, 12

AP Environmental Science is designed to provide students with the scientific principles, concepts and methodologies required to understand the interrelationships of the natural world and to identify and analyze environmental problems both natural and human made. Environmental Science is interdisciplinary. The following themes will provide a foundation for the course: energy conversions, changing natural systems, biochemical systems, technology and human impact on the environment, cultural and socio-economic factors, and development of practices that will achieve a sustainable world. *Prerequisite: Teacher recommendation and department approval. Students will prepare for and be required to take the AP Environmental Exam.* MHS Learning Expectations: 1, 2, 3, 4, 5

572 Environmental Science CP2 1 Credit Grade 11, 12

This course is an introduction to the study of how humans interact with their environment and the resulting consequences as well as what can be done to improve those interactions. Some important topics covered include basic ecological principles, ozone depletion, global warming, energy conservation, natural resources, air and water pollution and biodiversity. *Prerequisite: Teacher recommendation and department approval.* MHS Learning Expectations: 1, 2, 5

574 Environmental Science CP1 1 Credit Grade 11, 12

Environmental Science is designed to provide students with the scientific principles and concepts needed to understand the relationships between organisms and their environment. Students will identify and analyze environmental problems both natural and human made. They will also study possible solutions to these problems. Topics covered include ecology, population dynamics, energy, resource management and pollution. . MHS Learning Expectations: 1, 2, 5

538 Environmental Science H 1 Credit Grade 11, 12

Environmental Science is designed to provide students with the scientific principles, concepts and methodologies needed to understand the interrelationships between organisms and their environment. Environmental Science is an interdisciplinary course where students will identify and analyze environmental problems. Topics covered include energy conversions, changing natural systems, biochemical systems, technology and the human impact on the environment, cultural and socio-economic factors, and development of practices that will achieve a sustainable world. *Prerequisite: Teacher recommendation and department approval.* MHS Learning Expectations: 1, 2, 3, 4, 5

Anatomy & Physiology

Students will be able to:

- I. Discuss the relationship between structure and function.
- II. Explain the levels of organization within the human body.
- III. Discuss the importance of homeostasis.
- IV. Identify the systems making up the human body and describe the functioning of each.
- V. Discuss how body systems work together

558 Structure and Function of the Human Body CP2 1 Credit Grade 11, 12

A systemic survey of the anatomy and physiology of the major systems of the human body will be covered in this course. Emphasis is placed on the body in health and disease. **Prerequisite:** *Teacher recommendation and teacher approval.* MHS Learning Expectations: 3, 7, 9

554 Anatomy & Physiology CP1 1 Credit Grade 10, 11, 12

A systematic survey of the structures and functions of the major systems of the human body, this course is a lab oriented course in which the fetal pig is dissected. Emphasis is placed on the causative agents for the normal and abnormal functioning of the systems. **Prerequisite:** *Biology 522 B- or better.* MHS Learning Expectations: 2, 3, 7

557 Anatomy and Physiology H 1 Credit Grade 10, 11, 12

An in-depth systematic survey of the structure and function of the human body, this course is a lab oriented course. This class is designed to introduce students pursuing a career in medicine to the structure and function of the human body. **Prerequisite:** *Biology 508 or Biology 522 A- and teacher recommendation.* MHS Learning Expectations: 3, 5, 7

Chemistry

Students will be able to:

- I. Name and write the chemical formulas for simple ionic and molecular compounds, including those that contain the polyatomic ions: ammonium, carbonate, hydroxide, nitrate, phosphate, and sulfate.
- II. Balance chemical equations.
- III. Classify chemical reactions as synthesis (combination), decomposition, single displacement (replacement), double displacement, and combustion.
- IV. Use the mole concept to determine number of particles and molar mass for elements and compounds.
- V. Determine percent compositions, empirical formulas, and molecular formulas, the mass-to-mass stoichiometry for a chemical reactions and percent yield in a chemical reaction.

545 Chemical Interactions CP2 1 Credit Grade 11, 12

This course emphasizes the relationship of chemistry to other disciplines such as biology, physics, environmental sciences, earth science, and everyday life. Emphasis will also be on developing basic skills and laboratory techniques in chemistry and on solving problems. **Prerequisite:** *C or better in Algebra 1.* MHS Learning Expectations: 4, 5, 9

523 Chemistry 1 CP1 1 Credit Grade 11, 12

This course covers the most frequent theories of the nature of matter and its interaction. Major emphasis will be on chemical interactions from both a descriptive and mathematical approach. The student will derive conclusions from laboratory experiments and solving problems. **Prerequisite:** *Must be taking a CP Math class concurrently.* MHS Learning Expectations: 4, 5, 9

518 Chemistry 1 **H** **1 Credit** **Grade 10, 11**

Emphasis is placed on a theoretical and mathematical approach to the more advanced concepts of the nature of matter and its chemical interactions, with an equal stress on accurate and meaningful laboratory experiences. The combination of this course and Chemistry 2 is designed to approximate the essentials of first year college chemistry. *Prerequisite: Biology 1 H or A in Biology 1 CP with department approval. Student must be in an Honors Math class.* MHS Learning Expectations: 4, 5, 9

519 Chemistry 2 **H** **1 Credit** **Grade 11, 12**

The primary goal of this course is to provide a broad overview of the principles of chemistry, the reactivity of the chemical elements and their compounds, and the applications of chemistry. A major objective is to provide the tools needed for students to function as chemically literate citizens. This course will put an emphasis on advanced placement chemistry experiments. (B or better in Chemistry 518) MHS Learning Expectations: 4, 5, 9

Physics

Students will be able to:

- I. Understand the relationships among position, distance, time and direction for objects in linear motion.**
- II. Understand how force influences the motion of objects in linear and two-dimensional motion.**
- III. Understand how the conservation of energy and the conservation of momentum can be used to predict physical phenomenon.**
- IV. Understand how the electrical charge relates to the flow of electricity.**
- V. Understand the relationship between electrical voltage, current and resistance.**
- VI. Conceptually understand the relationship between electrical current and magnetism.**

544 Physics **CP1** **Credit** **Grade 11, 12**

This course is a concept-based treatment of physical phenomenon. The topics studied will include the study of motion, forces on objects, energy, heat, sound and light waves, electricity and magnetism. This course will use real world examples and basic mathematical strategies to illustrate physics concepts and solve physics problems. The course work will also include laboratory exercises and projects. A scientific calculator will be required for this course. *Prerequisite: Algebra 2, Chemistry 1.* MHS Learning Expectations: 3, 4, 5

539 Physics 1 **H** **1 Credit** **Grade 11, 12**

This course is a mathematical-based treatment of physical phenomenon. The topics studied will include kinematics, forces, mechanical energy, thermodynamics, waves, electricity and electro-magnetism. The course will emphasize mathematical problem solving. The course work will also include laboratory exercises and projects. A TI 80 series graphing calculator is required for this course. *Prerequisite: Chemistry 1H, Pre-Calculus H.* MHS Learning Expectations: 3, 4, 5

504 Advanced Placement Physics **AP** **1 Credit** **Grade 12**

This course will follow the curriculum prescribed for an Advanced Placement Physics class. The topics include: mechanics, thermodynamics, electricity and magnetism, optics, atomic physics and nuclear physics. Students will prepare for and be required to take the AP Physics exam. *Prerequisite: B+ or better in Physics 539 and teacher recommendation. Students must have a scientific calculator.* MHS Learning Expectations: 1, 2, 3, 4

Science Electives

562 Marine Ecology **CPI** **1 Credit** **Grade 11, 12**

Marine Ecology introduces students to ecology of saltwater ecosystems. Topics covered include: ecology basics; properties of water; chemical and physical oceanography (dissolved substances, properties of waves and currents); geological oceanography (seafloor topography, coasts and beaches); marine ecosystems and biodiversity. Global climate issues will be discussed. There is a lab contingent. This will include microscope work; gross anatomy of organisms; taxonomy; and water analysis. Students should be familiar with chemistry and conceptual Physics. **Prerequisite:** 2 years of science. MHS Learning Expectations: 1, 2, 4

564 Meteorology **CPI** **½ Credit** **Grade 11, 12**

Study the Earth's atmosphere, weather, and climate. Topics include all aspects of weather and their causes such as: precipitation, clouds, storms, hurricanes, and tornadoes. The course will include laboratory and project work. A working knowledge of chemistry and physics is helpful. **Prerequisite:** Two years of science. MHS Learning Expectations: 1, 2, 4

Astronomy

Students will be able to:

- I. Explain what causes seasons.
- II. Describe where the moon comes from and explain the influence it has on the earth and its organisms.
- III. Explain how stars are made and how they “live” and “die”.
- IV. Describe the tools of an astronomer and explain how they are used.
- V. Explain how the universe started and how it will end.

567 Astronomy **CPI** **1 Credit** **Grade 11, 12**

This class will provide students an introduction to astronomy, starting with the Earth-Moon system, working outward to the rest of the solar system (planets, the Sun). Additionally, students will explore the structure and life cycle of stars, using our Sun as a model star; the structure and movement of galaxies, using our own Milky Way as a model system; structure, evidence and influence of black holes; cosmology; and SET! (Search for Extraterrestrial Intelligence). A variety of text and media will be used. A working knowledge of chemistry and physics is helpful. **Prerequisite:** Two years of science. MHS Learning Expectations: 1, 2, 4

The Science in Science Fiction

Students will be able to:

- I. Explain orally or in writing how the scientific principals of chemical, physical and biological are used as devices in science fiction works and how they relate to real-world situations.
- II. Identify basic scientific laws, theories, formulas and observations in works of science fiction.
- III. Identify science fiction ideas that, through modern discoveries and inventions, have become a reality and currently operate in the fields of science, medicine, technology and communications.
- IV. Use the Scientific Method to recognize and differentiate between science fiction, “pseudo science” and real science in practice.
- V. Evaluate advantages, disadvantages and ethical implications associated with the impact of science and technology on current and future life.

566 The Science in Science Fiction **CP1** **½ Credit** **Grade10, 11, 12**

This one semester course would examine basic science concepts in the context of science fiction stories. The students will read classical science fiction stories by H.G. Wells, Heinlein, Niven and Pournelle, and Asimov and discuss the science ideas behind the stories. Students will also use popular science fiction movies and television programs like Star Trek, Forbidden Planet, Armageddon, and others to discuss topics like: gravity, special relativity, faster than light travel, black holes, the structure of matter, time travel, matter and anti-matter, and electromagnetic radiation. The course will be interdisciplinary in nature, combining reading comprehension, writing and mathematical skills. MHS Learning Expectations: 2, 3, 9

575 Bioethical Issues **CP1** **½ Cr edit** **Grade 11, 12**

An interdisciplinary topic, Bioethics combines sciences, including genetics, medicine, and ecology, along with law, philosophy, history, and pedagogy. Issues covered are extremely relevant to everyday life. The cases presented require students to revisit areas they have previously learned in other science courses to study the topics presented in this course. Problem solving, comparing and contrasting, explaining, listening, writing, decision making, and discussion will be important aspects of this course. *Prerequisite: Successful completion of Biology I.* MHS Learning Expectations: 1, 2, 4, 5

Fine and Performing Arts

Music

The Music Department offers courses and activities for the performer in larger performance organizations. Each student identifies his or her own interests and needs for creative self-expression and is encouraged to freely elect from one or more of the following areas of music: chorus, band, and orchestra. Any of the following courses may be applied toward the graduation requirement for Fine/Applied Arts.

Students enrolled in the performing organizations are granted full credit when they have met the requirements of performance at all scheduled concerts and major activities.

Membership in a choral or instrumental organization is a prerequisite to auditioning for membership in the Massachusetts Northeastern District, the Massachusetts All-State, or any similar organization, which has the approval of the Massachusetts Music Educators' Association.

Band

Student will be able to:

- I. Use a constant focused clear tone.**
- II. Develop a secure constant beat.**
- III. Observe constant and accurate interpretation of the dynamics and style.**
- IV. Perform with creative nuance and style in response to the score.**
- V. Show knowledge of articulation through secure attacks and markings executed accurately as directed.**

621 Band PD 1 Credit Grade 9,10,11,12

The Band is open to all qualified students. The Band performs for all varsity football games, competitions, formal concerts, parades, pops concert, and graduation. In order to receive full credit, the student is required to perform at ALL FORMAL PROGRAMS and rehearsals scheduled. **Prerequisite:** *Audition and/or participation in All Year Middle School Bands.* MHS Learning Expectations: 5, 6, 9, 10

Chorus

Students will be able to:

- I. Be responsible for developing proper singing tone.**
- II. Learn and apply diaphragmatic breathing principles.**
- III. Demonstrate their ability to sing harmony with other students.**
- IV. Demonstrate proper singing positions standing as well as sitting.**
- V. Show their ability to demonstrate interpretation of vocal music.**

627 Chorus PD 1 Credit Grade 9,10,11,12

628 Chorus PD ½ Credit Grade 9,10,11,12

The chorus is open to all students. The great variety of performances includes music from the current Broadway productions to the classics. Each year, members of the chorus participate in Christmas Concerts, Winter Concerts, Spring Concerts, and many concerts for local civic groups. In order to receive full credit, each student is required to perform at ALL FORMAL PROGRAMS and rehearsals scheduled. MHS Learning Expectations: 5, 6, 9, 10

Orchestra

Students will be able to:

- I. Use a constant focused clear tone.
- II. Develop a secure constant beat.
- III. Observe constant and accurate interpretation of the dynamics and style.
- IV. Perform with creative nuance and style in response to the score.
- V. Show knowledge of articulation through secure attacks and marketing executed accurately as directed.

638 Orchestra PD 1 Credit Grade 9,10,11,12

The orchestra is open to all students who play stringed instruments and to selected woodwind, brass, and percussion players to balance the instrumentation. Rehearsals provide for the development of skills in performance, sight reading, and concert and show production. To receive full credit, the student is required to perform at ALL FORMAL PROGRAMS and rehearsals scheduled. MHS Learning Expectations: 5, 6, 9, 10

Music Theory

Students will be able to:

- I. Learn and apply their knowledge of major and minor scales.
- II. Learn and apply their knowledge of intervals and triads.
- III. Learn and apply their knowledge of basic harmonization in major mode.
- IV. Understand first inversions of triads.
- V. Learn and apply their ability to use clefs, key and time signatures.

626 Music Theory PD 1/2 Credit Grade 10, 11, 12

This course teaches the student to develop music writing skills, starting with the basic construction of a major scale, developing key signatures and learning the basic structure of traditional four part harmony writing. This course will give the student skills to write music using chords, inversions, passing tones, suspensions, and original melodies with harmony parts up to four voices. *Prerequisite:* Teacher recommendation. MHS Learning Expectations: 5, 6, 9, 10

History of Music

Students will be able to:

- I. Demonstrate their knowledge notation and tablature of ancient music, scales, systems, intervals.
- II. Reflect their learning of early church music.
- III. Reflect their knowledge of 16th Century music of Germany, Spain, Italy, France and England/
- IV. Identify various musical styles of the various styles and their composers.
- V. Identify music and have a knowledge of composers such as Bach, Beethoven, Mozart, Verdi and Schubert.

625 History of Music PD 1/2 Credit Grade 9, 10, 11, 12

This course presents a history of music through various compositions, including orchestral, vocal and operatic examples of various musical periods. Students will be expected to develop an understanding of various compositions, composers, and the period of music in which they lived. MHS Learning Expectations: 5, 6, 9, 10

Co-Curricular Programs in Music

The Music Department makes available to students several co-curricular activities. Students in these groups are selected on an elective/selective basis through auditions.

Brass Ensemble
Band Front
Jazz Band

Megatones
Chamber Ensembles, String Quartet

Art

The Art Department offers a variety of courses designed to bring out and strengthen the natural creativity of all students. Through diverse projects, students will learn fundamental art skills and concepts, experience the use of a variety of media and materials, and develop their own unique talents. Students will be introduced to various artists and art movements and will discover basic art history.

The Arts Sequence is a series of courses designed for those students who really like art and think they may want to continue taking art throughout high school. These full year courses are Art I, Arts & Crafts, 2-D Art (1, 2 & 3), and 3-D Art (1 & 2). Serious students have an opportunity to receive Advanced Standing in art by submitting a portfolio to the Art Department in the spring of any year.

The Art Department will review these portfolios and designate honors credit to deserving students. Although this will not affect rank in class, the honors credit will appear on students' transcripts when applying to college. Students must receive a grade of B- or better to continue in the Arts Sequence. Homework will be an integral part of these courses.

Art 1

Students will be able to:

- I. Demonstrate the ability to problem solve effectively.**
- II. Demonstrate the ability to plan and implement goals.**
- III. Understand and apply the elements of composition and design.**
- IV. Demonstrate an understanding of color theory.**
- V. Apply the rules of 1 point and 2 point perspective drawing.**

700 Art 1

PD

1 Credit

Grade 9,10,11,12

This foundation art course will teach students the fundamentals of drawing and design. A major part of the year will be spent on teaching students how to draw what they see. Observational drawing will be stressed as students learn how to depict light and shadow, correct proportions, and one and two point perspective. Design concepts will be taught as students explore composition through a variety of media. Properties of color will be studied through tempera, and acrylic painting. MHS Learning Expectations: 3, 5, 6, 9

Arts & Crafts

Students will be able to:

- I. Demonstrate the ability to problem solve effectively.**
- II. Understand and apply the elements of composition and design.**
- III. Demonstrate an understanding of color theory.**
- IV. Recognize the importance of arts and crafts in society and culture.**
- V. Demonstrate knowledge of the methods, materials, and techniques unique to crafts in visual art.**

725 Arts & Crafts

PD

1 Credit

Grade 10, 11, 12

This intermediate art class will include work in both two and three dimensional media. Students will develop drawing and painting skills through more challenging media, such as charcoal, pastels, and acrylics. Sculpture units include work with clay, wire, paper mache, and plaster. **Prerequisite:** *Foundation Art*.

MHS Learning Expectations: 3, 5, 6, 9

2D-Art 1

Students will be able to:

- I. Demonstrate the ability to problem solve effectively.
- II. Understand and apply the elements of composition and design.
- III. Demonstrate an understanding of color theory.
- IV. Understand and apply proportions of the face and figure.
- V. Use a range of tones in art work.

723 2-D Art 1

CP

1 Credit

Grade 11, 12

In this advanced art course, students will spend a full year immersed in drawing and painting. Students will strengthen their ability to draw what they see by studying landscapes, still life and figure drawing. A series of assignments will help students improve skills and develop a personal style. *Prerequisite: Art 1 and portfolio approval.* MHS Learning Expectations: 3, 5, 6, 9

2-D Art 2

Students will be able to:

- I. Demonstrate the ability to problem solve effectively.
- II. Understand and apply the elements of composition and design.
- III. Demonstrate an understanding of color theory.
- IV. Recognize and apply the elements of art to their artwork.
- V. Understand and apply the elements of composition and design. Understand and apply proportions of the face and figure.
- V. Further develop use of shading to depict form in drawing and painting.

731 2-D Art 2

H

1 Credit

Grade 11, 12

In this sequel to 2-D Art I, advanced students will continue to explore drawing and painting in depth. Drawing skills will be strengthened as students work more independently. New media, such as pastel painting, oils and watercolors will be introduced. *Prerequisite: 2-D Art I and portfolio approval.* MHS Learning Expectations: 3, 5, 6, 9

2-D Art 3

Students will be able to:

- I. Demonstrate the ability to problem solve effectively.
- II. Demonstrate an understanding of arts and culture.
- III. Recognize and apply the elements of art to their artwork.
- IV. Understand and apply the elements of composition and design.
- V. Create an under painting as a prerequisite to painting.
- VI. Recognize and create contour and gesture drawings.

728 2-D Art 3

H

1 credit

Grade 12

Students will continue to develop skills learned in 2D Art 2. They will be expected to handle light and shadow, composition and color in an advanced way. Students will hone their ability at drawing what they see. The entire year will be spent on drawing and painting projects. MHS Learning Expectations: 3, 5, 6, 9

3-D Art 1

Students will be able to:

- I. Demonstrate the ability to problem solve effectively.
- II. Demonstrate an understanding of arts and culture.
- III. Recognize and apply the elements of art to their artwork.
- IV. Demonstrate an understanding of color theory.
- V. Demonstrate knowledge of methods, materials, and techniques unique for 3 dimensional building modeling in art.
- VI. Recognize and apply finishing techniques to work to achieve satisfactory results.

724 **3-D Art 1** **CP** **1 Credit** **Grade 12**

This full year course is for third-year art students who enjoy working in three-dimensional media. Through advanced projects in ceramics and sculpture, students will develop a personal style. Students may take up to two years of 3-D Art. *Prerequisite: Art I and Arts & Crafts.* MHS Learning Expectations: 3, 5, 6, 9

3-D Art2

Students will be able to:

- I. Demonstrate an understanding of arts and culture.
- II. Recognize and apply the elements of art to their artwork.
- III. Understand and apply the elements of composition and design.
- IV. Immediately recognize the methods, materials, and techniques unique for 3 dimensional building/modeling in art.
- V. Further explore using finishing techniques to achieve satisfactory results in their work.

732 **3-D Art 2** **H** **1 Credit** **Grade 12**

This full year course is open to fourth-year art students who want to concentrate on sculpture. Students will be expected to work more independently as they further explore 3-D media. *Prerequisite: 3-D Art and portfolio approval.* MHS Learning Expectations: 3, 5, 6, 9

Photography I

Students will be able to:

- I. Demonstrate the ability to problem solve effectively.
- II. Demonstrate an understanding of arts and culture.
- III. Recognize and apply the elements of art to their artwork.
- IV. Understand and apply the elements of composition and design.
- V. Understand basic camera mechanics.
- VI. Develop their own film, print, and enlarge.

712 **Photography 1** **PD** **½ Credit** **Grade 10-12**

Emphasis is placed on the use of black and white photography as an art form while covering the process, techniques, and aesthetics involved in taking, developing, and printing photographs. Students must have the use of a 35-mm camera and are required to purchase photographic paper and film. Approximate cost of film and paper will be \$35. Assignments outside of class are required. MHS Learning Expectations: 5, 6, 9, 10

Photography 2

Students will be able to:

- I. Demonstrate the ability to problem solve effectively.
- II. Demonstrate an understanding of arts and culture.
- III. Recognize and apply the elements of art to their artwork.
- IV. Understand and apply the elements of composition and design.
- V. Explore alternative photographic processes such as photogram, cyanotypes and solarization.
- VI. Use advanced darkroom techniques such as filters, dodging, and burning and printing on high Contrast paper.
- VII. Choose a theme for photographic exploration and carry it out in a format for presentation.

719 Photography 2

PD

½ Credit

Grade 10-12

In Photography 2, students will work on advanced photographic techniques. They will learn different manipulative processes in and out of the darkroom. In addition, they will learn about digital imaging on the computers with Adobe Photo Shop. This will include scanning their own photographs and manipulating them in the manner of professional digital photographers. Students must have the use of a 35-mm camera and are required to purchase photographic film and paper. Approximate cost of film and paper will be \$35.00. **Prerequisite:** *Photography 1, B or better in Photograph I.* MHS Learning Expectations: 1, 2, 4

Business & Technology

The responsibility of the Business and Technology Department is to provide a program for students who desire and can profit from business and technology training which will equip them with the knowledge and skills related to their needs for college preparation or business and industry employment.

Business and Technology courses are of value to ALL students, including the college bound, because career choice is one of life's most important decisions and because each student's life will be affected by technology in one way or another. Exploratory and advanced experiences are provided for students to introduce them to technology and its applications. Students also gain information in many of the courses on how to prepare for professions and careers. Salaries, working conditions, benefits, advancement opportunities, labor market forecasts, and related information complement the information, knowledge and skills. Skills development is a priority as students discover talents, clarify values, and define goals.

Television Production

Students will be able to:

- I. Shoot any scene in "film style" and be able to tell a story using video. in single camera production.
- II. Use digital technology to learn non-linear editing. (Final Cut Pro, MacIntosh based).
- III. Participate in multi-camera video production holding various positions on a studio crew: Director, Technical Director, Camera, Audio, Floor Director, Talent
- V. Mix multi-camera in studio footage with on location single-camera footage via non-linear editing (referred to above).
- VI. Recognize the differences in various digital and analog tape formats, the difference between film and and video.

713 Television Production 1 CP ½ Credit Grade 9-12

This is a half year course which serves as an introduction to all of the elements of making a video or a television program. Students will learn in-studio production such as: directing, technical directing, camera work, audio and character generator (graphics) as well as remote on-location production. Scriptwriting, organization, care and maintenance of equipment will be covered. Each student is required to do one on-location shoot per quarter. No previous experience is necessary. The Final Project in this class is a five minute documentary. Only students who get a B or above in this final project will be eligible for TV2, Advanced Television Production or Broadcast Journalism. Those who elect to take the Final Exam instead of a Final Project will not be eligible to go on to other, more advanced TV classes. MHS Learning Expectations: 4, 5, 9

722 Advanced Television Production CP 1 Credit Grade 10 - 12

This is a year long course. Students are required to produce projects that will be cablecast on METV Channel 15, our school channel. The first half of the year will concentrate on projects assigned by the instructor. The second half will consist of student's own projects as approved by the instructor. Written (typed) proposals are required before each project is begun.

Students are eligible for this class only if they have a B average or above in Television Production 1 and have received a B or above in the Final Project for that class. Students are not eligible for this class if they elected to take the Final Exam instead of a Final Project in TV 1. MHS Learning Expectations: 4, 5, 9

715 Broadcast Journalism & Documentaries CP 1 Credit Grade 10 -12

Broadcast Journalism and Documentaries is responsible for News Channel 15, the news show that is regularly produced by and for MHS students. Writing news stories is a requirement. At least one written story is required weekly from each student. Students will also be required to produce documentaries. Each documentary must be preceded by a typed proposal regarding subject matter, people involved, equipment used, and projected length of time required to finish. Elements of production and post-production learned in Television Production 1 and Advanced TV will be utilized here. Prerequisite: A sample news story must be written and submitted for approval by the instructor. MHS Learning Expectations: 4, 5, 9

Business Management Law

Students will be able to:

- I. Identify the skill-sets and competencies that a manager needs in order to be a successful entrepreneur, owner, or department head. Students will explore the profession as a potential career choice, the opportunities in business management in franchising a business. Students will understand the financial status necessary to begin a successful business entity.
- II. Learn business concepts including purchasing, contractual agreements, risk management and negligence, technology issues, and other fiscal concerns.
- III. Explore the legal issues involved in business ownership/management, which relate to contracts, sales, insurance, and administration of the law, public and private torts, and statutory regulations.
- IV. Identify how branding and advertising influences and creates a demand for services and products.
- V. Understand customer relationships, sales techniques and management methods.

886 Business Management & Law CP ½ Credit Grade 11, 12

This course will provide a practical working knowledge about how to plan, set up, and run a successful business. Students interested in small business ownership, business management, or post high school business administration training should take this course. Organization, marketing, finance, distribution, advertising, credit, budgets, taxes, stocks and bonds, employee relations, creating a business plan and government regulations are studied. Legal foundations of business ownership, management, and employment are developed which relate to contracts, sales, insurance, administration of law, public and private torts, and statutory regulations. MHS Learning Expectations: 4, 5, 9

Accounting I

Students will be able to:

- I. Identify accounting terms, accounting concepts and practices related to starting a service business organized as a proprietorship and to changes that affect the accounting practices related to analyzing transactions into debit and credit parts and to use T accounts to analyze transactions showing which accounts are debited or credited for each transaction. Students will be able to analyze how transactions affect assets, liabilities, owners equity, revenue and expense accounts.
- II. Identify accounting concepts and practices related to journalizing transactions into a five-column journal and be able to identify accounting concepts and practices related to posting individual items as well as totals from a five column journal to a general ledger.
- III. Identify accounting terms and concepts pertaining to using a checking account, debit/ATM cards, electronic banking and to reviewing a bank statement.
- IV. Identify accounting terms, accounting concepts and practices related to preparing a worksheet with adjustments for proprietorship. They will be able to prepare financial statements for a business from the worksheet information and to analyze the information using component percentages. Students will be able to complete the accounting cycle for a proprietorship by closing all temporary accounts at the end of the fiscal period.
- V. Identify accounting terms, concepts and practices related to purchase and cash payments for a merchandising business and be able to journalize using a purchases journal, and a cash payments journal.

887 Accounting I

CP

1 Credit

Grade 10, 11, 12

Accounting I provides the student with an introduction to accounting principles, examining basic accounting theory and applying theory to business and providing a general understanding of business methods and concepts and the ability to make business judgments. Accounting I will explore the entire accounting cycle. The student will be provided with the essential background to concentrate on more advanced accounting courses in two-and-four year colleges. This course is a “must” for college business administration majors and future business careers. Computerized Accounting will be introduced. **Prerequisite:** *Algebra completed or taken concurrently.* MHS Learning Expectations: 1, 2, 5, 9

Accounting II

Students will be able to:

- I. Identify accounting terms, concepts and practices related to journalizing all types of transactions associated with a merchandising business. Students will be able to use all types of journals associated with a merchandising business to include purchases, cash payments, cash receipts, sales and general journals.
- II. Identify accounting terms, concepts and practices related to posting all types of transactions associated with a merchandising business using the general ledger and subsidiary ledgers.
- III. Prepare payroll records for a company payroll and to calculate payroll taxes associated with a payroll.
- IV. Plan for and record depreciation expenses for a businesses assets.
- V. use an accounting software package and Microsoft Excel to accurately and efficiently record accounting information for a business.

890 Accounting II

H

1 Credit

Grade 11, 12

Students will work on individual projects and simulated accounting sets, with “hands-on” experience using a computer. Emphasis is given to accounting for partnerships, corporations, and cost accounting, including the voucher system and analysis and comparison of financial reports. This course is a “must” for all students planning a major in the many fields of business and economics at the college level. **Prerequisite:** *C or better in Accounting I and teacher recommendation.* MHS Learning Expectations: 1, 2, 4, 5, 9

Personal Finance

Students will be able to:

- I. Explore financial planning and creating budgets to help them reach their financial goals.**
- II. Explore savings and investment options and retirement savings options. Students will learn about the different types of savings accounts to include passbook, statement, money market, CD's, IRA's mutual funds, 401K's etc. Also, students will explore ways to finance a college education to include loans and available scholarship opportunities.**
- III. Explore the pros and cons of having a credit card. Students will explore the costs associated with having a credit card and find out how to research different credit cards to help them choose the best credit card for their needs.**
- IV. Explore the different types of insurance to include medical, life, automobile, renters, and home owners and will be able to identify the best choice for their needs.**
- V. Explore employment opportunities and benefits associated with employment. Students will be able to prepare and update a professional resume and compose and format a cover letter.**

885 Personal Finance

CP

1 Credit

Grade 10, 11, 12

Personal Finance is a course designed to help students take charge of their future. Now more than ever, making sound financial decisions is extremely important. The goal of this course is to help students become lifelong skillful managers of personal finance. Topics covered will include: budgeting your money, personal earning power, checking accounts, saving accounts, credit use and credit cards, purchasing goods and services, insurance, personal income tax, investment fundamentals, retirement, and auto and home buying. MHS Learning Expectations: 1, 2, 5, 9

Microsoft Office

Students will be able to:

- I. Use computer software and hardware and common storage devices in an appropriate manner for educational or professional use. Students will be able to manage files on their computer.**
- II. Use Microsoft Word, Microsoft Excel, Microsoft Access and Microsoft PowerPoint to present information, ideas and results of work**
- III. Use technology for research, problem solving and communication. Students will be able to use different search engines, databases and primary sources for research, and be able to cite the sources correctly and appropriately.**
- IV. Demonstrate the responsible use of technology and an understanding of ethics and safety issues associated with using electronic media.**
- V. Identify ways in which computers are used in the workplace and in society and understand issues of ergonomics and practices safe usage of equipment.**

869 Microsoft Office

CP

1 Credit

Grade 9,10,11,12

This course is designed to help students become proficient in word processing using Microsoft Word, Excel spreadsheets, Access and Power Point and Publisher. The students will progress from basic to advanced concepts through the use of hands on application material. If time permits, students will be introduced to web page design. In addition, students will be required to work on their own keyboarding skills using keyboarding software. The skills developed will be useful to students for both college and job settings. MHS Learning Expectations: 1, 2, 3, 4, 5

Web Page I

Students will be able to:

- I. Understand the process of planning and developing a web page.
- II. Identify vocabulary associated with web page development.
- III. Explain and follow laws restricting use of copyrighted materials
- IV. Create and develop a web page appropriate for educational or professional use using basic HTML coding tags. Students will be able to follow correct procedures to save and to view an HTML document in different browsers.
- V. Use HTML coding tags to format and organize a web page document using tables, graphics, links and colors.

873 Web Page I CP ½ Credit Grade 10, 11, 12

Have you ever wondered how the professional looking web pages on the Internet are made? Do you want to have the skills to create web sites? This course teaches the basics of building and maintaining a site on the Internet. Students will discuss Internet terminology and how the Internet and its associated technologies work. The Hypertext Markup Language (HTML), a basic Internet computer language, will be taught step by step. Other programs used by web page developers will be discussed and explored. MHS Learning Expectations: 1, 2, 3, 9

Advanced Web Page

Students will be able to:

- I. Explain and follow laws restricting use of copyrighted materials on the Internet. Students will be able to demonstrate responsible use of technology and an understanding of ethics and safety issues when using technology.
- II. Will continue to perfect their use of HTML coding to produce professional looking web pages.
- III. Will learn to create style sheets to format their web pages.
- IV. Will learn to create thumbnails and image maps to enhance their web pages. Students will be introduced to Adobe Photoshop and Dreamweaver to create professional looking images and web pages.
- V. Will learn JavaScript coding to create interactive web pages.

874 Advanced Web Page CP ½ Credit Grade 10, 11, 12

Students will learn how Java scripts can be used effectively to create more interactive web pages. Students will learn Java basics and will be able to create dynamic Java applets to help those visiting their web pages. The course will explore Java navigation tools, search engines, slide shows, and other information selection and presentation utilities. Students will be introduced to Adobe Photoshop and Dreamweaver. *Prerequisite: Web Page I.* MHS Learning Expectations: 1, 2, 3, 9

CAD 1

Students will be able to:

- I. Learn how to use the commands to draw and modify on the computer
- II. Learn how to use basic instruments such as compasses, protractors, circle templates, French curves, rulers, T-Squares, etc. on the table
- III. Learn the scales used in architecture rulers.
- IV. Learn the scales used in engineering rules
- V. Understand the angles measurements on both the computer and table. The computer requires complete understanding of polar tracking. The table requires complete understanding of angles and the use of a protractor.

822 Computer Aided Design 1 **CP** **1 Credit** **Grade 9,10,11,12**

The ability to communicate effectively through technical images within an industrial or construction environment will be the focus of this course. Students will develop the technical concepts to create and draft technical designs for a variety of products, concentrating on drafting concepts, applications of engineering, and industrial standards within the design process. Students will develop portfolio materials and research at least two related careers within this cluster of careers. Highly recommended for students considering careers in engineering. *Prerequisite: Algebra I or Geometry, completed or taken concurrently.* MHS Learning Expectations: 4, 5, 9

CAD 2

Students will be able to:

- I. Completely understand the paper size necessary to draw according to scale.
- II. Understand completely how to use the UCS (Unit Control System) to work in the 3D Environment.
- III. Understand the views and visual styles to proficiently draw 3D.
- IV. Understand 3D operations and solid editing.
- V. Understand the difference between surface and solids.

823 Computer Aided Design 2 **H** **1 Credit** **Grade 10, 11, 12**

The focus of this course will be on the development of CAD and drafting skills required for entry into the work world. Topics covered include electronics, mechanical, architectural, presentation graphics, 3-D computer applications and technical illustrations. Students will develop portfolio materials and research at least two related careers within this cluster of careers. *Prerequisite: Successful completion of Computer Aided Design 1.* MHS Learning Expectations: 4, 5, 9

CAD 3

Students will be able to:

- I. Understand how lighting and shadows can add to a 3D drawing.
- II. Learn how to add materials to make a drawing realistic.
- III. Learn how to edit vertexes and polygons to better shape your objects.
- IV. Learn how to manipulate and develop your solid editing skills.
- V. Learn how to manipulate and develop your 3D operation skills.

824 Computer Aided Design 3 **H** **1 Credit** **Grade 11, 12**

Students will select to specialize in one or two of the career pathways within CAD 2. Focus will be on 3-dimensional applications. Students will develop portfolio materials and research at least two related careers within this cluster of careers. *Prerequisite: Successful completion of Computer Aided Design 2 and teacher recommendation.* MHS Learning Expectations: 4, 5, 9

CAD 4

Students will be able to:

- I. Learn how to increase speed on a drawing by understating shortcuts.
- II. Learn how to draw in workspaces.
- III. Learn the difference between drawing in model space and paper space.
- IV. Learn the positives of imperial and metric drawings.
- V. Learn the professional way of developing a drawing for a portfolio and a professional render.

825 Computer Aided Design 4 **H** **1 Credit** **Grade 12**

Students will select to specialize in one or two of the career pathways within CAD 2. Focus will continue to be on 3-dimensional applications. Students will continue their portfolio and will research at least one related career within this cluster of careers. This course may be repeated for credit. *Prerequisite: Successful completion of Computer Aided Design 3 and teacher recommendation.* MHS Learning Expectations: 4, 5, 9

Animation I

Students will be able to:

- I. Learn the use of standard primitives.
- II. Learn the use of extended primitives.
- III. Learn the use of compound objects.
- IV. Learn the use of splines.
- V. Learn how to modify parameters.

827 Animation I

H

1 Credit

Grades 11, 12

Students will be introduced to the world of animation in modern times by means of a computer. The students work with 3D Studio Max programs, which are used in video game design. The students will work at beginner tutorials on creating people and working with kinematic motion. Some examples of the animation the students will be working with are creating umbrellas with rain falling as a special effect, ghosts, laser cut letters, Jack-O-Lanterns, ski pole grips and blooming flowers. *Prerequisite: Successful completion of Computer-Aided Design 1 & 2, and teacher recommendation.* MHS Learning Expectations: 4, 5, 9

Animation II

Students will be able to:

- I. Learn how to use all the modifiers to animate.
- II. Learn how to add materials.
- III. Learn how to add lights and cameras.
- IV. Learn how to use atmospheric apparatuses.
- V. Learn how to use space warps.

828 Animation II

H

1 Credit

Grade 12

Students will be working on more advanced animations on the computer. The special effects will be increasing as well as sounds, lights, and extra cameras. Introduction to drawing humans and characters and walk through of houses will be extensively worked on. Examples of some tutorials are shipwrecks, robots, jeeps and model cars, motorcycles and planes. *Prerequisite: Successful completion of Animation I and teacher recommendation.* MHS Learning Expectations: 4, 5, 9

Comprehensive Health Education

The Comprehensive Health Education Program encompasses the following disciplines: Health and Physical Education, as well as Family and Consumer Science. The primary goals for our Comprehensive Health Program are to educate and empower every student by providing health knowledge and life skills that promote wellness and reduce health-related risk behaviors. Skills are introduced that will help students become responsible and productive adults. Course offerings, within our Comprehensive Health Program, address all academic expectations.

Current health education curriculum literature identifies thirteen content areas. From these content areas students will acquire health knowledge and life skills that will promote responsible decision-making and help develop them into self-sufficient adults. The thirteen content areas are identified below and are addressed throughout the three disciplines:

Growth and Development	Mental Health
Physical Activity	Family Life
Nutrition	Interpersonal Relationship
Disease Prevention and Control	Consumer Health and Resource
Prevention	Ecological Health
Safety and Injury Prevention	Community and Public Health
Tobacco, Alcohol and other Substance Use/Abuse Prevention	
Violence Prevention	

The physical education program seeks to develop positive attitudes and an appreciation for activity and healthful living through various team and individual activities. Acquisition of motor skills, positive attitudes towards activity, fitness, and the development of a healthy body and mind are primary objectives of the program. Students are allowed to select activities from physical fitness activities, individual and dual sports, as well as team sports.

Wellness courses blend the disciplines of health and physical education. Team-taught by health and physical education teachers, Wellness courses help students to lead meaningful, healthy lives by introducing them to physical activity, knowledge, habits, and conduct which will serve to improve their quality of life.

The goal of the Family and Consumer Science program is to help students develop into responsible and productive adults by introducing them to life-skills that they will need to succeed in society. The skills gained in these courses may be cultivated into careers. Students can pursue higher education in areas such as early childhood education, nutrition, fashion design, clothing construction, interior design, consumerism and in the food service industry.

Health, Physical Education and Family Consumer Science utilize multiple learning styles for students to acquire, analyze and apply knowledge to improve their quality of life. Students exhibit clear, effective communication within the programs, while critically assessing themselves to meet the goal of each program successfully.

Lifetime and Recreational Activities

Students will be able to:

- I. Meet national, state and local physical education standards.**
- II. Create an activity and fitness plan, set individual goals, assess status and progress, manage time and responsibilities, and overcome barriers to regular physical activity.**
- III. Learn how to use technology to benefit fitness.**
- IV. Build confidence in their ability to lead an active lifestyle and take control of their own health.**

801 Lifetime and Recreational Activities (linked to 807 2nd semester)

PD ½ Credit

Grade 11, 12

This course will provide students in grades 11, 12 the opportunity to participate in fitness activities that provide lifetime benefits, such as: weight training, jogging, and aerobic walking. Also, students will be able to choose recreational activities such as basketball, volleyball, badminton, table tennis, softball, tennis etc.
Prerequisite: Successful completion of Wellness I and Wellness II. MHS Learning Expectations: 3, 7, 8, 10

Fitness/Women's Health

Students will be able to:

- I. Discuss the fitness needs of women.**
- II. Understand what rape is and describe recommended actions for preventing rape.**
- III. Explain the consequences of sexual violence, and describe how they can be treated.**
- IV. Explain the current recommendations for healthy eating.**
- V. List the major options available for contraception and explain the advantages/risk for each.**

802 Fitness/Women's Health (linked to 996)

PD

½ Credit

Grade 11, 12

This course is designed to have an effect on your life by providing you with the knowledge and skills that will enable you to achieve and maintain optimal health. The focus will be on defining and toning your body, building strength, smart eating and self defense. We will identify some of the important issues affecting how we feel about ourselves, especially our body image. MHS Learning Expectations: 7, 9, 10

Early Childhood Education I

Students will be able to:

- I. Identify the qualities that make a good parent.**
- II. Learn the risks, consequences, and reasons behind teen pregnancy.**
- III. Identify the stages of prenatal development.**
- IV. Understand what is involved in the pregnancy and delivery of an infant.**
- V. Understand how to properly care for the physical, emotional, intellectual, and social development of an Infant.**

804 Early Childhood Education 1

PD

1 Credit

Grade 9,10,11,12

This introductory course in child study is useful in exploring adult roles in parenting and guiding caregivers to develop a more resilient child for today's society. Students will learn about caring for children in general, with an in-depth study of parenthood, pregnancy, prenatal care, and the physical, intellectual, emotional, and social development of infants. The student will also be able to identify the legal and health consequences of child abuse, domestic violence, sexual harassment, rape, and other forms of violence. Current issues in human sexuality will also be discussed. Films, videotapes, role playing, and field trips, along with the observation of young children enhance the early childhood program. MHS Learning Expectations: 3, 7, 10

Early Childhood Education 2

Students will be able to:

- I. Identify the qualities that make a good parent.
- II. Understand what affects the physical, emotional, mental and social development of children ages two to eighteen.
- III. Learn and demonstrate the types of play that contribute to the education of children.
- IV. Be introduced to careers available in the childcare industry.
- V. Identify and experience how one effectively runs an early childhood classroom.

808 Early Childhood Education 2 PD 1 Credit Grade 10, 11, 12

This course takes a more in-depth look at the development of children from age two through adolescence. Emphasis will be on the physical, emotional, mental, and social development of children throughout their growth. Behavior patterns, development guidance, and discipline will be looked at in all areas. The development of responsible attitudes for themselves and their families will also be explored. Careers in child education will be studied and explored through the observation and placement in Early Childhood programs throughout the school year. **Prerequisite:** Successful completion of *Early Childhood Education 1*. MHS Learning Expectations: 7, 8, 10

Fundamentals of Independent Living

Students will be able to:

- I. Explore the benefits of making good decisions, personal values, and how personal financial decisions are influenced by an individual's interpretation of needs and wants.
- II. Compile a career notebook made up of examples of job application, resumes, cover letter, interview Etiquette and thank you notes to be used as a resource for career development.
- III. Explore product features that should be considered before making spending decisions, apply consumer shopping skills, identify the different types of personal identification information, how thieves use this information, what a person can do to protect him/herself, and what to do if they are a victim of identity theft.
- IV. Understand paycheck deductions, why deductions are taken, and how to complete employment forms which determine some of the deductions. They learn the difference between gross and net pay, state taxes, federal taxes, social security, and Medicare.
- V. Understanding the voting process: knowing who, how, when and where a person can register to vote.

807 Fundamentals of Independent Living (linked to 801 1st semester)

PD ½ Credit Grade 11, 12

Young people of today need to learn how to live in a society that is changing daily. They need to learn how to balance competing priorities and interests, and allocate time for study, work, and recreation. Topics for study will include issues surrounding decision making, value and goal setting, communication skills, the voting process, career development, consumer decisions and protection, and reading paychecks and tax forms. MHS Learning Expectations: 3, 7, 9

Fashion and Design Technology

Students will be able to:

- I. Identify how fashion history influences current fashion.**
- II. Learn the elements and principles of design and how do they influence fashion, art and culture.**
- III. Identify what past and present fashion designers have done to the art of fashion.**
- IV. Learn what career opportunities are present in the fashion industry.**
- V. Apply sewing techniques and consumerism in fashion to their everyday life.**

814 Fashion and Design Technology PD 1 Credit Grade 9,10,11,12

This course is designed for those who enjoy creating fashion garments. Historic costume as well as modern designs will be studied to understand the significance of history of fashion and its relation to current trends. The element of color and the principles of line and design will be explored. Study will be made of fashion designers and their contribution to the industry. Careers in apparel design and production, fashion merchandising, and fashion promotion will be explored. Students will be able to express their abilities with the creation of their own designs. MHS Learning Expectations: 4, 6, 10

Food and Nutrition 1

Students will be able to:

- I. Know the nutrition principles for maintaining optimum health.**
- II. Learn the preparation techniques for all menu categories to produce a variety of food products.**
- III. Learn behaviors that promote more nutritious eating habits, now and in the future.**
- IV. Learn how proper food handling contributes to the prevention of diseases.**
- V. Learn what knowledge, skills, and behaviors are essential to successful participation in a food lab.**

818 Food and Nutrition 1 CP 1 Credit Grade 10, 11, 12

This course is designed to introduce students to nutrition, consumer skills, and food preparation. Information is presented in a combination of in-class lectures, exercises, as well as laboratory work. Incorporated within each unit is the study of nutrition, simple food chemistry, food storage, food use, cooking terms, and the evaluation of recipes and food products. Throughout the course students will gain self-confidence in food preparation skills as well as strengthen their managerial skills. MHS Learning Expectations: 7, 9, 10
Nutritional 1 Consumable Fee - \$50.00

Professional/Foreign Foods

Students will be able to:

- I. Identify opportunities and qualifications for careers in the food service industry.**
- II. Develop marketable working skills and become oriented to the world of work within the food service industry.**
- III. Learn advanced preparation techniques for all menu categories.**
- IV. Describe how climate, geography and the culture of France, Mexico, China and Italy influence their food customs.**
- V. Recognize and prepare foods native to France, Mexico, China and Italy.**

819 Professional/Foreign Foods CP 1 Credit Grade 10, 11, 12

The first half of this course offers students opportunities to explore the many aspects of the food service industry. Topics to be covered include: careers, restaurant styles of operations, service styles, customer relations, menu development and labor relations. Hands-on experience will be provided in the food laboratory using advanced techniques that will help develop marketable working skills. The second half of this course introduces "Foreign Foods", studying various countries, their culture, traditions, and food habits. Managerial skills, cooperation and creativity are stressed. *Prerequisite:* "B-" or better in Nutrition I. MHS Learning Expectations: 6, 7, 9, 10
Dietary Science Consumable Fee - \$50.00

Wellness I

Students will be able to:

- I. Acquire knowledge about emotions and physical health, the management of emotions, personality and character development and learned skills to promote self-acceptance, set goals, make decisions and cope with stress.
- II. Be able to identify the relationship between the dimensions of wellness, integrating their efforts on overall well-being.
- III. Be able to evaluate fitness testing components and how they relate to personal fitness.
- IV. Acquire and refine a variety of manipulative, loco motor, non-loco motor movement skills and utilize Principles of training and conditioning, and apply the concept of wellness to their lives.

993 Wellness I

PD

1 Credit

Grade 9

Required for students in grade 9, this course presents developmentally appropriate material to address wellness content areas. A sample of health topic areas to be covered include: stress awareness and management, HIV awareness, decision making, nutrition, and the health risks of tobacco, alcohol, and other substances.

The physical education component of this course provides students with an understanding of fitness as it relates to physical activity. Emphasis is placed on refining motor skills and developing leadership and decision making skills. Students will have the opportunity to be trained in CPR, participate in individual fitness testing programs, and learn the skills, strategies and rules necessary to participate in and enjoy a variety of leisure and physical activities in order to maintain lifelong health and well being. MHS Learning Expectations: 3, 5, 7, 9, 10

Wellness II

Students will be able to:

- I. Evaluate fitness testing components and how they relate to personal fitness.
- II. Work together as a group in a variety of physical education activities and be able to apply the concepts of wellness to their lives.
- III. Acquire the knowledge and skills necessary to make effective personal decisions that promote their emotional, sexual and reproductive health.
- IV. Know the signs, symptoms, and treatment of chronic and communicable diseases, and gain the skills related to health promotion, disease prevention, and health maintenance.
- V. Recognize the factors that contribute to healthy relationships and acquire the skills to enhance and make many of these relationships more fulfilling through commitment and communication.

992 Wellness II

PD

1 Credit

Grade 10

Required for students in grade 10, this course presents developmentally appropriate material to address wellness content areas. A sample of health topic areas to be covered include: sexuality, accident prevention, interpersonal relationships, violence prevention, and the signs, symptoms, and treatments of STDs.

The physical education component of this course provides students with an understanding of fitness as it relates to physical activity. Emphasis is placed on fitness activities with lifetime value. Students will have the opportunity to compare their results of fitness testing from the previous years and develop strategies to improve in any areas that are necessary. Students will also participate in a variety of leisure and physical activities in order to maintain lifelong health and well-being. MHS Learning Expectations: 3, 7, 10

Peer Education

Students will be able to:

- I. Understand the concept and benefits of peer education.
- II. Identify the qualities of a good peer educator.
- III. Understand the importance of communicating clearly and accurately.
- IV. Identify some of the major issues facing teens today.

996 Peer Education (linked to 802)

PD

½ Credit

Grade 11, 12

This course provides an opportunity to learn to help other young people by developing communication skills, clarifying personal values, and examining contemporary teenage issues. Topics include self-esteem, peer pressure, depression, stress, coping skills, alcohol and drug use, sexuality, decision making, and health issues resulting from these decisions. Students will practice helping others by working with students at the elementary and middle school levels. *Prerequisite:* Successful interview and teacher recommendation. MHS Learning Expectations: 3, 7, 8, 9, 10

Strength and Conditioning for the Serious Competitor

Students will be able to:

- I. Physically and mentally enhance the student athlete's body structure.
- II. Recognize and develop specific needs for individual student athletes.
- III. Reduce the risk of injury through improved strength, flexibility, speed, and balance.
- IV. As student athletes, have the best chance to win through proper preparation.

972 Strength and Conditioning for the Serious Competitor

PD

1 Credit

Grade 11, 12

This class is designed to teach both the male and female athlete the importance of preparation for spirit, mind, and body during athletic competition. This course will cover a variety of topics including sports nutrition, muscular strength, flexibility, endurance and psychological wellness. The lessons demonstrated in this class will be beneficial for athletic competition and everyday life. All students are expected to participate both mentally and physically. *Prerequisite:* Successful completion of Wellness I and Wellness II, as well as participation on an athletic team or by permission of the instructor. MHS Learning Expectations: 3, 7, 8, 9

Community Learning

Service Based Learning

The purpose of Service Based learning is to give interested students the opportunity to serve their school in meaningful work-related ways and receive school credit for their efforts. Each student will be placed in a department within the school. Examples of placements include science or computer departments (lab aide), Resource Center (library assistant), Channel 15 (television production assistant), cafeteria (food service), nurse's office (nursing responsibilities), custodial (responsibilities in maintaining a large facility), and administrative offices (general office duties). The student will have a job description with specific duties and a supervisor to report to daily. Emphasis will be on developing good work habits.

Another set of school service experiences includes certain leadership positions in specific student activities that require considerable daily attention and which contribute to school life in general. Examples of such roles include yearbook editors, student council leaders, and tutors in core subject areas such as science and math. Students seeking to be enrolled in School Service under this area of service must have the permission of the Principal and the activity advisor or department coordinator in addition to the School-to-Career Coordinator.

983 School Service

PD

½ Credit

Grade 11, 12

This option cannot be selected by the student; assignment to School Service is by appointment only. Students who are interested in School Service should speak with Mrs. Farrell or Mr. Carovillano.

Special Education

The Office of Pupil Personnel Services within the Melrose School Department provides for the special needs of Melrose High School students through identification, assessment and program development as required by both state and federal law. Pupil Personnel Services staff members at Melrose High School provide students with a variety of supports and programming options designed to meet the unique needs of the students. Team meetings are held with parents, students and staff to review assessment information and student progress in their educational program. As part of this process, the Team will discuss the most appropriate support for the student based upon his or her individual needs with the goal of assisting the student to achieve success in all educational pursuits. Individualized Educational Programs (IEPs) specify programming that supports the student in the least restrictive environment. Some examples of programming include team teaching by a special educator and a general educator or small group instruction by a special education staff member.

Math 9/10

Students will be able to:

- I. Solve and graph linear equations.**
- II. Solve problems involving fractions, decimals, and percent.**
- III. Perform operations using Laws of Exponents.**
- IV. Identify types of angles and their measurements in triangles, polygons, and parallel line situations.**
- V. Find perimeter, and area of polygons, circumference, and area of circles, and volume of solids.**

Math 9/10

This course reinforces basic algebraic and geometric concepts in preparation for the math MCAS.

Topics covered would include:

1. Fractions/decimals/percents/integers
2. Use of calculator and or reference sheets in solving problems
3. Open response problems
4. Recognition and manipulation of algebraic properties and geometric shapes

This course is taught with the understanding that students may require individualized instruction to acquire the skills to be successful. MHS Learning Expectations: 3, 4, 5

Math 11/12

Students will be able to:

- I. Graph linear and quadratic functions.
- II. Identify domain and range of functions.
- III. Solve quadratic equations using varied methods.
- IV. Perform operations with radicals.
- V. Perform operations with imaginary and complex numbers.

Math 11/12

This course focuses on working on the individual strands in the math curriculum in preparation for taking the math MCAS. MHS Learning Expectations: 3, 4, 5,

Topics covered would include:

1. Review of Algebra I and Geometry
2. Open response problems
3. Factoring/graphing quadratic equations

English

Students will be able to:

- I. Write compositions that reflect knowledge of formal written English, including appropriate ideas, organization, voice, word choice, and sentence fluency.
- II. Read age and grade appropriate level fiction and non-fiction for comprehension and analysis.
- III. Successfully complete MCAS style essays using standard written English.
- IV. Present a monologue that is selected from the literature studied in grade nine and ten.
- V. Complete a research assignment, using MLA style, examining some aspect of literature they read in class.

English 9/10

CP

1 Credit

Grade 9/10

This course will emphasize essential areas of study -- grammar (usage and punctuation), composition, oral presentation, vocabulary, and literature. Course content will include reading (9th) mythology, *Julius Caesar*, *Lord of the Flies*, and *The Pearl*, and (10th) *Romeo and Juliet*, *The Catcher in the Rye*, *To Kill a Mockingbird*, and *Night*. This course emphasizes preparation for the MCAS exam by building skills in critical thinking, reading comprehension and the writing process. Grammar exercises, PSAT, SAT and MCAS related literature is used in the writing exercises and literature analysis as a preparation for standardized exams. MHS Learning Expectations: 1, 2, 3. This course is taught with the understanding that students may require individualized instruction to acquire the skills to be successful.

English 11/12

CP

1 Credit

Grade 11/12

This course concentrates on writing structured expository and persuasive papers and on the critical reading and analysis of works including (11th) *Macbeth*, *Of Mice and Men*, *The Great Gatsby*, and (12th) *Hamlet*, *Death of a Salesman*, and *Ethan Frome*. *The Elements of Style* is used as reference for writing exercises and grammar study. Students who are taking this course also focus on the writing skills necessary to master the MCAS exam. PSAT and SAT exercises will be used as preparation for standardized exams. This course includes the completion of a formal research paper. MHS Learning Expectations: 1, 2, 3

Goals:

1. This course is taught with the understanding that students may require individualized instruction to acquire the skills to be successful.

Notes

NOTICE TO ALL STUDENTS: An important piece of legislation affecting the public schools was passed August, 1971. This law, Chapter 622 of the General Laws of 1971, is intended to prohibit discrimination in the public schools and guarantees each student the right to equal educational opportunity, as amended in December of 1993.

"No child may be excluded from any school nor prohibited or discouraged from participating in any course, activity, or resource available in such schools on account of race, sex, color, national origin, religion, or sexual orientation."

In selecting a course of study, each student should be aware that all courses have been made fully open and available to members of both sexes and all minority groups.