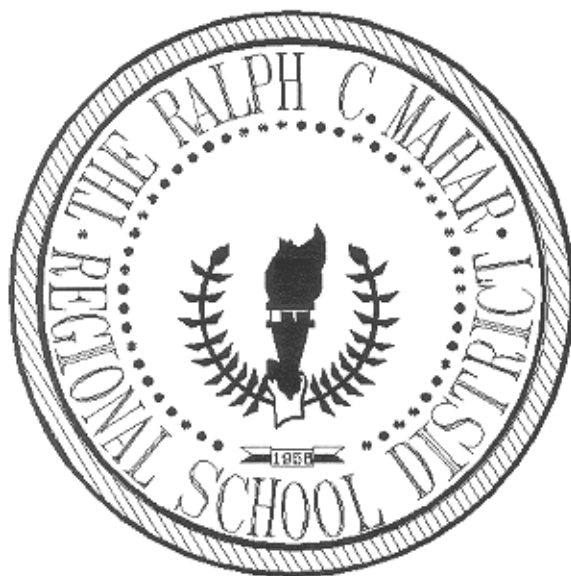


# Program of Studies

2022-2023

Approved  
2/10/22

Grades 9-12



Ralph C. Mahar Regional School

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## STATEMENT OF NONDISCRIMINATION

The Ralph C. Mahar Regional School District does not discriminate on the basis of race, color, sexual orientation, national origin sex, disability, religion, marital status, pregnancy, or age in any of its policies, procedures, or practices, in compliance with Title VI of the Civil Rights Act of 1964 (pertaining to race, color, and national origin), Title VII (pertaining to employment), Title IX of the Education Amendments of 1972 (pertaining to sex),, Section 504 of the Rehabilitation Act of 1973 (pertaining to disability), the Americans with Disabilities Act (pertaining to disability), and the Age Discrimination Act of 1975 (pertaining to age).

# Our Theory of Action

We believe that if we work as a cohesive system focused on:

- Improving the instructional core as the key variable in improving student achievement*
- continuously advancing rigorous instruction through a collaborative culture and continuous data analysis; and*
- involving all stakeholders in supporting a literacy-focused curriculum across all core subjects and grade levels, then*

Every student will graduate from high school ready for college success without remediation and for career success as a citizen in a global society.

## Three Strategic Objectives

The Strategic Plan (or District Improvement Plan) is centered upon the belief of students as our priority and that all students can achieve high academic success. These objectives are all focused on the central task of improving core reading and math instruction for all students with a focus on students with disabilities and students with limited English proficiency. We believe the Strategic Objectives complement and reinforce one another to provide a powerful plan for improvement.

- 1. Aligned and Consistently Delivered & Continuously Improving Curriculum*
- 2. Strong Instructional Leadership & Effective Instruction*
- 3. Well-Matched School Supports & Interventions with embedded assessment, technology integration and professional development*

## Vision Statement

It is the vision of the Ralph C. Mahar Regional School to prepare and motivate our students for a rapidly changing world by instilling in them critical thinking skills, a global perspective, and a respect for themselves, their community, the nation, and the world.

## Mission Statement

The Ralph C. Mahar Regional School's mission is to provide all students a challenging, comprehensive, learning experience through high quality instruction that supports each student's academic, social, and emotional development to prepare students to thrive in a democratic and technological global society for all of their future endeavors.

## Core Values

Respect                      Communication                      Achievement  
Responsibility                      Integrity

# Schoolwide Learning Expectations

## **Academic**

Students will:

Access, analyze, and utilize information effectively about themselves, others, and the world.

Communicate effectively through various means.

Solve problems effectively utilizing conventional and innovative ways and various types of reasoning.

Work collaboratively in a variety of situations.

## **Civic**

Students will:

Demonstrate respect for themselves, others, and property.

Demonstrate responsible membership in society.

## **Social**

Students will:

Practice informed decision making.

Be responsive to diverse perspectives

### **\*21<sup>st</sup> Century Skills**

1. creativity and innovation
2. critical thinking
3. problem solving
4. collaboration
5. effective communication- informed and appropriate
6. access, analyze, and utilize information about themselves, others, and the world

## Credit Requirements for Promotion and Graduation

### Credit Requirements for Promotion and Graduation\*

Graduation Requirements at a Glance	
	Minimum Credits
English	20
Math Including completion of Algebra II, and required math class during senior year	20
Science	15
Social Sciences (US and the World I, II, and III)	15
Foreign Language (2 courses in the same language)	10 **
Physical Education	10
Health	10
Arts	5
Additional Core Electives. (Must include Civics beginning with the class of 2025 and beyond.)	10
<b>Total</b>	<b>115</b>

**\*Please Note: Students enrolled in alternative high school programming such as the Integrated Learning Center, Online Dropout-Prevention Program, or dual enrollment programs may be exempt from the standard graduation requirements based on individual student programming needs. Record of a student's exemption (s) will be on file in Student Services.**

**\*\*Some students who are on an IEP may require a second language exemption. The need for this exemption must be determined and granted through the IEP process.**

Minimum Credit Requirements for Promotion		
	Semester I	Semester II
Grade 10	30	50
Grade 11	65	85
Grade 12	105	120
	140 (must pass 35 credits during final year <sup>1</sup> )	
Note: Students will not be promoted after the start of an academic year unless they reach 120 credits to become a senior.		

<sup>1</sup>Does not apply to fifth year students.

## Certificate and Career Pathway Options

The Certificate and Career Pathway program provides students with the opportunity to concentrate their academic studies and gain exposure to certain career fields and certificate opportunities. Students who choose one or more of the pathway options will take standards-based, academic courses as aligned with the R.C. Mahar graduation requirements. In addition to these required courses, students will have the opportunity to select from a dedicated cluster of courses that will form the core of their selected pathway experience. In addition to receiving a diploma at graduation, students who successfully complete one or more of the pathway options will receive a certificate verifying their successful completion.

Pathway Name	<b>Business</b>	<b>Environmental</b>	<b>Tech and Design Thinking</b>
Course Clusters	Accounting Financial Algebra Pre-Calculus Personal Finance AP Calculus Data Tracking and Analysis Civics World Language Creative Writing Related Co-Op Experience	Honors Plant Science Anatomy and Physiology Environmental Science AP Environmental Considering our Modern World Civics Journalism Related Co-Op Experience	Computer Aided Drafting Wood Art Design Maker Dronebotics Tech and Engineering Intro to Engineering and Design Physics Pre-Calculus Design Studio Digital Photography Digital Music Graphic Design Related Co-Op Experience
Pathway Name	<b>Life Science</b>	<b>Dual Enrollment</b>	<b>History and Journalism</b>
Course Clusters	Biology AP Biology Honors Plant Science Chemistry AP Chemistry Anatomy and Physiology DE GCC Psy 101 Health Related Co-Op Experience	ENG 101 ENG 112 PSY 101 MAT 117 BIO 132 Summer DE Courses	Journalism Creative Writing Considering Our Modern World WWII Youth and Law Honors History and Hollywood Sports Literature Related Co-Op Experience
Pathway Name	<b>Literature and Writing</b>	<b>Arts</b>	<b>Advanced Placement</b>
	Journalism Creative Writing Sports Literature Film Analysis AP English Language AP English Lit Jr./Sr. Honors Project ENG 101 ENG 112 World Language Shakespeare	AP Art Studio Art Honors Art 3D Art 2D Digital Photography Graphic Design Maker Wood Art Design Art and World Cultures I or II Creative Writing Considering our Modern World	AP English Language AP English Literature AP Calculus AP Statistics AP US History AP Chemistry AP Environmental Science AP Studio Art Other AP/VHS courses

	Related Co-Op Experience	Film Analysis Laughing Matters Related Co-Op Experience	
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## College Admission Standards

The admission standards for the University of Massachusetts and the state universities emphasize a strong academic high school background so that students enter college ready to learn. These standards are minimums; each campus may choose to consider additional factors in its admissions decisions. Further, the standards do not apply to the state's community colleges, which admit any high school graduate.

### Freshmen Applicants

If you plan to enter the University of Massachusetts or a state university as a freshman, you will need to:

- 1) take 16 college preparatory high school courses,
- 2) earn at least a "B" (3.0) grade point average in your college preparatory courses, and
- 3) take the SAT I or ACT test.

### Academic Course Requirement

Sixteen college preparatory courses (each course is equivalent to a year-long high school class) are required:

- English 4 courses
- Mathematics 3 courses (Algebra I & II and Geometry or Trigonometry, or comparable coursework).
- Sciences 3 courses (including 2 courses considered college lab courses).
- Social Sciences 2 courses (including 1 course of U.S. History)
- Foreign Languages 2 courses (in a single language)
- Electives 2 courses (from the above subjects or from the Arts & Humanities or Computer Sciences)

### Minimum Grade Point Average in Required Courses

The grades you earn in college preparatory courses will be averaged into a grade point average (GPA). In calculating your GPA, you will receive extra credit for accelerated courses from the college (for example, honors or Advanced Placement courses).

Highly selective or more competitive colleges will be looking for more than minimum state standards such as four math, four science, (especially for math, engineering, or science related majors), three social studies and three foreign language courses.

## LOSS OF CREDIT DUE TO ABSENCE

If a student is absent from a class, or from school, ten (10) times a semester (5 for an every other day class), he/she will lose credit for that class or those classes, even though he/she earns a passing course grade. If a student misses more than fifteen (15) minutes of a class period he/she is considered absent. Cutting a class is an absence and will result in disciplinary action. If a student violates this policy, he/she may need an additional course or courses to meet graduation requirements.

If a student has an acceptable, documented excuse such as an illness certified by a doctor, or a documented situation that made attendance impossible, he/she must submit the appropriate documentation to the school's office within ten (10) business days following his/her absence. Any documentation submitted later than ten (10) days following the student's absence will not be accepted.



A half-way point letter will be sent to the parent/guardian of a student who has been absent five (5) times from an every-day class, or three (3) times from an every-other-day class. The letter will include a warning of credit loss as well as an invitation to meet with the Dean of Students or guidance counselor.

SCHOOL TO WORK REQUIREMENT

Students must have a supervised work experience for a minimum of the 35 hours in order to fulfill the School to Work Requirement. Jobs, internships or volunteer experiences whether they are part-time, summer, or after-school may count. An Out of school CO-OP - while not a requirement itself - would also satisfy this requirement.

Note: Students are required to contract with the school and their supervisor, prior to beginning the experience and have their supervisor complete an evaluation at the end.

Options for fulfilling School-to-Work Requirement			
	Wage Earning	Earns H.S. Credit	Time
Employment	Yes	No	Outside School Day
Work for business or individual	No	No	Outside School Day
Recognized Community Project	No	No	Outside School Day
Recognized Social Agency	No	No	Outside School Day
<i>Out of School</i> CO-OP Experience *	Yes or No	Yes	During School Day

\*Only Students in grades 11 and 12 are eligible to participate in the CO-OP program.

COURSES THAT FULFILL THE ARTS REQUIREMENT

**Only art, music, and specifically identified Technology-Education classes will fulfill the arts graduation requirement.**

NATIONAL HONOR SOCIETY

In order to be eligible for the National Honor Society, students in grades 10-12 must have achieved a 90.0% average for each of the four quarters of the previous academic year. Transfer students must have been enrolled at Mahar for at least one semester of the previous year. Current members of the National Honor Society must maintain a 90.0% average for each of the four quarters of the current academic year in order to retain their membership.

Although students' grades determine initial eligibility, they do not guarantee membership for prospective or current members. The National Honor Society Council is empowered to accept or decline eligible students while considering faculty input. In addition to scholarship, initial and continued membership is based on demonstrated service, leadership, and character. Students are inducted at the annual ceremony in the fall of each academic year.

## MAKING UP CREDIT FOR PROMOTION

Students in grades nine through twelve who find themselves nearing the end of a year with fewer than the minimum number of credits required for promotion into the next grade may make up the deficiency as follows:

1. Retake the full course. **(During the school year)**
  - a. The student will be rescheduled into the course during one of the upcoming semesters.
  
2. Fee-based, online credit recovery course. **(During the school year)**
  - a. Take an online credit recovery course through a school-selected online platform for a per-course fee paid by the student. To be eligible for this option, the student must have received an original semester average of no less than 40%.
  - b. These courses are not taught by R.C. Mahar teachers. Instead, the course will be facilitated by an online instructor provided through the selected online platform.
  - c. Students may work on these courses at home and during times outside of their normal school day. However, students must complete the course within a specified amount of time.
  
3. Fee-based, online credit recovery course. **(Summer School)**
  - a. Take an online credit recovery course through a school-selected online platform for a per-course fee paid by the student. To be eligible for this option, the student must have received an original semester average of no less than 40%.
  - b. These courses are not taught by R.C. Mahar teachers. Instead, the course will be facilitated by an online instructor provided through the selected online platform.
  - c. Students may work on these courses at home. However, students must complete the course within a specified amount of time.

Summer school study must be completed prior to the start of the Mahar school year. There is one exception to this rule; after a student's class has graduated, the student may then enroll in an approved adult education program at a secondary institution or college, whenever such a program is available.

Students who have passed a course and received credit may not repeat the same course for credit, except arts classes.

Students selecting summer school in order to correct credit deficiencies are warned that the following limitations apply:

- a. No more than ten credits earned in this manner outside of the Mahar District may be counted toward graduation requirements (see section below).

- b. Credits earned in this manner may be used only to correct promotion credit deficiencies: they may not be used to increase a student's credit totals beyond 40 for a rising sophomore, beyond 80 for a rising junior, and beyond 120 for a rising senior.
- c. Course credits for work completed at summer or night school courses will be granted only after the student presents proper documentation of successful completion of the work to the Mahar administration.

ABOUT COURSE CHANGES

1. Student requests for program changes occur periodically throughout the year. Because such a change tends to disrupt the school plan, the change must be the result of valid requests that are in the best educational interest of the student and the school. For that reason, no single party – whether student, parent, teacher or coordinator – should unilaterally decide on the program change; rather, the decision should be a group decision involving all parties. The following procedures will govern a student request for changes:
  - a. For those changes requested by student or parent:
    - (1) The counselor will first determine if the change is feasible within the constraints of the master schedule, and he/she will then initiate contact with the teacher, coordinator, student, and parent as required. Every effort will be made to analyze the cause for the request and to determine whether the program change is the best educational decision for the student. The counselor will coordinate any meetings required among the various parties to clarify issues or to resolve conflicts.
    - (2) After all parties have approved the change, the counselor will coordinate the transfer, making sure class lists are correct and that appropriate schedules are posted.
    - (3) In the event that a consensus cannot be reached, the principal will be the arbiter of last resort.
  - b. For those changes requested by the teacher:
 

The teacher will make the preliminary contacts with the student, parent, coordinator and counselor. Once agreement has been reached by all parties concerned, the counselor will coordinate the change, making sure class lists are correct and that appropriate schedules are posted.
  - c. For those changes requested by the Student Services Department:
    - (1) The counselor will proceed as in (1) above and coordinate fully with all parties involved.
    - (2) Again, the principal shall be the arbiter of last resort.
2. Schedule changes will be processed during the summer and for the first five (5) school days of each semester. In general, requested schedule changes will not be made after the first five (5) school days in a semester. Any request for a schedule change after the first five (5) days will first require the approval of the Principal before processing may begin.

3. No student is to be allowed in to or out of a class until a schedule change has been completed by the appropriate counselor, and the teacher involved has a written change slip in hand, and the student is entered in to the teacher's PowerSchool electronic gradebook.

COURSE LEVELS AND GPA

Credits and class rank:

- a. Although all courses in grades nine through twelve carry academic credit, and all credits count equally in meeting promotion and graduation requirements, credits do not count equally in determining class ranking. A weighted system is used in order to make allowance for the varying levels of difficulty among courses. In this system, courses at higher levels count more than courses at intermediate or lower levels in establishing class ranking. (Counselors can provide a more detailed explanation of the method by which class ranks are determined.)
- b. To provide for individual differences, Mahar offers courses at three or four different levels. The level of the course is determined by the rigor of the course and its consideration as a college preparatory course. Below is a listing of the value of a course based upon the level of the course and the grade received.
- c. All AP courses are level 5. The College Board AP exam is a final requirement of all AP courses. It is the school's expectation that students taking an AP course will participate in the AP Exam. The AP exam results will not affect the Mahar course grade. Students may choose not to submit their AP scores to colleges, but some colleges will grant credit or waive requirements for students who obtain a score of 3 or higher.

WEIGHTED GRADE POINT AVERAGE

<u>MARK</u>	<u>LEVEL 1</u>	<u>LEVEL 2</u>	<u>LEVEL 3</u>	<u>LEVEL 4</u>	<u>LEVEL 5</u>
97-100	4.3	5.3	6.3	7.3	8.3
93-96	4.0	5.0	6.0	7.0	8.0
90-92	3.7	4.7	5.7	6.7	7.7
87-89	3.3	4.3	5.3	6.3	7.3
83-86	3.0	4.0	5.0	6.0	7.0
80-82	2.7	3.7	4.7	5.7	6.7
77-79	2.3	3.3	4.3	5.3	6.3
73-76	2.0	3.0	4.0	5.0	6.0
70-72	1.7	2.7	3.7	4.7	5.7
67-69	1.3	2.3	3.3	4.3	5.3
63-66	1.0	2.0	3.0	4.0	5.0
60-62	0.7	1.7	2.7	3.7	4.7
0-59	0.0	0.0	0.0	0.0	0.0

### UNWEIGHTED GRADE POINT AVERAGE

The unweighted GPA system is used when calculating honor roll and National Honor Society and National Junior Honor Society eligibility.

<u>MARK</u>	<u>LEVEL 1-5</u>
97-100	4.3
93-96	4.0
90-92	3.7
87-89	3.3
83-86	3.0
80-82	2.7
77-79	2.3
73-76	2.0
70-72	1.7
67-69	1.3
63-66	1.0
60-62	0.7
0-59	0.0

## PROGRAM OF STUDIES

### ART DEPARTMENT

Philosophy and Objectives: The philosophy of the Art Department is that everyone can enjoy and benefit from art education. The department provides a broad range of hands-on creative experiences, which meet many different student needs from the therapeutic to the most academic. The art room atmosphere is based on respect for people, their work, and the art materials used to create that work. The safe environment supports appropriate expression of emotions, reactions, and thoughts.

The department believes that art is a visual language, and that skills and understanding can be taught. The creative process is taught; the materials and techniques are part of a constantly changing process where theory and idealistic goals meet realistic considerations (such as teacher and student strengths, and budgetary limitations).

Whenever possible, the art department uses an integrated approach which includes art history and other disciplines. Art is seen as an inclusive subject, which brings ideas and concepts together. Our working definition is that art is an original, significant, personal statement about reality. To create art, the artist must communicate about what is original, which involves art history; what is personal, which involves psychology and self-awareness; what is significant, and to whom; and, of course, what is real. Finally, the artist must explore different concepts, views, and beliefs about reality.

Marking System: In all art department courses, grades are based on creative expression, work ethic, project planning and craftsmanship, as well as civic engagement within the classroom.

Course Offerings: Grades 9-12

These courses count toward the graduation requirement in the arts.

### ART DEPARTMENT

<u>Title and Code</u>	<u>Semester</u>	<u>Grade</u>	<u>Times per Cycle</u>	<u>Credit</u>	<u>Level</u>
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2D ART (AR112)	1 or 2	9-12	EOD	2.5	2
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This course is designed to offer students the opportunity to explore the many ways of developing and creating 2D (flat) artwork in a studio environment. As a student continues to select 2D art throughout high school, the student progresses from drawing into the areas of advanced drawing, painting, printmaking and collage. Students will undertake studies of line, composition, values, texture, form, and perspective in pencil, ink, charcoal, pastel, and marker as well as innovative choices that utilize a wide variety of materials, techniques, and processes. 2D art is designed to provide the student with a variety of styles and subjects in watercolor, acrylic, and oil paint. Uses of color, texture, contrast, and composition will be discussed and used to create paintings of varied style and subject. 2D art is designed to offer the student an experience in the practical application of art to specific design problems. Skills in problem solving as well as technical applications and references to art history will be utilized in a serious studio environment.

ART DEPARTMENT

<u>Title and Code</u>	<u>Semester</u>	<u>Grade</u>	<u>Times per Cycle</u>	<u>Credit</u>	<u>Level</u>
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3D ART (AR122)	1 or 2	9-12	EOD	2.5	2
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This course is designed to offer students the opportunity to study and explore the many ways of developing and creating 3D artwork. Three-dimensional artwork is any form that is in the round, or in other words, may be picked up, turned around and viewed from many different angles. Students will learn to utilize the elements and principles of design and construction techniques while creating three-dimensional artwork. Sculptures, functional forms, and decorative pieces will be considered and produced using a variety of materials. Students will explore the history and evolution of a variety of sculptural forms by studying the works of well-known historical and current sculptors and/or creators of 3D art forms. 3D art also includes a wide variety of craft techniques. If students continue to re-elect 3D art throughout high school and systematically progress through each activity, students then develop a concentration in an area of particular interest to them.

STUDIO ART Honors (AR324)	1 or 2	11 or 12	ED	5	4
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Studio Art Honors is offered to highly motivated art students. This is an honors class and therefore has honors-level expectations. Acceptance into the course is based upon teacher recommendation, portfolio review, resource availability, and department coordinator approval. Each student will begin developing a Drawing Portfolio or a Two-Dimensional Design Portfolio for evaluation. The portfolio should reflect two major areas of concern: (1) a sense of *quality* in a student's work; and (2) the student's need for *breadth* of experience in the formal, technical, and expressive means of the artist. Students must pass Studio Art Honors with a grade or 88% or higher in order to advance to AP Studio Art for the next semester. However, students do not have to enroll in AP Studio Art after taking Studio Art Honors. **Students must be able to achieve a semester grade of 88% or higher in this course to advance to AP Studio Art for the next semester.**

AP STUDIO ART (AR335)	1 or 2	12	ED	5	5
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Advanced Placement Studio Art is offered to highly motivated art students. Acceptance into the course is based upon the completion of Studio Art Honors with a grade of 88% or higher. Students must be enrolled in AP Studio Art the semester after completing Studio Art Honors. It is recommended that students who are considering studying art or visual design at a secondary institution should take Studio Art Honors in the spring of their junior year and AP Studio Art in the fall of their Senior year in order to have a portfolio prepared to submit during the college admissions process. Students will submit a Drawing Portfolio or a Two-Dimensional Design Portfolio to The College Board for evaluation in May. The portfolio should reflect three major areas of concern: (1) a sense of *quality* in a student's work; (2) the student's *concentration* on a particular visual interest or problem; and (3) the student's need for *breadth* of experience in the formal, technical, and expressive means of the artist. Students who take AP Art are required to complete the College Board AP Exam and submit a portfolio in May. There are extensive homework requirements in this course and the ability to work independently is expected. **It is the school's expectation that students taking this AP course will participate in the AP Exam and submit a portfolio. Successful completion of Studio Art Honors with a grade of 88% or higher is a prerequisite for this course.**

#### ART DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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#### ART AND WORLD

CULTURES II (AR182)	1 or 2	9-12	EOD	2.5	2
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Are you interested in traveling the world? Come visit faraway places...without ever leaving the school! Art and World Cultures II will explore art and visual culture\* from cultures on each inhabited continent through research, presentations, discussions and, of course, hands-on art projects. We will look at cultures and art practices past and present, including the art of Mexico, Australia, Haiti/Caribbean, Africa, Mexican Natives, Europe and Japan. Projects will include clay whistles, Mexican/personal shrines, basket weaving, reposes, Ndebele house painting, aboriginal dot paintings, art Nuevo/arts and crafts movement, and Japanese block printing. Each project will connect traditional art practices with contemporary ideas and frameworks. \*Visual culture is anything produced by people that can be looked upon (architecture, decorations, clothing, advertisements, etc.). This course may be taken only once for credit.

BOOKMAKING I (AR132)	1 or 2	9-12	EOD	2.5	2
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This course will focus on the study of bookmaking as an art form. The emphasis is on the book as an integration of historical aspects and the contemporary evolution of the craft. Students will develop skills based on historical principles and techniques, and the artistic expression that follows. A variety of book structures will be assigned. They will include but are not limited to pamphlet stitch, stab binding, folded books, and unusual bindings. Thematic development of text and imagery will be studied. This course may only be taken once for credit.

YEARBOOK (AR192)	1 or 2	11-12	EOD	2.5	2
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Yearbook is an every-other-day elective course for Juniors and Seniors during both the fall and spring semesters. The focus of this course is to create the yearbook for the graduating class. Students will be



responsible for attending sporting and club events, gathering and sorting yearbook materials, designing and editing yearbook pages, contacting potential yearbook sponsors, designing yearbook advertisements, monitoring and promoting yearbook sales and distribution.

**BUSINESS DEPARTMENT**

Philosophy and Objectives: Courses in the Business Department are designed to provide fundamental learning experiences through business simulations and activities. These experiences include financial applications, business computer skills, and personal finance activities. These courses prepare students for work in the business field and for college.

Marking System: The Business Department uses the school grading scale based on percentages. Students will be graded on participation, classwork, projects, and tests.

Course Offerings: Grades 9-12

\*This course counts toward the Mathematics requirement only when students have successfully completed the equivalent of Algebra I and Geometry for the classes of 2014-2016, and Algebra II for the class of 2017 and beyond. **Please note that these business courses may not meet the mathematics requirements for admission to a 2 or 4 year college.**

BUSINESS DEPARTMENT

<u>Title and Code</u>	<u>Semester</u>	<u>Grade</u>	<u>Times per Cycle</u>	<u>Credit</u>	<u>Level</u>
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DATA TRACKING AND ANALYSIS

(BU513)	1 or 2	9-12	EOD	2.5	3
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Programs such as Excel are powerful tools essential for managing and presenting data in today’s working environment. With this course, students will gain the knowledge and skills to create and edit worksheets, use formulas and functions, sort and filter detail data visually, and present summary information in a consumable and professional format. Students who complete this course can use these skills in businesses, hospitals, tech companies, colleges, and in other employment situations.

ACCOUNTING I (BU313)      1 or 2      9-12      ED      5      3

This course is designed to give students necessary background knowledge in keeping accurate financial records for businesses. It includes training in journals and ledgers, completing worksheets, and preparing financial documents including the income statement, balance sheet, and profit and loss statement. The computer program Excel is also used to do electronic ledgers, journals, and reports. Basic math skills are used in this course. This may not meet the mathematics requirements for admission to a 2 or 4 year college.

PERSONAL FINANCE (BU123) 1 or 2      9-12      EOD      2.5      3

Personal Finance prepares students to manage their finances through lessons on mindful money management. Units include strategies for budgeting, banking, credit card use, wages, taxes, insurance, investing, and preparing for retirement. Students will use online resources, video lessons, and text resources for this class. These lessons follow the National Standards for Financial Literacy and prepare students for life after high school. Grades will be determined by classwork, projects and tests.

**ELE - ENGLISH LANGUAGE EDUCATION**

English Language Education (ELE) provides services and guidance to those students who are Limited English Proficient and to their families. Those services include annual assessment, MCAS and ACCESS administration and accommodation, access to translation for specific school documents and activities, ELE programming, equal access to all academic programs and services, equal access to all non-academic and extracurricular programs, follow-up support to those who have exited the program, and opportunities for parents to be involved in their children’s education. **This course is designed for students designated as English Language Learners (ELL) through testing. This course can count as an English course for students at a WIDA proficiency level 1-3.**

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
ENGLISH LANGUAGE ED (EL111)	1 and 2	9-12	ED	5	1
ENGLISH LANGUAGE ED (EL121)	1and 2	9-12	EOD	2.5	1

English Language Education promotes and supports the rapid acquisition of English Language Proficiency by Limited English Proficient (LEP) students through English Language Development (ELD), English as a Second Language (ESL) and sheltered English Immersion (SEI) instruction.

**ENGLISH DEPARTMENT**

Philosophy and Objectives: Every student should have a mastery of the basic skills of oral and written communication that are needed to function successfully in society. The English Department follows the Massachusetts Framework for English Language Arts and Literacy incorporating the Common Core State Standards, which emphasizes college and career readiness for students in language arts, including discussion, questioning, oral presentation, academic vocabulary, the structure and history of English, reading informational text and literature, composition, and the study of the media with an emphasis on 21<sup>st</sup> century skills. Our work will encourage students to develop the habit of mind that underlies the study of these fields. In addition, emphasis will be placed on the development of the skills of critical thinking, analysis, creativity, and collaboration.

Marking System: In the English Department, report card grades are based on a system of points earned in which each test, quiz, composition, recitation, homework, project, or collaborative or cooperative activity is assigned a “point value” which is the maximum score that can be attained for that particular activity. The student’s grade in any quarter is then determined by the percentage he or she has earned of the cumulative points available in that quarter.

Note: All English courses are designed to prepare students for college. The content of these courses will essentially be the same; however, the intensity and pace at which the material is presented will vary. All courses in grades 9-12 now use the Elements of Literature textbook series, which provides a multi-cultural offering of literary selections in all genres. This textbook series will be supplemented by novels at each level.

Course Offerings: Grades 9-12

**\*These courses do not count for the English requirement.**

ENGLISH DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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ENGLISH 9 (EN113)	1	9	ED	5	3
English 9 provides a challenging curriculum designed to offer students a transition year between middle school and high school. This course is aligned with the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards. The course covers basic grammar, vocabulary, composition, informational text, and literature. Students will have opportunities to develop their 21 <sup>st</sup> century learning skills. Composition work will focus on expository writing, including open response, basic paragraph work, and the five paragraph essay. The grammar work will be done mainly through daily drills and through composition. The study of literature will focus on the elements of the short story, the novel, poetry, drama, and non-fiction; the course emphasizes close reading and the understanding of literary devices in all genres. This course integrates in-class work and guided practice.					

ENGLISH 9 HONORS (EN114)	1	9	ED	5	4
This course provides an accelerated and challenging curriculum aligned with the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards. The course covers basic grammar, vocabulary, composition, informational text, and literature. Students will have opportunities to develop their 21 <sup>st</sup> -century learning skills. Composition work will focus on expository writing, including open response, basic paragraph work, and the five-paragraph essay. The grammar work will be done mainly through daily drills and through composition. The study of literature will focus on the elements of the short story, the novel, poetry, drama, and non-fiction; the					

course emphasizes close reading and the understanding of literary devices in all genres. This course integrates in-class work and guided practice.

ENGLISH 10 (EN233)	2	9	ED	5	3
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This course has a challenging curriculum which is aligned with the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards and designed to prepare the student for both college and the workforce. This course consists of work in grammar, vocabulary, composition, information text, and literature. Students will have opportunities to develop their 21<sup>st</sup> century learning skills. The composition component includes work on the paragraph, open response questions about the literature, and the five-paragraph analytical literary essay. The literature component includes all genres through a thematic approach and emphasizes close reading and an understanding of literary devices. The grammar work will be done mainly through daily drills and through composition. This college prep level course integrates in-class work and guided practice.

ENGLISH TEST PREP (EN202)	1	10	EOD	2.5	2
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This class will meet every other day and will only be offered in the fall semester. The course will follow the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards and will further prepare students for the grade 10 ELA MCAS by individualizing instruction based on diagnostic testing. Test prep will stress test-taking skills and writing requirements which focus on responding to a literature prompt and organizing and writing effective open responses.

ENGLISH DEPARTMENT

<u>Title and Code</u>	<u>Semester</u>	<u>Grade</u>	<u>Times per Cycle</u>	<u>Credit</u>	<u>Level</u>
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ENGLISH 10 HONORS (EN234)	1 or 2	10	ED	5	4
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This course, which is aligned with the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards, is designed to prepare the student for both college and the workforce. The course has an extended and enriched curriculum which is academically rigorous to prepare the student to participate in advanced courses. The course includes work in grammar, vocabulary, composition, informational text, and literature. Students will have opportunities to develop their 21<sup>st</sup> century learning skills. The composition component includes work on the paragraph, open response questions about the literature, and the five-paragraph analytical literary essay. The literature component includes all genres through a thematic approach and emphasizes close reading and an understanding of literary devices. The grammar work will be done mainly through daily drills and through composition. The honors level course requires more intense, independent, out-of-class work.

ENGLISH 11 (EN333)	2	10	ED	5	3
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This course has a challenging curriculum which is aligned with the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards and designed to prepare the student for both college and the workforce. The course consists of grammar, composition, vocabulary, informational text, and literature study. Students will have opportunities to

develop their 21<sup>st</sup> century learning skills. The composition component includes work on the paragraph, open response questions about the literature, and continues the focus on the five-paragraph analytical essay. The literature component focuses on a study of American literature and includes all genres. It emphasizes close reading and an understanding of literary devices. Grammar is taught through daily drills and composition. The college prep level course integrates in-class work and guided practice.

ENGLISH WORKSHOP (EN312)    1            11-12            ED            5            2

This course is designed for students who have failed the English Language Arts MCAS Test. The class will meet every day for one semester. The course will follow the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards and will specifically prepare students for the MCAS English Language Arts Retest. Students will continue to take English courses (EN313) and (EN453) as they progress toward attainment of the proficiency benchmark. Course material will be individualized for student needs where appropriate.

ENGLISH WORKSHOP II (EN1122)    2            11-12            ED            5            2

This course is designed for students who have failed the English Language Arts MCAS Test and Retest and who have already completed the English Workshop course (EN312). The class will meet every day for one semester. The course will follow the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards and will specifically prepare students for the MCAS English Language Arts Retest and to complete the ELA Portfolio. Students will continue to take English courses (EN313) and (EN453) as they progress toward attainment of the proficiency benchmark. Course material will be individualized for student needs where appropriate.

ENGLISH DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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ENGLISH 11 HONORS (EN334)	1 or 2	11	ED	5	4
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This course, which is aligned with the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards, is designed to prepare the student for both college and the workforce. The course has an extended and enriched curriculum which is academically rigorous to prepare the student to participate in advanced courses. The course consists of grammar, composition, vocabulary, informational text, and literature study. Students will have opportunities to develop their 21<sup>st</sup> century learning skills. The composition component includes work on the paragraph, open response questions about the literature, and continues the focus on the five-paragraph analytical essay. The literature component focuses on a study of American literature and includes all genres. It emphasizes close reading and an understanding of literary devices. Grammar is taught through daily drills and composition. The honors level course requires intense, independent, out-of-class work.

DUAL ENROLLMENT ON-LINE (GCC) ENGLISH 101:  
(EN404)

1	11-12	ED	5	4
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Students will develop college-level English writing skills with an emphasis on the writing process, an awareness of purpose and audience, and an understanding of grammar, punctuation, and sentence structure. Reading selections will foster improved writing skills and critical and analytical thinking. By

semester's end, students will have produced at least four essays totaling 12-15 pages of original, polished prose, as well as additional writing in varied forms, such as journals, free-writes, peer review, reading responses, and rough drafts. Students are required to successfully complete the GCC Library Research Skills MOOC and will write at least one paper that incorporates outside source material. Working with an instruction librarian on the research project is encouraged. **Prerequisites: Passing Score on Accuplacer Exam**

DUAL ENROLLMENT; ON-LINE (GCC) ENGLISH 112: English Composition II: Exploring Literature (EN405) 2 11-12 ED 5 4

Builds and extends on the academic writing process and skills introduced in English Composition I. Students develop close reading abilities for a variety of literary and nonliterary texts, and hone critical thinking skills, as well as research and documentation skills using a variety of texts that may include essays, fiction, poetry, and drama among other texts. Writing assignments emphasize the formal researched and documented essay and include creative experiments and literary analysis. Course readings include selections from a wide variety of authors, genres and texts that engage students in analysis and research. NOTE: Students may receive credit for only ENG 112 or ENG 114 or ENG 116. **Prereq: GCC; ENG 101 or R.C. Mahar EN404**

ENGLISH PROFICIENCY (EN323) 2 11 ED 5 3

This course, which is aligned with the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards, offers focused reading and writing work designed to help students reach the ELA benchmark level of proficiency that is measured by a score of 240 on the MCAS. This course focus will include the study of British and American literature and will include material for all genres (i.e. fiction, non-fiction, drama, poetry). Students will have numerous opportunities through reading literature and through writing assignments to demonstrate their progress toward attainment of the proficiency benchmark. Students will have opportunities to develop their 21<sup>st</sup> century learning skills. **Prerequisites: Grade 10 MCAS, English 9, English 10, and English 11.**

#### ENGLISH DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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ENGLISH 12 (EN453)	1 or 2	12	ED	5	3
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This course, which is aligned with the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards, has a challenging curriculum and designed for both college-bound and work-oriented students and consists of a study of grammar, the essay, vocabulary, composition, informational text, and literature. Students will have opportunities to develop their 21<sup>st</sup> century learning skills. The composition component will focus on the paragraph with an emphasis on different methods of development and continues the focus on the five-paragraph analytical literary essay. The literature will focus on a study of British literature and includes all genres. It emphasizes close reading and an understanding of literary devices. Grammar is taught through daily drills and composition. The college prep level course integrates in-class work and guided practice.

ENGLISH 12 HONORS (EN434)	1 or 2	12	ED	5	4
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This course, which is aligned with the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards, is designed to prepare the student for both college and the workforce. The course has an extended and enriched curriculum which is academically

rigorous to prepare the student to participate in advanced courses. The course consists of a study of grammar, the essay, vocabulary, composition, informational text, and literature. Students will have opportunities to develop their 21<sup>st</sup> century learning skills. The composition component will focus on the paragraph with an emphasis on different methods of development and continues the focus on the five-paragraph analytical literary essay. The literature will focus on a study of British literature and includes all genres. It emphasizes close reading and an understanding of literary devices. Grammar is taught through daily drills and composition. The honors level course requires intense, independent, out-of-class work.

AP ENGLISH LITERATURE (EN455)	2	11-12	ED	5	5
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Advanced Placement English is a course which emphasizes the development of skills in critical reading of literature and in writing about literature and related ideas. The course is aligned with the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards. It is for students who are capable of doing college-level English while they are in secondary school, and who are willing to devote the energy necessary to complete a course more rigorous and demanding than other English courses designed for the college-bound student. The literature will focus on British and World literary pieces. Summer work will be required of students signed up for this course. The College Board AP Exam must be taken during the same academic year in which the course is taken. **It is the school's expectation that students taking this AP course will participate in the AP Exam.**

DRAMA (EN253)	1 or 2	9-12	EOD	2.5	3
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This elective course will provide students with an overview of the history of drama with exposure to a variety of playwrights and techniques. It will also include an in-depth understanding and analysis of several plays through reading and performance. Theater games designed to help students develop their acting skills will be a component of the course. Students will have ample opportunities for improvised and prepared performances. The class is activity-oriented.

ENGLISH DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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CREATIVE WRITING (EN123)	1 or 2	9-12	ED	5	3
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With the aid of prompts and literary selections, students will experiment through their own writing with the elements of poetry and prose. The course is aligned with the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards. Students will have opportunities to develop their 21<sup>st</sup> century learning skills. Through their poetry they will focus on meaning, voice, and tone as well as meter, musical devices, imagery, and figurative language. Students will experience various forms of prose writing: expression, reflection, direction, persuasion, narration, and description.

LAUGHING MATTERS (EN563)	1 or 2	9-12	EOD	2.5	3
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This course offers students the opportunity to explore the various aspects of writing, performing, and producing comedic pieces. We will cover current events and how they are explored, synthesized, and discussed through comedic performance. We will study the writing styles and techniques of a variety of comedians. Students will engage in creating, writing, and performing various comedic performances

(live and using video recording and video editing technology). Students will examine the psychological functions of humor. Students will create comedic pieces in various forms and mediums: narrative writing, performance, stand-up, etc.

SPORTS LITERATURE (EN353)            1 or 2            9-12    ED            5            3  
 The course will explore the use of sports in literature, as well as the literature in sport. Students will read various types of literature including but not limited to: novels, short stories, poems, magazine/news articles, and blogs. Students will write a variety of works, including but not limited to: responses, essays, blogs, stories, and poems. The class will explore multiple themes including the use of sports in literature, women in sport, losing, sports and social issues, and athletes as heroes. This course fulfills the grade 11 or 12 English requirement. Prerequisite: None

JOURNALISM (EN483)            1 or 2            9-12            EOD            2.5            3  
 Journalism is a semester course designed for students interested in newspaper journalism and developing their skills as a writer. The course explores the contemporary media and the ethical responsibility issues inherent in the press today. Students will learn the fundamentals of news, feature, editorial and sports writing. Copy reading, news style and editing will be stressed. Students will create numerous original stories using varied structures and writing techniques. Students will also learn to create computer generated layouts and graphics which will support the continued release of the school's official newspaper. Students will have the opportunity to study varied examples of news media focusing on use of primary sources as well as positive and negative bias. Examples will be taken from throughout history giving students examples of print media from both past and present. There will be included discussion of 21st century media and their respective outlets: (e.g. Facebook, Twitter, various Blogs, and Alternative News)

FILM ANALYSIS I (EN653)    1 or 2            9-12            EOD            2.5            3  
 This course is designed to introduce students to film analysis through careful study of the elements of film(e.g. cinematography, lighting, sound design, mise-en-scène, etc.) and across different genres (e.g. drama, action, musical, comedy, etc.). By viewing the film as text, students will critique individual scenes, as well as whole films, and communicate their interpretations through discussion, writing, and video essay. Students will learn the basics of video editing, write scripts, and create publishable video essays that incorporate their knowledge of the course content. This class will meet every other day.

ENGLISH DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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JUNIOR/SENIOR PROJECT I HONORS (HM014)	1	11/12	ED	5	4
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The purpose of education is to solve problems. What makes those problems difficult and engaging and beautiful are the constraints inherent in deploying them in the real world. We want to teach our students in such a way that they can begin solving those problems sooner. Why must a student wait until they have all the answers before they can begin operating in the real world? Why can't the natural desire to affect the world around them be the organizing force and motor of a child's education? We want to design a course where every moment is built around not passively receiving information, but actively searching for answers that further our students' attempts to solve concrete problems. In doing so we must



turn our students' education over to them. Their education must spring from inside of them and makes its way in as short a distance as possible into the world that surrounds them. We want a classroom filled with autodidacts, but autodidacts who do not allow that knowledge to lie dormant within them. Those who change the world do not wait for permission to do so. Everyone knows Bill Gates, Steve Jobs and Mark Zuckerberg dropped out of school. But we seldom get to the root of why or how? We believe it was because they no longer needed its organizing structure or extrinsic rewards. Both of these essential elements now sprang from inside of them. The search for knowledge and for answers to the real problems they saw burned so brightly that it consumed all the knowledge around them in its pursuit. We want to design a course for them.

Team Challenges (Part 1 - Research and Presentation) - Students will spend the first half of their fall semester researching a local or regional problem. They will devise a project that addresses this problem. They will present it to their classmates. Students will vote on which of the projects they would like to see implemented. The top four will become the class's projects and their presenters will become the project managers.

Team Challenges (Part 2 - Applications) - The students whose projects are not chosen will apply to the project or projects of their choice. They will detail for the project manager what skills they could add to the project and additional ideas for its implementation. The project manager will then assemble their team and then spend another quarter to semester planning for its implementation.

Team Challenges (Part 3 - Implementation) - In the final phase of the course, each group will go out and implement their project. A team will not have completed the course without attempting to implement their project.

(Students who successfully complete Senior Project I are required to take Senior Project II second semester.) *This course is offered through the English and Social Studies Departments and will satisfy the grade 11 and 12 English requirements upon successful completion of Jr/Sr Honors Project I and II. In addition, this course will satisfy English or Social Science core elective requirements.*

### JUNIOR/SENIOR PROJECT II HONORS

(HM024)    2    11/12    ED    5    4

This course is a continuation of Junior/Senior Project I. Teams of students will continue with the implementation of their final projects. (Prerequisite: successful completion of Senior Project I) *This course is offered through the English and Social Studies Departments and will satisfy the grade 11 and 12 English requirements upon successful completion of Jr/Sr Honors Project I and II. In addition, this course will satisfy English or Social Science core elective requirements.*

### HEALTH SCIENCE DEPARTMENT

Philosophy and Objectives: The Health Science Department along with the Physical Education department has produced a curriculum to develop skills and tools for living healthy. The objective of Health courses is to make healthy behavior a way of life, to define and examine what a healthy way of life is, to know the reasons for a healthy lifestyle (physically, mentally, environmentally, and emotionally), to understand the effects of choice and the effects of risks, to make educated decisions about personal health in the future and to build resiliency. Social and civic skills are learned and practiced for developing respect for individuals, expressing emotion properly and practicing sound decision-making skills with regard to personal health.

Marking System: Students are responsible for material presented in class or in laboratory experiences and are evaluated using an on-task grading system, quizzes, worksheets, projects, and reports.

Course Offerings Grades 9-12, split block with PE, 42 minutes each.

HEALTH SCIENCE DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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HEALTH (HE___)	1 and 2	9-10	EOD	1.25	1
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This health program is a two-year sequential curriculum designed to prepare students to develop responsibility for their own health and fitness focusing on prevention. This program offers students in grades 9 and 10, four units each quarter of the school year: Nutrition and Consumerism, Personal Health, Health and Safety, and Disease Prevention and Control. Developmental guidance topics will be introduced throughout each quarter such as the White Ribbon Campaign and the Great American Smoke Out. In addition, there will be units from the Anti-Bullying Program as well as Concussion Awareness units.

**The health program for grades 11 and 12 offers semester-based electives in the following sequence: (Concussion Awareness will be reviewed in all courses.)**

DEVELOPMENT THROUGH

THE LIFE CYCLE (HE302)	1	11	EOD	1.25	2
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In this course students will examine development throughout the life cycle. This course is designed to provide students with the opportunity to develop knowledge and skills related to parenting, pregnancy, and the development, care, guidance, and protection of children. Topics include the roles, responsibilities and challenges of parenting, human sexuality, adolescent pregnancy, prenatal development, preparation for birth, the birth process, meeting the physical, social, emotional, intellectual, and developmental needs of infants and children, impacts of heredity, environment, family and society on development of the child, meeting children's needs for food, clothing, shelter, and caregiving, caring for children with special needs, parental resources, services, and agencies, and career awareness.

HEALTH SCIENCE DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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DISEASES AND DRUGS

IN SOCIETY (HE322)	2	11	EOD	1.25	2
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In this course, students will examine a number of diseases and drugs and their impact on society. This course is designed to provide students with the opportunity to develop knowledge about chronic and communicable diseases, the causes of disease, society's response to epidemics, prevention, and programs that protect the public's health. This course will also provide a broad overview of drug and alcohol use and the problems caused by them. Alcohol and drug abuse impacts all aspects of society. This class will investigate different types of drugs including: illegal, prescription, and over-the-counter and their impact

on the health care system, the family system, and the legal system. Other topics discussed will include addiction, treatment, social support, personal responsibility, decision making, assertiveness and self-esteem.

LIFE AFTER HIGH SCHOOL (HE402)	1	12	EOD	1.25	2
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This course offers an in-depth look at the responsibilities and demands of life as an adult after graduating high school. The student will be learning topics such as self-responsibility, effects of consumerism, generational effects, global issues, coping techniques, self-improvement, healthy living, interdependency and healthy relationships, and an extensive exploration of career interests and how to manage a debt-to-income ratio pertaining to personal and household finances. This course will prepare the students to enhance and apply their knowledge to realistic situations and to continue to be life-long learners.

STRESS MANAGEMENT (HE422)	2	12	EOD	1.25	2
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This course offers a holistic approach to stress management. The student will be learning topics such as the nature of stress, physiology of stress, stress and disease, personality profiles, coping skills, and relaxation techniques. This course will prepare the student to combat the challenges of today's rigorous demands and lead more fulfilling and productive lives. Creating a portfolio of various teachings and techniques, they will have the essential tools and resources necessary to support them throughout their lives.

NUTRITION AND WELLNESS (HE342)	1 or 2	11-12	EOD	1.25	2
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This course focuses on the interrelationship between nutritional practices and human physical performance. Topics covered include the role of carbohydrates, fats, proteins, vitamins, minerals, supplement use, and water on performance. In addition, factors affecting body composition and weight control are covered. Prerequisites: 9 and 10 Health

## MATHEMATICS DEPARTMENT

Philosophy and Objectives: Students will be provided with opportunities to explore mathematical ideas in ways that maintain their enjoyment of and curiosity about mathematics, to become mathematical problem solvers, to gain confidence in their ability to do mathematics, and to improve their ability to communicate and reason mathematically. Our beginning level mathematics offerings reflect the Curriculum Frameworks for Mathematics established by the Massachusetts Department of Elementary and Secondary Education, and are designed to meet the needs of our learners.

Our intermediate course offerings, (which reflect the broader standards established by the National Council of Teachers of Mathematics), and advanced placement courses (which reflect the curriculum standards established by the College Entrance Examination Board), are designed to provide students with

an understanding of mathematical tools, models, structures, and simulations applicable to many disciplines.

Marking System: While tests and quizzes remain an important component of student grades, a variety of other assessment activities may include (but not be limited to) portfolios, non-routine problem solving, open-ended questions, performance tasks, presentations, research, teamwork, lab work, class participation, and measures of effort and initiative.

MATHEMATICS DEPARTMENT

Calculators: Calculators are used in every math course. The level and nature of the coursework determine the functions needed on a calculator. Calculators are available in the classrooms for those students who do not have their own.

Course Offerings: Grades 9-12. Every student must successfully complete the equivalent of Algebra I, Geometry, and Algebra II and all students must take a mathematics course their senior year. (Reference page 6)

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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ALGEBRA 1 (MA133)	1 or 2	9-12	ED	5	3
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In this course, students will extend their previously learned mathematical concepts. Students develop and use the real number system throughout the course with an emphasis on problem solving. Topics include solving linear equations, operations with polynomials, functions, systems of simultaneous equations, rational and irrational numbers, solving equations, and data analysis.

ALGEBRA I Honors (MA134)	1 or 2	9	ED	5	4
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This level 4 Honors course covers the following topics: Expressions, equations, functions; properties of real numbers; solving/graphing/writing linear equations and functions and inequalities; systems of equations and inequalities; exponents and exponential functions; polynomials and factoring; quadratic equations and functions; radicals and geometry connections; rational equations and functions; data analysis. **Prerequisite: Teacher recommendation and/or Proficient or Advanced on MCAS**

GEOMETRY 1A (MA2A3)	1	10-12	ED	5	3
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This is the first semester of a two semester course. It would include points, lines, and angles in the plane; parallel lines and transversals; coordinate geometry; triangles and quadrilaterals; congruency; transformations; proportion and similarity; the Pythagorean theorem; perimeter and area; circles and spheres.

MATHEMATICS DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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GEOMETRY 1B (MA2B3)	1 and 2	10-12	ED	5	3
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The second semester of Geometry is a continuation of the first semester course and includes a review of the five MCAS strands as well as an introduction to proof and solid geometry.

GEOMETRY Honors (MA234)	1 or 2	9-10	ED	5	4
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In this level 4 Honors course, students investigate the world of plane and solid geometry, and explore and apply plane and solid shapes in everyday life, and learn more of the skills necessary for problem

solving, calculator usage, and applications, as well as logic. They study points, lines, and angles in the plane; using proofs, parallel lines and transversals; coordinate geometry; triangles and quadrilaterals; congruency; transformations; proportion and similarity; the Pythagorean theorem; perimeter and area; circles and spheres; solid geometric figures. **Prerequisite: Algebra 1.**

ALGEBRA II (MA333)      1 or 2            10-12            ED            5            3  
 In this course, students will study expressions, equations, and functions; properties of real numbers; solving, graphing, writing linear equations, functions, and inequalities; exponents and exponential functions; polynomials and factoring; quadratic equations and functions; radicals and geometry connections; rational equations and functions; probability and data analysis. **Prerequisite: Geometry**

ALGEBRA II Honors (MA344)            1 or 2      10-12      ED      5      4  
 Algebra II (Honors) is the first of two math courses designed to meet the broader standards recommended by the National Council of Teachers of Mathematics. Students will study expressions, equations, and functions; properties of real numbers; solving/graphing/writing linear equations and functions and inequalities; systems of equations and inequalities; polynomials and factoring; quadratic equations and functions; radicals and geometry connections; rational equations and functions; and probability and data analysis. They will learn the concepts and skills necessary to succeed in higher level mathematics courses such as Pre-calculus and learn more of the skills necessary for problem solving, calculator usage, and applications. **Prerequisite: Geometry or Geometry 1B.**

PRE-CALCULUS Honors (MA354)            1or 2      10-12      ED            5            4  
 Pre-Calculus (Honors) is the second of two courses designed to meet the broader standards recommended by the National Council of Teachers of Mathematics. Students will learn how to apply the process of mathematical modeling to real-world situations in areas such as business, economics, biology, engineering, chemistry, physics, music, and psychology. The course will concentrate more heavily on the transcendental functions, which are the non-algebraic functions that are the building blocks for calculus. After completing this course, students should be well prepared for advanced placement courses and the study of mathematics in college. **Prerequisite: Algebra II.**

MATHEMATICS DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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ADVANCED TOPICS IN MATHEMATICS (MA363)	1 or 2	12	ED	5	3
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The purpose of this course is to expand mathematical understanding gained from Algebra 1, 2, and Geometry and apply it to topics in higher order mathematics. Some of the topics covered will be Sequences and Series (both arithmetic and geometric), Properties of Functions, Discrete Mathematics. The course will focus on functional understanding of mathematics in terms of numerical, algebraic, graphical, and analytical representations. This functional understanding will be gained through problem solving and exploration **Prerequisite: Algebra II**

MATH WORKSHOP MCAS (MA312) 1 11 - 12 ED 5 2  
 This course is designed for students who have failed the mathematics MCAS Test or Retest. The class will meet every day for one semester and will count as one year of the Mathematics graduation requirement. The course will follow the Massachusetts Mathematics Curriculum and will specifically prepare students for the MCAS Mathematics Retake Tests. Course material will be individualized for student needs where appropriate. Materials are aligned with DESE Next Generation Standards to prepare for the possibility that a portfolio needs to be submitted to fulfil grade 10 MCAS requirements.

AP STATISTICS (MA335) 1 or 2 10-12\* ED 5 5  
 This course follows the syllabus recommended by the College Board for the Advanced Placement Program in Statistics and prepares the student for the AP Exam. **Prerequisite: Algebra II. It is the school's expectation that students taking this AP course will participate in the AP Exam.**  
**\*Students in grade 10 require parent permission as well as approval by the department coordinator and the principal.**

AP CALCULUS AB (MA435) 1 or 2 11-12 ED 5 5  
 This course follows the syllabus recommended by the College Board for the Advanced Placement Program in Calculus AB and prepares the student for the AP Exam. **Prerequisite: Pre-Calculus. It is the school's expectation that students taking this AP course will participate in the AP Exam.**

FINANCIAL ALGEBRA (MA373) 1 or 2 11-12 ED 5 3  
 This course offers the opportunity for students to build on prior knowledge of algebraic math concepts and use them in real-world financial situations. It then requires students to use advanced math in topics such as functions, regressions, limits, exponential functions, linear/quadratic systems and more, to analyze how finance works. The course covers six financial areas: Investing, Banking, Credit, Income Taxes, Insurance, and Household Budgeting. The practice problems and projects are based on real-life scenarios. Students will also be using technology to create spreadsheets, charts, and presentations to demonstrate mastery of each area. **Prerequisite: Algebra II**

DUAL ENROLLMENT ON-LINE (GCC) MAT 117  
 MATHEMATICAL PROBLEM SOLVING (MA444) 1 or 2 11-12 ED 5 4  
 Provides students in the liberal arts with a foundation to mathematical reasoning and quantitative skills in decision making processes. Students focus on ideas rather than techniques as they implement problem solving strategies. The course introduces students to topics that might include, but are not limited to mathematical modeling, graph theory, the mathematics of social choice, growth and symmetry, descriptive statistics, and probability. **Prerequisite: Qualifying Accuplacer Test Score.**

## MUSIC DEPARTMENT

**Philosophy and Objectives:** Music is a unique and deeply meaningful aspect of human life and development and as such, music education is a vital component of the development of every student. By educating youth about what they hear around them, they will develop a better understanding and appreciation of not only what they hear, but also how it fits in their lives and communities, prompting them to make relevant connections to all facets of their society and culture. Music is a natural means of non-verbal expression and through music students have a unique and creative way to express

themselves. The music department strives to offer a variety of classes that will educate students about music so that they have the tools to reach their full potential.

Marking System: Numerical grades are awarded on the basis of criteria summarized as follows: “90-100,” indicating maximum participation in the program, growth, and effort; “80-89,” indicating good effort, almost total participation, and reasonable growth; “70-79,” or lower, indicating only average, or less than average, participation and growth, and a lack of effort. Music Department students are not marked on the basis of their natural talents (an excellent voice, for instance) but on their demonstrated desire to learn, their participation in the program, and performance criteria.

Course Offerings: Grades 9-12

These courses count toward the graduation requirement in the arts.

MUSIC DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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BAND (MU112)	1 or 2	9-12	EOD	2.5	2
<p>This course offers performance based music training and experience in a wide range of instrumental styles. The High School Band will perform at concerts, recitals, and various school and community events several times each semester including, but not limited to the annual winter and spring concerts, the town of Orange’s Harvest Parade, Lip Sync competition, the Homecoming Parade, the Veterans Day Assembly, designated football games, the annual pep rally, the Thanksgiving Day football game, Memorial Day, and commencement exercises. Repertoire up to and including level 4 in difficulty will be studied, and there will be individual or small group performance opportunities on a regular basis. Students wishing to take this class at the honors level 4 may do so if they fulfill a mentoring requirement and perform in an honors level recital.</p>					

HONORS LEVEL BAND (MU114)	1 or 2	11-12	EOD	2.5	4
<p>This course is offered to highly-motivated instrumental students. Students will have all the responsibilities of MU112 Band and have honor level expectations. Students will develop and pursue self-initiated and self-directed coursework such as, but not limited to, ensemble management, music arrangement and directing. Students are also required to attend multiple after school ensemble programs. Students must be independent and self-motivated. <b>Prerequisite: Prior approval by the band director.</b></p>					

MUSIC DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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CHORUS (MU122)	1 or 2	9-12	EOD	2.5	2
<p>Chorus offers students a performance experience in a wide range of musical styles representing diverse time periods and cultures. Each semester includes pieces in both English and foreign languages, in both accompanied and a cappella settings. Ensemble and individual skills including vocal technique, music</p>					

reading, analysis, and listening/blending will be stressed at all times. Students will be expected to perform at a winter and a spring school concert in addition to our Veterans Day assembly and at other school and community events.

JAZZ LAB (MU132)	1 or 2	9-12	EOD	2.5	2
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Jazz Lab is a performance ensemble with a strong emphasis on arrangement, improvisation, composition, and other small group ensemble skills. As such, learning and using the concepts of music theory are integral to success in this ensemble. Each member of the group has his/her own parts and responsibilities in each arrangement and many of the details are worked out cooperatively during rehearsal. Written parts, chord charts, and "head arrangements" will be utilized; repertoire is drawn from a wide range of sources and time periods within the jazz tradition, and the ensemble typically composes one or more original pieces each term. Melodic improvisation using diatonic, pentatonic, and modal structures is explored, while chord theory, rhythm study, and other essential elements of jazz are presented and studied in the context of the repertoire. The Jazz Lab performs at Parents' Night, the winter and spring concerts, and at various other school and community venues. A strong foundation of playing skill on an instrument and permission of the instructor is required for enrollment in this course.

STREET PERCUSSION ENSEMBLE (MU282)	1 or 2	9-12	EOD	2.5	2
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This course will serve as an entry-level performing ensemble for high school students with little or no previous study in music reading. Through the medium of a percussion ensemble, students will learn to read music and play a variety of percussion instruments. (Buckets, cans, trash barrels) The class will culminate in a performance or recording of the ensemble.

GUITAR AND PIANO WORKSHOP (MU212)	1 or 2	9-12	EOD	2.5	2
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In this class students will develop basic to advanced skills on guitar and/or piano, including (but not limited to) basic chording and scales, pop music structures and progressions, jazz and blues structures and scales, Classical music repertoire and structures, and elements of music theory to support these competencies. Students will have broad choices available in terms of music and styles studied and may choose to work in small groups or independently. This class can accommodate students at any level, and there is no prerequisite. Students may take this class multiple times if they are showing growth and improvement. This course is not designed as a performing ensemble but students in this class may create or be brought into performance situations to demonstrate the skills and competencies developed in class. In-class performance will be part of the overall assessment process.

**PHYSICAL EDUCATION DEPARTMENT**

Philosophy and Objectives: Physical Education is an integral part of the total educational experience. The physical education department strives to offer the student a variety of activities with an opportunity to use and develop physical skills in a supervised environment, to develop sound social and civic skills, such as respecting others, expressing emotion appropriately, and decision making skills in all classes. The department believes that skills thus acquired can be used to participate in a variety of sports and



leisure-time activities throughout the student's life. The program is designed to help the student attain desirable levels of physical fitness that can be maintained through active participation in sports and fitness activities. Self-confidence, initiative, and a feeling of personal worth as well as good health habits for life-long fitness are developed through participation in a Physical Education program that can help the student cope with stress. Opportunities for leadership and cooperation can be developed through the practice of teamwork.

Marking System: Each activity grade is composed of an evaluation of the student's achievements in four areas: skill as determined from skill testing and playing ability; knowledge as demonstrated in playing and game situations and in written tests; on task participation (student is actively engaged in the class, respectful of others and the equipment and facilities); and attitude, as demonstrated by concern for proper attire, promptness, care of equipment, and making up missed classes.

Course Offerings Grades 9-12, split block with Health, 42 minutes each.

PHYSICAL EDUCATION DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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PHYSICAL

EDUCATION (PE111/PE121)	1 and 2	9-12	EOD	1.25	1
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The physical education program offers a selection of team and individual sports to encourage the development of physical fitness, recreational and life skills for beginners through advanced participation. Students elect two co-educational activities per quarter for a total of eight different activities in each school year. An effort is made to encourage the development of many new skills and the further development of existing ones.

Archery	Tennis
Indoor Soccer	Street Hockey
Basketball	Self Defense
Touch Football	Lacrosse
Holistic Health/Stress Reduction	Field Games
Dance (Ballroom/African/ Country	Frisbee Games
Line/Party/Square/ Folk)	Bicycling
Pickleball	Cross Country Running
Badminton	Orienteering (Map & Compass)
Low Adventure	Speed-A-Way
Softball	Aerobics (multiple levels)
Strength and Conditioning	High Adventure/Climbing Wall
Recreational Games (Horseshoes, Bocce,	Health Related Fitness Testing: Postural
Ping-Pong, Bowling, Shuffleboard)	Screening & Vision/Hearing Screening
Walking for Cardiovascular Fitness	Coordination Potpourri (Juggling)
Golf	Volleyball

SCIENCE DEPARTMENT

Philosophy and Objectives: The primary objective of the science department is to provide a sound educational experience and to promote the student's understanding of self and the environment. Other aims, in order of importance, are (1) to teach an appreciation of technology in the modern culture and to develop a philosophical and historical approach to science along with the development of a body of factual scientific knowledge and (2) to train and encourage students to use inquiry and the scientific method in solving problems, not only in the classroom, but in their everyday living experiences as well.

Marking System: Grading in the science department is on the basis of the accumulation of points. Each item of a student's work is assigned a point value determined by the teacher. When a piece of work is graded, the marks placed on it indicate the point value of the item (that is, the maximum number of points that could have been earned on the project) and the number of points actually earned by the paper in question. At the discretion of the teacher, an equivalent letter grade may also be assigned. At any one time, then, a student's grade is determined by dividing the total number of points she or he has accumulated by the number of points possible. In the event that it is found desirable to adjust the distribution of grades within a class, the teacher may substitute an appropriate divisor in place of the total number of possible points. Any such adjustment must be applied consistently to all students within a class.

The determination of a student's term grade is based on an evaluation of all types of work, indicative of the student's achievement in the course. The following items are ordinarily considered: announced and unannounced quiz scores, test scores, homework, class work, laboratory reports, notebook and/or laboratory notebook, required and optional projects, required and optional reports, oral recitations and classroom participation, and the teacher's judgment of a student's ability and willingness to work. Not all of the items listed will be appropriate to all courses, and additional items might have to be included for some courses.

Course Offerings: Grades 9-12

(L) = Life Science (P) = Physical Science

SCIENCE DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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(P) INTRODUCTION TO PHYSICAL SCIENCE (SC123) (LAB)	1 or 2	9-12	ED	5	3
This course is designed as a laboratory and math oriented approach to the Physical Sciences. Students will study energy, motion, electricity, and the atomic nature of matter. Relevant evidence is to be developed by the student through group laboratory work, discussions, and laboratory reports. <b>Passing this course is a graduation requirement.</b>					

(L) BIOLOGY (SC273) (LAB)	1 or 2	10-12	ED	5	3
This course is designed to cover the structure and function of living things and their relationships to each other by means of lecture, discussions, and a laboratory program. The course includes a cellular and a chemical approach to the subject and leads to the study of genetics. <b>Prerequisite: Introduction to Physical Science</b>					

SCIENCE DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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(L) HONORS BIOLOGY (SC234) (LAB)	1 or 2	10-12	ED	5	4
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Honors Biology offers the science-oriented student a chemical approach to biology through a laboratory-centered curriculum. In it the student is encouraged to work at his or her maximum level in studying the structure and function of living things and their relationships to each other. This course is a prerequisite for all those who intend to take Advanced Placement Biology at a later date. Instruction approaches the AP level and several laboratory experiences are AP required labs. Additionally, students are required to participate in Mahar's Science Fair.

**Prerequisite: Introduction to Physical Science**

(L) BIOLOGY II (SC213) 2 10-12 ED 5 3  
 This course is designed to afford the student an opportunity to better familiarize themselves with the various biological concepts and principles that are addressed in both the Biology and Honors Biology classes. The program will be directly tied to the state frameworks and standards for high school biology with the expressed intent of correcting any previous misunderstandings or misconceptions about the biological issues being addressed. **Prerequisite: Successful completion of either Biology or Honors Biology, but did not pass MCAS biology test.**

(L) PHYSICS  
 (SC473) (LAB) 1 or 2 11 or 12 ED 5 3  
 The course offers a straightforward approach to the study of the basic concepts of physics. The central themes to be developed in this course include Motion and Forces, Conservation of Energy and Momentum, Heat and Heat Transfer, Waves, Electromagnetism, and Electromagnetic Radiation. Conservation laws are stressed throughout. The course plan stresses an emphasis on problem solving with extra attention given to math instruction as needed. **Prerequisite: Biology/Honors Biology, and completion of, or concurrent enrollment in Algebra II.**

(L) HONORS PHYSICS  
 (SC434) (LAB) 1 or 2 11 or 12 ED 5 4  
 This course is designed for the student who has above average interest and motivation and the ability to work in science. Major topics to be covered include Motion and Forces, Conservation of Energy and Momentum, Heat and Heat Transfer, Waves, Electromagnetism, and Electromagnetic Radiation. Particular emphasis will be placed on problem solving. Laboratory work is done consistent with the topics covered. Additionally, students are required to participate in Mahar's Science Fair. **Prerequisite: Biology/Honors Biology and Algebra II**

SCIENCE DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
(L) CHEMISTRY (SC373) (LAB)	1 or 2	11-12	ED	5	3

Chemistry is designed for the student who is not as strong in mathematics as an Honors Chemistry student. The program is primarily lecture material, further developed by laboratory exploration and demonstrations. The topics studied are similar to Honors Chemistry with the instructor helping in making mathematical calculations. **Prerequisite: Algebra I, and Biology/Honors Biology.**

(L) HONORS CHEMISTRY  
 (SC324) (LAB) 1 or 2 11-12 ED 5 4  
 Topics covered include atomic theory, matter and energy, bonding, formulas and equations, the periodic table, electron configuration, moles, stoichiometry, solids, liquids, gases, solutions, acids-bases-salts, and equilibrium. Each topic will involve mathematical computations with an emphasis on using dimensional analysis as a method of solving problems. Conducting laboratory investigations and writing lab reports are an integral part of this course. Additionally, students are required to participate in Mahar's Science Fair. **Prerequisite: Algebra II, and Biology/Honors Biology.**

(L) AP CHEMISTRY  
 (SC425) (LAB) 2 11-12 ED 5 5  
 This course is designed for students who have a keen interest in chemistry and plan to pursue a science major in college. It consists of a rigorous program using a freshman college text and will prepare students to take the AP Chemistry exam. Topics covered include acids-bases-salts, equilibrium, thermodynamics, oxidation-reduction reactions and electrochemistry, kinetics and rates of reactions, and nuclear chemistry. The laboratory component of the course will involve work in the above areas. Laboratory techniques and safety practices will be heavily stressed. Pre-course work will be required. **Prerequisite: Passing Honors Chemistry with a grade of 80% or higher, or by permission of the instructor. It is the school's expectation that students taking this AP course will participate in the AP Exam.**

(L) AP BIOLOGY (SC445) (LAB) 1 or 2 11-12 ED 5 5  
 This biology course is offered for the benefit of students who wish a vigorous extension of their biological knowledge. A college text, Campbell's Biology, will be the source of most information. Any participant should be a very good reader and a dedicated student. The content of the course will involve units of study on the chemistry of life, the cell, genetics, evolution and ecology. Laboratory work will be a vital and interesting part of the course. Each student will be required to take the College Board AP Biology exam in the same year the course is taken. **Prerequisite: Biology/Honors Biology and Chemistry/Honors Chemistry although Chemistry may be taken concurrently. It is the school's expectation that students taking this AP course will participate in the AP Exam.**

SCIENCE DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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(L) ENVIRONMENTAL SCIENCE

(SC333) 1 or 2 11-12 ED 5 3  
 This program provides the students with basic knowledge and skills in the areas of soils, aquatics, wildlife, forestry, and current environmental issues. It is designed to give students the knowledge and skills to pursue additional advanced courses of study as well as preliminary training in related outdoor careers. **Prerequisite: Introduction to Physical Science and Biology/Honors Biology.**

(L) AP ENVIRONMENTAL SCIENCE  
 (SC465) 1 or 2 11-12 ED 5 5  
 Advanced Placement Environmental Science is designed to be the equivalent of a one-semester, introductory college course in environmental science. Students will study and analyze environmental topics from a scientific standpoint, as well as from a sociological and political perspective. Specifically, students will learn concepts and methodologies required to understand the interrelationships of the natural world and environmental problems that arise naturally and from human actions, as well as solutions for resolving or preventing such issues. **Prerequisite: Introduction to Physical Science and Honors Biology. It is the school's expectation that students taking this AP course will participate in the AP Exam.**

(L) ANATOMY AND PHYSIOLOGY  
 (SC 353) (LAB) 1 or 2 11-12 ED 5 3  
 This course analyzes the structure and function of cells, tissue and organ systems. Focus is placed on the muscular, skeletal and nervous systems as they relate to human movement and homeostasis. Other systems covered include the cardiovascular, respiratory, digestive and urinary systems. Selected topics in human development and genetics are also discussed. Prerequisite: Biology/Honors Biology

(L) HONORS ANATOMY  
 AND PHYSIOLOGY (SC454) 1 or 2 11 and 12 ED 5 4  
*Honors Anatomy and Physiology* is a challenging course focusing on the structure and function of the human body systems. Topics covered will include the orientation, organization and names of the various parts of the body, as well as the relationship between systems as the body seeks to maintain homeostasis. Clinical connections and case studies will be used to apply accumulated knowledge and to make real-world connections about the challenges currently faced by the health care professionals. There will also be the opportunity for bioengineering model making and experimentation as all Honors A&P students are required to participate in the Mahar Science Fair. This course is designed for, but not limited to, students who plan to enter careers that require extensive knowledge of human anatomy and physiology.  
**Prerequisite: Honors Biology or AP Biology, Teacher discretion.**

SCIENCE DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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DUAL ENROLLMENT, ONLINE (GCC) BIOLOGY

BIO132 LIFESTYLE, HEALTH, AND MEDICINE (SC544) 1 or 2 11-12 ED 5 4

An investigation into the impact of lifestyle on the human body with an emphasis on the treatment of lifestyle related disease. Topics include an overview of physiology, metabolism, stress, nutrition, and exercise. Topics relate to the treatment of obesity, heart disease, hypertension and type II diabetes. Students apply class knowledge to emerging trends in the business of medicine.

**Prerequisite: Qualifying Accuplacer Test Score.**

SOCIAL SCIENCES DEPARTMENT

Philosophy and Objectives: The primary goal of this department is to help students understand people and their relationships with their natural environment and with other human beings. Through the study of the social sciences students will become better-informed individuals and thus, more effective members of the various groups in which they perform. The Social Sciences are selected from many related disciplines including: history, geography, psychology, sociology, and global studies.

Marking System: The Social Sciences Department uses a system of points earned to determine grades. Each test, quiz, report, map, project, etc., is assigned a point value, which is the maximum number of points that can be earned on that piece of work. The student’s mark for each piece of work is either the same as, or a percentage of, that point value; and in any given quarter his or her grade is determined by the accumulated scores expressed as a percentage of the total of all point values.

Course Sequence:

All grade 9 will take U.S. & The World I (1790-1865).

All grade 10 students will take U.S. & the World II (1865 - 1945).

All grade 11 students will take U.S. & the World III (1945 - Present).

Course Offerings: Grades 9-12

SOCIAL SCIENCES DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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US AND THE WORLD I (SS513) 1 or 2 9 ED 5 3

US and the World I is a study of U.S. and world history from approximately 1790 to approximately 1865 concentrating on the study of the development of U.S. society from a small, isolated agrarian and commercial society into a much larger and increasingly industrialized nation that reached world power status by the end of the 19th century. Major topics include Revolutions in America, Europe, and South America, political democratization, westward expansion and impact on neighboring countries, the economic growth in the North and the South from 1800-1860, social, political and religious changes from 1800-1860, and the Civil War and Reconstruction.

SOCIAL SCIENCES DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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US AND THE WORLD II (SS613)	1 or 2	10	ED	5	3
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Students will analyze the global consequences of the American Civil War and analyze America's Industrial Revolution and our growing role in diplomatic relations. Students will study the goals and accomplishments of the Progressive movement and analyze the global impact of the Great Depression and New Deal. Students will also learn about the various factors that led to America and the world into both world wars and what the consequences of these events had on our own nation as well as others. **Prerequisite: US and The World I or World History.**

US AND THE WORLD II HONORS (SS614)	1 or 2	10	ED	5	4
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Students will analyze the global consequences of the American Civil War and analyze America's Industrial Revolution and our growing role in diplomatic relations. Students will study the goals and accomplishments of the Progressive movement and analyze the global impact of the Great Depression and New Deal. Students will also learn about the various factors that led to America and the world into both world wars and what the consequences of these events had on our own nation as well as others. **Prerequisite: US and The World I or World History.**

US AND THE WORLD III (SS713)	1 or 2	11	ED	5	3
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Students will analyze the causes and consequences of America's entry into World War II as well as the consequences of World War II on American life as well as the world. Finally, students will study the causes and course of the Cold War, its global impact, and the important economic and political changes during the Cold War. Students will also study movements demanding equality and fair representation in government/society around the world, including the Civil Rights movement, and recent events and trends that have shaped modern-day America. Finally, students will analyze the global war on terror and how lives have been changed since 2001. **Prerequisite: US and The World II, or US and The World II Honors, or US History I, or US History I Honors.**

US AND THE WORLD III HONORS (SS714)	1 or 2	11	ED	5	4
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Students will analyze the causes and consequences of America's entry into World War II as well as the consequences of World War II on American life as well as the world. Finally, students will study the causes and course of the Cold War, its global impact, and the important economic and political changes during the Cold War. Students will also study movements demanding equality and fair representation in government/society around the world, including the Civil Rights movement, and recent events and trends that have shaped modern-day America. Finally, students will analyze the global war on terror and how lives have been changed since 2001. **Prerequisite: US and The World II, or US and The World II Honors, or US History I, or US History I Honors.**

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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AP US HISTORY (SS375)	1	12	ED	5	5
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AP U.S. History is designed for those students who desire a college level study of U.S. history from 1776 to the present concentrating on the development of the United States as a major world power and its economic and societal influence on the rest of the World. Major topics include: American Revolution, Civil War, Industrial United States and its emerging role in international affairs, the Progressive Reform Movement, World War I, the New Deal, World War II, the Cold War, the American post-war economy, and contemporary United States. This course will be a test prep course with the development of analytical skill, comparative analysis, and writing of Document Based Questions. The College Board AP exam must be taken during the same academic year in which the course is taken.

**Prerequisite: US HISTORY I HONORS, US HISTORY II HONORS and summer work between Junior and Senior years. It is the school's expectation that students taking this AP course will participate in the AP Exam.**

WORLD WAR II (EOD) (SS1433)	1 or 2	11-12	EOD	2.5	3
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World War II is an elective course designed to provide students a comprehensive study of the causes, events, and implications of the war time era. Topics discussed and analyzed will include the causes of war, military strategies and tactics, technological advancements, the major theatres of the war, political and military leadership, the peace process and war crimes. This course will handle most of the geographic areas involved, the major diplomatic, political and military events, and identify the key figures of the war. Prerequisites: U.S. and the World I.

#### HISTORY AND

HOLLYWOOD HONORS (EOD) (SS1134)	1 or 2	11 - 12	EOD	2.5	4
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The purpose of this course is to analyze the historical accuracy, content and context of popular historical films. This course will cover primarily American movies (and possibly some television) spanning several different eras. Students will understand how film and media can be based on true events, but may have altered facts within the story. This course is not one where students will only watch movies. This course seeks to analyze, evaluate, and correct historical flaws, omissions, or outright mistakes. Prerequisites: U.S. and the World I, U.S. and the World II.

#### CONSIDERING

OUR MODERN WORLD (SS443)	1 or 2	11-12	ED	5	3
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This course is a Senior elective that allows students to use their previous historical knowledge in an academic forum to discuss the present world. With a comparative approach, students will gain a deeper understanding of history, government, economies, geography, and societies on a global scale. This course is designed to assist students to apply their historical study to the world in which they live in and to better navigate a complex world which requires global citizenship.



SOCIAL SCIENCES DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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YOUTH AND LAW Honors (SS254)	1 or 2	11 or 12	ED 5	5	4
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The purpose of the Youth and Law course is to engage our students to learn more about the laws of our country. It is not necessarily about cases or statutes; it's about concepts and principles. Essentially the class would be a way of teaching students about their rights but will also focus on the bigger picture which is to teach students about the law in a way they would find engaging, interesting and most of all exciting. The main focus would be to teach about the laws and make them relevant to those learning it.

The Youth and Law course will also provide authentic context that helps students develop the reading, writing, listening, and speaking skills that are central to the Common Core. A Youth and Law course will provide students with opportunities to demonstrate proficiency within the English Language Arts Literacy standards. Students who take the course will participate in activities, discussing and writing about current and controversial issues, engage in simulations of democratic practices, receive important civic instruction, and learn how to devise arguments in support of policies they advocate.

There are many opportunities throughout the Youth and Law curriculum to either bring community resources into the classroom or to travel outside the classroom to connect students to their local legal community as well. While standards alignment is important, so too is the opportunity for students to see real life examples of how the legal community functions. Adding community connections to an already rich legal curriculum can bring the law to life for our students, while giving students the opportunity to consider possible careers in law, law enforcement, and government. *Prerequisites: US and The World I and II.*

DUAL ENROLLMENT ON-LINE (GCC): PRINCIPLES of PSYCHOLOGY 101:

(PSY404)	1 or 2	11-12	ED 5	5	4
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Introduction to the field of psychology. The student considers topics pertaining to mental processes and behavior, such as theoretical perspectives, research methods, biopsychology, states of consciousness, sensation and perception, learning, cognition, memory, development, motivation, personality, and mental disorders. **Prerequisite: Passing Score on Accuplacer Exam**

CIVICS (SS113)	1 or 2	9-12	ED 5	5	3
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Civics is designed to help students acquire a better understanding of the principles and practices of the United States democratic system of government. An emphasis of this course (for upper class students) is to encourage and understand civic engagement. Major topics to be covered include: the foundations of the democratic system of government, the Presidency, Congress, the Supreme Court, state and local governments, politics, and the role of the citizen. **\*This course is a core elective requirement beginning with the class of 2025 and beyond.**

## SPECIAL EDUCATION DEPARTMENT

Philosophy and Objectives: The goals and objectives of the Special Education Department are established by Massachusetts General Laws, Chapter 71-B and federal statute, known as The Individuals with Disabilities in Education Act (IDEA-04). These laws mandate that all children with disabilities ages 3 through 21 are entitled to a free, appropriate public education which provides specially designed instruction and/or related services that are reasonably calculated to meet their unique needs in the least restrictive environment. Special Education services are provided in conformity with an Individualized Educational Program (IEP) plan established as the result of a systematic evaluative process which requires parental consent and involvement.

<u>Title and Code</u>	<u>Semester</u>	<u>Grade</u>	<u>Times per Cycle</u>	<u>Credit</u>	<u>Level</u>
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Specialized Math (SE222)	1 and 2	9-12	ED	5	1
This course is designed for motivationally or developmentally challenged students who require instruction based on their academic needs, their learning styles, and the goals in their Individual Education Plans. It provides specially designed instruction in the mathematics standards. This course includes topics in number sense and operations, patterns, relations and functions, geometry, measurement, data analysis, statistics, and probability. Functional skills such as time, money management and use of data analysis are also developed. This course follows the Massachusetts Curriculum Frameworks and will further prepare students for the grade 10 MCAS.					

Specialized English (SE11L)	1 and 2	9-12	ED	5	1
This course is designed for motivationally or developmentally challenged students who require instruction based on their academic needs, their learning styles, and the goals in their Individual Education Plans. It provides specially designed instruction in the English standards. The course covers basic grammar, vocabulary, composition and literature. Grammar will be presented basically in drill practice. Composition writing will focus on open response, basic paragraph work, and five paragraph essays. Literature focuses on the elements of the short story, poetry, fiction and non-fiction. MCAS practices and test taking strategies are also utilized within the daily routine.					

<u>Title and Code</u>	<u>Semester</u>	<u>Grade</u>	<u>Times per Cycle</u>	<u>Credit</u>	<u>Level</u>
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Inclusion Support Tutorial (SP11L) or (SP110P3)	1 and 2	9-12	ED/EOD	5/2.5	1
The main focus of the Inclusion Support Tutorial Class is for each student to receive the support and specialized instruction they require based on their academic needs, their learning styles, and the goals in their Individual Education Plans. The class provides specially designed instruction in the Curriculum Standards to support each student in developing the skills necessary for them to be successful in their regular education academic classes. Each student's academic needs and level of support required will be different.					

Specialized Reading (SERE1)	1 and 2	9-12	EOD	2.5	1
The specialized reading course is designed to target reading skills and strategies that students may not have developed completely and are necessary for the student to become an effective reader. Informal reading assessment instruments are regularly conducted to determine each student's reading strengths and weaknesses. These assessments and the goals in their Individual Education Plans guide instructional					

emphasis. The course offers instruction and practice in encoding, decoding, spelling, vocabulary development, comprehension, and fluency.

Functional Skills (VO11L)                      1 and 2                      9-12                      EOD                      2.5                      1

This specialized career exploration course is designed so students are able to investigate the world of work in relation to knowledge of self and to make informed career decisions. Students will employ strategies to achieve future career success and satisfaction through understanding the relationship between personal qualities, education and training, and the world of work. Students are introduced to decision making, money management, career choices, resume, application, and interview preparation.

The following programs and related services are offered but not limited to:

Tutorial  
Inclusion Support  
Integrated Programs  
Integrated Learning Center (ILC)  
Individual and Group Counseling  
Speech/Language Therapy  
Physical Therapy  
Occupational Therapy  
Alternative Programs  
Home-Hospital Programs  
Private Day Programs  
Private Residential Programs

## **TECHNOLOGY EDUCATION DEPARTMENT**

Philosophy and Objectives: The Technology Education Department believes that important benefits can be derived from a broad-based technology education program. The program should be adaptable to the individual student's needs and revolve around the multiple applications of technology in today's world. The students benefit from the program by exploring industrial materials and processes and their relationship to our daily lives.

The department feels that a strong work ethic, work habits orientation, and reinforcement of the learning process by means of basic skills training is important in entry level job skills. The student develops appropriate interpersonal skills while working in a simulated laboratory environment that is supportive of individual differences. The Mahar Regional Technology Education student would demonstrate the ability to work cooperatively and to show respect for materials and equipment by expressing oneself through a variety of technological means.

The aim of the department is to employ an interdisciplinary approach using first, the resources available in the several technology education areas and second, cooperation among Technology Education and other school departments. The department's goals are to emphasize work efficiency, responsibility, non-specific skill development, career awareness, and the ability to function effectively in a highly technological society, and to accomplish these goals to the reasonable limit of each student's potential.

Marking System: Students' grades are based on points earned from assignments, quizzes, tests, demonstrated work habits, project grades, and homework. The teacher's personal judgment necessarily enters into all grades based on established criteria for course work.

Course Offerings: Grades 9-12

TECHNOLOGY EDUCATION DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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WOOD ARTS AND

DESIGN TECHNOLOGY (TE112)	1 or 2	9-12	EOD	2.5	2
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This is a progressive course in general woodworking starting with basic hand tools and technology and leading to more complex projects and sophisticated techniques. Initially projects will be assigned to the students. After demonstrating competence students can progress to projects of their own selections. The course will include learning the safe operation of such tools and machines as various power saws, drill press, sanders, router, grinder, other portable power tools, wood burning tools, carving tools, and hand tools. Other topics covered include wood joints, wood classifications, refinishing of furniture, sharpening of tools and the maintenance of various machines. Supplemental technology activities will be incorporated such as basic robotics, K'NEX and Lego/Logo designing and engineering systems.

**This course will fulfill the Art or Core Elective graduation requirement.**

DRONEBOTICS (TE373)	1 or 2	9-12	EOD	2.5	3
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This class is intended to introduce students to unmanned aerial vehicles (UAVs); what they are, how they work, and the legal requirements for safely operating a UAV. The primary focus of the course is a career readiness component designed to prepare eligible students (must be 16 years or older) for the FAA remote pilot license exam. Students will learn about applicable regulations, operating requirements, flight restrictions, aviation weather, aeronautical decision-making and more. In addition, students will learn aeronautical engineering concepts specific to the flight and proper operating of rotorcraft UAVs. These concepts are taught using a variety of methods including, but not limited to, lecture, research-based projects, hands-on design incorporating the engineering design process, and use of drones in a controlled environment to improve flight control skills.

INTRODUCTION TO ENGINEERING

AND DESIGN HONORS (TE224)	1 or 2	10-12	ED	5	4
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The purpose of this course is to introduce students to the field of engineering; the way engineers think, ask and answer questions. The course will be multidimensional and multidisciplinary with "minds-on" and "hands-on" components. In addition, students will be exposed to various branches of engineering including civil, chemical, electrical, mechanical, industrial, and emerging fields. **Prerequisite: Algebra I and Geometry.**

TECHNOLOGY/

ENGINEERING (TE123)	1 or 2	9-12	ED	5	3
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This course introduces students to various Technology/Engineering concepts and principles, in preparation of the Science and Technology/Engineering MCAS test. Students will examine emerging technologies in the fields of Engineering Design, Construction, Manufacturing, Communications, Transportation, Energy and Power. Students will engage in activity based learning which incorporates the areas of science and mathematics in order to enhance their critical thinking skills to help them solve complex problems. Students are presented background information on selected topics, followed by one

or two explorations and/or experiments. Students are then presented with problems that illustrate those processes. Students are expected to research, design and construct solutions to these problems. This program blends with the “thinking” and “doing” goals detailed in the Massachusetts Science and Technology/Engineering frameworks.

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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INTRODUCTION TO DIGITAL

PHOTOGRAPHY (TE333)	1 or 2	9-12	EOD	2.5	3
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This one semester course will explore digital photography in relation to art. Students will be given assigned specific projects, will be asked to produce their own works of art. Class discussions and lectures will be used in order to have the student better understand the physical, conceptual and theoretical characteristics of the electronic media. Students will be introduced to the basic technology necessary for the production of their art work, as well as learning about the visual arts, how to look at and critique photography, photographic vocabulary, using tools such as framing, composition, light, texture, pattern, lines, and symmetry, depth of field, and distance and perspective. Students will be expected to demonstrate an ability to use the tools competently in the production of their art work, however, the production and analysis of expressive and thoughtful art work is the main objective of this course. **Prerequisite: None (Lab) Please note, this course can be taken only once. This course will fulfill the Art or Core Elective graduation requirement.**

MAKER (TE363)	1 or 2	9-12	ED	5	3
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This course will be built around the maker concept of design, build, test, reflect. The curriculum will consist of real world applications of the engineering design process to bring something from an idea to a physical or digital product. Students will choose to work on the fabrication of this product in either a group or individually. Groups/Individuals will have progress deadlines (have design done, have proposal done, have all material, have final product, etc.) throughout the course where they will discuss & design future plans as well as reflect on their work. At the end of the semester students will present their final product at the Mahar Science Fair/Makerspace Exposition. **Students may elect to take this course multiple times only with permission of the instructor and if space is available. Priority will be given to first-time students.**

INTRODUCTION TO

GRAPHIC DESIGN (TE343)	1 or 2	9-12	EOD	2.5	3
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This one semester course provides students with the creative, technical and communication skills required in one of today’s exciting new fields. Students who elect to take this course will learn to solve visual communication problems through a comprehensive program of study that incorporates basic design principles, color theory and typography, and advanced production techniques. Since graphic design is an aesthetic and technical discipline, students will learn to apply theories and historical research in the creation of visual and written information. Students in the graphic design class will make use of current technology as an integral part of their visual communication exploration. **Prerequisite: None (Lab) Please note, this course can be taken only once. This course will fulfill the Art or Core Elective graduation requirement.**

## **Title I**

Philosophy and Objectives: The Ralph C. Mahar Regional School Title I Program offers the learner the opportunity to develop and expand the language arts skills that are necessary for personal achievement and intellectual growth. Learning experiences in a safe environment promote the acquisition of new skills needed for success on the ELA MCAS test and in critical thinking, organizing written responses, and strategic reading.

The Title I mission is to provide an individualized supplemental language arts program specific to scoring at the proficient level required on the MCAS. Students will have opportunities to develop their 21<sup>st</sup> century learning skills. This program accommodates varied learning styles and prepares the learner to function in an ever changing world.

Marking System: Grades are based on a system of points earned for each daily assignment, activity, quiz, and/or test, and other means used to demonstrate understanding such as participation/task points. A portfolio assessment instrument is also used annually. The total number of points determines the grade.

Course Offerings: Grades 9-12

### TITLE I DEPARTMENT

<u>Title and Code</u>	<u>Semester</u>	<u>Grade</u>	<u>Times per Cycle</u>	<u>Credit</u>	<u>Level</u>
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TITLE I (CH111)	1 and 2	9-12	EOD	2.5	1
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This course provides supplemental instruction in the areas of vocabulary, comprehension, spelling, listening, grammar, critical thinking, and writing in response to reading. The program is designed to enhance students' skills and promote success on the MCAS test. The classes are set for small group instruction.

## WORLD LANGUAGE DEPARTMENT

Philosophy and Objectives: Learning other languages and understanding the culture of the people who speak them is a 21<sup>st</sup> Century skill that is vital to success in the global environment in which our students will live and work. Culture and language are inextricably intertwined, and studying a foreign language implies studying its corresponding cultures. In addition, through foreign language study, one can begin to understand one's own language and culture more fully. It was with these ideas in mind that the objectives of the World Language Department were established. In the World Language Department, students develop the ability to communicate their thoughts orally and in the written forms of a foreign language. Cultural comparisons enhance students' awareness of themselves as members of a global community. The study of art, history, geography and cultures combine to help students develop an appreciation for and an understanding of cultures found in their communities, in their nation, and in the world at large.

Marking System: Grades are determined by an evaluation of standardized chapter test results, frequent oral presentations, daily quizzes, term projects, homework, on task points and demonstrations of listening comprehension. All grammar courses include a cumulative final exam.

Course Offerings: Grades 9-12

### WORLD LANGUAGE DEPARTMENT

<u>Title and Code</u>	<u>Semester</u>	<u>Grade</u>	<u>Times per Cycle</u>	<u>Credit</u>	<u>Level</u>
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FRENCH I (WL113)	1 or 2	9-12	ED	5	3
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This course is designed for students who are beginning French at the high school level. French 1 students will begin a developmental reading and writing program. Students will be taught how to pronounce the French sounds and to begin the acquisition of speaking, reading, listening and writing skills in the language. Students will learn basic conversational patterns for use in everyday situations. The use of audio and video materials will help strengthen listening skills and promote conversational ability. Students will participate in a wide variety of learning activities and games and will perform skits with classmates. Homework is assigned daily and frequent quizzes and tests are administered. By the end of the course, students' acquired language skills will allow them to discuss simple topics such as family and friends, introductions, favorite activities, and café etiquette. Consistent effort in doing homework and the development of study skills are necessary for success. With a passing grade or with permission of the instructor, students may proceed to French II.

FRENCH II (WL213)	1 or 2	9-12	ED	5	3
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This course follows the same format as French 1. Speaking ability, listening comprehension and pronunciation skills are reinforced through the use of audio and video materials, daily class participation, small group and partner work. Students will be able to conjugate all regular verbs in the present tense, the near future, and are introduced to the past tense as well as the imperative form. Students are

expected to respond in French, and to build and expand conversational skills. Students will continue their work in developmental reading and writing. Homework is assigned daily and frequent quizzes and tests are administered. With a passing grade or with permission of the instructor, students may proceed. Honors French III. **Prerequisite: French I with a passing grade or permission of the instructor is required.**

WORLD LANGUAGE DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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SPANISH I (WL133)	1 or 2	9-12	ED	5	3
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This course meets the needs of high school students, grades 9-12, beginning the study of Spanish. Emphasis is on developing oral proficiency and listening comprehension. Reading and writing skills will reinforce oral and listening skills. The primary grammatical emphasis is on the present tense of verbs. Games, projects, and videos will guide the study of Hispanic influences and cultures in the U.S., Latin America, and Spain. Homework is assigned daily and frequent quizzes and tests are administered. Active participation is a key component of the course. Consistent effort in doing homework and the development of study skills are necessary for success. With a passing grade or permission of the instructor, students may proceed to Spanish II. **Prerequisite: None.**

SPANISH II (WL243)	1 or 2	9-12	ED	5	3
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This course is designed for high school students wishing to continue the study of Spanish. The prerequisite course is Spanish I. Emphasis continues to be placed on developing oral proficiency and listening comprehension. Reading and writing skills will be reinforced, and cultural aspects of the language will be introduced regularly. The study of present tense verb forms is continued along with the introduction of reflexive verbs. Simple commands and the preterit tense are also introduced at this level. Games, projects, and videos will guide the study of Hispanic influences and cultures in the U.S. and Latin America. Homework is assigned daily and frequent quizzes and tests are administered. Active participation is a key component of the course. Consistent effort in doing homework and the development of study skills are necessary for success. With a passing grade or permission of the instructor, students may proceed to Spanish III. **Prerequisite: Spanish I with a passing grade or permission of the instructor.**

HONORS SPANISH III (WL334)	1 or 2	9-12	ED	5	4
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The four language skills are developed emphasizing aural/oral communication. This course centers on the present and present progressive tenses, both past tenses, and direct and indirect object pronouns. Students will also be exposed to the subjunctive and future tenses. Extensive vocabulary supplements are used in the development of writing skills. Games, projects, and videos will guide the study of Hispanic influences and cultures in the U.S. and Latin America. Homework is assigned daily and frequent quizzes and tests are administered. Consistent effort in doing homework and the development of study skills are necessary for success. Active participation is a key component of the course. With a passing grade or permission of the instructor, students may proceed to Honors Spanish IV. **Prerequisite: Spanish II with a passing grade or permission of the instructor.**

HONORS SPANISH IV (WL434)	1 or 2	10-12	ED	5	4
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This course continues the study of the past tenses. Oral communication skills are strengthened through frequent oral presentations and daily conversations in the target language. Advanced levels of grammatical structures are introduced, such as complex command structures, the present subjunctive, the present and past perfect, and the future tense. Vocabulary is expanded through supplemental work, including readings. Authentic music CD's are used to reinforce and manipulate the course vocabulary and structures. Games, projects, and videos will guide the study of Hispanic influences and cultures in the U.S. and Latin America. Homework is assigned daily and frequent quizzes and tests are administered. Consistent effort in doing homework and the development of study skills are necessary for success. Active participation is a key component of the course. Daily work will incorporate all previously learned tenses and grammatical uses. With passing grade and permission of the instructor, students may proceed to Honors Spanish V. **Prerequisite: Honors Spanish III with a passing grade or permission of the instructor.**

WORLD LANGUAGE DEPARTMENT

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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HONORS SPANISH V (WL534)	1 or 2	10-12	ED	5	4
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This course provides students the opportunity to develop and refine their speaking and listening skills in the target language. Students will follow an individualized plan focusing on verb tenses and other advanced points of grammar studied in the context of literature, film, music, and conversations. Journals are required in this accelerated language class. Games, projects, and videos will guide the study of Hispanic influences and cultures in the U.S., Latin America, and Spain. Homework is assigned daily and frequent quizzes and tests are administered. Consistent effort in doing homework and the development of study skills are necessary for success. Active participation is a key component of the course. Daily work will incorporate all previously learned tenses and grammatical uses. **Prerequisite: Honors Spanish IV with a passing grade or permission of the instructor.**

AMERICAN SIGN

LANGUAGE I (WL533)	1 or 2	9-12	ED	5	3
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This beginning level course in American Sign Language (ASL) introduces students to the 4th most used language in the United States. Deaf culture and history are integrated into the instruction of the foundation of ASL including grammar, syntax, non-manual markers, vocabulary, fingerspelling and numbers. Students will engage in weekly tests and quizzes, unit performance dialogues, regular written and performance homework assignments, routine lesson interpreting videos, and in-class partner and small group signing activities. These activities will be used to enhance and enrich developing expressive and receptive skills in the targeted language. **Prerequisite: None**

AMERICAN SIGN

LANGUAGE II (WL543)	1 or 2	9-12	ED	5	3
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This course, which is a continuation of American Sign Language 1, allows students to build upon their previously established skills and knowledge of sign. Students will engage in weekly tests and quizzes, unit performance dialogues, regular written and performance homework assignments, routine lesson interpreting videos, in-class partner and small group signing activities, and interpreting a song of their choice. Students will engage in voice-off activities each day, with partners, small group, and full group activities. **Prerequisite: American Sign Language Level 1. Prerequisite: American Sign Language I.**

AMERICAN SIGN

LANGUAGE III (WL553)	1 or 2	9-12	ED	5	3
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This is an advanced level course designed to strengthen the fundamental knowledge of American Sign Language (ASL) at the conversational level. All classes will be conducted in the targeted language of ASL

to further develop both receptive and expressive language skills. Students will engage in visual readiness activities to strengthen receptive skills and appropriate cues, to then progress through a group of targeted lexical items including advanced fingerspelling. Throughout units, contexts will stress the proper use of questions, statements, commands and conversational rules including appropriate attention getting and turn taking. To strengthen students' knowledge of the syntax of ASL, written language activities will be conducted in class, for take home work, and on unit tests and quizzes. In addition to increasing expressive language skills, extensive study pertaining to Deaf culture and the Deaf community will be presented in readings, videos and discussions in ASL. **Prerequisites: American Sign Language I, American Sign Language II.**

### COOPERATIVE EDUCATION PROGRAM

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
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CO-OP IN-SCHOOL (CO321)	1 or 2	11-12	ED or EOD	up to 5	1
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Students perform a variety of tasks to assist teachers, office staff, and cafeteria personnel. Students fill out a CO-OP contract which includes a job description and keep a log of daily activities. CO321 may be taken more than once.

#### CO-OP OUT-OF-SCHOOL

(CO311)	1 or 2	11-12	ED (2 blocks)	10 per semester	1
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Students arrange a contract between themselves and a local employer to replace two consecutive blocks of school. The CO-OP director will assist you in this endeavor. The periods rotate with each marking quarter and student and employer agree that all school hours will be spent working. Credit is equal to two blocks (10 credits per semester) and make-up is not guaranteed in the event of loss of employment. Attendance is a consideration for eligibility, and students must maintain a daily log. Each semester that students are involved in CO-OP, they must take and pass ten additional course credits.

#### INDEPENDENT LEARNING PERIOD

(IL100)	1 or 2	11-12	EOD	0	0
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Independent learning period is an opportunity for 11th and 12th grade students with rigorous coursework (honors and/or AP courses) during the school day to work on current assignments. In order to be eligible for this opportunity, students must meet the following criteria: Have not lost credit in the past due to grades or attendance, have a current GPA of 3.0 or higher, have no discipline record, complete an application process, have parent approval, and have approval by the principal.

## Virtual High School

Title and Code	Semester	Grade	Times per Cycle	Credit	Level
VHS	1 or 2	11-12	EOD 2.5	Varies depending on course	

Online course options for students are available through the Virtual High School platform. This platform provides students the opportunity to take courses that are not otherwise offered by the school.

A Virtual High School (VHS) elective is a course taught entirely through online methods. Instructors are not an educator employed by Ralph C. Mahar, but rather an instructor from *The Virtual High School* program. Consultation with an instructor of a course will be through online measures only.

A VHS course will provide students with the opportunity to earn credits in a particular area of interest which can be counted toward graduation or advancement to the next grade.

All courses taken through VHS are subject to prior approval and authorization of guidance and/or the building principal. The following measures must be in place and adhered to in order to be enrolled in a VHS course:

Guidelines:

- Students must be a junior or senior; unless approved by guidance and administration
- Students must have successfully met all State testing requirements for graduation; unless approved by guidance and administration
- Students must have meet all course and graduation requirement for their freshmen and sophomore year; unless approved by guidance and administration
- Students must be on track for successfully completing all graduation requirements for their cohort graduation year
- Juniors must have a 3.5 GPA or higher; Seniors must have a 3.0 GPA or higher; and the approval of administration or the administration's designee
- Students must have demonstrated the ability to work independently and autonomously - two educator recommendations required to support this claim (minimum one from an academic core course from the current semester)

- Students may not take a VHS course for which an equivalent Mahar course is available; unless approved by guidance administration
- Students may not take more than one VHS course per semester
- Space is limited (approximately 10 VHS courses offered per semester) – preference given to seniors on a first come basis
- Students must complete and submit an application the prior semester with academic and administrative recommendations in order to be considered for enrollment in the upcoming semester.

## **High School/College Dual Enrollment**

“The Commonwealth Dual Enrollment Partnership (CDEP) provides opportunities for Massachusetts high school students to take college-level courses at a discounted price\* and earn credit toward high school completion and their future college degrees. CDEP eases the transition from high school to college, allows students to get a head start on their college careers, and provides meaningful and challenging academic experiences to qualified students who otherwise may not have access to an early college experience. The ultimate goal of CDEP is to increase the population of high school graduates who are college ready.

Student participation in CDEP is at the discretion of the participating institution of higher education, subject to capacity constraints and state appropriation.

*\* CDEP funded students take their first course free of charge or for a nominal fee. Subsequent course fees are set by the institution. Please contact your local public campus to find out what dual enrollment opportunities and funding is available.”*

To be eligible to participate, students must:

- Be Massachusetts residents.
- Be enrolled in grade 9, 10, 11, or 12 in a Massachusetts public secondary school or non-public school, including home school.
- Meet all course prerequisites as required by the participating college or university campus. (Prerequisites are courses that a student must complete before taking a more advanced course in the subject area. For example, before you can take Calculus, you may have to take Algebra I, Algebra II, Geometry, and Trigonometry. A course prerequisite could also include taking a college-level placement exam.)
- Have a minimum cumulative high school GPA of 3.0 or demonstrate their potential for academic success through submission of evidence of steadily improving high school grades, high class rank, special talent, strong grades in the field of the CDEP course, strong recommendations, etc.

- Not have earned a high school diploma or GED.

Consultation between the student’s guidance department at the high school and individual institutions of high education required in order to receive the dual credits.  
 For more information visit: [http://www.mass.edu/strategic/read\\_cdep.asp](http://www.mass.edu/strategic/read_cdep.asp)

### Even/Odd Year Courses

2023-2024 Courses offered (Even Year)	2022-2023 Courses offered (Odd Year)
Art and World Cultures I Bookmaking II Accounting II AP English Language Music Theory Shakespeare Honors Plant Science AP Physics Exploring Computer Science Computer Aided Drafting Design Studio Model United Nations French III Honors French IV Honors Intro to Digital Music	Art and World Cultures II Bookmaking I Dronebotics AP English Literature Drama Creative Writing Laughing Matters Sports Literature Film Analysis I AP Chemistry Youth and Law Honors Intro to Engineering and Design Intro to Graphic Design Considering our Modern World

### Even-Year Courses

#### ART AND WORLD

CULTURES I (AR172)      1 or 2      9-12      EOD      2.5      2

Are you interested in traveling the world? Come visit faraway places...without ever leaving the school! Art and World Cultures I will explore art and visual culture\* from cultures on each inhabited continent through research, presentations, discussions and, of course, hands-on art projects. We will look at cultures and art practices past and present, including the art of

prehistoric times, Japan, China, Africa, Mexico, Panama, Islamic culture and India. Students will learn about the traditions, beliefs and ways of life for each culture and how art fits in. Projects will include mask making, ceramics, painting, drawing, sewing, fabric dyeing and printmaking. Each project will connect traditional art practices with contemporary ideas and frameworks. This course includes cultures studied in grade 8 social science classes. Students will link their previous knowledge with course content. \*Visual culture is anything produced by people that can be looked upon (architecture, decorations, advertisements, clothing, etc.) This course may be taken only once for credit.

BOOKMAKING II (AR142)      1 or 2                      9-12                      EOD                      2.5                      2

This course will focus on the study of bookmaking as an art form. The emphasis is on the book as an integration of historical aspects and the contemporary evolution of the craft. Students will develop skills based on historical principles and techniques, and the artistic expression that follows. A variety of book structures will be assigned. They will include but are not limited to books from around the world, altered books, folded books, and container books. Thematic development of text and imagery will be studied. Although this course is similar to BOOKMAKING I, the content of this course varies in the assigned book structures. This course may only be taken once for credit.

\*ACCOUNTING II (BU413)      2                      11-12                      ED                      5                      3

Students will review arithmetic and accounting skills for operating a business as a proprietorship and as a partnership and then be introduced to accounting procedures for a corporation. They will gain experience in making entries in payroll registers, figuring taxes (income, FICA, state and federal unemployment), completing worksheets, balance sheets, and income statements in detail. Students will use the computer lab to apply many of the skills learned in this course. The use of computer technology in accounting is extended through Excel® spreadsheets, and Southwestern® journals and ledgers. A final exam is given via the computer. Prerequisite: Completion of Accounting I (BU313)

AP ENGLISH LANGUAGE (EN345)      2      11                      ED                      5                      5

Advanced Placement English Language and Composition engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts and in becoming skilled writers who compose for a variety of purposes. The course is aligned with the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards. It is for students capable of doing college-level work in English while they are in secondary school, and who are willing to devote the energy necessary to complete a course more rigorous and demanding than other English courses designed for the college-bound student. Summer reading will be required of students who are signed up for this course. The College Board AP Exam must be taken during the same academic year in which the course is taken. It is the school's expectation that students taking this AP course will participate in the AP Exam.

MUSIC THEORY (MU142)      1 or 2      9-12      EOD      2.5      2

Students in Music Theory will study scales, chords, music harmony and composition. The course will teach students to write musical arrangements in a variety of styles and for different size ensembles. The course may be taken in successive semesters at more complex levels. This class will explore the formal structure of music. Students will analyze music from a variety of genres with a focus on melody, harmonic structure, chords and rhythm. Students will present their analysis and reflect upon their work.

\*SHAKESPEARE (EN173)    1 or 2      9-12      EOD      2.5      3

This elective course is an in-depth study of several Shakespearean plays from the genres of comedy, tragedy, and history. The course will focus on close reading and hands-on activities including improvisations, rewriting of scenes in modern language, pantomime, and the directing and performing of the plays. The course will provide students with an understanding of the thoughts, customs, language, and history of the Shakespearean era. Students will do some research on topics related to the plays being studied. The emphasis is on an in-depth understanding and appreciation of the plays while having fun. Units of study include: (1.) A Midsummer's Night Dream/King Lear; (2.) Twelfth Night/Othello; (3.) The Merchant of Venice/As You Like It. A student may take the course more than once only if the unit of study being offered is different than the one he/she has already taken.

(L) HONORS PLANT SCIENCE (SC354)  
    1 or 2      11-12      ED      5      4

Honors Plant Science is an inquiry based laboratory science course combining botany, horticulture and soil science. Through scientific inquiry, students will discover the changes that occurred in plant anatomy and physiology as plants evolved from the aquatic environment of oceans and ponds, to soil/land based ecosystems. Field research done in collaboration with Harvard Forest in Petersham, offers another opportunity for students to learn laboratory protocol and authentic data collection techniques being used to track changes in the New England forested landscape. On the global and local scale, students will learn the pivotal role plants play not only as the first link in every food chain, but as a means of maintaining a healthy, breathable, sustainable atmosphere. Additionally, students are required to participate in Mahar's Science Fair. Prerequisites: Honors Biology or teacher recommendation.

P)      AP PHYSICS  
    (SC455) (LAB)      1 or 2      11 or 12      ED      5      5

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory electricity including simple circuits. LABORATORY REQUIREMENT: This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices. Students should have completed

geometry and be concurrently taking Algebra II or an equivalent course. Although the Physics 1 course includes basic use of trigonometric functions, this understanding can be gained either in the concurrent math course or in the AP Physics 1 course itself.

**EXPLORING COMPUTER**

**SCIENCE (TE313CS) 1or2 10-12 ED 5 3**

Course will be an introductory course in Computer Science Topics. The course is designed through a National Science Foundation Grant. It is geared towards low-income and minority students to give them access to Computer Science materials. It is recommended by the Association of Computing Machinery and the Computer Science Teachers Association. Full details of the course can be found at <http://www.exploringcs.org>

**COMPUTER AIDED**

**DRAFTING (TE122) 1 or 2 9-12 EOD 2.5 3**

This is a progressive course in graphic representation starting with basic descriptive drafting and visualization. As a student continues to re-elect drafting throughout high school, the student will focus on machine drafting which utilizes the AutoCAD 2014 program, or architectural drafting and design. Various input/output systems such as printers, plotters, image scanners, and digital cameras will be used. Supplemental design and engineering activities and programs will also be incorporated into the course.

**DESIGN STUDIO (TE463) 1 or 2 10-12 EOD 2.5 3**

In the Design Studio, students will combine and deepen their knowledge of the engineering design process and woodworking concepts. Students will be encouraged to develop a project that will meet and fulfill the needs of their school or local community. Working collaboratively, students will develop a conceptual plan, create design documents, evaluate pertinent codes and laws, and finally, build their proposed project. To complete their project, students will use architectural prototyping, CAD Software, woodworking tools, and automated cutting machinery. Students who complete the course should have a deep understanding of the design-build process used by engineering professionals worldwide. Prerequisites: Wood Art and Design (TE112)

**Model United Nations Honors (SSXXX) 1or2 10-12 ED 5 4**

This course offers students with the opportunity to learn how the United Nations and individual countries attempt resolve major issues that are affecting our world today (Global Warming, Nuclear proliferation, terrorism, Globalization, conflicts and war, poverty, etc.). The students will be participating in 5-6 crisis simulations throughout the semester. Students will be placed into groups and will be assigned a role for each crisis. Examples of these roles include: Countries(Germany, China, India, Saudi Arabia, etc.), Multinational Corporations(Facebook, Google, Apple, etc), and other various groups like the United Nations, the Red Cross, and the International Monetary Fund. For each crisis simulation, students will be instructed on what the world crisis is and what is at stake. Students will then have to conduct research on how their assigned country would attempt to deal with the crisis, the goal(s) of the country and to then come up with a well-written and researched game plan to try to put into place during the crisis



simulation. Students will then get together to compete in a simulation in which each and every student advocates for their assigned role using their gameplan. Throughout the simulation, the teacher will provide the class with hidden developments to throw a spin on the crisis simulation which will require the students to think on the fly and change up gameplans turning to second and third options. In the end, students will learn about the following: modern global issues, debate skills, research skills, and problem solving.

HONORS FRENCH III (WL314)      1 or 2      10-12      ED      5      4

The scope of the content is wider in order to help students improve in their abilities to converse, listen, read and write about a greater variety of topics. Students learn and practice the past tense, the near future, and the present tense, and they are introduced to the future and conditional. This course is designed to help students develop their mastery of their emerging language skills so that they will be able to express more complex ideas. In addition to the basic text, students are encouraged to develop increased comprehension of the material both culturally and linguistically through the use of varied French materials. Many role-playing activities are incorporated to simulate actual situations needed in daily French life. Homework is assigned daily and frequent quizzes and tests are administered. Several full-length movies will be viewed. With a passing grade and with permission of the instructor, students may proceed to Advanced Honors French. Prerequisite: French II with a passing grade or permission of the instructor is required.

HONORS FRENCH IV (WL444)      1 or 2      10-12      ED      5      4

This course is intended to prepare students for the study of French at the university level. Students will improve skills in reading, writing, listening, and speaking. Students will develop their grammar skills to an advanced level. In addition to the basic text and extensive grammar study, students may be required to keep a journal, read and memorize poetry, and/or be required to peer teach during the semester. Homework is assigned daily and frequent quizzes and tests are administered. This course is designed for highly driven, self-motivated, independent learners. Prerequisite: Honors French III with a passing grade and permission from the instructor.

#### INTRO TO DIGITAL MUSIC PRODUCTION

(TE323)      1 or 2      9-12      EOD      2.5      3

This one semester course is an introductory digital music production course that explores a variety of equipment, software and production techniques used in the digital production of music. This course includes the study of sequencing, recording techniques, sampling and loop creation, arranging, mixing and editing of the music. With virtual studio technology, there will be an emphasis on electronic keyboards and the utilization of music notation software. The intent of this course is to provide the student with a balanced introduction to the major areas of study within the field of music. Prerequisite: None (Lab) Please note, this course can be taken only once. This course will fulfill the Art or Core Elective graduation requirement.

## Odd-year Courses

### ART AND WORLD

CULTURES II (AR182)      1 or 2      9-12      EOD      2.5      2

Are you interested in traveling the world? Come visit faraway places...without ever leaving the school! Art and World Cultures II will explore art and visual culture\* from cultures on each inhabited continent through research, presentations, discussions and, of course, hands-on art projects. We will look at cultures and art practices past and present, including the art of Mexico, Australia, Haiti/Caribbean, Africa, Mexican Natives, Europe and Japan. Projects will include clay whistles, Mexican/personal shrines, basket weaving, reposes, Ndebele house painting, aboriginal dot paintings, art Nuevo/arts and crafts movement, and Japanese block printing. Each project will connect traditional art practices with contemporary ideas and frameworks.

\*Visual culture is anything produced by people that can be looked upon (architecture, decorations, clothing, advertisements, etc.). This course may be taken only once for credit.

BOOKMAKING I (AR132)      1 or 2      9-12      EOD      2.5      2

This course will focus on the study of bookmaking as an art form. The emphasis is on the book as an integration of historical aspects and the contemporary evolution of the craft. Students will develop skills based on historical principles and techniques, and the artistic expression that follows. A variety of book structures will be assigned. They will include but are not limited to pamphlet stitch, stab binding, folded books, and unusual bindings. Thematic development of text and imagery will be studied. This course may only be taken once for credit.

DRONEBOTICS (TE373)      1 or 2      9-12      EOD      2.5      3

This class is intended to introduce students to unmanned aerial vehicles (UAVs); what they are, how they work, and the legal requirements for safely operating a UAV. The primary focus of the course is a career readiness component designed to prepare eligible students (must be 16 years or older) for the FAA remote pilot license exam. Students will learn about applicable regulations, operating requirements, flight restrictions, aviation weather, aeronautical decision-making and more. In addition, students will learn aeronautical engineering concepts specific to the flight and proper operating of rotorcraft UAVs. These concepts are taught using a variety of methods including, but not limited to, lecture, research-based projects, hands-on design incorporating the engineering design process, and use of drones in a controlled environment to improve flight control skills.

AP ENGLISH LITERATURE (EN455) 2 12 ED 5 5

Advanced Placement English is a course which emphasizes the development of skills in critical reading of literature and in writing about literature and related ideas. The course is aligned with the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards. It is for students who are capable of doing college-level English while they are in secondary school, and who are willing to devote the energy necessary to complete a course more rigorous and demanding than other English courses designed for the college-bound student. The literature will focus on British and World literary pieces. Summer work will be required of students signed up for this course. The College Board AP Exam must be taken during the same academic year in which the course is taken. It is the school's expectation that students taking this AP course will participate in the AP Exam.

DRAMA (EN253) 1 or 2 9-12 EOD 2.5 3

This elective course will provide students with an overview of the history of drama with exposure to a variety of playwrights and techniques. It will also include an in-depth understanding and analysis of several plays through reading and performance. Theater games designed to help students develop their acting skills will be a component of the course. Students will have ample opportunities for improvised and prepared performances. The class is activity-oriented.

CREATIVE WRITING (EN123) 1 or 2 9-12 ED 5 3

With the aid of prompts and literary selections, students will experiment through their own writing with the elements of poetry and prose. The course is aligned with the Massachusetts Curriculum Framework for English Language Arts and Literacy incorporating the Common Core State Standards. Students will have opportunities to develop their 21st century learning skills. Through their poetry they will focus on meaning, voice, and tone as well as meter, musical devices, imagery, and figurative language. Students will experience various forms of prose writing: expression, reflection, direction, persuasion, narration, and description.

LAUGHING MATTERS (EN563) 1 or 2 9-12 EOD 2.5 3

This course offers students the opportunity to explore the various aspects of writing, performing, and producing comedic pieces. We will cover current events and how they are explored, synthesized, and discussed through comedic performance. We will study the writing styles and techniques of a variety of comedians. Students will engage in creating, writing, and performing various comedic performances (live and using video recording and video editing technology). Students will examine the psychological functions of humor. Students will create comedic pieces in various forms and mediums: narrative writing, performance, stand-up, etc.

SPORTS LITERATURE (EN353) 1 or 2 9-12 ED 5 3

The course will explore the use of sports in literature, as well as the literature in sport. Students will read various types of literature including but not limited to: novels, short stories, poems,

magazine/news articles, and blogs. Students will write a variety of works, including but not limited to: responses, essays, blogs, stories, and poems. The class will explore multiple themes including the use of sports in literature, women in sport, losing, sports and social issues, and athletes as heroes. Prerequisite: None

FILM ANALYSIS I (ENXXX) 1 or 2 9-12 EOD 2.5 3

This course is designed to introduce students to film analysis through careful study of the elements of film (e.g. cinematography, lighting, sound design, mise-en-scène, etc.) and across different genres (e.g. drama, action, musical, comedy, etc.). By viewing the film as text, students will critique individual scenes, as well as whole films, and communicate their interpretations through discussion, writing, and video essay. Students will learn the basics of video editing, write scripts, and create publishable video essays that incorporate their knowledge of the course content. This class will meet every other day.

(L) AP CHEMISTRY

(SC425) (LAB) 2 11-12 ED 5 5

This course is designed for students who have a keen interest in chemistry and plan to pursue a science major in college. It consists of a rigorous program using a freshman college text and will prepare students to take the AP Chemistry exam. Topics covered include acids-bases-salts, equilibrium, thermodynamics, oxidation-reduction reactions and electrochemistry, kinetics and rates of reactions, and nuclear chemistry. The laboratory component of the course will involve work in the above areas. Laboratory techniques and safety practices will be heavily stressed. Pre-course work will be required. Prerequisite: Passing Honors Chemistry with a grade of 80% or higher, or by permission of the instructor. It is the school's expectation that students taking this AP course will participate in the AP Exam.

YOUTH AND LAW HONORS (SS254) 1 or 2 11 or 12 ED 5 4

The purpose of the Youth and Law course is to engage our students to learn more about the laws of our country. It is not necessarily about cases or statutes; it's about concepts and principles. Essentially the class would be a way of teaching students about their rights but will also focus on the bigger picture which is to teach students about the law in a way they would

find engaging, interesting and most of all exciting. The main focus would be to teach about the laws and make them relevant to those learning it.

The Youth and Law course will also provide authentic context that helps students develop the reading, writing, listening, and speaking skills that are central to the Common Core. A Youth and Law course will provide students with opportunities to demonstrate proficiency within the English Language Arts Literacy standards. Students who take the course will participate in activities, discussing and writing about current and controversial issues, engage in simulations of democratic practices, receive important civic instruction, and learn how to devise arguments in support of policies they advocate.

There are many opportunities throughout the Youth and Law curriculum to either bring community resources into the classroom or to travel outside the classroom to connect students to their local legal community as well.. While standards alignment is important, so too is the opportunity for students to see real life examples of how the legal community functions. Adding community connections to an already rich legal curriculum can bring the law to life for our students, while giving students the opportunity to consider possible careers in law, law enforcement, and government. Prerequisites: 9th grade World History and 10th U.S History I

#### INTRODUCTION TO ENGINEERING

AND DESIGN HONORS (TE224) 1 or 2 10-12 ED 5 4

The purpose of this course is to introduce students to the field of engineering; the way engineers think, ask and answer questions. The course will be multidimensional and multidisciplinary with “minds-on” and “hands-on” components. In addition, students will be exposed to various branches of engineering including civil, chemical, electrical, mechanical, industrial, and emerging fields. Prerequisite: Algebra I and Geometry.

#### INTRODUCTION TO

GRAPHIC DESIGN (TE343) 1 or 2 9-12 EOD 2.5 3

This one semester course provides students with the creative, technical and communication skills required in one of today’s exciting new fields. Students who elect to take this course will learn to solve visual communication problems through a comprehensive program of study that incorporates basic design principles, color theory and typography, and advanced production techniques. Since graphic design is an aesthetic and technical discipline, students will learn to apply theories and historical research in the creation of visual and written information. Students in the graphic design class will make use of current technology as an integral part of their visual communication exploration. Prerequisite: None (Lab) Please note, this course can be taken only once. This course will fulfill the Art or Core Elective graduation requirement.

#### CONSIDERING

OUR MODERN WORLD (SS443) 1or 2 12 ED 5 3

This course is a Senior elective that allows students to use their previous historical knowledge in an academic forum to discuss the present world. With a comparative approach, students will gain a deeper understanding of history, government, economies, geography, and societies on a global scale. This course is designed to assist students to apply their historical study to the world in which they live in and to better navigate a complex world which requires global citizenship.

