

# *Program of Studies*

## *2013-2014*

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### **Mission**

***The Nashoba Regional High School community works together to achieve high intellectual and ethical standards while discovering and developing the gifts and talents of all. Each member of our school community recognizes his or her role and responsibility in creating a learning environment based upon respect, trust, teamwork and enthusiasm.***

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This Program of Studies booklet has been prepared to guide and assist you in planning your academic program at Nashoba Regional High School. It provides information on the academic offerings, suggested course patterns, course descriptions, and policies affecting the offerings. The curriculum will be continuously reviewed and revised to provide an even stronger program in the months and years ahead.

Parry Graham, *Principal*  
Tracey Calo, *Assistant Principal*  
Brian Cote, *Assistant Principal*

It is the policy of Nashoba Regional High School not to discriminate on the basis of sex, race, color, religion, age, national origin, or sexual orientation in educational programs, activities, or employment agencies. Inquiries regarding compliance may be directed to the Title IX Coordinators at Nashoba Regional High School. Please contact Parry Graham, Principal.

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## Mission Statement

The Nashoba Regional High School Community works together to achieve high intellectual and ethical standards while discovering and developing the gifts and talents of all. Each member of our school community recognizes his or her role and responsibility in creating a learning environment based upon Respect, Trust, Teamwork, and Enthusiasm.

## Academic Expectations for Learning

All Nashoba courses are aligned with our Mission Statement and Academic/Civic/Social Expectations for Learning. Courses are noted by the representative Academic/Civic/Social Expectations for Learning that are reviewed and evaluated within the individual course. The codes are listed below and noted by the codes in each course description.

All Students upon graduating from NRHS will:

**AE1 Acquire, integrate, and apply essential knowledge;**

- 1 Adapt skills appropriate to subject matter and situations
- 2 Apply knowledge to new situations
- 3 Recognize the relevance of what is learned in school to real life

**AE2 Read, write, and communicate effectively;**

- 1 Read and listen carefully for information, understanding, and enjoyment
- 2 Write and speak clearly, factually, persuasively, and creatively in standard English
- 3 Distinguish fact from opinion, identify stereotyping, and recognize bias
- 4 Read, write, and converse in at least one language in addition to English

**AE3 Define, analyze, and solve complex problems;**

- 1 Make careful observations and ask pertinent question
- 2 Seek, select, organize, and present information from a variety of sources
- 3 Analyze, interpret, and evaluate information
- 4 Make reasoned inferences and construct logical arguments
- 5 Develop, test, and evaluate hypothesis
- 6 Develop and present conclusions through speaking, writing, artistic, and other means of expression

**AE4 Study and work effectively;**

- 1 Set goals and achieve them by organizing time, work, space and resources effectively
- 2 Monitor progress and learn from both success and mistakes
- 3 Work both independently and in groups

## Civic and Social Expectations:

All students upon graduating from NRHS will demonstrate personal, social, and civic responsibility: They will:

**C/S 1 Treat others and oneself with respect and appreciate the uniqueness and value of other people and cultures;**

**C/S 2 Understand, accept and demonstrate one's role as a responsible and active member of the community or school;**

**C/S 3 Participate in meaningful community and/or school activities that promote service to others;**

**C/S 4 Cultivate and develop positive social skills in order to minimize conflicts within the community and/or school.**

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## Planning Your Future

Utilizing this Program of Studies you will be making some important decisions regarding your future. Some of you have already given this much thought, have made definite plans, and will continue toward your objective. Others will need to set up a tentative two, three, or four-year program. Whether your final decision is for immediate employment or further education, a high school diploma is a virtual necessity.

The importance of choosing the right program to fill your particular needs, interests, and abilities cannot be stressed enough. Select your subjects only after weighing with great care your interests, special abilities and scholastic record. Evaluate critically the recommendations and suggestions of your parents, teachers, and counselor. Choose subjects that will benefit you directly. Nashoba Regional High School provides the opportunity for all students to select challenging courses and levels with high expectations. Nashoba Regional High School does not “track” students. You and your parents are asked to solicit and consider teacher and counselor recommendations for courses and level placement when considering your selections.

Remember, if you select a course and after two weeks wish to change to another course, grades earned during the time in the course to be dropped will be averaged into the grades of the new course. As such, avoid being influenced by the choices of friends.

At Nashoba Regional High School you will have the opportunity to select your course of studies from different subject areas without being confined to a single curriculum level. You will be expected to include in your program certain subjects that are considered basic to a well-rounded high school education.

The guidance services of the school will help you intelligently choose a course of studies that will enable you to fulfill your ambitions beyond high school graduation. Guidance personnel are available to answer any questions you may have. You should see your guidance counselor for assistance in preparing your new schedule.

*Counselors:* Sue Allaire, Career Counselor  
Sarah Dodd  
Daniel Glover  
Ellin Richardson  
Trevor Short  
Jodi Specht, Director of Guidance

## Admission Policy - District Residents

Any student residing in the district who has successfully completed the eighth grade or its equivalent in any elementary, middle, or junior high school will be admitted to the ninth grade. Students transferring from other schools in advanced grades (10<sup>th</sup>, 11<sup>th</sup>, or 12<sup>th</sup>) will be placed in an appropriate program upon evaluation of their records by the guidance director and the principal.

A student will be considered for admission without having completed the full eight grades upon written request of parents, accompanied by recommendations from local school officials. Such a student must meet any further explicit requirements that may be set by the Nashoba Regional School District Committee.

## Graduation Requirements

There are certain required courses as well as a required overall credit total that must be earned. It will be necessary to plan ahead so that you will have satisfied all graduation requirements by the end of your senior year.

### Courses Required

<u>Subject</u>	<u>Years</u>	<u>Credits</u>
ENGLISH	4 YEARS	16 CREDITS
MATHEMATICS	3 YEARS	12 CREDITS
SCIENCE	3 YEARS	12 CREDITS
SOCIAL STUDIES	3 YEARS	12 CREDITS
LANGUAGES	2 YEARS	8 CREDITS
FINE AND PERFORMING ARTS (Drama, Music, Art, Graphics)	1 YEAR	4 CREDITS
TECHNOLOGY	1 YEAR	4 CREDITS
WELLNESS	4 SEMESTERS	4 CREDITS (1 PER YEAR)

### Minimum Credits Required for Graduation

**90 Credits**

A full year course which meets every day is granted 4.0 credits, a half year course earns 2.0 credits, and a quarterly course earns 1.0 credit.

To receive credit for summer school and night classes, students must have earned a C- or better.

Students must pass the Massachusetts Comprehensive Assessment System (MCAS) tests to receive a high school diploma in the Commonwealth of Massachusetts.

## Transfer Courses

Only courses taught at Nashoba or transferred in from a student's prior high school will be included in the weighted GPA. To be included in Nashoba's class standing, a student must have completed no less than a full year's coursework at Nashoba (i.e., a minimum of 24 credits).

Recognizing that each educational provider offers a specific level of rigor that may or may not be reflected within a course title or level, and because we do not have the ability to objectively and inarguably determine the corresponding Nashoba level, the most advantageous method to represent these courses to colleges is for them to be presented on their originating transcript.

All credits on a student's transcript from a prior educational setting will be converted to Nashoba credits, where each full year course is granted 4 credits and all courses will be recognized. For courses being brought in from non-traditional educational institutes (home school, online, therapeutic, etc.) that have not been awarded credit, credit will be calculated according to the amount of time spent on each course prorated for independently verified instructional hours.

Nashoba recognizes only those educational experiences which have been within an accredited educational institution. Home school programs approved by the LEA are the sole exception.

The practical application to a student who transfers in to Nashoba as an upperclassman will result in the following example transcript entry:

**Minuteman Regional High School**  
Transfer credit 30

As a matter of policy, any outside transcript received by the high school will be forwarded along with Nashoba's transcript for the college's review.

**Proof of Residency/Guardianship:**

When a student is enrolling new to the Nashoba Regional School District, the following conditions must be satisfied. First, either a Purchase and Sale (if new construction, Oct. 1 Occupancy/Building Permit) or a Lease agreement; real estate tax statement, utility bill (that shows actual street address & name) is required to register a student in Nashoba Regional High School. If a student's guardian is not named on the above document, the school must have a notarized statement from the owner/lessee indicating that the guardian and student are current residents of the address indicated (P.O. Boxes will not be accepted).

Proof of guardianship is also required if the guardian is not a parent. Either a DSS statement of custody, foster parent agreement, or a Legal Order of temporary guardianship (attorney/notary seal required) is sufficient. In addition, current immunization records and physical exam reports are necessary. Finally, last year's transcript, which will include historical and current academic grades, is needed if a student is transferring mid-year.

**Nashoba Regional High School Foreign Exchange Student Contract**

Sponsoring organizations shall notify the NRHS Principal and/or Foreign Exchange Student representative (guidance department) no later than May 25th regarding potential Foreign Exchange Students for the forthcoming school year. Each request shall be reviewed by the principal and/or representative. Notification of approval shall be issued to the sponsoring program no later than June 1<sup>st</sup>. NRHS will not be able to accommodate mid-year or semester break transfers into the school.

In order to provide outstanding service and achieve our mission statement goals, Nashoba Regional High School allows **three** Foreign Exchange students per academic year. The principal reserves the right to reduce the number of foreign exchange students based on financial hardships or unforeseen circumstances. Students must be approved by an accredited foreign exchange program. Students are eligible for a maximum stay of one continuous academic year, September through June at NRHS. Students must register prior to the first day of school. Host parents and students are required to be present at the time of registration. Foreign Exchange students must maintain at least a 2.0 grade point average at the end of each semester to remain in good standing at NRHS. Foreign Exchange students who are enrolled as seniors (grade 12) are able to participate in graduation ceremonies and will receive a Nashoba diploma provided that they pass MCAS exams, a US History course, and the NRHS graduation requirements. An 'Honorary Recognition Diploma' will be awarded if the full MCAS requirements or local graduation requirements are not met at the conclusion of the academic year.

**Agreement:**

- 1 Foreign Exchange students will be subject to all rules and regulations governing all students at Nashoba Regional High School
- 2 The program representative is responsible for informing students of any agreements with the program and all rules and regulations.
- 3 Foreign exchange students are not eligible for FREE and REDUCED lunches.
- 4 The following information should be presented for acceptance:
  - a Insurance ( medical and accidental coverage)
  - b Permission to participate in athletics sponsoring organizations must meet MIAA standards.
  - c Physical examination form including shot record and current physical.
  - d If the student wishes to achieve an NRHS diploma, an official English translated transcript from the foreign student's school.
  - e A profile of student and his or her family.
  - f Statement regarding responsibility of host parents for supervision and support of all school activities.
  - g A copy of host family application and host family profile.

## Course Levels

Course levels give students of different abilities opportunities for academic success, appropriate challenge and enrichment. Different levels are geared to specific student characteristics and academic needs. Most elective courses are not differentiated by level and are not included in the weighted GPA to encourage students to explore their interests.

### Honors (HON)

**Honors Level** courses are recommended for students who have demonstrated exceptional academic achievement through a combination of ability and motivation. Instruction will assume that students are able to grasp concepts on initial presentation and will, therefore, emphasize observation, analysis, synthesis, and problem-solving. Students are expected to be able to organize their time, to plan long-term assignments and to seek help when necessary, all on their own initiative. A student recommended for Honors demonstrates the following characteristics:

- Has comprehensive and in-depth understanding of rigorous subject matter
- Has the ability to provide sophisticated solutions to complex problems
- Has the ability to self-assess and learn from mistakes
- Engages in metacognition
- Has the ability to organize time and materials efficiently
- Has the ability to read and understand college level materials
- Has excellent ability to convey complex ideas both verbally and in writing
- Has the ability to easily analyze, synthesize and evaluate information
- Demonstrates intellectual curiosity by exceeding stated requirement

### Advanced Placement Courses (AP)

Within the Honors level, students may participate in Advanced Placement programs. AP classes prepare the student to take AP exams. The AP curriculum is prescribed by the College Board and successful completion may enable the student to receive college credit at some schools. These courses are recommended only for students who have demonstrated exceptional academic achievement through a combination of ability and motivation. Students should have teacher recommendations to enroll in AP classes. In order for a student to receive the AP designation on a transcript, he/she must take the AP exam. If the student chooses not to take the exam, the course will be designated as "Honors" on the transcript.

### Accelerated Level (ACC)

Students who are recommended for this level demonstrate high levels of achievement and motivation. These courses either move at a somewhat faster pace than our college preparatory courses and/or include some additional materials that expand on topics being covered; therefore, more homework can be anticipated both in volume and in degree of difficulty. While these courses provide some practice and repetition in the classroom, it is assumed that students will be able to operate independently with the teacher's direction. A student at this level demonstrates the following characteristics:

- Has a solid understanding of challenging subject matter and the ability to solve a wide variety of problems
- Reads above grade level
- Has the ability to self-assess and articulate areas he/she does not understand
- Will independently seek extra help
- Has the ability to write with few grammatical errors
- Is able to connect what is learned to relevant topics in the world and in real life
- Has developed and utilizes a repertoire of organizational and study skill

### College Preparatory Level (CP)

**College Preparatory Level** courses are recommended for students who have solid levels of achievement and motivation and perform best when there is consistent explanation and repetition as well as structure and support in their instructional setting. College Prep courses incorporate strategies for test taking, study and project planning; these courses provide



sequential directions and steps for activities and projects. A student at the college prep level demonstrates the following characteristics:

- Has a partial understanding of subject matter and the ability to solve basic problems
- Reads at or above grade level
- Does better with structured tasks and guided activities
- Sometimes has difficulty with time management
- Benefits from advanced organizers and study guides
- Needs development of writing skills
- Is still building a repertoire of strategies for organizing work and time
- Benefits from additional time to process information
- Utilizes basic organizational strategies such as keeping a notebook and assignment book but wishes to enhance them
- Needs direction to self-assess and learn from mistakes
- Benefits from a comprehensive grammar review in preparation for college level writing and SAT exams

Within the College Prep level, additional support from special education staff is provided in several co-taught inclusion classes. Students enrolling in these courses benefit from:

- Monitoring of organizational strategies such as keeping a notebook or assignment book
- More frequent opportunities to revise poor work in order to learn from mistakes
- Development of strategies to self-assess
- More time in class to apply learning

## The Registration Process

The purpose of the registration process is to generate interest in the many courses that are offered at Nashoba. After students have selected their courses in the spring, administrators use that information to build a schedule for the following year. For this reason, students must select their courses carefully as *changes must be held to a minimum*.

***Although we would like for all classes to be available, there may be some classes that are not offered due to insufficient student enrollment. In addition, there are often scheduling conflicts which prevent students from taking all their desired courses.*** Therefore, any class with less than 15 student requests will be studied very carefully to determine whether the class will run or not. Also, in some cases, academic levels within a course may be combined.

The program of studies booklet is revised each year to accurately reflect our present course offerings, and to maximize a student's chance of being able to take courses appropriate to their interests and abilities. Should any changes, corrections or adjustments become necessary after this booklet goes to press, we will publish the necessary addendum and make it available in the main office and on the high school web site as the information becomes available.

## Teacher Recommendations

The different levels are geared to specific student characteristics and academic needs. Faculty members give serious thought to both the student and the curriculum in making recommendations and students are encouraged to discuss each level recommendation with their teacher. Historically, the recommendations made by teachers have been the most appropriate placements.

In the event that a student wishes to *override* a teacher recommendation into a more advanced level, there is a process that must be followed and a form will be available with the registration materials. Any student enrolling in a course at an override level is committing to the course for a minimum of 10 weeks. To ensure enrollment and a balanced schedule for all, overrides must be completed in tandem with the course selection process.

Due to the increasing number of summer enrollments, any requests for overrides initiated after Course Request Verifications have been distributed will be held for evaluation until the start of school.

## Drop/Add

*Course changes* involving a subject change (for example Physics to Chemistry, or French to Spanish) elected by the student will be made *for the first three weeks of classes only* and the student is responsible to make up all missed work.

*Level Changes* within the same subject (Accelerated Chemistry to College Prep Chemistry, for example) may be initiated by the student *up to two weeks after the first progress report* for the course. Beyond this point a student is expected to seek extra help from the teacher and additional support from the Academic Support Center, and parents are advised to

consult the teacher for academic and study strategies. Communication and concentrated effort are often the keys to a student finding success at this stage.

If after these significant efforts, both the teacher and the student agree that a level change is appropriate, the student can initiate a schedule change request in guidance.

## Class Standing and Grade Point Average (GPA)

Statistics are reported in a format containing only the weighted and unweighted GPA accompanied by a graph profile. Class standing is reported as: 1<sup>st</sup> percentile, 2<sup>nd</sup> percentile, 5<sup>th</sup> percentile, 1<sup>st</sup> decile – 5<sup>th</sup> decile, 3<sup>rd</sup> and 4<sup>th</sup> quartile. A valedictorian and salutatorian will still be recognized at graduation, based upon seventh semester class standing.

### Weighted GPA

Grades in each leveled course are assigned quality points when computing the weighted measures. Non-leveled courses are not factored into the weighted GPA calculation. The more difficult the course, the greater the number of quality points awarded. The weighted GPA is calculated using the allotted quality points multiplied by the number of credits and the above product is then divided by the total number of credits.

$$\frac{\text{Quality Points} \times \text{Credits}}{\text{Total Credits}} = \text{Weighted GPA}$$

#### Quality Points

Honors	Accelerated	College Prep
A+ 5.00	A+ 4.50	A+ 4.00
A 4.75	A 4.25	A 3.75
A- 4.50	A- 4.00	A- 3.50
B+ 4.25	B+ 3.75	B+ 3.25
B 4.00	B 3.50	B 3.00
B- 3.75	B- 3.25	B- 2.75
C+ 3.50	C+ 3.00	C+ 2.50
C 3.25	C 2.75	C 2.25
C- 3.00	C- 2.50	C- 2.00
D+ 2.75	D+ 2.25	D+ 1.75
D 2.50	D 2.00	D 1.50
D- 2.25	D- 1.75	D- 1.25
F 0	F 0	F 0

### Unweighted GPA

Students receive an unweighted GPA. All classes with letter grades are used in this calculation. Pass/fail grades are not included in the calculation. This GPA is calculated using the allotted points multiplied by the number of credits and the above product is then divided by the total number of credits. Unweighted GPA is on a 4.0 scale.

A = 4.0

B = 3.0

C = 2.0

D = 1.0

F = 0

### Additional Information

1 **Scheduling:** The process begins with the distribution of the Program of Studies and course and level recommendations made by current teachers. Although we do our best to provide every student with every course he/she wishes to take, scheduling conflicts sometimes make this impossible and alternate course choices must be made.

2 **Performance Reports:** Report cards are issued four times a year. In addition, teachers, counselors, and administrators may provide information on performance through letters, PowerSchool Parental/Student Access, e-mail, or telephone calls as necessary.

3 **Formal Records:** A *Temporary File*, containing all school information collected during earlier school years (report cards, transfer reports, test summaries) is maintained for each student. This file is located in the guidance office and may be reviewed by a student or parent upon request for an appointment. In addition, the administration maintains a *Permanent File* for each student, which is a record of courses taken, grades awarded, and credits accrued.

4 **Remember, fall eligibility for athletic and extra-curricular programs is based on a student passing a minimum of 16 credits in four major academic subjects during the previous school year's 4<sup>th</sup> quarter as well as the year end grades.** Eligibility for winter and spring participation is based on the preceding quarter's grades. A student must be passing the equivalent of four full year courses as well as maintaining an overall cumulative average of 60% or more. Credit reduction in a course is considered to be a non-passing grade for eligibility purposes only

5 **Honor Roll** - Only those subjects that meet 5 days a week are considered. Honor roll eligibility is determined as follows:

o Honors

A student must maintain a "B" average to be included in the Honor Roll. If a student receives a "C" in a class that meets five days a week, he/she must receive an "A" in another class that meets five days a week to maintain the "B" average.

o High Honors

A student is awarded high honors when he/she has as many "A's" as "B's" in those classes which meet 5 days a week.

o Highest Honors

A student is awarded highest honors when he/she receives all "A's" in the classes which meet 5 days a week.

6 **Attendance:**

All students are expected to attend school on a regular basis. Under the laws of the Commonwealth of Massachusetts: "Every child between the ages of 7 and 16 is compelled to attend school." At NRHS, pupils 16 years of age or over are also expected to conform to the same rules of attendance.

The Nashoba Regional School District adheres to, and is in full compliance with, Chapter 76 of the laws of the Commonwealth of Massachusetts which defines attendance regulations. Except in cases of illness or other extenuating circumstances, students are expected to be present when school is in session. Family vacations and trips which are scheduled when school is in session are not considered valid reasons for absence. Although teachers will allow students to make up missed assignments, tests, and quizzes, they are not required to prepare work in advance for a vacation related absence. In addition, teachers are not required to re-teach or tutor students when they return from a vacation. Furthermore, the classroom teacher will establish the appropriate timeframe for making up the work. It is the student's responsibility to determine the work which needs to be done when he or she returns to school.

Any student who is absent from school on a particular day will not be allowed to participate in any school activities or dances on that day. (The only exception would be if the absence from school has been authorized by the Principal, or his/her designee, in advance.) A student who is tardy after 9:45 AM or is dismissed prior to 11:15 AM will be ineligible to participate in extra-curricular activities on that day unless the tardy arrival or dismissal has been authorized in advance by the Principal. This rule applies to games, practices, club meetings, rehearsals, dances, and any inter-school competitions. Other special requests for excused absences or the changing of final exams must be cleared in advance by the Principal prior to approval.

A student who enrolls in a course is expected to be present for every class session. A student is allowed **14 unexcused absences total for a year long course (4 credits) and 7 unexcused absences for a semester course (2 credits)**. Students would be permitted **4 unexcused absences for P.E. or any 1 credit course**. Attendance will be reviewed quarterly and each semester and noted on progress reports and report cards. Missing more than half of the class period due to unexcused tardiness will be counted as an absence for the class period. **7 unexcused tardies (tardies without a note from a sending teacher/administrator/staff member) will equal one unexcused absence) will equate to unexcused absences. See the current Student Handbook for the specific ratio.**

A student is required to submit an absence note to the main office within two days of his/ her return to school. Notes do not eliminate/excuse absences, tardies, or dismissals; they indicate parent awareness of the absence. The notes are important documentation should an appeal process be necessary.

Excusable Absences (Formal Documentation Required)

Absences not counted toward the limit of 14 or 7 for semester course:

- o Death in the family (parent, sibling, grandparent, aunt, uncle, niece, nephew, cousin.)
- o Health Professional appointment - formally documented note needed from Physician, Dentist, Optometrist, etc.
- o School sponsored/sanctioned activities: field trips, class meetings, in-school or external suspension, up to 3 college interviews approved by the Guidance Department, Administration, and teachers in advance of the interview/visit
- o Religious Holiday Observance

- Legal/Court appointments- Court note required upon return to school

**Please see the Student Handbook for additional information regarding the attendance policy.**

## **Accreditation Statement**

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

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

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

Inquiries regarding the status of an institution's accreditation by the New England Association should be directed to the administrative staff of the school or college. Individuals may also contact the Association at the following address:

Commission on Public Secondary Schools  
New England Association of Schools and Colleges  
209 Burlington Road  
Bedford, MA 01730-1433

## **Credits and Graduation Requirements**

### **Credit System**

A minimum of 90 credits is required for graduation. Students must be enrolled in at least 24 credits per year. All academic subjects that meet daily for the entire year are given 4.0 credits. Those which meet daily for a semester are given 2.0 credits. Those which meet daily for a quarter are given 1.0 credit.

Credit for all special projects, independent study courses, and teacher aides will be determined by the number of hours completed. All courses of this type must be approved by the Principal.

*Students are expected to carry at least 24 credits each year.*

### **Make-Up Credit**

Students must earn a grade of F (50 – 59) in order to be eligible to earn credit through summer school. Students who earn an F (0-49) are not eligible to earn academic credit in summer school. To receive credit, a C- (70%) grade or better in summer school is required. Prior approval from the guidance office is required for summer school courses.

### **Placement Exams**

Nashoba Regional High School has the right to administer a Nashoba placement exam in courses such as Math and Foreign Language where prerequisite knowledge is essential in order to progress to the next level.

### **Credit Courses at Other Schools**

Credit toward a Nashoba diploma for outside activities will be awarded to a student only if the following criteria are met:

- The outside activity is an academic classroom course given by an accredited institution.
- The Principal or the Director of Guidance must approve the course prior to enrollment.
- The student must achieve a satisfactory grade and must be in attendance ninety percent of the class time.

## Early Graduation

Students who wish to graduate early must plan to earn the required credits and complete the required courses in the appropriate time-frame. Students are expected to present a plan to their guidance counselor and the principal for approval. This agreement must be signed by student, parent, guidance counselor and principal by the end of sophomore year for graduation after junior year and by the end of junior year for graduation mid-senior year.

Students graduating early will be able to begin college, work to save for college, join the military, explore careers, do volunteer work, or travel. Be advised that this option may weaken one's chances for college admission.

## Planning for After High School

### Massachusetts State Universities & UMass Minimum Admissions Standards

The admissions standards for the state universities and UMass emphasize a strong academic high school background so that students enter college ready to learn. These standards represent minimum requirements; meeting them does not guarantee admission since campus officials consider a wide range of factors in admissions decisions. Students shall have fulfilled all requirements for the high school diploma or its equivalent upon enrollment. It is important to note that admissions standards for the state's community colleges differ. Community colleges may admit any high school graduate or GED recipient.

### Freshmen Applicants

The new admissions standards for freshmen applicants have two main parts:

- 16 required academic courses
- A minimum required grade point average (GPA) earned in college preparatory courses completed at the time of application.

Applicants must also submit an SAT or ACT score.

#### *Academic Course Requirement*

Sixteen college preparatory courses distributed as follows are required. (A course is equivalent to one full school year of study. Courses count toward the distribution only if passed).

- English 4 courses
- Mathematics 3 courses (Algebra I & II and Geometry or Trigonometry)
- Sciences 3 courses (natural sciences)
- Social Sciences 2 courses (including the full coursework in U.S. History)
- Foreign Languages 2 courses in a single language
- Electives 2 courses (from the above subjects or from the Arts & Humanities and/or Computer Sciences)

### Minimum Required Grade Point Average (GPA)

The GPA must be achieved based on all college preparatory courses completed at the time of application and should be weighted for Honors or Advanced Placement courses only. Effective fall 2001 the required minimum high school GPA is 3.0 for the four-year public state college and university campuses and **no applicant with a high school GPA below 2.00 may be admitted to a Massachusetts state college or university campus.** The NRHS unweighted GPA is often very close to the Massachusetts Public system calculation, but students are urged to do their own calculations with the table below. Pay particular note to the fact that the formula does not allow for weighting of our accelerated level in this calculation formula. To calculate a weighted GPA, individuals must convert each final grade earned in college preparatory courses to a 4-point grading scale (where "A+"=4.3; A=4.0; "A-"=3.7; "B+"=3.3; etc.). Honors level and Advanced Placement courses will receive an extra .5 and 1.0 points on the 4-point scale, respectively. For details, see <http://www.mass.edu/forstudents/admissions/admissionsstandards.asp>

### SAT Scores

Applicants who meet the GPA requirement do not have to use the sliding scale for admission but still must submit SAT or ACT test scores for consideration if they are applying to a state college or UMass within three years of high school graduation. See <http://www.mass.edu/forstudents/admissions/admissionsstandards.asp>

If an applicant's GPA falls below the required minimum, a sliding scale will apply. This scale should be used only when an applicant's GPA falls below the required 3.0 minimum for admission to the state colleges or UMass.

An applicant with Learning Disabilities may submit the current IEP in lieu of testing.

## Twelfth Year Program/Dual Enrollment

Students wishing to complete their high school education at a state community college, state college, or state university may do so through the Twelfth Year Program. The student's family must cover all costs (i.e., tuition, fees, books, and transportation). Costs may range from \$3,000 to \$7,000 per year. Requirements for the Twelfth Year Program differ from school to school. As a general rule, appropriate applicants must:

- Have a high school profile free of any disciplinary actions
- Have attained a G.P.A. of 3.0 higher
- Pass the appropriate placement tests in math and English at the institution they wish to attend. In some cases, students may also be required to take a placement test in science.

Students interested in the Twelfth Year Program should plan to meet with their guidance counselor to discuss the requirements.

## College Articulation Agreements

Students taking Accounting I or Information Computer Technology (ICT) are eligible to receive three college credits from Quinsigamond Community College and Mount Wachusett Community College.

## College-Bound Student Athletes

Students wishing to compete on a Division I or Division II college athletic team must meet NCAA Clearinghouse eligibility requirements. Requirements include a strong set of academic course requirements, a minimum GPA, and a sliding scale SAT or ACT requirement. If you are considering college athletics, please see the NCCA Guide for details. Division III sports do not use the Eligibility Center, and college intramural teams are open to all.

## Course Descriptions

**Please Note:** *The description of a course in this Program of Studies indicates the ability of the Nashoba Regional High School staff to provide the experience. However, if an inadequate number of students select a specific course, it will not be possible to offer the course. In cases where courses are oversubscribed, priority for enrollment will be given first to seniors, then juniors, then sophomores, and finally freshmen, provided they have satisfied course prerequisites. Students who are unable to be enrolled in a course of their first choice will be offered an alternate course.*

## Art Program

The art department offers courses designed to expose students to a number of subject areas and experiences in the arts. Courses are designed to help students interpret and solve visual problems in a variety of media in engaging studio classrooms. The program contributes to the aesthetic education of students with a wide variety of abilities and interests. Classes are organized around a series of projects designed to give students the experience of working with various materials and approaches within each elective subject area. In addition to learning basic skills, students will have numerous opportunities for personal expression and exploration of their interests.

*All courses count (2.0 or 4.0) towards the Fine & Performing Art Requirement for graduation.*

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**Introduction to Art** 9-12 4.0  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4**

Art history, art criticism, aesthetics, and studio art will be addressed through countless experiential exercises and projects. Reading, writing, and verbal articulation about the aforementioned topics are woven in to the curriculum, thereby giving students the skills to be able to think creatively and self assess his or her own art making processes. The broader themes in art are addressed throughout the curriculum. At the end of this year- long course, each student will have the ability to list and execute the basic elements and principles of two dimensional design. Students will be asked to supply their own 100 page 11x14 acid free sketch book for this class.

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**NL Ceramics 1** 9-12 2.0  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4**

Preparatory drawing and art history will support the planning and learning in this course. Students will be expected to work individually and in small groups. We will explore several different materials and processes of three dimensional art design and studio maintenance. In-class work and the finished products will be observed in a portfolio by the end of each semester. Teaching concepts will include the following: traditional techniques of pinching, coiling, slabbing, and/or draping clay to form practical or decorative sculpture. Students will also be introduced to the potter's wheel. Please note that this course requires physical activity and consistent participation in a structured rotating cleaning chore system. Students will get dirty in this class. Manicured nails are not recommended and jewelry will not be permitted for safety reasons.

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**NL Ceramics 2** 9-12 2.0  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4**

This course is designed to enhance students' skills on the potter's wheel. Participants will develop an understanding of basic wheel work while exploring forms such as cups, bowls, and vases. Students may also choose to explore hand building techniques using the elements of three dimensional design to create functional or sculptural products. Students will build on and refine their techniques and ideas. *Prerequisite: Ceramics 1*

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**NL Printmaking and Silk-screening** 9-12 2.0  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4**

This course explores wood carving, linoleum carving, and t-shirt/ poster design through silk-screening. It is designed to challenge students to develop original concepts through creative thinking by designing logos, labels, and symbols that communicate meaningful messages to the community. The curriculum will build a foundation of 2-dimensional design skills and enable students to practice advertising and marketing strategies through their imagery. Students will explore and acquire essential knowledge of the elements of art and principles of design in order to create artwork that reflects their ideas and artistic intent. Digital photography, stenciling techniques, and drawing will be used as strategies for the design process. From exploring the traditional carving methods of the early 1600's and the contemporary printing methods of today's pop culture, students will draw parallels between historical and modern day practices. (No prerequisite required.)

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**ACC Drawing & Painting 1** 10-12 4.0  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4**

This course explores various drawing and painting techniques as well as a variety of art media and materials. Students will learn and implement the artistic process in every project: brainstorming techniques, layout, color studies, exploring medium, and finished artwork. Students will explore and acquire essential knowledge of the art elements and principles of design in order to create artwork that reflects their ideas and original artistic intent. *Prerequisite: successful completion of Introduction to Art.*

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<b>ACC Drawing &amp; Painting 2</b>	<b>11-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4</b>		

This course is designed for the student who wishes to further develop his/her skills in the fine arts. This course will entail intensive drawing classes and direct observation of subject matter. The students will demonstrate their skills of observation, abstraction, invention, and expression in a variety of media, materials, and techniques. The student will observe and analyze Master drawings throughout history to increase knowledge of artist style, technique, and original idea or intent of piece. Students will describe and analyze their own work and the work of others using appropriate visual arts vocabulary. Students will acquire knowledge to connect their analysis to interpretation and evaluation. Students will explore the various roles of an artist in the community. Students who are exploring the possibility of obtaining higher education in the arts are encouraged to research colleges early in the year to ensure proper time to create a strong portfolio of their artwork and fulfill the many college requirements. Prerequisite: Drawing & Painting 1

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<b>ACC Senior Art</b>	<b>12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4</b>		

This course provides an opportunity for the student to work independently after the student and teacher design an individual syllabus of work that meets his/her needs. This course is designed for seniors who are seriously planning a career in art or who desire to further explore and refine their artistic skills. The course is designed to create a meaningful body of artwork for each student, as well as implement goals and achieve them by organizing time, work, space, and resources effectively. Students will acquire the knowledge and experience to formally present and exhibit their work and also produce a digital portfolio to send to shows, competitions, and colleges. Students will be exposed to the many roles of an artist via college presentations and visiting artists. *Prerequisite: Permission of the Instructor*

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<b>AP Advanced Placement Studio Art: Drawing/2-D Design/3-D Design</b>	<b>11-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4</b>		

This course is for anyone would like to build a strong portfolio for college admission, to earn college credits in Art, and to intensely develop processes and techniques in art. The work load is heavy. Be prepared to spend up to 10 hours a week on your portfolio. Dedication and work ethic is a MUST. During the month of May, students must submit 20-25 original products via web to the College Board for review. The sections are scheduled concurrently. There is a mandatory summer homework assignment for this course. There is also a fee associated with the AP exam/portfolio submission process. For more information, please refer to the course description at the College Board site: [http://www.collegeboard.com/student/testing/ap/sub\\_studioart.html?studioart](http://www.collegeboard.com/student/testing/ap/sub_studioart.html?studioart). *Prerequisite: Portfolio submission and permission from instructor. Student must meet with teacher in June and/or prior to the course starting in the fall.*

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## **Business/Computer Technology**

The Business/Computer Technology program is designed to integrate business and computer technology skills in the high school curriculum. Using current technology, students are exposed to real-world applications while learning marketable skills. Courses are designed to prepare students for successful entry into a business related field.

Business students are eligible to participate in DECA (Website <http://massdeca.org>) a national association of business students. Students compete in three levels of competition against high school students from around the country. Competitions consist of role plays, presentations and simulations.

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<b>ACC, CP Accounting 1</b>	<b>10-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2</b>		

The preparation and interpretation of financial records is called accounting. This course will teach the fundamentals of financial accounting for business, social, and personal use. Projects and practice sets at frequent intervals will give practice in performing accounting tasks commonly found in business. It is recommended that those students interested in a college major in business take accounting. The course of studies includes double-entry accounting procedures, financial records, business transactions, banking activities, and special projects. Students will be introduced to automated accounting using the personal computer. Accelerated classes will be given additional practice



problems and a second simulation. *Meets math requirement for graduation. DECA eligible course.* This course has an Articulation Agreement with Quinsigamond Community College and Mount Wachusett Community College to receive three college credits.

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<b>ACC, CP Accounting 2</b>	<b>11-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2</b>		

Accounting 2 provides the capable student with further skills in double-entry accounting. Emphasis in this year is on accounting for partnership, corporations, and income tax. Accounting 2 increases the competence of those who seek positions as qualified accounting clerks and builds a good foundation in accounting for those who may take a further course in accounting in post-secondary school or major in Business/Accounting in college. Students utilize personal computers. Accelerated classes will be required to do additional practice problems and a simulation using the computer. *Prerequisite: Accounting 1. Meets math requirement for graduation.*

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<b>NL Banking</b>	<b>9-12</b>	<b>1.0-2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, CS1, CS2</b>		

This course will introduce students to the career field of banking. Students will receive on-the-job training and work as tellers in Nashoba's branch of the Clinton Savings Bank. Students will take online blended classes from Banker's Academy through Clinton Savings Bank and will focus on financial literacy as a component of this class. *Banking can be flexibly scheduled to meet the individual needs of the student's representative schedule. DECA eligible course.*

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<b>NL Introduction to Business</b>	<b>9-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2</b>		

Introduction to Business presents the board-based business knowledge and skills that every worker should know. This course introduces all aspects of industry. These give you the entry level skills needed to for success in any career path you choose (Planning, Management, Finance, Labor, Technician/Production Skills, Principles of Technology, Community, Health, Safety, and Environment). *DECA eligible course.*

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<b>(ACC, CP) Economics</b>	<b>11-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2</b>		

This course provides the advanced high school student with a comprehensive introduction of the fundamentals of economics. This micro-macro approach offers a balance of economic theory and practical application to current problems and issues. Any junior or senior who thinks he/she will be majoring in any field of business in college should take this course.

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<b>NL Entrepreneurship/Stock Market</b>	<b>10-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE4, CS1, CS2</b>		

This semester course is designed to help students understand the principles of starting a small business and how the stock market works. Through the use of computers and the on-line stock market competition, students will become familiar with buying and selling stocks. *DECA eligible course.*

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<b>NL Marketing</b>	<b>10-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE4, CS1, CS2</b>		

Marketing is the process of buying, selling, transporting, storing, and other facilitating functions that take place in the marketplaces of the world. The consumer would have nothing without production, and production would be pointless without someone to use what is produced. Marketing brings the two of them (producer and consumer) together. Topics of study include the Businesses of America, retailing, consumer behavior, marketing management, and The Marketing Plan. If anyone is to interpret intelligently the economic news of the day, that person must know something about the forces of marketing that operate in our market-oriented economy. Through this course students will develop a general understanding of the marketing process including: marketing environment, consumer behavior, consumer markets, market segmentation, positioning, product, pricing, distribution strategies, retailing and promotional activities. This qualifies as a DECA course. Note: Students wishing to participate in DECA (a national association of business students) must be enrolled or have taken at least one DECA-qualifying course.

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<b>NL Marketing 2</b>	<b>10-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE4, CS1, CS2</b>		

This course is a continuation of the Marketing 1 curriculum. Students will study marketing in industrial, agricultural, government, health, and educational sectors. They will learn the importance of a marketing plan, marketing research, and current retail practices. This qualifies as a DECA course. *Prerequisite: Marketing 1*

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<b>NL Sports and Entertainment Marketing</b>	<b>11-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE4, CS1, CS2</b>		

The field of sports and entertainment marketing is rapidly growing and expanding. Many colleges and universities offer specializations in sports and entertainment marketing. This class will explore the intriguing world of sports and entertainment from the perspective of marketing. The functions of marketing that are presented are intended to be a guide in taking the first career step into the exciting world of sports and entertainment. This course will help students develop a thorough understanding of the marketing concepts and theories that apply to sports and entertainment events. In addition, Sports and Entertainment Management teaches leadership, finance, product management, sponsorship, event marketing, promotions, human resources, legal and ethical issues, managing, and customer relations. This course will also delve into promotion plans, sponsorship proposals, sports marketing plans, and be exposed to DECA related activities and curriculum. *Prerequisite: Marketing I*

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<b>NL Personal Finance</b>	<b>9-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2</b>		

This course covers financial decision making from a personal standpoint focusing on 21<sup>st</sup> century financial literacy concepts. It is very important to make sure our students are knowledgeable in how to manage their finances. In our society, everyone will buy a car, a home, insurance, pay taxes, and save which means using credit wisely. Thus, in order to use credit wisely, our students must learn how to be fiscally responsible. Personal Finance will teach our students to manage their personal finances and gain control over the financial impact of their choices. Learn to create and use a budget, borrow and invest wisely and plan for your financial future. Furthermore, the program helps students realize that they are already making financial decisions, shows them how their decisions affect their future, and allows students see the business applications of finance. *DECA eligible course.*

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<b>NL Desktop Publishing</b>	<b>10-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2</b>		

This one semester course is designed for students interested in learning the fundamentals of page layout and design. Using Microsoft Publisher, Adobe PhotoShop Elements and Adobe InDesign, students will create publications such as newsletters, business cards, magazine covers, flyers, brochures, candy bar sleeves, and more. *This class fulfills 2.0 credits of the Computer Applications graduation requirement.*

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<b>NL Integrated Computer Technology</b>	<b>9-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2</b>		

This practical hands-on course is an in-depth study of the Microsoft Office Suite and Google Apps for Education. Students will master skills in the areas of Word, Excel, Access, PowerPoint, Publisher and Outlook. Students will use the Office suite for real world applications to create, communicate and work in a productive manner to support 21st century learning, including Digital Literacy and Citizenship skills. Students enrolled in this class should have basic keyboarding skills. *This class fulfills the Computer Applications graduation requirement.* This course has an Articulation Agreement with Quinsigamond Community College and Mount Wachusett Community College to receive three college credits.

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<b>NL Multimedia I</b>	<b>9-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2</b>		

Multimedia is designed for students interested in creating interactive presentations using the elements of text, graphics, animation, sound, video, and digital imaging. Students will acquire the knowledge needed to effectively prepare and deliver these presentations using a variety of tools such as Adobe Premiere Elements and Web 2.0 tools that support 21<sup>st</sup> century learning. *This class fulfills 2.0 credits of the Computer Applications or Art graduation requirement.*

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<b>NL Multimedia II</b>	<b>10-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2</b>		

This course is a continuation of Multimedia I or Intro to Video. Students will to continue their exploration of multimedia applications and expand their knowledge of software applications to create digital video, audio, podcasting and interactive multimedia. Some of the programs used include, Flash and Adobe Premier.. Students will create a digital portfolio showcasing their work. *Prerequisite: Multimedia I. This class fulfills 2.0 credits of the Computer Applications or Art graduation requirement.*

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<b>NL Computer Applications/ Keyboarding</b>	<b>9-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2</b>		

This two credit course is designed to teach students basic keyboarding skills using the touch method with emphasis placed on technique. Students will use Microsoft Word, PowerPoint, and Excel to format, store, retrieve, edit, and print a variety of personal and business documents. Student will use NRSD Google Apps in order to work collaboratively on documents to support 21st Century learning, including Digital Literacy and Citizenship skills. *This class fulfills 2.0 credits of the Computer Applications graduation requirement.*

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<b>NL Web Page Design</b>	<b>10-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2</b>		

This semester long course will introduce students to the field of Web page design. Students will create, manage, and publish websites using Hypertext Markup Language (HTML) and Adobe's Dreamweaver web authoring tool and Flash. Students will demonstrate these concepts through exercises and projects. *This class fulfills 2.0 credits of the Computer Applications or Art graduation requirement.*

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## English Program

Successful completion of a four-year English program is a requirement of Nashoba Regional High School. Semester senior electives are available for seniors. All courses are designed to strengthen students' communication and critical thinking skills in listening, speaking, reading, and writing. Areas of major emphasis include composition and literary analysis as well as studies in drama and media literacy.

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<b>HON Freshman English</b>	<b>9</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS4</b>		

The honors program consists of an intensive study of the fundamentals and basic skills of English with the additional expectation of the highest standards in three areas: work ethic, organization, and intellect. Students need to be self-motivated, independent, and organized. The homework is substantial as is the reading and composition. Students need to respond and think analytically and critically. In addition, a rigorous vocabulary program is employed and an extensive portfolio is developed. *Placements are based on teacher recommendations, English/Language Arts MCAS scores, and /or 8<sup>th</sup> grade scores on homework, quizzes and tests.*

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<b>ACC, CP Freshman English</b>	<b>9</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2</b>		

This course consists of an intensive study in the basic areas of composition and analytical reading, with a focus on developing students' abilities to be careful readers and effective writers. Writing instruction focuses on teaching students to structure arguments, to communicate clearly, and to use grammar properly. Writing is taught as a process through which drafting and revision are required steps. Strategies and techniques emphasized throughout literary units help students think critically, learn vocabulary, and practice analyzing challenging texts. Ninth graders will be encouraged at all times to become responsive and responsible learners.

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<b>HON, ACC, CP Sophomore English</b>	<b>10</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2</b>		

This course will continue to strengthen students' understanding of English Language Arts skills. Units of study include grammar, vocabulary, analytical reading and writing, topic development within various forms of writing, research skills,

and public speaking. Students will focus on the basic literary genres: novel, short story, poetry, drama, and nonfiction. Emphasis will be placed on the application of literary terminology in analysis. Students will become better readers, writers, thinkers, and speakers during this course.

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**HON, ACC, CP American Literature** 11 4.0  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2**

This course is a survey of the historic and thematic development of American literature, with special emphasis on major writers, styles, themes and the novel, short story, drama, and poetry. All juniors will complete a formal research paper that employs research skills, shows analytical reading and writing ability in the synthesis of researched material, and demonstrates mastery of MLA format. This course will also include the continuation of strengthening skills involved with writing, grammar, and vocabulary.

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**AP English Literature and Composition** 12 4.0  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2**

AP English Literature and Composition is a full-year English course for seniors. The course focuses on developing students' independent close-reading and analytical skills in their exposure to a wide variety of literary genres. In addition, students will develop an understanding of major contributors to Western philosophical thought and literary theory. Literature read throughout the course encompasses works from Classical periods to the Victorian and Modern eras. Texts may include *The Odyssey*, *Inferno*, *Hamlet*, *Jane Eyre*, *Damian*, *Heart of Darkness*, *A Streetcar Named Desire*, *Beloved* among others. **Students should expect and be able to handle a great deal of reading, as well as production of frequent short papers and lengthy research papers. There is an expectation that these students will complete summer reading.** This course is intended to prepare students for the AP English Literature and Composition examination.

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**ACC, CP English 12 Senior English FALL British Literature Electives** 12 2.0  
**Mission Expectations Fulfilled: \*dependent upon semester course**

All ACC & CP English 12 students are **required to take one fall British Literature senior elective**. Each year the teachers tailor the offerings for that particular class. An addendum will follow in the spring with full descriptions of the semester course options.

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**ACC, CP English 12 Senior English SPRING Electives** 12 2.0  
**Mission Expectations Fulfilled: \*dependent upon semester course**

All ACC & CP English 12 students are **required to take one spring senior elective**. Each year the teachers tailor the offerings for that particular class. An addendum will follow in the spring with full descriptions of the semester course options.

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**NL Journalism in the 21st Century** 9-12 2.0  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4**

Do you want to be a part of Nashoba News? If yes, then take this elective! In this course students will learn how to report skillfully, attribute appropriately, and conduct an effective interview through various units. Units will include print journalism, photojournalism, radio, and television broadcasting. There will be an emphasis on the changes in journalism in the 21st century. (We will discuss how social media, citizen journalism, blogs, and smart phones have changed the way we gather and report the news.) Students will have the opportunity to write for Nashoba News via the school's news website and the school's morning video announcements. This course is designed for students who have a strong interest in both written and visual communication and are considering a communications field in the future. With the journalism teacher's approval, you may take this course more than once, as long as you contract to take on a managerial role and further your understanding of journalism. As this is an elective, this course would be taken in addition to the yearly English course requirement. **\*THIS COURSE DOES NOT FULFILL THE ENGLISH GRADUATION REQUIREMENT.** This course fulfills 2.0 Technology credits. *Recommended Prerequisite: Intro to Video*

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**NL Speech** 9-12 2.0  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS4**

This course will increase students' confidence in how to think clearly and express themselves more effectively in front of an audience in a comfortable, fun environment. Students will write and deliver a variety of assignments, including personal narratives, persuasive speeches, research assignments, and demonstrations. The course introduces the

beginning speech student to the study of poise, the use of body and voice, and the basics of public speaking. By the end of the term, students will be more comfortable, confident speakers for a variety of situations. As this is an elective, this course would be taken in addition to the yearly English course requirement. Course will run dependent on enrollment. **\*THIS COURSE DOES NOT FULFILL THE ENGLISH GRADUATION REQUIREMENT**

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**NL Acting**

9-12

2.0

**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS4**

This course is structured as an **intensive, hands-on** class on the art of acting. Initially, students will learn the art of improvisation, and the in-class work will focus on breathing techniques, stage presence, characterization, motivation, and listening skills. There will be writing assignments both creative and analytical. Students who enroll for this class must understand that they will be required to memorize lines and perform in front of other students during class time. Performance will be a key component of the final grade. Finally, students will work with numerous contemporary plays. Working in groups, students will perform scenes from these plays or any other appropriate work of their choice. As this is an elective, this course would be taken in addition to the yearly English course requirement. **\*THIS COURSE DOES NOT FULFILL THE ENGLISH GRADUATION REQUIREMENT. This course does fulfill 2.0 Fine Arts credits.**

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## Foreign Language Program

There is a two year Foreign Language graduation requirement for all students. Students are encouraged to progress in the chosen language(s) as far as they desire or as far as their abilities will allow. Modern language classes are offered in French, German, and Spanish and stress the four skills of foreign language study: listening, speaking, reading, and writing. The classical program offers Latin. All courses aid students in understanding foreign cultures and the connection to their own culture. Foreign language study should enrich students' lives by opening up a wider variety of career choices, and ultimately should encourage them to communicate and contribute more in our increasingly interdependent world.

*Note to all: Students who are enrolled in either Accelerated or Honors who receive a grade of 69 or below must either retake the course or move into a lower level course offering the following year. Students taking a College Preparatory level course who receive a grade of 59 or below must retake the course prior to moving to the next year. These recommendations/requirements are intended to help students find continuous success in each successive year of a specific language. The entry requirement for middle school, choice, or transfer students into the second year of the high school Foreign Language Program is determined by the 8th grade Foreign Language teacher's recommendation, which includes the consideration of an evaluation score received on a placement exam, coupled with other factors (e.g., student grades).*

A student who does not pass the class may not move on to the next level.

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**HON, ACC, CP Latin I**

4.0

**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4**

This course is designed to give the student a basic understanding of language and how it operates through an understanding of Latin. Grammatical concepts, necessary to the study of all foreign languages, are systematically developed. Stress is placed on Latin root words that make up over fifty percent of our English vocabulary and are found today in the modern Romance languages. Knowledge of Roman culture is developed through readings in Latin and English and supplemental materials.

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**HON, ACC, CP Latin II**

4.0

**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4**

The program described in Latin I is continued into the second year. Basic readings are gradually introduced into the course. The readings become more mature with the development of vocabulary and grammar structures. Brief readings in English are included to develop an appreciation of Roman life, literature, customs, laws, institutions, religions and philosophies that have a major influence on the civilization of the western world. The passive voice and subjunctive mood will be the focus of grammatical study.

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**HON, ACC Latin III** **4.0**

**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4**

The third and fourth years consist of an introduction to Latin literature and culture. Oral presentations may be required. Grammatical concepts presented in the first two years will be reviewed. One year will be based on poetry, particularly Vergil, and the other will be prose.

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**ACC Latin IV** **4.0**

**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4**

The third and fourth years consist of an introduction to Latin literature and culture. Oral presentations may be required. Grammatical concepts presented in the first two years will be reviewed. One year will be based on poetry, particularly Vergil, and the other will be prose.

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**AP Latin Vergil and Caesar** **4.0**

**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4**

This course is open to Fourth Year Latin students, by approval of the teacher, who wish to take the AP Latin Language test in the spring for advanced college standing in Latin. The course emphasizes the reading of Latin texts and the translations of works by Ovid, Vergil, Horace, and Catullus. An objective of the course is translating the literary masterpieces of Latin literature. Students will take the 3 hour AP test given in May. Practice exams will be given as preparation. Students not taking the AP Exam will be allowed to take AP Latin only at the accelerated level.

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**HON, ACC, CP French I, German I, Spanish I** **4.0**

**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4**

*The first year* of a modern foreign language stresses listening comprehension and speaking, with an emphasis on learning to hear and reproduce the sounds unique to the language. The ability to understand a native speaker at a normal speed and the ability to speak with an acceptable pronunciation and correct grammatical usage are important goals in these courses. Elementary reading and writing are introduced. In addition, students develop an understanding of the foreign culture and people through experience with the language, films, filmstrips, videos and supplementary materials. Videos that coincide with the text have become an integral part of the modern language program. Outside projects may be assigned. Content topics include present tense verbs, simple descriptions, and vocabulary for common daily activities.

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**HON, ACC, CP French II, German II, Spanish II** **4.0**

**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4**

*The second year* of language study continues to emphasize listening, speaking, and grammar. Reading and writing for comprehension are important parts of each unit. Awareness of cultural diversity will continue through the use of supplementary materials. Outside projects may be assigned. Content topics include advanced verb conjugations and more sophisticated vocabulary.

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**HON, ACC, French III, German III** **4.0**

**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4**

*The third year* of language study encourages students to express their own thoughts, both written and spoken, with grammatical accuracy and adequate fluency. Cultural aspects of the country and people are presented in the reading selections. Students may be introduced to literature through the occasional use of short stories, research, magazines and newspapers. Students may be asked to research influential people from different countries. Content topics include complex verb conjugations and highly specialized vocabulary. *Outside projects may be assigned.*

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**HON, ACC, CP Spanish III** **4.0**

**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4**

*The third year* of language study encourages students to express their own thoughts, both written and spoken, with grammatical accuracy and adequate fluency. Cultural aspects of the country and people are presented in the reading selections. Students may be introduced to literature through the occasional use of short stories, research, magazines and newspapers. Students may be asked to research influential people from different countries. Content topics include complex verb conjugations and highly specialized vocabulary. *Outside projects may be assigned.*

**HON, ACC Spanish IV, French IV; ACC German IV**  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4**

**4.0**

The *fourth year* of language study gives a general review of the many previously presented grammatical points. Literature is further introduced through research and through a variety of reading selections of fiction, non-fiction, poetry and drama. These selections are provided to improve reading skills and vocabulary, and as a departure point for group discussions. Students are now expected to understand an educated native speaker, to carry on a conversation with grammatical accuracy and adequate fluency, and to express their ideas in written compositions. Outside projects may be assigned. Students are encouraged to participate in the Foreign Language program of teaching in the elementary and/or middle schools when it is available.

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**AP German Language and Culture**  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4**

**4.0**

This course is open to fourth year German students by approval of the teacher. The course emphasizes the use of German for active communication. The objectives of the course include: developing a strong command of vocabulary and structure; understanding spoken German; reading plays, novels, contemporary poetry and literature, and non-technical articles, and expressing ideas accurately and fluently both orally and in writing. German films, videos, and auditory tapes will be included which will lead to projects using PowerPoint presentations in German. Participation in the annual German Theaterfest is left to student choice. Students will take the three-hour AP test in the spring. Practice exams will be given as preparation. Students not taking the AP Exam may take German IV at the accelerated level.

**German Foreign Exchange (Bi-annually)**

Prerequisite: Student must be enrolled in German 2 or higher. Participants must be in good academic standing (in all classes), have a 70 or higher in German, and be recommended by the German teacher. Participants must host a student from the participating German school, participate in fundraising activities, and be responsible for making up all missed work while on the exchange.

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**AP Spanish Language and Culture/Spanish 5 ACC 11-12**  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4**

**4.0**

Advanced Placement Spanish Language emphasizes active communication in Spanish. The objectives include developing a strong command of vocabulary and structure, understanding spoken Spanish, reading plays, novels, contemporary poetry and literature as well as non-technical articles. Students will be expected to express themselves fluently in speaking and writing. Spanish films, videos and the Internet will be utilized as instructional tools, and students will complete presentations in Spanish. Students electing the course for Advanced Placement credit are expected to take the Advanced Placement Language Test at the end of the course. It is encouraged that students receive a teacher recommendation to enroll in the course. For more information, please refer to the course description at the College Board site: [http://www.collegeboard.com/student/testing/ap/sub\\_spanlang.html?spanlang](http://www.collegeboard.com/student/testing/ap/sub_spanlang.html?spanlang).

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**AP French Language and Culture / French 5 ACC 11-12**  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4**

**4.0**

This course has two objectives: it will emphasize the use of French language for active communication; it will immerse students into 21st century French culture. In this course, students will develop a strong command of vocabulary and structure, understand spoken language, read a variety of selections such as news articles, short stories, songs and poetry. They will express ideas accurately and fluently both orally and in writing. Throughout the year, students will gain insights in the French culture and society by reading texts from the textbook *Ensemble: Culture et société*, newspapers on line and watching TV news segments in class (le journal de vingt heures) and on line (TV5 Monde and France 24). Discussions on various current events will be regularly offered in class. Formal listening and speaking exercises will be included in class and in the computer laboratory. This course will be conducted entirely in French. Students who sign up for the course will be expected to take the AP French Language and Culture examination.

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## Mathematics Program

The mathematics program is designed to provide a broad range of courses that will meet the individual needs of all students. The course offerings and content are designed to be in full accordance with the NCTM standards. The **TI-83+, TI-84, or TI-Nspire graphing calculator** will be used throughout the curriculum and it is recommended that one be purchased prior to the beginning of Algebra II. The distinctions between the levels are more fully described in the course leveling system explanation in the front of this program.

*Please Note: The phrase "successful completion" means a grade of C- or better and the recommendation of the teacher*

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### Mathematics Program Sequence

#### Honors

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<b>HON Algebra II &amp; Trigonometry</b>	<b>9-10</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>		

The purpose of this course is to give a thorough and intensive approach to the subject. Topics studied include open sentences, graphs of linear equations and inequalities, systems of linear equations and inequalities, matrices, polynomials, factoring, quadratic equations and inequalities, quadratic systems, the conic sections, exponential and logarithmic functions and a comprehensive treatment of trigonometry. *The TI-83+, TI-84, or TI-Nspire graphing calculator is required for this course. Prerequisite for entering freshmen: Student score within range established by the Algebra 1 Transition Selection Criteria Sheet; teacher recommendation; A review Chapter packet is recommended.*

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<b>HON Geometry</b>	<b>10</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>		

This course is a thorough and intensive approach to the study of plane and solid geometry. Its purpose is to enable students to reason mathematically through a logical development of thought processes. Emphasis is placed on the discovery of geometry in everyday life and on the underlying reasoning processes. Topics include deductive and inductive reasoning, parallel lines and planes, congruent and similar polygons, right triangle relationships, circles, constructions and loci, area and volume, and coordinate and transformational geometry. Individual and group projects may be utilized to help students with their understanding. *Prerequisite: Successful completion of Honors Algebra II & Trig; teacher recommendation.*



<b>HON Pre-Calculus</b>	<b>11</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b> This is a rigorous study that serves as a prerequisite for students taking the AP Calculus BC course. It requires a strong background in algebra, geometry and trigonometry. Pre-calculus topics include linear and quadratic functions, polynomial functions, inequalities with linear programming, exponential and logarithmic functions, analytic geometry, trigonometry, complex numbers, vectors and determinants, sequences and series, matrices, combinatorics, probability statistics, curve fitting and models. AP Calculus topics include limits, the derivative and its applications. Emphasis is placed on involving realistic applications with these concepts. The TI-83+, TI-84, or TI-Nspire graphing calculator is required for this course. <i>Prerequisite: Successful completion of Honors Algebra II &amp; Trigonometry; teacher recommendation.</i>		
<b>AP Calculus AB</b>	<b>12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b> This course prepares students for the Advanced Placement test in AP Calculus AB. The course addresses limits and a variety of topics in differential and integral calculus. A graphing calculator such as a TI-83+, TI-89, or TI-Nspire is a must for the course and the AP test. AP Calculus AB covers a subset of the content of AP Calculus BC. <i>Prerequisite: Successful completion of ACC PreCalculus or Honors PreCalculus and teacher recommendation.</i>		
<b>AP Calculus BC</b>	<b>12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b> This course prepares students for the Advanced Placement test in AP Calculus BC. The course briefly reviews limits and the definition of the derivative and then thoroughly treats a variety of topics in differential and integral calculus, Topics include Taylor series and calculus for parametric and polar curves, which are not part of the AP Calculus AB course. A graphing calculator such as TI-83+, TI-84, TI89, or TI-Nspire is a must for the course and the AP test <i>Prerequisite: Successful completion of Honors Pre-Calculus and teacher recommendation.</i>		
<b>AP Statistics</b>	<b>12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b> This course will introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: (1) exploring data: observing patterns and departures from pattern; (2) planning a study: deciding what and how to measure; (3) anticipating patterns: producing models using probability and simulation; and (4) statistical inference: confirming models. <i>The TI-83+, TI-84 or TI-Nspire graphing calculator is required for this course. Prerequisite: Successful completion of Honors Pre-Calculus; teacher recommendation or successful completion of Acc Pre-Calc, teacher recommendation and current math teacher recommendation.</i>		

## Accelerated

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<b>ACC Algebra I</b> <b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>	<b>9</b>	<b>4.0</b>
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This course is intended for students interested in pursuing a comprehensive study of algebra. It is structured around functions, emphasizing linear and quadratic relationships. Students will learn to represent these functions in multiple ways; using verbal descriptions, equations, tables, and graphs. Modeling real-world applications using functions will provide the basis for the problem-based learning involved. This study is designed for students who have not completely mastered algebra concepts or those just initiating this topic. It will build and strengthen algebra skills while engaging students in solving problems and communicating their thinking involved in this effort. In addition to the algebra studied, lessons on probability, data analysis, and numerous exercises involving geometry will also be included. It is a course designed for all students wishing to study Algebra I at the accelerated level. The TI-83+, TI-84 or TI-Nspire graphing calculators will be used in this course. *Prerequisite: Grade 9 within range established by the Algebra 1 Transition Selection Criteria Sheet; teacher recommendation*

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<b>ACC Algebra II &amp; Trigonometry</b> <b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>	<b>9-11</b>	<b>4.0</b>
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This course includes a challengingly paced and comprehensive review of Algebra I as well as graphs of equations and inequalities, polynomial functions, exponential and logarithmic functions, number theory, matrices, conics and an introductory unit on trigonometry. The course provides a challenging approach to the subject matter and makes extensive use of the TI-83+, TI-84 or TI-Nspire graphing calculator. *Prerequisite: Grade 9 within the range established by the Algebra 1 transition selection criteria sheet; teacher recommendation.*

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<b>ACC Geometry</b> <b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>	<b>10</b>	<b>4.0</b>
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This course presents to the student a logical development of thought processes through the analytical study of two and three dimensional shapes and forms. Connections will be made to geometry in everyday life. Topics include deductive and inductive reasoning, parallel lines and planes, congruent and similar polygons, right triangle relationships, circles, constructions and loci, area and volume, coordinate and transformational geometry. Individual and group projects may be

utilized to help students with their understanding. *Prerequisite: Successful completion of Algebra I; teacher recommendation. Any student new to the district planning to take geometry will be required to take the Algebra I placement test.*

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<b>ACC Pre-Calculus</b>	<b>11-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>		

This course provides students with a strong foundation of pre-calculus concepts, techniques, and applications for more advanced work. It includes material from a number of branches of mathematics enabling students to experience connections and interrelationships among them. Topics include: function-linear, quadratic, polynomial, exponential, and trigonometric; inverses-exponential, logarithmic, and trigonometric; experimental and theoretical mathematics; circular functions, sequences and series; coordinate systems and complex numbers; parametric equations; recursive and closed form definitions. In addition, discrete mathematics and data analysis will be discussed as time allows. *The TI-83+, TI-84, or TI-Nspire graphing calculator is needed for this course. Prerequisite: Successful completion of Algebra II & Trigonometry and Geometry; teacher recommendation; A review Chapter packet is recommended.*

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<b>ACC Calculus</b>	<b>12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>		

This course examines limits, differentiation and integration, as well as logarithmic, exponential and trigonometric functions. Students need to have a strong math background in algebra, geometry and pre-calculus to be successful with this work. Applications of the derivative and integral are extensively involved in analyzing realistic problems. *The TI-83+, TI-84, or TI-Nspire graphing calculator is needed for this course. Prerequisite: Successful completion of Accelerated Pre-Calculus; teacher recommendation.*

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<b>ACC Statistics</b>	<b>12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>		

This course is an introductory statistics course. Although the use of algebra is minimal, students should have successfully completed Accelerated Algebra2/Trig. Basic algebra topics used throughout the course include, but are not limited to, solving equations, exponential equations, logarithms, and the equation of a line. Should the need arise students must review the algebra topics. Students are expected to complete reading assignments and be prepared to participate in discussions about the reading. Topics covered include: data analysis, probability distributions, hypothesis testing, correlation and regression, and contingency tables. *The TI-83+, TI-84, or TI-Nspire graphing calculator is required for this course. Prerequisites: Successful completion Accelerated Algebra2/Trig; teacher recommendation.*

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## College Prep

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<b>CP Algebra I</b>	<b>9-10</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>		

The purpose of this course is to provide a solid foundation for all future math courses in high school and in college. Successful completion of Algebra I is a prerequisite to geometry and algebra II. Topics to be covered include terms, symbols, signed numbers, solving equations, graphs of lines as well as work with fractions, decimals, percents and radicals. *Prerequisite: Successful completion of Pre-Algebra; teacher recommendation.*

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<b>CP Algebra II</b>	<b>11-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>		

Topics covered include functions, systems of equations and inequalities, matrices, complex numbers, quadratic equations, conics, and exponential and logarithmic functions. The pacing of the course allows students to focus upon comprehension of the material. *The TI-83+, TI-84, or TI-Nspire graphing calculator is recommended for this course. Prerequisite: Successful completion of Algebra 1; teacher recommendation.*

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<b>CP Pre-Algebra</b>	<b>9</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>		

This course will provide students with the skills necessary to be successful in future math courses. Additionally, students will study several topics covered on the MCAS exam. Topics will include: the fundamental operations of mathematics, an introduction to statistics & probability, solving equations, linear & non-linear functions, graphing, exponents, inequalities, polynomials, ratios, proportions, similar figures, percent, parallel lines, polygons, congruency, right triangle relationships, area, surface area, volume and an introduction to Algebra 1. Students requiring reinforcement in MCAS preparation, and who may benefit from a higher level of structured academic support in preparing for Algebra I, are encouraged to enroll in

this course. This course would be inappropriate for any student who has “successfully completed” Algebra I and/or Geometry. *A scientific calculator is recommended for this course.*

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<b>CP Algebra 1 A /Geometry A</b>	<b>10-11</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>		

The purpose of this course is to provide students with a solid understanding of the first half of Algebra 1 and Geometry. Students requiring reinforcement in MCAS preparation, and who may benefit from a higher level of structured academic support, are encouraged to enroll in this course. Algebra topics to be covered include: the distributive property, signed numbers, solving equations & inequalities, graphing linear equations & inequalities, and systems of equations. Geometric concepts will include: points, lines, planes, segments, angles, nets, parallel & perpendicular lines, congruent triangles, relationships within triangles, polygons, quadrilaterals, area, and volume. *A scientific calculator is recommended for this course. Prerequisite: Successful completion of Pre-Algebra; teacher recommendation.*

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<b>CP Algebra 1 B /Geometry B</b>	<b>11-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>		

This course emphasizes use of the skills learned in Algebra 1 A / Geometry A to master the remainder of the Algebra 1 and Geometry curriculum. Algebra topics to be covered include: exponential functions, polynomials, factoring, quadratic functions, radical expressions & equations, rational expressions, data analysis, and probability. Geometric concepts will include: similarity, transformations, circles, geometric probability, right triangles, and trigonometry. Students requiring reinforcement in MCAS preparation, and who may benefit from a higher level of structured academic support, are encouraged to enroll in this course. This course would be inappropriate for any student who has “successfully completed” Algebra I and/or Geometry. *A scientific calculator is recommended for this course. Prerequisite: Successful completion of Algebra 1 A /Geometry A and/or teacher recommendation.*

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<b>CP Algebra 2 A /Algebra 2 B</b>	<b>11-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>		

This course emphasizes application and expansion of the skills and concepts mastered in Algebra 1 A / Geometry A and Algebra 1 B / Geometry B. Further, it completes the state requirement of Algebra II which allows students to be eligible for the Massachusetts four-year state university system. In addition, the pacing of the course allows students to focus upon a deeper comprehension of the material. Algebraic concepts covered will include: absolute value functions, quadratic functions, polynomial functions, radical functions, rational exponents & functions, matrices, complex numbers, conic sections, exponential functions and logarithmic functions. This course would be inappropriate for any student who has “successfully completed” Algebra I, Geometry, and/or Algebra 2. *A scientific calculator is recommended for this course. Prerequisite: Successful completion of Algebra 1 B / Geometry B and/or teacher recommendation.*

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<b>CP Geometry</b>	<b>10-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>		

This course is a hands-on approach to geometry. It includes the study of two and three dimensional shapes so that students can interpret and draw these objects, and use geometric models. Constructions are integrated throughout the course and are used to develop spatial relationships. It provides discovery learning and promotes students’ critical thinking skills. *Prerequisite: Successful completion of Algebra I or permission of the teacher; teacher recommendation*

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<b>CP Probability and Mathematical Modeling</b>	<b>12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>		

The objective of this course is to provide students with background in the quantitative techniques necessary to better understand and appreciate the courses normally taken in undergraduate training. It also lays the foundation for more advanced courses, such as statistics. The topics covered include Linear Functions, Matrices, Linear Programming, Sets and Counting, Probability, Statistics, Mathematics of Finance and if time permits, Markov Chains and Game Theory. *The TI-83+, TI-84, or TI-Nspire graphing calculator is recommended for this course. Prerequisite: Successful completion of Algebra II; teacher recommendation. This course is not appropriate for students who have successfully completed a Pre-Calculus course.*

<b>CP Pre-Calculus</b>	<b>11-12</b>	<b>4.0</b>
<b>Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>		

This course consolidates and reviews previously studied material in Algebra 2 and introduces new topics including trigonometry, linear programming, graphing linear and polynomial functions, exponential and logarithmic functions, probability theory and an introduction to statistics. *The TI-83+, TI-84, or TI-Nspire graphing calculator is required for this course. Prerequisite: Successful completion of Algebra I, Geometry and Algebra II; teacher recommendation.*

<b>ACC/HON Computer Programming</b>	<b>10-12</b>	<b>4.0</b>
<b>Expectations Fulfilled: AE1, AE3, AE4, C/S1</b>		

In taking this course students should expect to learn elements of computer programming design, good programming practice and how to develop computer applications.. The first semester will focus on the design of programs using a student friendly programming environment, Dr. Racket. The second semester will call upon students' design skills to produce object-oriented computer applications in Java. This approach is consistent with that currently used in many technology-based schools and in colleges. This class is recommended for all students who wish to strengthen their critical thinking, problem solving, and writing skills. College credit for this course may be available from WPI. *Prerequisite: Successful completion of high school Accelerated Algebra I; teacher recommendation*

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### **Music Program**

The music department offers courses designed to contribute to the musical and aesthetic education of students with a wide variety of abilities and interests. The program provides opportunities to increase proficiency with a musical instrument or voice, to study music theory, or to experience music as a form of expression. In addition to courses that may be scheduled during the school day, additional opportunities are provided through jazz ensembles, madrigal choir, women's ensemble and jazz choir.

The instrumental program and the vocal program are designed to help a student develop the musical skills essential for quality performance in musical organizations. Each of the courses provides experience with a variety of musical styles that encourage a student to appreciate music as a vehicle for expression. In addition, through rehearsals and concerts, a student is able to recognize the value of a disciplined collaboration and to take pleasure from the resulting harmony.

*All courses count (2.0 or 4.0) towards the Fine & Performing Art Requirement for graduation.*

Courses offered by the music department are:

#### Instrumental

Band	(Full Year)
Introduction to Guitar	(Semester)
Advanced Jazz Ensemble	(Full Year)
Intermediate Jazz Ensemble	(Full Year)
Introduction to Piano	(Semester)

#### Vocal

Women's Pops Choir	(Full Year)
Concert Choir	(Full Year)
Jazz Choir	(Full Year)
Madrigal Choir	(Full Year)
Women's Ensemble	(Full Year)

#### Theory

Music Theory 1	(Full Year)
AP Music Theory/Composition	(Full Year)
Music Technology	(Semester)

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<b>Concert Band</b>	<b>9-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2, CS3</b>		

Band meets one full period during the school day. Students will study the technique involved in playing their instruments. The music studied will be standard concert band repertoire and orchestral transcriptions. Band music will include marches, symphonic arrangements, wind ensemble literature, and popular music. Opportunities for district and all-state participation, solo and small ensembles are available to members. Students are required to participate in the following activities: Winter Concert, Spring Concert, Pops Night, Memorial Day Parades, MICCA Band Festival and NRHS Graduation ceremony and in-school performances. Students may also opt to participate in the Football Band, which rehearses after school and performs at all home football games. No credit is given for Football Band.

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<b>ACC Advanced Jazz Ensemble</b>	<b>9-12</b>	<b>4.0/2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2, CS3</b>		

Meeting times 4 periods per cycle in regular school day, one two-hour block each Thursday evening from 6:30 – 8:30, additional hours for performances. Thursday evening rehearsals are required for all students in the class. Students who cannot be scheduled, by guidance, to meet during the school day may take the course Thursday evenings only for 2 credits. Literature studies will be predominantly at the NYSSMA/MAJE Grade 4 and 5 levels. Repertoire will emphasize the works of Ellington, Kenton and other masters of the big band style. Instruments included in this group are based on standard Big Band jazz instrumentation (Alto Saxophone, Tenor Saxophone, Baritone Saxophone, Trumpet, Trombone, Bass Trombone, Piano, Guitar, Bass (Upright or Electric), Vibraphone, and Drum set. Other instruments may be used as a ‘double’, but the student’s primary instrument for this ensemble must be on this list. Written research of composers and significant works is required. Participants are required to perform with the ensemble at the Fall Jazz Concert, Winter Instrumental Concert, MAJE Central District Jazz Festival, Berklee Jazz Festival, Spring Instrumental Concert, and Spring Pops Concert. Additional performances will be added as are appropriate for the ensemble. **Prerequisite: Audition** (auditions for incoming freshmen should be arranged through the middle school band director in January.)

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<b>Intermediate Jazz Ensemble</b>	<b>9-12</b>	<b>4.0/2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2, CS3</b>		

Meeting times 4 periods per cycle in regular school day, a long block each Thursday evening from 5:00 – 6:20 PM, additional hours for performances. Thursday evening rehearsals are required for all students in the class. Students who cannot be scheduled, by guidance, to meet during the school day may take the course Thursday evenings only for 2 credits. Literature studied will be predominantly at the NYSSA/MAJE Grade 2-3 level. Topics covered will include review of intonation, meter and time, scales, chords and basic chord progressions for improvisation. Instruments included in this group are based on standard Big Band jazz instrumentation (Alto Saxophone, Tenor Saxophone, Baritone Saxophone, Trumpet, Trombone, Bass Trombone, Piano, Guitar, Bass (Upright or Electric), Vibraphone, and Drum set. Other instruments may be used as a ‘double’, but the student’s primary instrument for this ensemble must be on this list. Styles studied will include Swing, Ballad, Blues, Latin Jazz styles, and Jazz-Rock. Participants are required to perform with the ensemble at the Fall Jazz Concert, Winter Instrumental Concert, MAJE Central District Jazz Festival, Berklee Jazz Festival, Spring Instrumental Concert, and Spring Pops Concert. **Prerequisite: Audition** (auditions for incoming freshmen should be arranged through the middle school band director in January.)

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<b>Introduction to Guitar</b>	<b>9-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1</b>		

This course teaches basic guitar skills and is open to all students. Students who enroll in this class must have little or no prior experience with the guitar. Proper playing technique is covered including note reading, chords and tablature. Musical skills such as rhythm, harmony, and melody are also included. An acoustic guitar will be available to each student during the class period. This class is limited to an enrollment of 15.

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<b>Introduction to Piano</b>	<b>9-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1</b>		

This course is designed as a beginning piano class for students with little or no music reading skills. Students will learn musical skills such as rhythm, harmony, and melody. Students who have never played piano will learn how to read musical notation and will become acquainted with basic piano techniques such as playing scales and intervals, playing

single-line melodies with chord accompaniment, and playing simple popular and classical songs. This class is limited to 12 students.

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<b>Introduction to Piano II</b>	<b>10-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1</b>		

This course is designed as an intermediate beginner piano class for students who have taken Introduction to Piano or have the equivalent of one year of piano study. Students should be comfortable with basic note reading in both hands, and should have a basic understanding of music terminology. Students should be able to play using both hands. Students should have a good basic understanding of rhythms and note values. Students in this course will begin to explore playing music by the world's greatest composers as well as some popular music. This course is not designed for advanced students. *Prerequisite: Introduction to Piano or by audition.*

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<b>Mixed Best Buddies Pops Choir</b>	<b>9-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1</b>		

Best Buddies and friends will join in the fun of singing the best of Broadway including songs from the many "Disney shows" and other musicals such as "Wicked" and "Hairspray". Pops music will include selections from "Glee" as well as selections from artists including The Beatles, Taylor Swift, Rascal Flats and Carrie Underwood. Come and join in the fun of making music with our wonderful choir. In collaboration with our Life Skills program, this group learn to use American Sign Language for many of our selections. This choir performs in three concerts per year as well as in the Holiday Assembly. This choir is open to all Nashoba students. No audition is required.

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<b>Concert Choir</b>	<b>9-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1</b>		

Open to all students in grades 9-12 by audition. Vocal technique will be explored in depth to aid the student in developing their full potential as singers. Students will sing a variety of repertoire representing the standard periods up to and including current Broadway music. Works by composers such as Handel, Bach, and Mozart will be explored. Music may be performed in languages other than English such as Latin, French, Italian or German. Students in Concert Choir will be required to perform in three concerts per year as well as one competition (MICCA) and at graduation. Students in grades 9, 10 & 11 will be auditioned for the choir during January and will be announced via Mrs. Mianulli's SharePoint site. Incoming freshman are encouraged to audition and should check with their middle school music teacher for audition information. Students may audition in pairs.

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<b>Jazz Choir</b>	<b>9-12</b>	<b>1.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1</b>		

Jazz choir is designed to explore the vast vocal jazz repertoire of the 1930's, 40's and 50's as well as contemporary jazz a cappella repertoire. Students are admitted by audition only and will try out during January and February of the preceding school year. Incoming freshmen are encouraged to audition and should check Mrs. Mianulli's SharePoint web site for audition information. Students should have a strong interest in jazz and should have good reading and listening skills. Jazz Choir performs in three concerts per year. This course meets one day after school for an hour and fifteen minute rehearsal.

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<b>Madrigal Choir</b>	<b>9-12</b>	<b>1.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1</b>		

This course is geared towards the study of small ensemble a cappella vocal music from the 16<sup>th</sup>, 17<sup>th</sup>, and 18<sup>th</sup> centuries as well as level five and six contemporary compositions. Madrigal Choir performs in three concerts per year as well as one competition (MICCA). Students should exhibit good reading and listening skills. This chorus is by audition only with auditions held during February of the preceding school year. Incoming freshman are encouraged to audition and should check Mrs. Mianulli's SharePoint web site in January for audition information. This course meets one day after school per week for an hour and fifteen minutes.

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<b>Women's Ensemble</b>	<b>9-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE, CS1</b>		

Women's Ensemble is designed to explore the vast repertoire of treble vocal music from the 16<sup>th</sup> century to contemporary pop music. Women's Ensemble performs in three concerts per year and in one competition (MICCA). Students should exhibit good reading and listening skills. This class is by audition only. Auditions will be held during January and February



of the preceding year. Incoming freshman are encouraged to audition and should check Mrs. Mianulli's SharePoint web site in January for audition information This course meets one day per week after school for a 1 hour 30 minute rehearsal. Auditions will be held in groups of two or more students. Come audition with your friends!

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**ACC Music Technology** **9-12** **2.0**  
**Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2**

This course introduces students to current computer applications and related technologies as well as presenting an overview of electro-acoustic music history, theory, and techniques. Students will also use a few Windows-based applications of music technology to create computer generated performances, printed sheet music, and digital recordings. Understanding of concepts, development of skills, and creation of projects will be stressed, with extensive hands-on experience. Topics will include the following: (1) introduction to the computer and basic computer skills, (2) History of Electro-Acoustic Music, (3) MIDI, (4) computer-based MIDI sequencing, (5) computer-based notation, (6) basics of music theory, (7) microphones and sound reinforcement, and (8) digital audio recording concepts and skills. Limit of 17 students per section. *This class fulfills 2.0 credits of the Art or Computer Applications requirement.*

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**ACC Music Theory** **9-12** **4.0**  
**Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2**

This is a full year course designed to introduce the student to musical literacy and the construction of traditional music. Topics include Pitch Notation, Rhythmic Notation, Meter, Major and Minor Keys, Intervals, Chords, Harmonic Progression, Four Part Voice Leading, Composing and Arranging for Voices and Instruments. In addition, students will use MIDI (musical instrument digital interface) keyboards to create printed scores and computer generated performances of their composition. Students will also use Practica Musica software to study ear training and will make use of websites such as Teoria, Music Theory Online, and EasyMusicTheory.com to the study notation and construction of music. *This class fulfills 4.0 credits of the Art or Computer Applications requirement.*

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**AP Music Theory/Composition** **11-12** **4.0**  
**Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2**

This is a full year course that meets five periods a week and is geared towards arranging and preparing for the AP music exam. This course will cover advanced concepts in theory and composition. Instrumentation, transposition, counterpoint, four part voice leading, melodic dictation, harmonic dictation, rhythmic dictation and sight singing will be covered in depth. Extensive use of computers, notation software and midi-applications will be covered so that students will be able to hear their work through midi-playback. This course is recommended for students who are interested in taking the Advanced Placement Music Theory test in the spring as well as those who may be majoring in music at the college level. *AP credit will be awarded only after a student taking this course completes the AP exam. Prerequisite: Music Theory 1 and/or teacher approval after demonstrating the ability to read music in at least one clef. This class fulfills 4.0 credits of the Art or Computer Applications requirement.*

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## Science Program

The science department offers courses designed to acquaint students with the means of inquiry used by scientists, to acquire knowledge that comprises the essential structure of each of the sciences, and to develop a respect for and an enduring curiosity about the natural world and the mysteries of the universe. A student may choose to be introduced to the content and methods of several of the sciences or may wish to concentrate on one or more of the sciences by doing advanced work.

Laboratory work is integrated into the curriculum of the courses. Additionally, for those students desiring a greater depth to their laboratory experience, some courses include a 5-credit option which meets an additional period every 4 days. The 5, 6, and 8 credit courses require the student to commit extra periods to science within their seven period schedule.

All students **must pass one** of the four approved MCAS science tests (Technology/Engineering, Biology, Chemistry, or Physics) to qualify for a diploma. In addition, students **must complete one of the tests** by the end of their sophomore year by either taking Engineering the Future as a freshman or Biology as a sophomore. Nashoba does not explicitly recommend either course of action. See the Massachusetts Department of Education website for more specific information: <http://www.doe.mass.edu/mcas/science/?section=about>

## Science Program Sequence

Grade 9	Grade 10	Grade 11	Grade 12
<b>Honors/AP Courses</b>			
-Physics with Engineering Applications -Environmental Science	AP Biology	AP Chemistry	AP Physics C: Mechanics
<b>Accelerated Courses</b>			
-Physics with Engineering Applications -Environmental Science	Biology	-Chemistry -Anatomy & Physiology -Genetics for the 21st Century	-Chemistry -Anatomy & Physiology -Genetics for the 21st Century -Physics
<b>College Prep Courses</b>			
-Environmental Science -Engineering the Future	-Biology -Biology and the Human Body	-Chemistry -Anatomy & Physiology -Principles of Tech 1 -Physical Science: Physics I & II -Physical Science: Chemistry I & II -Entomology -Projects in Biotechnology	-Physics -Chemistry -Anatomy & Physiology -Principles of Tech 1 and 2 -Physical Science: Physics I & II -Physical Science: Chemistry I & II -Entomology -Projects in Biotechnology

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**HON, ACC Physics with Engineering Applications** **9** **6.0**  
**Mission Expectations Fulfilled: AE1, AE3, AE4, CS2**

Physics with Engineering Applications takes a hands-on, project based approach in teaching the 9<sup>th</sup> grade physics curriculum. Lab work is the primary focus as teams of students use the engineering design process and the scientific method to design, build, test, and improve prototype devices. Students learn basic principles of physical science and explore engineering ideas like modeling of systems. Students learn the basics of instrumentation and data collection. Graphing and data analysis are stressed. Projects are based in physics, chemistry, and electronics

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**CP Engineering the Future: (MCAS Engineering Preparatory course)** **9-10** **4.0**  
**Creating the World of the 21st Century**  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2**

Engineering the Future is a full-year, introductory engineering course, suitable for students in grades 9- 10. The course provides a strong foundation in engineering and offers students an opportunity to explore the social, historical, and environmental contexts of emerging technologies. A central goal of the course is to build technological literacy for every student. Throughout the course, students develop a practical understanding of how we all are influenced by technology, and how we all influence future technological development by the choices we make as workers, consumers, and citizens. The course is not intended exclusively for pre-engineering students or students who wish to enter technical trades. The course is aimed specifically at seven standards in technology and engineering: Engineering Design, Manufacturing, Construction, Communication, and Energy Systems: Fluid, Thermal, and Electrical. The course is consistent with the National Standards for Technological Literacy (ITEA 2000). *Students are expected to complete the corresponding MCAS test at the end of this course.*

**Environmental Science** is a survey course designed to introduce fundamental concepts used in biology, chemistry, earth science and physics. Topics are interrelated through an environmental science curriculum, designed to help students understand issues relating to energy and resource management. Emphasis on the development of study skills, laboratory investigations, content and problem solving will vary by level. Laboratory skills are emphasized in this inquiry based class.

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<b>HON Environmental Science</b>	<b>9</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

This course will develop advanced verbal, writing and thinking skills. Measurement, organization of thought processes, graphing, mathematical relationships and analysis of data will be emphasized in class and lab to aid in problem solving. Students interested in the Honors course should meet the criteria outlined on page 7 of the Program of Studies and should be recommended for Algebra II. *Prerequisite: Knowledge of metric measure, basic algebra & familiarity with basic lab equipment.*

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<b>ACC, CP Environmental Science</b>	<b>9</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

This course is designed to develop study skills and higher thinking skills using content material, then applying these skills to problem solving. It will include lab set-up, equipment usage, data collection, organization and graphing, along with the analysis to see patterns and relationships in the natural world. *Prerequisite: Basic knowledge of the metric system, mathematical & laboratory skills is assumed to be part of the student's background.*

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**Biology** is a laboratory-oriented course that studies major biological concepts and enables the student to discover inter-relationships within the physical and biological environment. It provides students firsthand experience with such learning skills and processes as observing, classifying, hypothesizing, experimenting, organizing and recording data, interpreting, predicting and report writing. Most of the text material requires students to grasp the principles being presented in order to permit time for appropriate laboratory investigations. *Prerequisite: Successful completion of freshman science.*

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<b>AP Biology</b>	<b>10</b>	<b>8.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

AP Biology is an intensive high school course, designed to be the equivalent of a college introductory biology. Students must be able to read, comprehend, and take competent notes on a widely used college text, master assigned material, and work well both independently and with others. Essential to success is the ability to utilize scientific reasoning and the mastery and synthesis of many facts into a unified, and coherent whole. There will be a required summer assignment. Students will be required to take the biology MCAS at the end of the year. *Prerequisite: B or higher in 9<sup>th</sup> grade honors or accelerated science course.*

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<b>ACC Biology</b>	<b>10</b>	<b>4.0/5.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

This course will develop critical thinking and writing skills. Laboratory periods include some student-designed investigations. Students will organize, graph and interpret data collected during their experiments. Recent developments in technology and their implications for society are studied throughout the year. Students electing this course are expected to have excellent reading skills in order to identify, organize and comprehend the ideas presented in the textbook. Students in the 5-credit course will be encouraged to take the biology SAT II exam. *Students will be required to take the biology MCAS at the end of the year.*

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<b>CP Biology</b>	<b>10</b>	<b>4.0/5.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

This course is designed to further develop independent study skills and higher thinking skills using content material and applying these skills to problem solving. This course utilizes lab set-up, equipment usage, data collection, organization, graphing and analysis to discover patterns and relationships in the natural world. *Students will be required to take the biology MCAS at the end of the year.*

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<b>CP Biology and the Human Body</b>	<b>10</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

This course is geared towards students who have **passed the Science and Technology MCAS exam** during their freshmen year. Major biological concepts will be taught by examining the structures and functions of the human body. Science skills will be developed through laboratory experience including set up, data collection and analysis, and interpreting results. The hands-on approach is designed to help students apply their knowledge to study and understand major life processes. Additionally, this course is designed to further develop independent and higher order thinking skills.

*Prerequisite: Successful completion of a freshmen science course and a **passing score** on a science MCAS test.*

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## Chemistry

<b>AP Chemistry</b>	<b>11-12</b>	<b>8.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

A rigorous and extremely challenging chemistry course, meeting ten periods per week, whose aim is to satisfy requirements of college freshmen chemistry. Students are expected to take the Advanced Placement (AP) test in the spring. Topics covered include stoichiometry, atomic structure, bonding theory, reaction theory, gases, solution and colloidal chemistry, equilibrium, solubility product, chemical thermodynamics, oxidation-reduction, and organic chemistry. Students must exhibit willingness and have available time in their daily schedules to complete an average of at least one hour of homework per night. (Physical) *Prerequisite: Excellent science grades, ability to read & comprehend a college text, excellent mathematical application skills.*

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<b>ACC Chemistry</b>	<b>11-12</b>	<b>4.0/5.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

This course deals with the nature, composition, and change of matter. The emphasis is on chemical laws and theories, atomic structure, and chemical mathematics necessary to prepare for work at the college level. The scientific method of observation, discovery, correlation of data, and the formulation of theories gives the student experiences similar to that of the practicing scientist. The student must be able to assimilate material from the text independently. *Prerequisite: B in comparable level science courses & a thorough proficiency in solving algebraic word problems. Students enrolled in Chemistry must have taken or be currently taking Algebra II/Trig or Pre-Calculus.*

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<b>CP College Chemistry</b>	<b>11-12</b>	<b>4.0/5.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

This course is basic chemistry for the college-bound student, non-science majors. It requires some math but not the math expertise required in Accelerated or AP chemistry. The major chemical concepts of bonding, charges, atomic structure, gas laws, and equilibrium are discussed and used in experiments. *Prerequisite: A basic proficiency in algebraic word problems, comfort with math, and a grade of B or better in high school science courses.*

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<b>ACC, CP Human Anatomy &amp; Physiology</b>	<b>11-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

This course is designed for students who may wish to enter some aspect of the medical field: doctor, nurse, paramedic, medical technician, etc. All systems will be studied in detailed terms of their anatomy and physiology. Information for understanding the structure and function of the human body are presented. Laboratory activities and dissections will be used to enrich textbook readings. Advanced reading levels of the text require that students possess good interpretive reading skills. (Biological) *ACC Prerequisite: Successful completion of biology honors or accelerated level with grades of A or B and recommendations of previous science teachers. CP Prerequisite: Successful completion of biology, college preparatory level or above.*

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<b>ACC Genetics for the 21st Century: Genes, Computers, and Disease</b>	<b>11-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

This course is designed for students who have completed accelerated or honors biology and may be interested in a career in the biological or medical sciences. In this project based course, students will use online bio-computing resources to study the roles of genes and proteins in various genetic and infectious diseases; including AIDS, cholera, E. coli outbreaks and diseases of the eye. Computer based research will be supplemented with laboratory exercises, lectures and dissections. Students will use the same web-based research tools, such as 3-D protein modeling software, currently

used by scientists on a daily basis. This course will meet every other day to enable students to fit it into their schedule. *Prerequisite: Biology class at accelerated level or higher.*

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<b>CP Introduction to Entomology</b>	<b>11-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

A course designed to introduce juniors and seniors to a basic understanding of insects and their significance. Practice research, experimentation, dissection, observation, collection techniques, graphic organizers and outdoor activities make this a hands-on thought provoking experience. You will never again see an insect as “just a bug.” Assessment will be ongoing based on accumulated knowledge, laboratory work, and an insect collection. *Prerequisite: Biology*

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<b>CP Projects in Biotechnology</b>	<b>11-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

This course is geared towards those students who have completed a biology course and would like to earn science credit through hands-on projects involving biotechnology. Topics will include purification of a glow-in-the-dark protein, the identification of fish by protein fingerprinting and isolating viruses from tobacco. *Prerequisite: Biology*

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<b>CP Physical Science: Physics I</b>	<b>11-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

The class is designed for students in grade 11 or 12 interested in furthering their science knowledge through a hands-on project based course and are planning to attend a two-year college or technological school. Selected topics in mechanics will be explored, developed, and refined through laboratory work and mathematical applications.

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<b>CP Physical Science: Physics II</b>	<b>11-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

The class is designed for students in grade 11 or 12 interested in furthering their science knowledge through a hands-on project based course and are planning to attend a two-year college or technological school. Selected topics including heat, light, sound, electricity, and magnetism will be explored, developed, and refined through laboratory work and mathematical applications.

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<b>CP Physical Science: Chemistry I</b>	<b>11-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

This course is for students in grade 11 or 12 who have completed biology and would like to further their science knowledge through a thoughtful, methodical approach to the basic concepts of chemistry. Topics will include: naming compounds, writing formulas, balancing equations, predicting product composition and predicting product quantity. Laboratory work will be an integral part of the course and evaluation.

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<b>CP Physical Science: Chemistry II</b>	<b>11-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

This course is for students in grade 11 or 12 who have completed biology and would like to further their science knowledge through a thoughtful, methodical approach to the basic concepts of chemistry. Topics will include: solutions chemistry, exploration of the gas laws and their application, acids and bases, and oxidation-reduction reactions. Laboratory work will be an integral part of the course and evaluation.

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<b>AP Physics C: Mechanics</b>	<b>12</b>	<b>6.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

This course is designed to meet the needs of students taking the AP C: Mechanics exam and going to four year liberal arts or engineering colleges, possibly majoring in a science field. Included is the study of the basic laws of physics along with the experimental and mathematical development of logical and critical thinking skills through the use of the scientific method. Calculus will be used in problem solving where appropriate within the confines of the course. . In addition to the AP C: Mechanics curriculum, selected topics in electricity, magnetism and light will be introduced. *Prerequisite: Currently enrolled in calculus and recommendation of previous science teacher.*

<b>ACC Physics</b>	<b>12</b>	<b>4.0/5.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

This course is designed to meet the needs of student going on to four year liberal arts or engineering colleges, possibly majoring in a science field. Included in the course is a study of the basic laws of physics and application of these basic laws through problem-solving to develop logical and critical thinking skills. *Prerequisite: Currently enrolled in pre-calculus or calculus and recommendation of previous science teacher.*

<b>CP Physics (Conceptual Physics)</b>	<b>12</b>	<b>4.0/5.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

This course is designed for the student going to a four-year/two-year college, not majoring in engineering or technology, and also for the student going on to a two-year technological school. The basic laws of physics and their relationship to practical situations will be studied. There will be some problem-solving to develop logical thought processes. Emphasis will be placed on learning and applying basic physics concepts. *Prerequisite: Successful completion of algebra I and geometry.*

<b>CP Principles of Technology</b>	<b>11-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

A combination laboratory/research course using technology learning activities (T.L.A.) to develop critical thinking, creative thinking, and problem-solving skills needed to reinforce the technological system concepts studied. Problem-solving methodology includes, in a variety of forms: problem definition, problem analysis, creative solution generation, development, and evaluation. Activities used are relevant, interesting, and challenging. *This applied technology course may not be accepted by four year state universities as natural science credit.*

<b>CP Principles of Technology 2</b>	<b>12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS2</b>		

The Principles of Technology 2 course is a full year course offered to senior students. It is a rigorous problem-solving course based on problems of global, national, or local nature. The student must identify the problem he/she proposes to solve and produce an outline of the plan of attack. The solution must include at least one semester of research and one semester spent in the development of a three dimensional representation of the solution arrived at by the research. *This applied technology course may not be accepted by four year state universities as natural science credit.*  
*Prerequisite: 'C' or higher in Principles of Technology.*

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## Social Studies Program

The social studies program is designed to prepare students for active, intelligent, and informed decision-making within the framework of democracy. The methods of inquiry in history and the social sciences are essential to these objectives. Students may benefit by the course offerings in the following ways:

- *Citizens and Taxpayers* - The emphasis on why events happen and why people behave as they do, rather than a simple narrative, forms the basis of all courses. By clarifying the alternatives on important social issues, the students are encouraged to develop the ability to exercise critical thinking skills.
- *Occupational Choice* - Business and industry are recognizing that they have an obligation to deal with a wide range of social problems. Scientific and engineering problems will be dealt with more effectively by those with a background in social studies.
- *Future Study* - College admissions officers are inclined to view students with a balanced education more favorably than those with narrow preparation. These students will be an asset to the institution they attend, as well as to society. Portions of the college entrance exams also reflect the need for social studies education.

**\* All students taking Social Studies are now required to take 1 semester of US History I or Pre-AP US History during Sophomore year.\***

<b>AP American Government</b> <b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>	<b>12</b>	<b>4.0</b>
<p>This course will be a full year course to be offered for seniors. The course will involve an in depth study of the U.S. Constitution. Students will be responsible for such topics as branches of government, civil rights and liberties, political parties, campaigns, state and local government, and foreign policy. The course will also use current case studies in a project-based format. <i>All students enrolled in AP Government and Politics will take the AP exam.</i></p>		
<b>ACC, CP Baseball in History</b> <b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>	<b>10-12</b>	<b>2.0</b>
<p>This course will take a deeper look into this important era and sport in modern American history. It will be framed around major events in both American and Baseball history with an emphasis on how each impacted the other, and will introduce students to the concepts of historiography and definitive research. Students will read from primary sources, examine closely the major figures of both American and Baseball history, and examine multiple sources of history, from 19<sup>th</sup> century newspaper accounts, correspondences, and the visual record from both television and the internet. Students will develop a greater understanding of both American and Baseball History in political, social and historical terms.</p>		
<b>CP Civics</b> <b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>	<b>10-12</b>	<b>2.0</b>
<p>The civics course will study what it means to be a citizen in the United States of America. The constitution and framework for United States government will be examined, as well as the rights, responsibilities and privileges that citizens have in the United States. A special emphasis will be placed on determining the role of the citizen in a representative democracy. All students will be required to complete a community service project as a demonstration of their citizenship skills.</p>		
<b>HON, ACC The Civil War Era</b> <b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>	<b>10-12</b>	<b>2.0</b>
<p>This course will focus on the underlying causes of the Civil War, surveying the establishment of slavery in the Americas from the 16<sup>th</sup> century, discussing the role of slavery and states' rights in the formation of the Constitution, and major political, economic and social/psychological factors leading up to hostilities in 1861. Coverage of the war will focus on secession, military campaigns in the east and west. In addition the social history of the war will be studied, including contrasts of northern and southern society, and the roles of women and African-Americans in the war effort. Finally the effects of technological advancements will be juxtaposed against a society in transition, and compared with seminal pre-war and wartime individuals.</p>		
<b>ACC International Affairs</b> <b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>	<b>10-12</b>	<b>2.0</b>
<p>This class presents an in-depth study of American foreign policy from 1945 to the present. Units of study include the Cold War, United Nations, Middle East, China, Southeast Asia and the current status of Russia. Advanced research, writing and analysis skills are expected of accelerated level students. Essay writing, individual projects and oral presentations are stressed.</p>		
<b>ACC, CP Introduction to Ethics</b> <b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>	<b>10-12</b>	<b>2.0</b>
<p>A survey of the main theories of classic ethics with an emphasis on modern ethical justice. Case studies from the areas of business, government, law and medicine will be analyzed. Student readings, oral reports and research projects will be required.</p>		
<b>ACC, CP Justice &amp; Law</b> <b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>	<b>10-12</b>	<b>2.0</b>
<p>This course offers a practical exposure to the major areas of civil, criminal, and constitutional law. A study of the role of law enforcement, causes of crime, and current punishment trends will be analyzed. A comparison of ideals versus reality in the dispensing of justice will be stressed. Students of all levels of ability may benefit from this course, as responsible citizenship is a primary objective.</p>		

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<b>ACC, CP Military History After World War II</b>	<b>12</b>	<b>2.0</b>
<b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>		

This course will go into a deep analysis of the Korean, Vietnam, Panama, Grenada, and Desert Storm conflicts. Curriculum will be based on the political and economic reasoning behind the actions as well as an in-depth look into the strategy, intelligence and conclusions of the conflicts as a whole. The course will use projects, independent readings, videos, and research-based instruction.

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<b>H, ACC, CP Facing History</b>	<b>10-12</b>	<b>2.0</b>
<b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>		

Using materials from nationally recognized Facing History and Ourselves, students will explore the roots of anti-Semitism and racism in the US and the world. Using the Holocaust and other examples of genocide and mass violence, students in this class will learn to combat prejudice with compassion, indifference with participation, and myth and misinformation with knowledge. Work will be done through selected readings, research, and an emphasis on class participation.

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<b>AP Psychology</b>	<b>12</b>	<b>4.0</b>
<b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>		

This Advanced Placement course introduces students to the systematic and scientific study of the behavior and mental processes of human beings. Students will study the psychological facts, principles, and phenomena associated with each of the major units in this course; assigned projects emphasize the application of these principals to students' own lives. Independent reading and research at an advanced level—as well as the completion of a summer assignment-- are also required. ***All students enrolled in AP Psychology will take the AP exam.***

ACC,

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<b>CP Psychology</b>	<b>12</b>	<b>4.0</b>
<b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>		

This course provides an introduction to basic theory and research in the areas of human motivation, intelligence and learning, personality and development, and individual and group behavior. Various aspects of psychology will be studied as they relate to the home, school and the society at large. Accelerated level will cover the vocabulary and theories of psychology in an intensive survey of the latest trends in psychology. Above average reading and research skills are necessary. College preparatory level will approach a more practical application of psychology at a less intensive pace.

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<b>ACC, CP Sociology</b>	<b>12</b>	<b>2.0</b>
<b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>		

This discussion-based course explores the meanings and functions of different aspects of society. The class will introduce the main theorists and topics for the subject of sociology while encouraging opinion and independent thought. Reflective essay writing, individual and group projects, student readings and oral presentations are stressed.

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<b>ACC, HON Pre-AP US History I</b>	<b>10</b>	<b>2.0</b>
<b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>		

This semester elective is designed to both cover the curriculum of US History I from Pre-Columbian history through Reconstruction and provide students with intensive instruction in the writing skills, document analysis skills, critical thinking skills, and historical habits of mind required for success in AP US History. Accelerated student will have the opportunity to sample the work-load and expectations of AP US history while still be graded according to accelerated rubrics. *Since Accelerated Pre-AP US History is designed to be a bridge class from Accelerated to AP US History it is recommended that only students with at least a "B" in both Accelerated World History and Accelerated English consider enrolling.*

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<b>ACC, CP U.S. History I</b>	<b>10</b>	<b>2.0</b>
<b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>		

This course is the first part of a 3 semester sequence designed to cover the US History curriculum and prepare students for the MCAS exam. It will survey the development of the United States from a colony through the end of Reconstruction in 1877. Topics include Colonialism, The American Revolution, Federalism, Sectionalism, Early Industrialization, and the Civil War. Political, economic and social change will be evaluated with an emphasis on critical thinking. Readings and



research projects will be an integral part of the course. Accelerated level students should have above average reading and writing skills.

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<b>ACC, CP U.S. History II</b>	<b>11</b>	<b>4.0</b>
<b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>		

This course completes the three semester sequence for US History. Beginning with a thematic review of US History I, it will then cover the major events in US History from 1877 to the present. Topics include the Gilded Age, the emergence of the United States as an industrial and world power, major social, cultural, and political developments of the twentieth century, the World Wars and the Cold War. Political, economic and social change will be evaluated with an emphasis on critical thinking. Readings and research projects will be assigned each quarter based on student interest. Accelerated level students should have above average reading and writing skills.

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<b>AP U.S. History</b>	<b>11</b>	<b>4.0</b>
<b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>		

This Advanced Placement course in U.S. History corresponds to the most recent trends in AP curricula. Students will be required to do extensive reading, research and analysis of primary and secondary sources. The ability to handle college-level assignments is expected. A balance of political, economic and social history from the Colonial period to the present will be presented. *All students enrolled in AP US History will take the AP exam. In addition, students will be required to complete a summer project before entering AP US history in the fall.*

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<b>HON, ACC Understanding the Sixties</b>	<b>10-12</b>	<b>2.0</b>
<b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>		

This course will take a deeper look into this important era in modern American history, often mythologized and misunderstood. It will be framed around three major events of the era (US/Soviet relations, civil rights, Vietnam War) and will introduce to students the concept of historiography - how the writing of history can influence the shaping of historical understanding. Students will read from primary sources, examine closely the major figures of the period, and examine multiple sources of history, from traditional texts, literature, correspondences, private presidential tapes, and the visual record from the growing televised medium. Students will develop a greater understanding of American history, and hopefully of the undercurrents of present-day America in both political and social terms.

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<b>CP World Geography</b>	<b>10-12</b>	<b>2.0</b>
<b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>		

This course provides an understanding of the five themes of geography: place, location, human environment, interaction and regions. Topics include urban and rural geography, mapping, reading, orienteering, climatology, oceanography, landforms, vegetation, ecosystems and local geography.

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<b>HON, ACC World History</b>	<b>9</b>	<b>4.0</b>
<b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>		

This course provides a foundation for the study of American history, literature, and the fine arts. Selected topics from both Western and non-Western cultures are studied from an economic, political and social aspect. The cultural legacy of Greece, Rome, the Renaissance, the Reformation and Imperialism will be studied in parallel with events in Asia and Africa. Students interested in the Honors course should meet the criteria outlines on page 4 of the Program of Studies. Students in the accelerated level are expected to do independent reading, handle research topics, and write at an advanced level.

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<b>CP World History</b>	<b>9</b>	<b>4.0</b>
<b>Mission Expectations fulfilled AE1, AE2, AE4, CS1, CS2, CS4</b>		

This course provides a foundation for the study of American history, literature, and the fine arts. Selected topics from both Western and non-Western cultures are studied from an economic, political and social aspect. The cultural legacy of Greece, Rome, the Renaissance, the Reformation and Imperialism will be studied in parallel with events in Asia and Africa.

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## Specialized Courses

Teachers, guidance counselors and students all can initiate the creation of specialized courses. These are courses that do not presently exist in the *Program of Studies*; they are created throughout the academic year. When teachers and students mutually agree to create a new course, a specialized course form must be filled out. These are on file in the guidance department. Specialized courses must be pre-approved by the principal. The teacher will provide a detailed course description which includes objectives and criteria for assessment and will also note the course level; semester; periods and days offered. Credits will be added after the director of guidance and principal review this form. All of the courses that are currently offered unlevleled can be leveled at the discretion of the teacher, but a specialized course form must be filled out to do so. Specialized courses must be approved by the principal.

Students are reminded that unlevleled courses are not used in the weighted class rank and GPA calculations. If an unlevleled course is leveled, this grade will then be used in both calculations.

Specialized course forms must be signed by the teacher involved, the director of guidance, and the principal. After the principal has signed the form, a new course code number will be created for the course and the form will remain on file in the main office. Specialized courses normally are created when a student is extremely interested in pursuing an area of study beyond the typical course offerings or when a schedule conflict arises that is impossible to resolve without the creation of a new or modified course.

## Virtual High School

10-12

**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS**

Individual Students can personalize their education through VHS by extending the NRHS curriculum in subject areas that are of interest. Virtual High School (VHS) offers full semester core, elective and AP courses that are NCAA accredited. VHS courses will be posted to the Nashoba transcript with the specific title intact but will not be included in the GPA calculation. VHS Courses require independent study skills and are taught asynchronously using a learning management system (LMS Desire2Learn). For an application and additional information visit <http://nrhs.nrsd.net/vhs.php>. Once your application is processed and approved by the VHS Site Coordinator and Principal you will be notified of your enrollment status. For additional information and a full list of the courses offered, see the Virtual High Site Coordinator/Teacher (Mrs. Hoover/English Office) and/or visit the following link: <http://www.govhs.org/Pages/Academics-Catalog>

*VHS Technology courses will fulfill 2.0 credits of the Computer Applications graduation requirement.*

*VHS Art courses will fulfill 2.0 credits of the Art graduation requirement.*

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## Freshman Study Skills

**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4**

As a special focus on transition support for 9<sup>th</sup> graders, all Freshmen are assigned to Directed Study. Directed Study is a more structured learning environment and is intended to help each student make a positive transition to high school and to form a bond with an adult mentor. Efficient and effective use of your study time is crucial to a student's continuing academic success as well as their personal well-being. During the first semester a course on Study Skills and Time Management strategies including organization, reading, listening, note-taking, critical thinking, procrastination, motivation, individual learning styles, and the writing process will be offered. One (1) credit will be earned upon successful completion of the Freshmen Study Skills Course (completion is not a requirement).

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## NL Emergency Medical Technician (E.M.T.) Year 1

10,11,12

4.0/Full Year

**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4**

An intensive college level course that lasts approximately 150 hours of both classroom and practical work. This prepares a person to be eligible to take the state EMT certification exam. Some of the areas covered include CPR, trauma, medical emergencies and pediatric emergencies. This program is supported by the Town of Bolton with the purpose of assisting the Bolton Ambulance Squad with daytime ambulance coverage. Students interested in participating in the EMT program will be required to be 15 ½ year of age by January 1<sup>st</sup> of sophomore year. The application process includes submission of an essay of demonstrated interest, an academic review of the transcript, and screening by a committee of EMS and school officials. Class size is restricted, and we regret that not every eligible candidate can be admitted.

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**NL EMT Year 2/3****4.0/Full Year****Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4**

NRHS Students who have successfully completed EMT Year 1 participate in a course of continued study in the area of Emergency Medical Technology. Students who are enrolled in the EMT Year 2/3 participate in a field internship with the Bolton Volunteer Ambulance Service. Designated crews of four students carrying pagers provide emergency medical coverage for the Town of Bolton on weekdays between 7:15a.m. and 5:00p.m., and at sporting events.

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**Academic Support Center**

The Academic Support Center is a positive atmosphere where students can get homework done and receive academic support. This course, as a tutor or a student learner, is available to all Nashoba Regional High School students upon request from students, teachers, parents, counselors, or administrators. Tutoring includes assistance with basic concepts in specific subjects, classroom assignments, completion of tests, and general study skills including: note-taking, outlining, following directions, and organization. Tutoring is provided by peer tutors, teachers and volunteers in a supportive academic environment. Course credit is awarded to both peer tutors and student learners at a rate of 1 credit per semester for each period 4 out of the eight day cycle. We embrace a cooperative learning environment where positive relationships are developed.

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**NL Senior Project****12****4.0****Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4**

This course will give students the opportunity to make their senior year more meaningful through an authentic investigation on a topic of his choice. Choosing a topic of personal interest allows a student to take control of their own learning. This course will provide students the flexibility to design, produce, examine, research, and investigate an area they choose to spend time on. Responsibilities include meeting with an advisor and senior project leader to help design his or her project. Students will be required to maintain appointments, keep a journal, and write a final paper that includes an annotated bibliography. Like any course students will have a scheduled period of the day that meets. *Students are required to submit a letter of intent to the Principal by August. Projects that have a clear community service component will be given priority.*

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**NL Information/Digital Literacy Course****11/12****2.0****Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4**

Introduction to Information Literacy is a hybrid course that includes instruction in both an online learning environment and in the Media Center. Students electing this course will learn how to use library resources for academic and personal pursuits. In addition, students will take part in project-based learning activities designed to develop 21<sup>st</sup> Century information and digital literacy skills. *This class fulfills 2.0 credits of the Computer Applications graduation requirement.*

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**Transition to Independent Living****11/12****2.0****Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4**

This course will focus on those skills fundamental to independent living. Students will learn the basics of

- personal finance, including banking and budgeting tasks;
- transitioning skills including realistic job goals, applications and interviewing techniques;
- independent living skills including exploration of housing options, assessment of self-care skills including food preparation, self-maintenance, and other related skills
- social interactions including a focus on interpersonal behavior in a variety of settings and instruction on safety issues in social settings;
- other topics will be individualized to the population of the course each year

Students will engage in a variety of activities, in school and in community settings, devised to teach and practice critical living skills. A goal for each student will be a better understanding of their strengths and weaknesses in this area. *Teacher recommendation required for enrollment.*

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**Junior Guidance Seminar** **11**  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4**

All juniors are encouraged to take this second semester course which is aimed at helping students formulate and realize their post high school plans. This course will meet one period in each eight day cycle during the third quarter and is taught by the Guidance Department. With a focus on exploration of post secondary options available, the overall process will be broken down into manageable steps. With Guidance support, students will select programs and institutions of interest, learn the ins and outs of visiting and evaluating schools, develop an activity list, begin compiling materials necessary for the application and develop a timeframe to manage all testing and application deadlines.

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**Senior Guidance Seminar** **12**  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4**

With guidance support, seniors will work through the process of submitting applications to colleges and other post secondary institutions. Counselors will meet with students in this small group format once every eight day cycle throughout the first quarter. Topics covered will progress from continuing the college search and refining a tentative list, to recommendations, essays, resumes, testing, and completing applications, to investigating financial aid and scholarship sources. All seniors are encouraged to utilize this course as a resource in this post graduate planning.

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**NL Career Research, Development and Portfolio Design** **12** **1.0**  
**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4**

This course is designed to introduce career planning as a lifelong process of incorporating an individual's multi-faceted roles within an ever-changing society. Opportunities will be provided to explore and identify individual's interests, attitudes, values, and skills. Students will investigate various occupational requirements and work environments with the purpose of formulating an integrated career/life plan. Students will complete their personal portfolios as well as a presentation portfolio.

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**Independent Study – (Non-Credit Option)**

There are times when a student may not be able to enroll in all selected courses. For example, both the desired math class and the desired language class meet in the same period, a requested course does not run, etc. In the event that that student wishes to learn the curriculum, perhaps in order to progress to the next level in the specific subject area, he or she may undertake study of the curriculum independently in furtherance of this goal. Nashoba will provide a text book (if available) and course syllabus. In order to ensure mastery of the curriculum, and thus earn a recommendation for the next sequential course, the student must pass a department-prepared comprehensive assessment. This private undertaking is not a credit-bearing option, and as such will not be reflected on the student's transcript. Independent Study forms must be approved by the Director of Guidance, the Department Head, and the Principal.

**Individualized Study (Credit Option)**

Individualized studies are typically created when a junior or senior expresses interest and wish to pursue an area of study beyond existing course offerings as a form of enrichment and/or initiative. To qualify, an independent study must involve academic study and research linked to a curricular subject area. The plan will include details such as a course description, clear objectives, and assessment criteria along with the amount of time during the semester (i.e., number of periods or days) that the class will meet. The plan must then be approved by the Department Head. Credits to be awarded will be determined by the Director of Guidance and the Principal.

In addition, Individualized study projects may not duplicate or supplant courses that currently exist in the NRHS curriculum. If approved, individualized study projects will be counted as elective graduation credit (1 credit = 45 hours). Finally, individualized study projects will be unlevleed and will not be included in the weighted GPA or class standing. Individualized study forms must be signed by a Nashoba Regional High School teacher involved in the proposal, the Director of Guidance, the Department Head, and the Principal. After the Principal has signed the form, the individualized study will be considered a "course" and the independent study will then be exclusive to that student.

## Special Education Program

Nashoba Regional High School is an inclusive school environment where we work together to discover and develop each student's unique gifts and talents. The Special Education Department provides a continuum of services and programs for students who have been identified as having educational or social/emotional needs that cannot be met through regular education programs and services alone. Through the Special Education Team Evaluation Process, potential students are evaluated, a TEAM meeting is held and if a student is found eligible for special education services, an Individualized Education Program (I.E.P.) is developed. The I.E.P. identifies the student's strengths and weaknesses, provides goals appropriate to his/her individual needs, and describes the services required to meet those needs in the least restrictive environment possible.

Assessments are conducted by special education teachers, the school psychologist, speech/language pathologist, and other specialists to determine whether a student has a disability and a need for specially designed instruction. Special education services include academic assistance in general education classrooms as well as in three learning centers designed to provide varying degrees of support in a separate setting. Related services such as speech/language therapy and individual or group counseling are also available. Referrals are directed to the special education Team Chairperson.

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## Technology Education Program

Technology education, as part of the *Science and Technology* curriculum framework, provides a comprehensive, action-based program concerned with the application of knowledge (math, science, writing skills) and the investigation of industry and occupations. Opportunities are provided for students to explore an interest in communications, construction, manufacturing and power, energy and transportation.

As a result of taking technology education, students will:

- Experience the practical applications of basic scientific and mathematical principles.
- Gain an in-depth understanding and appreciation for technology in our society and culture.
- Develop increased skills in the proper use of tools, machines, materials, and processes.
- Make better decisions on career choice and educational goals after high school.

When selecting courses over the next four years, you should keep in mind your career goals. The career you are considering should influence the path you follow. The chart below was developed to facilitate course selections. Technology courses are listed beneath careers you may be considering. Technology staff members are available to meet with you to answer any questions you might have regarding classes being offered or careers not listed.

### TECHNOLOGY & ENGINEERING CAREER PATHS & COURSE RECOMMENDATION

<p><b>ENGINEERING &amp; MANUFACTURING</b></p> <ul style="list-style-type: none"> <li>● Engineering the Future</li> <li>● Robotics</li> <li>● Engineering Drawing 1</li> <li>● Engineering Drawing 2</li> <li>● Advanced Drafting Designs</li> <li>● Principles of Technology</li> <li>● Principles of Technology 2</li> </ul>	<p><b>GRAPHICS &amp; WEB-DESIGN</b></p> <ul style="list-style-type: none"> <li>● Graphics 1</li> <li>● Graphics 2</li> <li>● Introduction to Video Production</li> </ul> <p><b>WOODWORKING</b></p> <ul style="list-style-type: none"> <li>● Woodworking Production &amp; Design</li> <li>● Woodworking Technology 1</li> <li>● Woodworking Technology 2</li> </ul>
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<p><b>ARCHITECTURE &amp; BUILDING</b></p> <ul style="list-style-type: none"> <li>• Architectural Drawing 1</li> <li>• Construction Basics</li> <li>• Architectural Drawing 2</li> <li>• Construction Basics 2</li> </ul> <p><b>WELDING &amp; METALS</b></p> <ul style="list-style-type: none"> <li>• Metal Production &amp; Design</li> <li>• Metal Manufacturing Technology</li> <li>• Advanced Metal Manufacturing Technology</li> </ul>	<p><b>MEDICAL FIELD/TECHNOLOGY</b></p> <ul style="list-style-type: none"> <li>• Engineering Drawing</li> </ul> <p><b>EXPLORATORY (MCAS Preparation)</b></p> <ul style="list-style-type: none"> <li>• Principles of Technology</li> <li>• Engineering the Future (9<sup>th</sup> Grade MCAS)</li> <li>• All electives are listed on preceding pages</li> </ul>
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**CP Engineering the Future: (MCAS Engineering Preparatory course) 9-10 4.0**

**Creating the World of the 21st Century**

**Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2**

Engineering the Future is a full-year, introductory engineering course, suitable for students in grades 9- 10. The course provides a strong foundation in engineering and offers students an opportunity to explore the social, historical, and environmental contexts of emerging technologies. A central goal of the course is to build technological literacy for every student. Throughout the course, students develop a practical understanding of how we all are influenced by technology, and how we all influence future technological development by the choices we make as workers, consumers, and citizens. The course is not intended exclusively for pre-engineering students or students who wish to enter technical trades. The course is aimed specifically at seven standards in technology and engineering: Engineering Design, Manufacturing, Construction, Communication, and Energy Systems: Fluid, Thermal, and Electrical. *Students are expected to complete the corresponding MCAS test at the end of this course.*

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**NL Robotics 9-12 4.0**

**Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2**

This course introduces the principles of robotics and the role in which robots play in our technologically evolving world. From the fields of manufacturing, medicine, deep sea, and space exploration, the science of robotics continues to evolve as a significant tool in the workplace. Students will study the principles of mechanical engineering, manufacturing, electronics, and computer programming as they design, build, and mobilize remote control and autonomous robots. They will work within specific design and engineering guidelines as they design, build, and mobilize remote control and autonomous robots. They will work within specific design and engineering guidelines as they plan and build robots designated to performing specific tasks and functions.

Robotics is a hand-on engineering course with an emphasis on problem solving, design construction, and teamwork. Students will integrate mathematics, science/engineering, and language arts as they explore the field of robotics. This class will also help with the First Robotics Competition assisting the robotics club whenever possible. The course will be team-taught by the Technology and Science departments.

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**CP Principles of Technology 11-12 4.0**

**Mission Expectations Fulfilled: AE1, AE3, AE4, CS2**

A combination laboratory/research course using *technology learning activities* (T.L.A.) to develop critical thinking, creative thinking, and problem-solving skills needed to reinforce the technological system concepts studied. Problem-solving methodology includes, in a variety of forms: problem definition, problem analysis, creative solution generation, development, and evaluation. Activities used are relevant, interesting, and challenging.

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<b>CP Principles of Technology 2</b>	<b>12</b>	<b>4.0</b>
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**Mission Expectations Fulfilled:** AE1, AE3, AE4, CS2

The Principles of Technology 2 course is a full year course offered to senior students. It is a rigorous problem-solving course based on problems of global, national, or local nature. The student must identify the problem he/she proposes to solve and produce an outline of the plan of attack. The solution must include at least one semester of research and one semester spent in the development of a three dimensional representation of the solution arrived at by the research.

*Prerequisite: 'C' or higher in Principles of Technology.*

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<b>ACC Engineering Drawing 1 (Part 1)</b>	<b>9-12</b>	<b>2.0</b>
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**(Part 1 and Part 2 should be taken in sequence as a full year course whenever possible).**

**Mission Expectations Fulfilled:** AE1, AE3, AE4, CS1, CS2

This is an introductory course for any student, especially for the student who is planning to pursue or interested in an Engineering or Medical Technology Engineering career. No prior knowledge of the subject is needed to take this course. Units will cover hand sketching, 3D computer parametric modeling (Creo software), covering dimensioning, section views, detailed orthographic drawings, along with assembly 3D modeling and drawings. Students will be given a final design challenge to complete using knowledge and skills acquired in the class. Design challenges will be real-world problems with teams of students working collaboratively using the design process. *This class fulfills 2.0 credits of the Computer Applications graduation requirement.*

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<b>ACC Engineering Drawing 1 (Part 2)</b>	<b>9-12</b>	<b>2.0</b>
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**Mission Expectations Fulfilled:** AE1, AE3, AE4, CS1, CS2

This course explores in greater depth 3D solid modeling used in major engineering fields. Students will construct complex 3D parts, assemblies and 2D conceptual designs in a team approach. Students will then develop motion designs covering gearing, cam and follower, linkages along with material analysis. Upon completion of this course each student will have explored the design philosophy of today's 3D parametric modeling concepts. *This class fulfills 2.0 credits of the Computer Applications or Art graduation requirement.*

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<b>ACC Engineering Drawing 2</b>	<b>10-12</b>	<b>4.0</b>
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**Mission Expectations Fulfilled:** AE1, AE3, AE4, CS1, CS2

This course is for the student who is planning to pursue or interested in an Engineering or Medical Technology Engineering career. No prior knowledge of the subject is needed to take this course. Units will cover hand sketching, 3D computer parametric modeling (Creo software), covering dimensioning, section views, detailed orthographic drawings, along with assembly 3D modeling and drawings. Students will be given a final design challenge to complete using knowledge and skills acquired in the class. Design challenges will be real-world problems with teams of students working collaboratively using the design process. The second part of the course explores in greater depth 3D solid modeling used in major engineering fields. Students will construct complex 3D parts, assemblies and 2D conceptual designs in a team approach. Students will then develop motion designs covering gearing, cam and follower, linkages along with material analysis. Upon completion of this course each student will have explored the design philosophy of today's 3D parametric modeling concepts. *This class fulfills 4.0 credits of the Computer Applications or Art graduation requirement.*

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<b>ACC Advanced Drafting Designs</b>	<b>11-12</b>	<b>4.0</b>
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**Mission Expectations Fulfilled:** AE1, AE3, AE4, CS1, CS2

Advanced 3D parametric modeling gives the student an excellent opportunity to pursue further any interest in the area of 3D parametric modeling. After a review of material covered in previous courses and the completion of units in 3D sheet metal development, welding, and tool & die design, the student may pursue areas of his/her own choice within the scope of the course subject to the approval of the teacher. The course will include a unit in technical illustration during the fourth quarter. *This class fulfills 4.0 credits of the Computer Applications or Art graduation requirement.*

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<b>ACC Architectural Drawing 1</b>	<b>11-12</b>	<b>4.0</b>
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**Mission Expectations Fulfilled:** AE1, AE3, AE4, CS1, CS2

A study in modern home planning and construction, this course includes units in hand sketching, function and design of areas within the home, exterior design, fundamentals of building construction, choice of building sites, site planning, and building codes as they affect home construction. Practical problems include floor plan layout for various types of homes,

elevations, cross-sections, plot plans, perspectives, etc. Scale-model homes will be constructed. Computer Software (*ArchiCAD*) using *building information modeling (BIM)* will be used to complete a full set of detailed house plans. This class fulfills 4.0 credits of the Computer Applications or Art graduation requirement.

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<b>ACC Architectural Drawing 2</b>	<b>12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2</b>		

This course will build on the knowledge previously gained in Architectural Drawing I. The foundation of this course will be an in-depth study of modern construction, both commercial and residential. Students will independently design both a residential and commercial set of architectural plans. Additionally, students will use project management to collaborate on various phases of a final design project. Computer Software (*ArchiCAD*) using *building information modeling (BIM)* will be used to complete a full set of conceptual designs, construction plans and documentation. This class fulfills 4.0 credits of the Computer Applications or Art graduation requirement.

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<b>NL Graphics 1</b>	<b>10-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2</b>		

This is an introductory course in the creation digital media. Students will use many of the features of the Adobe **Creative Suite** program which incorporates Photoshop, Illustrator, and InDesign for creating effective promotional and collateral pieces, publications, packaging design, corporate identity and digital artwork through the use of state-of-the-art computer technology and the latest graphic design software. This class fulfills 4.0 credits of the Computer Applications or Art graduation requirement.

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<b>NL Graphics 2</b>	<b>10-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2</b>		

Graphic Design II will build on the skills acquired in Graphic I as well as incorporate advanced techniques in image editing, illustrating, and desktop publishing. Students will learn advanced techniques, in design theory while preparing design work for print and various projects, such as, yearbook and digital portfolios. Students will utilize the design process using the **Adobe Creative Suite**, which includes PhotoShop, Illustrator, and InDesign. Additionally, students will also be exposed to video production using **Adobe Premiere**. *Prerequisite: Graphics 1.* This class fulfills 4.0 credits of the Computer Applications or Art graduation requirement.

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<b>NL Intro to Video Production</b>	<b>10-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2</b>		

Students will acquire the knowledge needed to effectively prepare and deliver video using state-of-the-art technology. Students will learn the basic techniques of video/digital editing using **Adobe Premiere** (nonlinear editing software). This project-based class will include broadcasting morning announcements, school events and meeting that can be shown live or taped for television shows for airing on cable access television networks. Adobe Premiere will be used to edit and prepare film. Students will be required to record a minimum of one school related activity each semester for morning video announcements. *No prerequisite.* This class fulfills 4.0 credits of the Computer Applications graduation requirement.

## Construction Courses

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<b>NL Construction Basics</b>	<b>10-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1</b>		

With today's high cost of living, students will learn how to do their own minor home repairs, thus avoiding expensive repair bills. Topics to be covered are: soldering, plumbing, electrical repair, faucet repairs, lawnmower tune-ups, simple carpentry, hand-tool use, and safety. In addition, other universal biomes will be researched and modeled to reflect mankind's need for shelter.

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<b>NL Construction 2</b>	<b>11-12</b>	<b>4.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1</b>		

This course is the study of the American construction industry. The students are involved in the basic theory of residential house construction and repair. Utilizing manipulative experiences, the student will gain competence in surveying, layout,



and construction. All students will be involved in the diversified problems of erecting a new structure, either full-size or scaled.

## Manufacturing Courses

**NL Production & Design** 9-12 2.0  
**Mission Expectations Fulfilled: AE1, AE3, AE4, CS1**

This is an introductory course for any student who has an interest in applied hands-on technology. Students will learn different manufacturing, measurement, and fabrication techniques. Projects are developed and refined using metal turning and milling machines, grinding and hand tools, forging, casting, sheet metal development and forming, arc welding, mig welding, oxyacetylene welding, and plasma welding. After taking this course, the student will understand how machines and equipment are implemented into today's manufacturing situations. Additionally, students will acquire basic entry level skills in many of the manufacturing fields.

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**NL Metal Manufacturing Technology** 10-12 4.0  
**Mission Expectations Fulfilled: AE1, AE3, AE4, CS1**

This is an extension of the work studied in Production & Design, with greater emphasis on the processes of fabrication, machining and design. Students will work independently and in teams to develop real world products using the eight step engineering process. A final design challenge will be a class collaboration involving mass production, and total quality management (TQM).

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**NL Advanced Manufacturing Technology** 11-12 4.0  
**Mission Expectations Fulfilled: AE1, AE3, AE4, CS1**

This course is an extension of the skills that were learned in Manufacturing Technology. The students will incorporate their prior knowledge and work independently to solve problems presented by the instructor leading to the development of working prototypes. Problems will vary every semester. One example could be the designing, planning, and fabrication of a working prototype of a human-powered vehicle for competition. Another could be to develop assistive technologies that empower people with disabilities to overcome barriers.

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**NL Woodworking Production & Design** 9-12 2.0  
**Mission Expectations Fulfilled: AE1, AE3, AE4, CS1**

The study of mass production in the woodworking field. The student will participate as an employee of a company set up to mass produce a product for market. The class will study different methods used by management to coordinate man, money, machines and materials to produce and design a sellable item. Emphasis will be placed on computer generated products, the use of jigs, fixtures, and line production techniques.

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**NL Woods Technology** 10-12 4.0  
**Mission Expectations Fulfilled: AE1, AE3, AE4, CS1**

This course is designed to acquaint the student with the processes and operations that are involved in the planning, building, and finishing of a piece of custom-designed furniture. He/she will be able to formulate and express his/her interests and needs by designing and building furniture for a significant purpose, with emphasis on research and study of design processes, fabrication, and finishes used on different styles of period furniture.

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**NL Woodworking Technology 2** 11-12 4.0  
**Mission Expectations Fulfilled: AE1, AE3, AE4, CS1**

A course for the student who is interested in exploring a particular aspect of manufacturing or construction in depth. In September, the student will identify his/her particular interest or problem and work towards a solution using current technology. A representative project may or may not accompany the solution.

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# Comprehensive Wellness

Each student must take and pass Physical Education during grades 9, 10, 11, and 12 at Nashoba.

*Freshmen* will participate in a yearlong alternating day Wellness program. *Sophomores* will participate in a semester of Physical Education and a semester of Health Education. This can be done in the same semester or in 2 different semesters during sophomore year. *Juniors and Seniors* must take and pass one Physical Education elective each year.

In Physical Education at Nashoba, students must be prepared, dressed appropriately, and participate in every assigned class. Students should make up any classes missed to regain any points lost and may do so by participating in a class similar in level and activity. In the case where a student is medically excused and has a doctor's note, alternate methods of assessment will be used.

Electives in Health, and Family and Consumer Science are also offered. One of these classes may be taken as a onetime credit for a Junior or Senior Physical Education elective.

**Note:** *To receive full credit in any area of wellness education, a student must satisfy the Nashoba attendance policy.*

## Physical Education

<b>NL Freshmen Wellness REQUIRED</b>	<b>9</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS4</b>		

This alternating day, year long course is designed to expose freshmen students to a wide variety of physical activities. Our belief is that the more activities a student is exposed to, the more choices he or she has later in life. Units of study include personal fitness assessment, developing guidelines for appropriate lifelong exercise, and participation in a variety of seasonal physical skill activities. These include traditional sports and games, individual and team sports as well as tumbling, ballroom dancing, and more. This course lays the foundation for Junior and Senior electives. Some additional classroom instruction will include the introduction of health topics to be covered in greater detail in the Sophomore Wellness program. All students will be required to wear appropriate attire for participation.

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<b>NL Sophomore Wellness REQUIRED</b>	<b>10</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4</b>		

Sophomore Wellness is a required course and includes:

### 1. *Sophomore Physical Education: 1.0*

The physical activity component is designed to expose students to a wide variety of physical activities. Units of study include personal fitness assessment, developing guidelines for appropriate lifelong exercise, and participation in a variety of seasonal physical skill activities. These include traditional sports and games, individual and team sports. This course lays the foundation for Junior and Senior electives.

### 2. *Sophomore Health: 1.0*

The health component of this sophomore course will introduce students to modern perspectives in an array of health topics. Lessons are designed to improve health literacy as well as, develop skills needed to promote mental, physical, social, and emotional well being. **\*\* A student is required to register for both physical education and sophomore health. A student can take both concurrently or separately during the sophomore year.**

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<b>NL Lifetime Sports</b>	<b>11,12</b>	<b>1.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS4</b>		

This alternating day, semester long course will provide the opportunity for students to participate in fitness enhancing sports on a more personal level. Emphasis will be placed on lifelong activities that encourage conditioning, flexibility, muscular strength, and cardio vascular endurance. All students will be required to wear appropriate clothing for participation. Activities will be seasonal and are activities that can be easily engaged by students through adulthood. They include: Badminton, Golf, Tennis, XC Skiing, DDR, Weights, Walking, Volleyball, and others.

<b>NL Team Sports</b> <b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS4</b>	<b>11,12</b>	<b>1.0</b>
<p>This alternating day, semester long course will be offered for students who enjoy active participation in traditional team sports. Sports will be offered in season and are designed to teach students the rules and strategies involved in team activities. Physical Wellness through the application of conditioning, flexibility, muscular strength, and cardio vascular elements will be addressed. All students will be required to wear appropriate attire to participate. Team Sport activities will include: Flag football, Soccer/Speedball, Volleyball, Basketball, Softball, Mat Ball, Team Handball, Floor Hockey, and other group activities.</p>		
<b>NL The Total Body Workout</b> <b>Mission Expectations Fulfilled AE1, AE3, AE4, CS1, CS4</b>	<b>11,12</b>	<b>1.0</b>
<p>This semester course offers a variety of fitness activities which focus on cardiovascular, strength, flexibility and stress reduction. Some of the activities will be Pilates, yoga, zumba and more! All students will be required to wear appropriate clothing for participation.</p>		
<b>NL Personal Safety – Rape Aggression Defense Systems (R.A.D.) Females Only</b> <b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS4</b>	<b>11,12</b>	<b>1.0</b>
<p><b>R.A.D. Systems</b> is a program that is designed to help women overcome the effects of sexual harassment and sexual violence on campus by teaching <b>assertiveness, awareness, risk reduction, risk recognition, avoidance and physical defense strategies</b>, since it has been well established that sexual harassment and sexual violence on campus are forms of sexual discrimination prohibited by Title IX. The classes consist of a power point presentation, warm-ups and stretches, learning and practicing self-defense techniques. The final class is a controlled live simulation assault where students will put knowledge, instinct, and self-defense techniques into action. <b>Requirements:</b> <i>Signed forms, sneakers and a change of clothes.</i> Recommended Students: 12</p>		
<b>NL Mentors in Violence Prevention-MVP</b> <b>Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4</b>	<b>10-12</b>	<b>2.0</b>
<p>This course, through discussion and role playing, focuses on creating strategies to empower students to be pro-active in helping promote a positive and safe school environment (high school, college, work place, etc.). This innovative curriculum has been developed by Northeastern University and is co-taught by both a male and female wellness instructor. Students will gain a heightened sense of awareness and will explore safe ways to confront issues of violence, harassment, and abusive peers to make a difference in our society. This class meets for a semester, on alternating days. Maximum Students 12 boys and 12 Girls</p>		
<b>NL Best Buddies Physical Education</b> <b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2, CS3, CS4</b>	<b>9-12</b>	<b>1.0</b>
<p>This class is designed for motivated students. It focuses on teaching skills, sportsmanship, and the importance of physical activity to students with intellectual disabilities. Students will be asked to demonstrate and assist with game playing and be positive role models. The class will cover a wide variety of activities and will also include practice and training for the Special Olympics. Students will be required to wear appropriate clothing for participation.</p>		
<b>NL Strength/Resistance Training</b> <b>Mission Expectations Fulfilled AE1, AE3, AE4, CS1, CS4</b>	<b>11-12</b>	<b>1.0</b>
<p>This course is designed as an introductory course that will help students understand the principles of strength training. Students will learn several different exercises for each muscle group, understand the difference between lifting for strength and lifting for endurance, execute lifts using correct technique, and properly warm up and cool down before and after workouts. They will also plan an individual program by applying the principles of resistance, overload, and specificity which will have positive effects on motor performance parameters and contribute to successful participation in sports.</p>		
<b>NL CrossFit Conditioning</b> <b>Mission Expectations Fulfilled: AE1, AE3,AE4, CS1, CS2, CS3, CS4</b>	<b>11-12</b>	<b>1.0</b>
<p>In this class students will put their strength, agility, balance, and endurance to the test in a fun, fast-paced environment.</p>		

Workouts will consist of constantly varied, high-intensity, functional movements including but not limited to running, weight lifting, plyometrics, and calisthenics. A nutrition component will also provide information on how to maximize health and performance. This class is perfect for students of all ability levels who are looking to improve their level of fitness.

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<b>NL Student Leader</b>	<b>10-12</b>	<b>1.0</b>
<b>Mission Expectations Fulfilled: AE1, AE3, AE4, CS1, CS2, CS3, CS4</b>		

Junior and senior students who display outstanding qualities with regards to leadership ability and skill mastery may select this program upon approval of the wellness department. This group leader serves as the assistant to the teacher and should be capable of motivating younger students. Among other responsibilities, student Leaders will be asked to prepare equipment for the class activity, officiate and supervise the activity, and assist in clean up at the end of the activity. This course may be elected for one or two semesters.

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## **Family and Consumer Science**

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<b>NL Foods 1</b>	<b>9-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4</b>		

In this course you will have an opportunity to prepare a wide variety of foods representing all parts of the Food Pyramid, while learning some basic food preparation techniques. Emphasis is placed developing sound work habits when cooking, while developing an appreciation for healthful cooking and eating. An examination of current food trends and nutrition issues will be included. Join us to discover how you can get more “go power” from the food you eat, and have fun learning to cook for yourself, your family, and your friends.

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<b>NL Foods II International Cuisine</b>	<b>9-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4</b>		

In this course students will have an opportunity to explore the cuisine of countries all over the world, and to examine how eating habits everywhere are influenced by geography, climate, and culture. Students will prepare and taste a variety of recipes each week, covering six different regions of the world. They will use various food preparation techniques, ingredients, and practices that contribute to healthful eating habits. A variety of sources will be used to help students make the connection between great-tasting food and general health and well-being. *Prerequisite: Foods I*

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<b>NL Consumer Education</b>	<b>9-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4</b>		

This course will provide students with an opportunity to learn some real-life skills including goal setting and decision making; financial planning; career exploration, developing a personal budget; smart shopping; saving and investing; using credit and credit cards wisely; how debt affects you; and automobile insurance. Specific topics and activities included in this course will be similar to those found in the National Endowment for Financial Education High School Financial Planning Program.

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<b>NL Nutrition, Food, and Fitness</b>	<b>10-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4</b>		

In this course, students will learn about the importance of healthful eating and regular physical activity as permanent lifestyle habits rather than short-term programs. Students will have the opportunity to prepare healthful meals and snacks each week, and will be given the opportunity to incorporate additional physical activity into their day on a regular basis. Students in this course will have the opportunity to learn to maintain control over their state of wellness through the decisions they make and the habits they develop around eating and physical activity. A variety current issues and topics in these areas will be covered, based on the interest areas of students in the class. *Prerequisite: Foods I*

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<b>Senior Cooking</b>	<b>12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS4</b>		

In this course, seniors who have taken at least one Foods course will have an opportunity to prepare tasty and healthy breakfasts, snacks, and other small meals on a regular basis. The focus will be on eating well when eating on your own. Balancing personal resources such as time, money, knowledge, food preparation skills, and equipment availability will be a part of this course. The connection between diet, exercise and long-term health will be examined in light of current

research, as reported in the media. A community service component will also be included, based on particular interests of students in the course, allowing them to take their new knowledge and skills and help others in the community make the connection between eating well and feeling well. *Prerequisite: At least one Foods Course*

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## **Health**

Health courses are designed to raise students' awareness to important social, family, and personal issues that will help them to make informed decisions as young adults and productive citizens.

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<b>NL On Your Own</b>	<b>11-12</b>	<b>1.0</b>
<b>Mission Expectations Fulfilled: AE1, AE2, AE3, AE4, CS1, CS2, CS3, CS4</b>		

Imagine yourself finished with high school or college and living "on your own." What will you need to make this a successful venture? Concepts of this course will focus on banking, wise use of money/money management, a basic knowledge of food preparation/ nutrition, interpersonal relationships and communication skills. This course will help introduce students to selected activities to prepare them for being "on their own."

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<b>Best Buddies Health</b>	<b>11-12</b>	<b>2.0</b>
<b>Mission Expectations Fulfilled: AE1 AE2 AE4 C/S1 C/S3</b>		

This course studies health-related topics and is open to juniors and seniors who are interested in the Best Buddies program at Nashoba. Topics include fundamental information about body systems, nutrition, personal health, disease prevention, communication skills, human growth and development, risk assessment and refusal skills. The course provides peer buddies with the opportunity to be partnered with a student in the Life Skills program and participate in health educational activities as well as explore current topics related to disabilities and differentiated learning in a classroom setting. It is a suggested choice for students interested in career opportunities in the social services or educational field, and provides a community service option.

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### **Alternative Wellness Option:**

Students requesting an alternative of Sophomore Wellness course option or assessment must have a fully booked academic schedule where their only possibility to meet the Wellness requirement would be to drop an elective course. Students are required to complete a form which can be obtained from the Wellness Department Head, attach a copy of their current schedule to it, and resubmit it to the Wellness Department Head.

If students meet the criteria, they will be permitted to choose their method of alternative assessment. Choices include;

1. The student will attend a regular Physical Education class two out of every eight days per cycle and register for a future elective Health class to be completed before graduation. The course needs to be taken in addition to the expected annual PE requirement.

2. The student will register for and pass two one credit courses through Virtual High School. One class will be in the area of Physical Education. The other will be a general health course. Both will need to be approved by the Wellness Department Head.

3. The student will take an elective health class or register and pass a Virtual High School general health class or Wellness department generated online course in addition to taking a 1 credit regular Physical Education class prior to graduation.

*Should a student's course load drop below 28 credits, he or she will instantly be enrolled in a regular Physical Education course and Health class.*

## **NOTES:**