



Mascoma 2026-2027 Program of Studies



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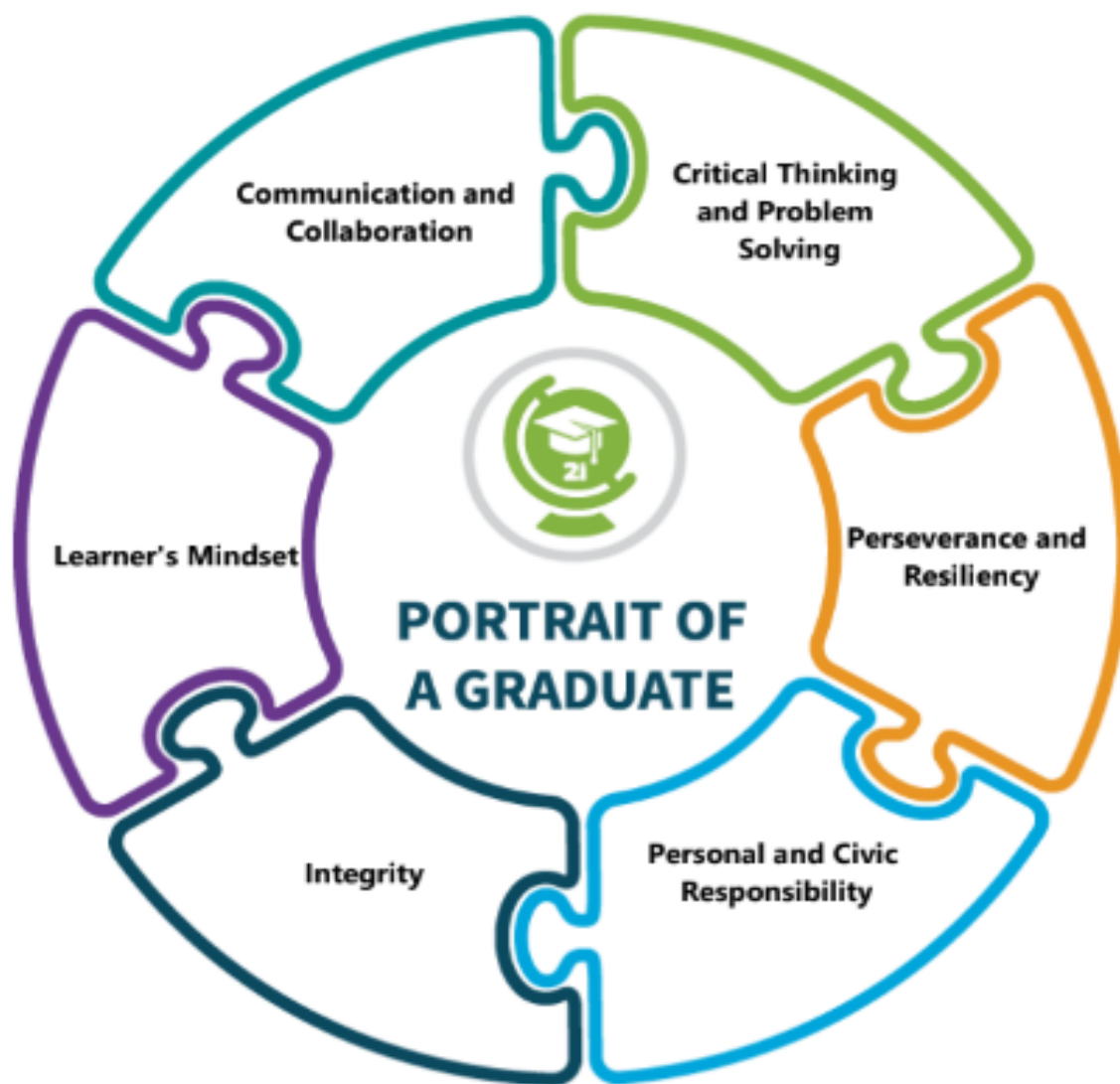
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MVRHS CORE VALUES BELIEF STATEMENT

Mascoma Valley Regional High School strives to be a community of lifelong learners who demonstrate engagement and perseverance in academic and personal endeavors. Through a collaborative effort, the school community is responsible for fostering a safe and respectful environment that promotes a strong work ethic, intellectual curiosity, integrity, and movement toward academic excellence.

MASCOMA VALLEY REGIONAL HIGH SCHOOL PORTRAIT OF A GRADUATE



Communication and Collaboration	Our students: • Articulate thoughts and ideas effectively using oral, written, and nonverbal communication skills in a variety of forms and contexts. • Listen effectively to decipher meaning, including knowledge, values, attitudes, and intentions. • Use communication for a range of purposes and audiences (e.g. to Inform, instruct, motivate and persuade) • Honor and leverage strengths to build collective commitment and action. • Enrich the learning of both self and others. • Seek, contribute, and respond to feedback to achieve collective outcomes. • Elicit diverse perspectives and contributions.
Critical Thinking and Problem Solving	Our students: • Understand the “bigger picture” and propose solutions that are mindful of the impact they may have on other parts of a system. • Consistently improve the quality of one’s own thinking by skillfully analyzing, assessing, and reconstructing. • Applies disciplined thinking that is clear, rational, open-minded, and informed by evidence. • Identify, evaluate, and prioritize solutions to difficult or complex situations. • Implement and reflect critically on a solution.
Perseverance and Resiliency	Our students: • Believe in one’s ability to ultimately attain a defined goal. • Persist to overcome adversity and obstacles to uncover alternate strategies to achieve goals. • Take initiative and act with purpose. • Exhibit steadfastness in achieving success despite difficulty, opposition, and/or failure. • Embrace the idea that failure is a part of success and quickly pivot to keep moving forward. • Reflect on successes and failures as a means to refine the path moving forward.

Personal and Civic Responsibility	Our students: • Act honestly and demonstrate care for the interests of the larger community and greater good. • Honor commitments and own the outcomes, whether positive or negative. • Value and embrace diversity and unique perspectives through mutual respect and open dialogue. • Demonstrate personal, civic, social, local, and global responsibility through ethical and empathetic behaviors. • Know how to make appropriate personal economic choices and understand the role of the economy in society. • Contribute and take action to make the world a better place.
Integrity	Our students: • Adhere consistently to a set of core values that are evident in choices and behaviors. • Earn others' trust and respect through honest, principled behaviors.
Learner's Mindset	Our students: • Embrace curiosity to experience new ideas. • Possess the desire to learn, unlearn, and relearn. • Find and maximize opportunities to actively listen and elicit diverse perspectives from others. • Develop positive attitudes and beliefs about learning.

21ST CENTURY LEARNING EXPECTATIONS

Mascoma Valley Regional High School has developed a set of measurable 21st Century Learning Skills based on our Core Values Belief Statement. These learning expectations are assessed with the school-wide analytic rubrics. In order for a student to become a knowledgeable, productive member of society, they must be able to:

Communicate Appropriately
 Think Critically and Solve Problems Efficiently
 Utilize Technology Productively
 Collaborate Effectively
 Demonstrate Responsible Citizenship

NH DEPT OF EDUCATION APPROVAL STATEMENT

Mascoma Valley Regional High School is fully approved by the New Hampshire Department of Education. The approval is based upon a review of our program offerings and facilities according to current state Standards for Public School Approval. Mascoma Valley Regional High School is also fully accredited by the New England Association of Schools and Colleges.

CREDITS AWARDED UPON DEMONSTRATION OF ACHIEVEMENT OF COMPETENCIES

(Mascoma School Board Policy – 9/23/25)

A Mascoma Valley Regional High School credit is an acknowledgment that a student has met or exceeded all of the academic standards and other requirements associated with that credit. In virtually all respects, those standards and requirements are identified as “competencies” developed by the state or the district as learning targets within a subject area that represent key content-specific concepts, skills, and knowledge. Students are awarded a credit when they achieve proficiency or, in some cases, mastery of the competencies associated with that credit. In addition to traditional course work, students may demonstrate competencies (and earn credits) through learning opportunities outside of the classroom setting, such as extended learning opportunities (ELOs), Learn Everywhere programs, Career and Technical Education (CTE) programs, and other such learning opportunities described below.

A. Definitions.

1. "Academic standards" means what a student should know and be able to do in a course or at each grade level.
2. "Achievement of competencies" means a student has demonstrated competencies at a “proficient” level through a collection of evidence.
3. "Credit" refers to the official record that a student has achieved competencies associated with learning opportunities.
4. "Competencies" means student learning targets that represent key content-specific concepts, skills, and knowledge applied within or across content domains (i.e., similar to subjects).
5. "District competencies" means specific competencies identified by the district as requirements for a specific subject area (which may be contained in a single course or across different courses).
6. "Learning opportunities" means educational experiences, including but not limited to in-person, online, blended, and self-guided classes, ELOs, work-based learning, and alternative learning plans that lead to achievement of competencies. The term also includes “course”.
7. "Proficiency" (including “proficient”) means the minimum student performance required to satisfy the achievement of a competency.

B. Credits Awarded Upon Demonstration of Achievement of Competencies.

1. Credits are earned when students demonstrate achievement of competencies for the course are shown and are not awarded based on class time, age or enrollment status. Demonstration of achievement of a competency is shown by:
 - a. A collection of evidence showing achievement of competencies (e.g., out of school achievements, home education program portfolio, etc.);
 - b. Assessments:
 - i. District approved assessments, or
 - ii. New Hampshire Department of Education approved assessments.

NOTE: Pre-placement tests will not generate credit if they do not fully encompass and assess all required competencies for that credit.

2. Credit is not awarded based solely on time spent achieving these competencies, and may be awarded irrespective of age or enrollment. Credit may be awarded through other learning opportunities, outside the traditional classroom setting, see Section C, below.

C. Learning Opportunities - Methods of Achieving Competencies – Earning of Credits

1. Traditional: Students demonstrate achievement of competencies through the successful completion of a course’s requirements, including class assessments,
2. Other Learning Opportunities and Pathways to Demonstrating Achievement of Competencies:
 - a. Transfer credit from an approved school pursuant to Section E, below;
 - b. An approved home education program (see Board policy IHBG); home-educated students may demonstrate achievement of competencies through evaluation of their portfolio or assessments;

- c. Extended learning opportunities (ELO) under the provisions of Board policy IHBH;
- d. Online/remote learning opportunities under the provisions of Board policy IMBA;
- e. College Credit, including credit earned through Dual and/or Concurrent Enrollment under Board policy IHCD/LEB;
- f. Learn Everywhere programs (pursuant to N.H. Dept. of Education Rule Ed 1400) (See Section F, below);
- g. Co-Curricular activities;
- h. 7th and 8th grade coursework that meets the standards of Board policy IMBD. (Note: competencies may also be achieved regardless of age under paragraph B.2 above.)

D. Interdisciplinary Credit. Interdisciplinary credit is credit that is earned through achievement of competencies across disciplines (e.g., physics) or domains (e.g., science). Districts shall reward credit for competencies earned through interdisciplinary learning opportunities, which may include courses identified as interdisciplinary by the school, or established through an individualized learning plan.

E. Transfer Credit

1. Students can receive credit towards graduation from other approved schools as described in this Section.
2. “Approved schools” include New Hampshire public schools, charter schools, public academies, approved public or private tuition program schools, and all schools in Vermont and Maine that are members of an interstate school district with schools in New Hampshire.
3. The building Principal shall grant credit for any similar courses or programs that have been satisfactorily completed at any other approved schools. If the credit awarded by the original school aligns with the competencies established by the state for the same subject, the transfer credit will be awarded.
 - a. For the purposes of reviewing the issue of whether a course or program is “similar”, the Principal shall consider District course descriptions and curricula, course syllabi, District and graduation competencies, and any other relevant information provided by the parent/guardian of the transferring student, and/or the approved school at issue.
 - b. If the Principal finds that the courses are not similar enough to grant transfer credit in the specific subject area, the Principal may accept the credit as an elective.
4. Review of denial of credit for courses from different school:
 - a. Should the building Principal deny transfer credit, the building Principal shall provide a timely and written notification of the denial. The written denial shall include a justification for denial, including discussion of criteria set out in the section above and any other factors that support the Principal’s decision.
 - b. Upon written request by the parent/guardian, such denial can be submitted for review to the Superintendent, who may override or modify the Principal’s denial. The Superintendent’s decision shall be final.

EXAMINATION OF PUPIL RECORDS <i>(Mascoma School Board Policy – 4/22/25)</i>

The Principal will make the needed arrangements as soon as possible and notify the parent or eligible student of the time and place where the records may be inspected. This procedure must be completed within fourteen (14) days of when the request for access is first made. Note: the fourteen (14) day limit is required under New Hampshire RSA 189:66, IV, in contrast to the forty-five (45) day period otherwise allowed under FERPA.

TRANSFER OF PUPIL RECORDS

The School District will release student records to authorized representatives of the Comptroller General of the United States, the secretary, or an administrative head of an education agency or state educational authority.

Under the conditions set forth earlier in this policy, student information will be furnished in compliance with judicial order or pursuant to any lawfully issued subpoenas upon satisfaction that the parents and student(s) have been notified of such orders and subpoenas in advance of compliance by the school district.

GRADING PROCEDURE

Report cards will be issued four times a year and are distributed about one week after each term ends. In addition, progress reports will be issued to students at the mid-term of each quarter. Both report cards and progress reports will be sent digitally through Alma. An Alert Now message will be sent via email when these reports are sent through Alma.

PROMOTION REQUIREMENT

Promotion to the next grade requires having earned a specific number of units of credit.

<u>Grade</u>	<u>Credits Required</u>
Grade 10 (Sophomore)	6
Grade 11 (Junior)	12
Grade 12 (Senior)	18
Graduate	23

COURSE LOAD

(Mascoma School Board Policy – 9/23/25)

1. Students shall be enrolled in no less than 3 credits or its equivalent per year, unless the student: (306.23(i)(1-3))
 - a. Has an approved IEP plan that has determined the need for fewer credits per year; (Ed1109)
 - b. Has been approved for early graduation (see Board policy IKF;
 - c. Pursuant to any other Board policy;
 - d. Special or unusual circumstances exist such that a waiver might be appropriate under applicable Department of Education or policy BAAA. 306.23(i)(3)

***Also be sure to consult minimum requirements for sports eligibility.**

GRADUATION REQUIREMENTS

Required Courses:

English Language Arts 4 credits
starting with the freshman class of 2026-2027 and graduating class of 2030 these 4 credits
 must include: ½ credit of writing

Mathematics 4 credits for the graduating classes of 2027-2029
 must include: one (1) credit in Algebra I, and one (1) credit can be an embedded math credit
3 credits starting with the freshman class of 2026-2027 and graduating class of 2030
 must include: algebraic concepts and at least a ½ credit in statistics or data analysis

(Students shall engage with and apply English and mathematics graduation competencies during every year they are enrolled in high school even if graduation competencies for English and mathematics have been demonstrated. Such engagement may occur through integration of these graduation competencies in courses focused on content areas other than English or mathematics. Such engagement shall support students to be college and career ready in mathematics and English/language arts. Nothing contained in this section shall preclude a school or district from offering courses and other learning opportunities in addition to the minimum outlined in Ed 306).

Science 3 credits for the graduating classes of 2027-2029
 must include: 1 unit physical science, 1 unit biological science, and 1 unit science elective
2 credits starting with the freshman class of 2026-2027 and graduating class of 2030
 must include: 1 unit physical science and 1 unit biological science

Social Studies 3 credits for the graduating classes of 2027-2029
 must include: ½ unit World History, 1 unit US History (embedded NH History),
 ½ unit Civics (embedded government), ½ unit Economics, ½ unit Personal Finance
5 credits starting with the freshman class of 2026-2027 and graduating class of 2030
 must include: 1 unit World History, ½ unit US History, ½ unit NH History, 1 unit History, Government,
 and Constitution of US and NH, ½ unit Civics, ½ unit Economics, ½ unit Financial Literacy and ½ unit embedded
 Logic and Rhetoric

Health and Wellness 1 credit
 Education

Physical Education 1 credit
 Ways to earn 1 credit of PE: a). Take 2 ½ credits of any of the following classes: PE IA, PE IB, Fitness Experience IA, Fitness Experience IB, Outdoor Pursuits IA, Outdoor Pursuits IB or Strength/Nutrition/Wellness. b) Students can earn a ½ credit for playing two sports in the same year JV or Varsity. This is a one time sports participation ½ credit. The other ½ credit needs to be done through a PE course offered within the high school.

Arts Education ½ credit
 Ways to earn ½ Art Credit: Concert Band, Concert Choir, Percussion, Guitar Ensemble, Musical Theater, Music Theory, Art Concepts, Ceramics, Drawing, Painting, Art Portfolio, Graphic Communications, and Advanced Woods.

Digital Literacy ½ credit
 Ways to earn ½ credit of computers: Graphic Communications; Website Design; Intro to Business Economics; Intro to Computer Assisted Design; Advanced Topics in Computer Assisted Design; Intro to Computer Science; Python 1; Python 2; Mobile App Development (AP Computer Science Principles); Intro to CyberSecurity; AP CSA (Java Programming); and Computer Science and AI Foundations.

Open Electives 6 credits

Total Credit 23 credits to Graduate

Alma

The Mascoma Valley Regional High School uses Alma for communication between parents, students, and teachers. You can use Alma to:

- Check your child's latest grades
- See what homework has been assigned
- Check attendance and your child's schedule
- View teacher and school calendar events
- To access your Alma account go to <https://mascomavalleyregionalhighschool.getalma.com/>

HONOR ROLL and ACADEMIC HONORS

Graduating with academic honors

- acquire advanced academic skills and develop sound decision-making and critical-thinking skills
- be more prepared for college and be less likely to need costly remedial courses
- be a stronger candidate for certain types of financial aid and scholarships
- have enhanced opportunities for placement and future advancement with employers
- be recognized for successfully completing a challenging curriculum

At Mascoma Valley Regional High School, individual academic achievement is recognized on the basis of quarterly GPA and cumulative GPA at graduation.

We recognize three levels of performance:

Highest Honors	= 3.8 - 4.33 GPA
High Honors	= 3.3 - 3.79 GPA
Honors	= 3.0 - 3.29 GPA

Additionally, we present a gold tassel to students who have earned a cumulative GPA of 3.0 or higher on their final transcript.

Valedictorian & Salutatorian:

To be eligible for consideration, a student must have spent two full semesters at MVRHS prior to the midpoint of the individual's graduation year. The student in the senior class with the highest cumulative GPA at the end of the third quarter before graduation will be identified as the Valedictorian. In the event of a tie, we will have Co-Valedictorians.

The student with the second highest cumulative GPA at the end of the third quarter before graduation, will be identified as the Salutatorian. In the event of a tie, we will have Co-Salutatorians.

Note: Only MVRHS classes, including the HACTC program, are used to calculate GPA.

Underclass honor students from the previous school year are recognized at a public ceremony each year. Students who made the Honor Roll two or three times during the previous year receive a certificate. Students who made the Honor Roll four times in one year, or at least six times in the previous two years, receive an Academic Letter. Students who have previously earned a letter receive an Academic Excellence pin if they again made the Honor Roll four times during the previous year. Students who have earned a letter and a pin, and again made the Honor Roll four times during the previous year, will receive a special Royals Panther pin.

NATIONAL HONOR SOCIETY

The highest honor the faculty of Mascoma Valley Regional High School can bestow on a student is election to the National Honor Society. Induction of new members takes place in October. To become eligible for consideration, a student must be academically successful in school and obtain a 3.33 cumulative GPA by the end of their sophomore or junior year. Qualifying students will receive notification, a Google Classroom join code, and information on the selection process via their school email account by mid August. Students who wish to pursue membership must submit all materials by the deadlines listed in the selection timeline using the NHS Google Classroom page. In addition to the GPA qualification, final selection criteria include:

- 1) Evidence of leadership/participation in school and/or community activities.
- 2) Demonstration of the positive qualities of honesty and character in daily dealings with fellow students, teachers, and others within their daily lives.
- 3) Exhibition of the ability to communicate clearly through written expression. Scoring will be based on the school wide communication rubric.

After students enroll in the NHS Google Classroom, they will have access to the specific expectations required to meet the above criteria. Student qualifications are reviewed and final selection is completed by the five member National Honor Society Faculty Council. Students/Parents interested in the specifics of the selection process should contact Allyson Tessier or Stephanie Cooney, the NHS Advisers at the school, at atessier@mvrdsd.org or scooney@mvrdsd.org.

NH SCHOLARS PROGRAM

New Hampshire Scholars is a community-based program that encourages students to take a more rigorous Course of Study in high school. The New Hampshire Scholars philosophy is based on the belief that it is better to pass an academically challenging course satisfactorily than to get a higher grade in an easier course.

Please see the planning pages at the end of the Program of Studies to be eligible for the NH Scholars Program.

NCAA ELIGIBILITY REGULATIONS

To practice and play as a freshman at a NCAA Division I or II college, the student athlete must satisfy the NCAA requirements. Students must have eligibility for practice and competition in the freshman year certified by the NCAA Initial-Eligibility Clearinghouse. Students are required to have completed a minimum of sixteen (16) core courses in high school, with a minimum GPA level and achieve a minimum score on the SAT I test. Not all Mascoma courses are acceptable core courses for NCAA eligibility. Students will find more information in the MVRHS Student/Athletic Handbook and should discuss their eligibility with their School Counselor.

<https://web1.ncaa.org/eligibilitycenter/common/>.

SCHOLARSHIPS

Mascoma Valley Regional High School is very fortunate to be in such a giving community. With over 50 local scholarships, there are opportunities for students pursuing education beyond high school. Scholarships are awarded based on their specific criteria, which may include, GPA, intended field of study, type of post-secondary education, residency, financial need, community service, etc. Students that are interested in applying to scholarships should connect with the School Counseling Department as well as check the Local Scholarship page on XELLO.

A majority of scholarships are posted after the December Vacation

SCHOOL LIBRARY AND MEDIA PROGRAM
LIBRARY MATERIALS SELECTION AND ADOPTION
(Mascoma School Board Policy – 6/11/24)

The Mascoma Valley Regional School Board believes that a school library program is essential to educational development. Thus, the School Board adopts the following Mission Statement and Goals for the library and media center program.

Materials for school classrooms and school libraries shall be initially selected by the appropriate personnel in consultation with administration and faculty. The ultimate decision on acquisitions shall rest with the Board.

Mission Statement: The mission of the library media program is to ensure that students and staff are effective users of ideas and information. Shared Foundations from the AASL: Inquire, Include, Collaborate, Curate, Explore, Engage.

MVRHS Library Media Center Curriculum Overview

At the high school level, the librarian media specialists provide access to and instruction in the use of a variety of information sources, as information literacy and technology objectives are totally integrated with curricular objectives from various disciplines. The Library curriculum includes the following competencies: location, evaluation, and access of materials, information and technological literacy, literature appreciation and understanding, and responsible citizenship in the use of information. A sequential problem-solving research approach is taught as students gather, interpret, and organize information for curricular projects. Standardized systems for citing sources are also taught. The teaching of these information and technology objectives is the joint responsibility of the librarians and the subject area teachers, who plan together to develop and deliver lessons.

Students also have frequent opportunities, through the use of study halls and research passes, to use the library to pursue individual academic needs and personal interests. The library is open both before and after school. As students participate in these learning activities, they discover the wide applicability of information literacy and technology skills to all areas of study and develop the independent skills necessary to function successfully in today's information-rich world. The library media center is staffed by a full-time Library Media Specialist.

MASCOMA ALTERNATIVE PATHWAYS TO GRADUATION

The mission of MAPs is to create multiple pathways to graduation for all learners. This includes Distance Learning Opportunities, Extended Learning Opportunities, Independent Studies, Hi-Set preparation, and Credit Recovery opportunities.

Distance Learning Opportunities

Mascoma Valley Regional High School (MVRHS) has established a procedure for students to follow in order to receive permission to participate in Distance Learning Opportunities. A Distance Learning Course for the purpose of this procedure will be defined as an online course taken through VLACS, Edgenuity, and Early College Online formally known as E-Start courses. MVRHS recognizes that at times there may be certain scheduling restrictions which create a need to look outside the building in order to meet a student's academic scheduling needs.

Examples of these restrictions may be, but are not limited to the following:

1. The course is not currently offered by the Mascoma Valley Regional School District.
2. The course is currently offered; however, the student will not be able to enroll due to an unavoidable scheduling conflict.
3. The building administrator, with agreement of the student's school counselor, teachers, and parent(s)/guardian(s) determines that the student requires a differentiated or accelerated learning environment for courses offered at Mascoma Valley Regional High School.

4. A student is unable to attend school due to a documented medical reason.

Process for Enrollment Permission and Awarded Credits

1. The student and parent(s)/guardian(s) must meet with the student's school counselor to determine if placement in the Distance Learning Program is academically appropriate for the student based on the following criteria: course prerequisites, academic history, age, and course appropriateness.
2. The courses must be selected from a list of approved vendors whose standards align with the Mascoma Standards.
3. The student completes an application form and submit it to their school counselor.
4. The student remains in their scheduled course(s) at Mascoma Valley Regional High School until the online course is “live.”
5. Assessments may be proctored by the Extended Learning Opportunity Coordinator.
6. The student must meet every three weeks with the ELO Coordinator to discuss progress of online courses required for graduation. An action plan of course completion can be created at any of these meetings. The student will be responsible for completing the action plan.
7. If a student is in danger of failing a scheduled MVRHS course, the student may not be able to drop the MVRHS course to begin an online course due to the amount of time left in the semester (for half year courses) or quarter (for full year courses). To determine this option to drop the MVRHS scheduled course to add and complete an online course, a required meeting must be held with administration, student, student’s school counselor, course teacher, and parent(s)/guardian(s).
8. Students enrolled in Distance Learning through MVRHS should be scheduled one period per day in the distance learning lab when possible to facilitate completion of the course.

HOW TO EARN COLLEGE CREDIT WHILE IN HIGH SCHOOL
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How students can earn college credit while in High School:

1. Some of our teachers have credentials at the college level so that they can offer college credit as an option during the high school class.
2. Students may take classes in the building online through the NH Community College System and earn college credits. In addition to the college credit, students earn 1 High School credit for each NH Community College Class.
3. AP Classes offer the possibility of earning college credit depending on a student’s score on the final exam.
4. Dartmouth has a Community High School program that allows students to take classes on campus at Dartmouth for college credit.

Advanced Placement Courses

The College Board’s Advanced Placement Program® (AP®) enables students to pursue college-level studies while still in high school. AP provides willing and academically prepared students with the opportunity to earn college credit, advanced placement, or both. Taking AP courses also demonstrates to college admission officers that students have sought the most rigorous curriculum available to them.

Mascoma’s AP courses include: Biology (alternating years), Calculus, Chemistry (alternating years), Computer Science Principles, CS A, English Literature & Composition, European History (alternating year), US History (alternating years), and Statistics. If you take an AP course, you can not withdraw from the course half way through the school year. You must be enrolled in an AP course for the whole year.

AP Exams are an essential part of the AP experience, enabling students to demonstrate their mastery of college-level coursework. AP exams are a college-level assessment developed and scored by college and university faculty members, as well as experienced AP teachers. The exams are proctored every May. Mascoma students enrolled in AP courses, except English Literature and Composition, are **required** to take the exams. The school district covers all associated costs.

AP English Literature and Composition is offered as College Composition for three (3) college credits through Running Start, River Valley Community College of the Community College System of New Hampshire. Students enroll through RVCC in the fall and pay a nominal fee. A grade of C or better at year's end awards the student the college credits.

Credits are accepted by colleges and universities throughout the country. However, if a student wishes to take the AP exam, they may do so, and the district will cover all associated costs.

Performing well in AP means more than just mastering the material in a particular subject; it is a pathway to success in college. Research indicates that students who complete an AP course typically experience greater academic success in college. AP exam scores range from 1 (low) to 5 (high). Universities and colleges recognize AP Exam scores in the admission process and/or award credit and placement for qualifying scores. Typically institutions expect scores of at least 3, but many will only honor 4s or 5s.

Students may elect to engage in an AP curriculum outside of Mascoma. VLACS and VHS, for example, offer several AP courses. **These students need to contact their school counselors and communicate their intent by October of each year. Students in this situation are responsible for exam costs.**

Early College Online

Early College Online (formerly known as eStart) is an online dual credit program that enables high school students to take community college courses for dual high school and college credit.

Courses offered through the Early College Online program are 100% online college courses~ For more information regarding the Early College Online courses see your School Counselor and go to the following link:

<https://www.ccsnh.edu/colleges-and-programs/programs-for-high-school-students-to-earn-college-credit/estart/>

Requirements for eStart courses:

- Enrolled in an approved NH high school or an approved NH home school program.
- Students must be a high school sophomore, junior, or senior. Home School students age 15 or older are eligible. Early College Online courses must be completed prior to 21st birthday. Waivers for students who do not meet these requirements can be reviewed on a case-by-case basis.
- Have not earned a high school diploma prior to class completion date.
- Not be expelled from a school or diploma granting program.
- Students are required to create an account with the Virtual Learning Academy Charter School (VLACS).
- Account information is required by VLACS and the NH Department of Education to ensure proper funding. Students who do not create a VLACS account will not receive high school credit for the Early College Online course and will be charged the full price of a Community College System of New Hampshire (CCSNH) college course.
- If you already have a VLACS student account, there is no need to create a new one.
- High school counselors, parents, and students should be aware that courses offered through the Early College Online program are college courses.

Important Early College Online Information:

- The Early College Online tuition is \$150 per course, provided that the course is taken concurrently for high school credit. The cost of tuition does not include the cost of textbooks or other course materials.
- Courses may require the purchase of a textbook or other course materials. Please verify requirements through the instructor, course syllabus, or college bookstore.
- Students receive a college transcript from the CCSNH college offering the course. High school credit is awarded through the Virtual Learning Academy Charter School (VLACS). The student or parent must contact the college and VLACS to obtain transcripts. Copyright © 2022 New Hampshire Community Colleges

Early College Online Scholarship

The Early College Online Scholarship Program is designed to assist students who would not be able to take a course through the Early College Online Program without this financial assistance.

Scholarship applicants must be economically disadvantaged and have a clear financial need (examples include: eligible for the federal free/reduced lunch program, currently receiving other forms of financial assistance, or experiencing other economic hardship, etc.). Children Nutrition Program: Income Eligibility Guidelines, <https://www.federalregister.gov/documents/2018/05/08/2018-09679/child-nutrition-programs-income-eligibility-guidelines>

*** Review all information below prior to proceeding with application**

- Scholarship amount is \$75.00.
- Students are eligible for only one scholarship per semester.
- Scholarship applications will be completed during the online registration process.
- Students applying for an Early College Online Scholarship are only required to pay the remaining tuition cost of \$75.00.

CCSNH Scholarship Program

Thanks to a program through the State of NH and the Community College System of NH, eligible high school students taking dual or concurrent credit courses (courses that earn both high school and college credit) through Early College At Your High School (formerly Running Start), Early College Online (formerly eStart) and Early College On a College Campus (formerly Early College) can take up to 2 courses per academic year for free.*

Eligibility Requirements:

- Student's high school and/or school district must have a current and approved School Board Dual and Concurrent Enrollment Policy and a Dual and Concurrent Enrollment Agreement with CCSNH.
- Course eligibility has been expanded beyond STEM and CTE, and now includes all dual and concurrent enrollment course content areas, unless otherwise noted.
- Students must be high school sophomores, juniors or seniors. Homeschooled students age 15 or older are eligible.
- Students who meet all the eligibility requirements can register for the designated course free of charge.*

*Tuition-free. There may be additional costs for textbooks/course materials. Scholarships are subject to available funds.

<https://www.ccsnh.edu/colleges-and-programs/programs-for-high-school-students-to-earn-college-credit/estart/estart-stem-scholarships/>

EXTENDED LEARNING OPPORTUNITIES
(Mascoma School Board Policy – 9/23/25)

“Extended Learning Opportunities” (ELOs) are personalized learning experiences that allow for achievement of competencies through means outside of the traditional classroom/course setting. The Mascoma Valley Regional School Board encourages students to pursue extended learning opportunities as a means of acquiring knowledge and skills through instruction or study outside the classroom. Extended learning opportunities may include, but are not limited to, independent study, private instruction, performing groups, internships, community service, apprenticeships, remote learning, summer activities, or other opportunities approved as provided below, and in accordance with applicable Board policies.

The purpose of extended learning opportunities is to provide educational experiences that are meaningful and relevant, and that provide students with opportunities to explore and achieve at high levels. In order to maximize student achievement and meet diverse pathways for learning, this policy permits students to employ extended learning opportunities that are stimulating and intellectually challenging, and that enable students to fulfill or exceed the expectations set forth by State minimum standards and applicable Board policies. Credit is earned when students achieve the State or District competencies of a subject area. Students achieve competency when they can demonstrate proficiency in the subject area. Extended learning opportunities allow students to earn credit through demonstration of competencies, or may be taken to supplement regular academic courses. Extended learning opportunities may also be used to fulfill prerequisite requirements for advanced classes. If a student can demonstrate proficiency in high school competencies after the completion of the extended learning opportunity, irrespective of current grade level, the provisions of Policy IK will apply.

Application Process

1. The application is to be completed by the student/parent/guardian seeking approval for the extended learning opportunity.
2. The application should be completed and submitted at least thirty (30) days prior to the beginning of the proposed program. However, the Board recognizes that short-term notice opportunities may present themselves to students from time to time. As such, the Principal may grant waivers to the thirty (30) day submission requirement at his/her discretion, provided all other application criteria are satisfied. Such waivers will be granted on a case-by-case basis. All required information must be attached to the application and submitted to the student’s School Counselor.
3. The application will be reviewed by appropriate District staff and administration and a decision will be made within ten (10) days of receipt of the application. The student will be notified in writing of the status of the application. If additional information is requested, the information must be submitted within one week of receipt of the request.
4. It is the student’s responsibility to maintain academic standing and enrollment in the approved program. Any failure to complete an approved program may jeopardize the student’s ability to earn credit for the course. The student and parent/guardian recognize that in the event the student withdraws from an approved program, the District cannot guarantee placement in an equivalent District-offered course.
5. The District reserves the right to determine the number of credits to be awarded. Any credits earned may be calculated towards the overall Grade Point Average. The course name and actual grade earned will be noted on the student’s official transcript.

The following are **examples** of past and present ELOs undertaken by Mascoma students include:

- learning the ropes at the local cable station
- growing cells in a DHMC lab
- training a colt
- working alongside college professors
- re-programming a TV remote using an open-source electronics platform
- helping out in a local kindergarten
- exploring career interests
- meeting and shadowing therapist

SUMMER CREDIT RECOVERY

Credit Recovery may be available from a variety of sources. Please see a school counselor. The goal of credit recovery is to allow students who have failed core courses (courses required for graduation) an opportunity to graduate in a timely manner. Any student failing one or more core courses and meets eligibility in grades 9-12 may apply for admission to the Credit Recovery Program. Credit Recovery coursework and assessments are provided through teacher developed curriculum or Edgenuity. Students who apply for admission and who are accepted into credit recovery must adhere to a contract that is collaboratively reviewed and signed by the student, parent/guardian, School Counselor, Teacher, Alternative Pathways Coordinator, and the Principal. The contract outlines the guidelines for participation in credit recovery.

Student Eligibility:

Students who have earned at least a 50% each quarter are eligible for credit recovery. Anything below a 50% per quarter needs administrative approval. Units of study not mastered by the student will be identified by the teacher of record. Students must apply and complete the credit recovery contract for recovery no more than 10 days after receiving notice that they have not passed a class. Parent signatures on the form signify agreement with the terms of credit recovery. Students must complete credit recovery by the end of the next quarter.

LEARN EVERYWHERE PROGRAM

(See Mascoma School Board Policy for full details– 9/23/25)

1. A "Learn Everywhere" program is a state board approved alternative program for granting credit leading to graduation.
 - a. Successful completion of an approved Learn Everywhere program shall result in a certificate awarded by the program, redeemable for high school credit toward graduation in the approved subject matter detailed in 306-1 for students who entered high school prior to the 2026-27 school year, or 306-2 for those entering in 2026-2027 or thereafter.
 - i. Credit earned from a learn everywhere program cannot be applied to subjects that fall outside of those detailed in 306-1 and 306-2. However, a student may seek to apply competencies from the Learn Everywhere program.
 - ii. Credits earned through this program shall appear on high school transcripts and are not to be included in calculating GPA.
 - b. The District will accept Learn Everywhere credits for at least 1/3 of the total number of credits required for graduation. A student may petition the Principal to allow for a greater percentage of credits, up to 100%, to be allowed. The Principal will review the request and make a recommendation to accept or deny the request to the Superintendent, whose decision to approve or deny the request will be final,
 - c. Students may petition the Principal to allow credit earned through this program to be applied towards a different required subject (including electives), in compliance with Section E (Transfer Credit), above:
 - i. The Superintendent will make the final approval or denial,
 - ii. If the petition is denied, the credit shall be applied to the originally designated area, even if it results in an excess of credits in that area.
 - ii. Should a student with an IEP seek credit through a learn everywhere program, the IEP team may decide not to redraft, revise, amend, or modify the IEP to include the desired learn everywhere program, as described in 1406.01(c).

For questions about the Learn Everywhere program you are encouraged to contact the NHED Administrator of Educational Pathways at 603-491-8060 or at LearnEverywhere@doe.nh.gov.

HARTFORD AREA CAREER AND TECHNOLOGY CENTER EMBEDDED CREDIT

Students may earn three credits per year upon successful completion of a specific program at the Hartford Area Career & Technology Center. At the end of the senior year, a student who has finished a sequential two-year career or technology education program *may* receive one of the following embedded credits as an elective credit: Vocational English, Vocational Mathematics, Vocational Science or Vocational Social Studies. *See course listings for Hartford Area Career & Technology Center for more information.*

P.E./HEALTH OPT-OUT OPTION

Health and P.E. are required for graduation. However parents and students may opt out of specific Health and PE topics. A student interested in this option must see their school counselor to obtain information.

ACADEMIC CREDIT FOR SPORTS PARTICIPATION

Students participating in two sports, (varsity or junior varsity), not managing in a given school year can earn a ½ credit towards the 1 credit of physical education required to graduate. This 1/2 credit must be applied for the year in which it occurred and can only be issued once in a student's 4 year high school career. ***Students must see their school counselor to get the paperwork that is required to be filled out for this credit to show on their transcript.***

To fulfill the other ½ credit, students must participate in a physical education course here at the high school.

AUDITING AND REPEATING CLASSES

Students will be permitted to audit a class with administrative and school counselor approval. The audit will show on the student's transcript and report card in lieu of credit or a grade. Students are expected to participate in classroom activities. Students will make arrangements with teachers regarding homework and tests. Audit courses are not considered part of a student's course load.

Students may repeat a class to improve a grade with teacher, school counselor, and administrative approval. Both sets of grades will show on transcripts, but only one credit will be issued. The higher grade will be used to compute GPA. Students repeating classes must meet all academic expectations.

ALTERNATIVE GRADUATION DATE

Promotion and Retention of Students (Mascoma School Board Policy – 2/9/21)

The Mascoma Valley Regional School District Superintendent and the building principals shall develop rules for the promotion and retention of students. The rules will be approved by the Board. These rules shall be published in the Parent-Student Handbook. Criteria to be considered regarding the promotion of students should include, but is not limited to, a student's mastery of course level competencies, grades, teacher recommendations, and the student's social growth and readiness.

Early Graduation

(Mascoma School Board Policy-9/23/25)

The Board supports early graduation as a means to earn a high school diploma. Parental involvement for students under the age of 18 is required. The high school principal shall approve such requests if he/she determines that all state and local graduation requirements will be met and that early graduation is related to the career and/or educational plans of the student making the request. Upon approval by the high school principal, the minimum 3 credit requirement per year for enrolled students shall be waived, and the student shall be awarded a high school diploma.

SCHEDULE CHANGES

Students who withdraw after the 10th class will receive a “WF” (Withdrawn Failing) or a “WP” (Withdrawn Passing) printed on their transcript. Partial credit will not be awarded for partial completion.

Changing classes unless necessitated by extenuating circumstances, will NOT be allowed. “Not liking” a class or teacher is not sufficient reason. Any schedule change requires input from the student, parents, teachers, counselor and administration. Forms for initiating consideration of a schedule change are available from the school counselors.

SPORTS ACADEMIC ELIGIBILITY REQUIREMENT

1. Eligibility to Tryout

In order for a student to be eligible to tryout for any school sponsored activity, students in grades 9-12 must:

- i. Meet all NHIAA standards for eligibility.
- ii. Maintain a 2.0 GPA and be passing 4 classes.
- iii. Pass a physical examination within the year prior to entering Grade 9 or participation in his/her first sport season. Physicals are required yearly.
- iv. Complete a Health Information Form for each season of participation with documentation of health insurance against accident or injury.
- v. Complete an Acknowledgment of Risk(s) and Consent Form.
- vi. If a student is unable to try-out because of academic ineligibility, they will not be allowed to play on that team during that season.
- vii. Have completed an IMPACT concussion baseline test prior to the first practice. These tests will be administered in the spring before the end of school and in August prior to tryouts.
- viii. All appeals are subject to Section VI, Athletic Grievance Procedure.

2. Eligibility to Participate

In order for a student athlete to participate in any school sponsored or NHIAA sponsored activity, a student must be selected for a team after tryouts and he/she must fulfill the following requirements to participate:

- i. Students are to be enrolled in at least five (5) courses for high school or vocational credit earning four credits and maintain a 2.0 GPA and continue to meet NHIAA standards for eligibility. If a student fails to meet those standards at the end of a marking period, they will be removed from the team. The effective date of the dismissal of an athlete from a team will be the date of issuance of report cards.
- ii. Comply with all school district policies, rules, and regulations and team rules during the season of participation.
- iii. Be in school for the entire day in order to participate in any co-curricular activity. The only exceptions are for doctor's appointments (written verification must be provided to the athletic director) or family emergencies (written notice provided by the parent or guardian). Student Athletes will be excused once per season for emergencies. Students with Junior/Senior Privilege must attend all scheduled classes.
- iv. If a student gets a suspension from school (either in or out of school) he/she will sit out the next scheduled game.
- v. Meet all attendance requirements on Friday to be eligible for a Saturday game.
- vi. All appeals are subject to Section VI, Athletic Grievance Procedure.

ADVANCED STUDIES -- SUMMER PROGRAM

St. Paul's School of Advanced Studies Program is designed for academically successful and highly motivated juniors. Students complete an advanced-level course in a 6-week period. The school counselors have information about this selective residential program. The selection process starts in October.

Mascoma students have attended many other summer school opportunities usually held at colleges throughout the northeast. Students that are interested in enhancing their education through summer advanced studies programs should make an appointment with their school counselor **early in the school year** to discuss the variety of opportunities and application deadlines.

PREPARING FOR YOUR FUTURE

If you are preparing for more learning and training after high school please consider this chart and key information as you work toward your future.

Preparing for College - Number of Credits to Consider

Academic Area	Highly Selective College/Univ	4 Year College/Univ	2 Year College/Univ	Technical Program
English	4+	4	4	4
Math	4+	4	4	4
Science	4+	3-4	3	3
Social Studies	4	3	3	3
Foreign Language	4+	2-4	0	0

Also know that:

- Most colleges will require Chemistry, Algebra II and two or more years of a World Language
- Colleges consider academic rigor in addition to grades, honors classes, AP classes and early college classes are considered to be more valuable by admissions counselors.
- Details and requirements for trade programs (such as lineman school) and military programs should be considered as you plan your academic pathway.

All students who plan to attend college should know that colleges place great importance on your transcript. Your transcript will include grades for each class, each quarter, class rank, overall GPA and class levels (honors, AP, CP, etc). Admissions Counselors look for consistency or an upward grade trend in core courses and take course difficulty into consideration.

The Preliminary Scholastic Aptitude Test (PSAT) will be taken in grades 9 & 10 in the spring. The test has two purposes: (1) an indication of success on the Scholastic Aptitude Test (SAT); (2) the initial step to enter the National Merit Scholarship Program.

The SAT Reasoning Test will be taken in the spring of grade 11. Students interested in a highly competitive college should participate in our SAT prep and work toward attaining a strong score. MVRHS provides the SAT for all Juniors during a school day. Additionally, students may retake the SAT at their own cost in an effort to improve their scores. For more information about PSAT/SAT, go to: www.collegeboard.com. Juniors are also required to take the SAS Science assessment in the spring.

Our Faculty and School Counselors will be helping students to prepare for next steps after high school. Our Xello programs are valuable tools that help students explore options and build pathways.

The School Counseling Department urges students and their families to start visiting colleges during their junior year and the summer leading into their senior year. Students should consider who they will be personally approaching to request a letter of recommendation from; as well as creating a ‘brag sheet’ to provide to the recommenders. Standard applications require two letters, one of which should be from a teacher. A past or present employer, or other professional is another good source for a letter of recommendation. Keep in mind due dates for applications, and provide your recommenders a suitable amount of time to complete their letter.

SCHOOL COUNSELING CURRICULUM

The School Counseling Department Curriculum addresses specific competencies divided into 3 major developmental domains: Social/Emotional, College/Career, and Academic. Individual students receive counseling for crisis intervention and referral to outside agencies.

The platform used to deliver these lessons is Xello. Xello is useful to students whether students are applying to college or preparing for the workforce. This platform curates key information based off of each student's assessments to assist them with postsecondary discovery and planning. The career planning and assessment tools through Xello allows students to realize their strengths, goals, knowledge, values, and interests in future careers, to help them work toward a path that is inspiring to them.

Grade 9: This year, the students investigate and select possible career interests and pathways. The Xello Program is introduced to students in a classroom setting. We work with students to track and plan their progress towards graduation and future career. All 9th graders take the 8/9th grade PSAT in the spring.

Grade 10: Students continue their journey using Xello and complete units within the sophomore program. Before registration of classes, students re-evaluate and update their four year plan. Information about the Hartford Area Career and Technology Center (HACTC) is presented to all sophomores. Students interested in HACTC will apply to their desired programs. If admitted they attend the following year. All sophomores take the PSAT.

Grade 11: This year, students will continue using the Xello program. They will explore their interests further to help narrow their focus. The Junior unit also covers the college/military application process. Junior students and parents are invited to the College Planning Night. The ASVAB and NMSQT are offered to juniors. Juniors will be taking the SAT in the spring.

Grade 12: The following programs and services are offered for post-graduation preparation: College Planning Night; Financial Aid Night; Alumni Roundtable; assistance with career decision-making; assistance with exploring college options; and introduction to NH Employment Security. Scholarship information is constantly updated and made available to Seniors through Xello. Students are required to meet with their School Counselor to coordinate their individual college/career goals. Seniors will complete a graduation survey in the spring. In this survey students will answer questions to express their goals and plans after high school.

COURSE DESCRIPTIONS

The philosophy of Mascoma Valley Regional High School is to promote the intellectual growth of our students by placing them in courses with appropriate challenges. This philosophy recognizes that different students have different levels of academic ability, skills, and motivation. Appropriate placement will promote optimal academic achievement and responsibility.

Level I: Level I courses, including Advanced Placement and honors courses, focus on critical thinking and higher order skills to a greater degree and frequency than those courses at other levels. Exemplary work habits, and habitual completion of short- and long-range assignments are essential in these courses. Students' grades are based almost exclusively on mastery of complex information, of process, and of skills. These courses prepare students for postsecondary educational choices, including competitive colleges.

Level II: Level II courses have expectations appropriate for the grade level. In addition to positive work habits students are expected to complete all long- and short-range assignments. Students' grades will be determined by the mastery of information and the development of skills over time. These courses prepare students for postsecondary educational choices, including 2- and 4-year colleges, or vocational options.

Level III: Level III courses emphasize basic concepts and focus on the development of fundamental skills. The students' grades are based on their mastery of specific information and skills.

All: Certain courses offered at Mascoma Valley Regional High School carry an "all" level designation. These classes are open to all students meeting the prerequisites. Students' grades will be determined by a combination of any of the criteria from above—mastery of skills and information and improvement over time. These classes meet a wide range of students' educational goals.

COURSE RECOMMENDATIONS

If a student and or parent chooses to register for a course other than the course recommended by the current teacher, the following procedure will be followed:

- 1) Discussion between current teacher and student.
- 2) Conversation between current teacher and parent.
- 3) Meeting with parents, current teacher, curriculum coordinator, and administrator.
- 4) Parents and students sign a contract stating that they take responsibility for the decision and will not request a change in schedule if the student is not successful in the higher level course.

COURSES TAKEN PRIOR TO HIGH SCHOOL

Prior to grade 9, all Mascoma Valley Regional School District 7th and 8th grade approved advanced coursework which meets the Mascoma Valley Regional School Board policies relative to assessment, mastery and competency will count toward the required 23 credits for graduation. These courses will not count toward the GPA.

GPA SCALE

Transfer courses from other high schools, distance learning courses, extended learning opportunities count toward the required 23 credits to graduate but do not count towards the student's GPA. We do include the Hartford vocational courses in our students GPA because it is considered part of our programming.

<u>score</u>	<u>grade</u>	<u>GPA pts</u>
97-100	A+	4.33
93-96	A	4.00
90-92	A-	3.67
87-89	B+	3.33
83-86	B	3.00
80-82	B-	2.67
77-79	C+	2.33
73-76	C	2.00
70-71	C-	1.67
67-69	D+	1.33
63-66	D	1.00
60-62	D-	0.67
0-59	F	0.00

ENGLISH

English courses emphasize: (1) the life skills of forming, supporting, and communicating opinions and conclusions; (2) the belief that through the study of literature, students gain understanding and perspective of world cultures and the human condition.

The English Department promotes the intensive study and practice of writing, listening, speaking, and reading literature of all periods, cultures, and genres – novel, poetry, short story, drama, and the essay – while at the same time offering students a degree of choice to pursue their own academic interests. All courses require a research component.

The goal of the English program is to assure that all students have the opportunity to work toward English competencies that meet their post – secondary goals at their skill level and the school district's mission to prepare them to become lifelong learners and responsible citizens. ***New Hampshire requires students enroll in and pass at least one credit of English each academic year.***

Grade 9 Placement Information

English Literature and Composition 9: Designed for students who are performing at or above grade level in both reading and writing as determined by their standardized test scores and teacher recommendation, if warranted. The course content challenges students at higher levels of thinking and writing. On and above grade level reading and frequent writings in analytical writing are required. The course is for four and two year college bound students.

English Workshop 9: Designed for students who are performing below two grade levels or more in reading and below in writing as determined by their standardized test scores and teacher recommendation. The course focuses on reading and writing shorter pieces for expository, narrative and descriptive assignments. The course is for two year and technical college bound students. *At the end of the 9th grade course, if a student has achieved higher/lower testing marks and upon teacher recommendation due to the student's performance in grade 9, a student may move between courses.*

Grade 9 Courses

English Literature & Composition 9

Course Number: 3100

Length: All

Prerequisite: Successful completion of Grade 8 English

Unit Credit: 1

Open to Grade: 9

Level: I & II

The course focuses on grade level readings, and on the multiple skills needed to construct expository, persuasive and narrative writings. Students practice the skills needed to succeed in reading, writing, grammar, vocabulary, and oral presentations. In writing, the mastery of the basic components of the literary essay is necessary. Well-supported and clear reasoning are stressed. Novels and short stories serve as major tools for the teaching of critical thinking. A research paper in MLA format is required. Major readings may include *Romeo and Juliet*, *Night*, *Of Mice and Men*, and/or *The Odyssey*. Oral presentations emphasize confidence in public speaking.

English Workshop 9

Course Number: 3101

Length: All

Prerequisite: Placement based on standardized reading test scores more than two levels below Grade 9.

Unit Credit: 1

Open to Grade: 9

Level: III

This course is designed as an alternative for freshmen whose reading level trails their grade level by more than two years. The course focuses on writing with an emphasis on organization, content, mechanics/usage and spelling. Students are introduced to the basic elements of literature. Literary works may include *Of Mice and Men*, *Night*, *The Giver*, and *Orbiting Jupiter*, as well as modified versions of *Romeo and Juliet* and *The Odyssey*. Students practice library skills through the completion of a research paper. Oral presentations emphasize confidence in public speaking. A positive approach to work habits and regular completion of short and long-range assignments are essential for success in this course.

English Academy

Course Number: 3113

Length: All

Prerequisite: Placement based on standardized reading test scores

Unit Credit: 1

Open to Grade: 9

Level: III

Using individualized small-group instruction, the course focuses on developing close reading skills to improve fluency, comprehension, and literary analysis. Elements of research based reading intervention programs will be integrated. An emphasis on understanding and identifying basic elements of literature will be reinforced. Literary works may include: *Of Mice and Men*, *Bearstone*, *Under the Same Sky*, *Stargirl*, *Never Say Die*, and modified versions of *The Tragedy of Romeo and Juliet*. Various short stories and works of nonfiction will also be integrated. Additionally, the course focuses on the development of secondary level writing skills with an emphasis on mastering writing mechanics, improving spelling, achieving effective organization, and providing specific text support and elaboration for assertions. Weekly vocabulary studies will focus on using roots, prefixes, and suffixes to “unlock” new words and phonics review activities are integrated to improve fluency and comprehension skills.

Grade 10 Placement Information

English Literature and Composition 10: Designed for students who are performing at or above grade level in both reading and writing as determined by their standardized test scores and teacher recommendation, if warranted. The course content continues to challenge students at higher levels of thinking and writing; thereby, challenging their close reading skills. Frequent analytical writings required. The course is for four and two year college bound students.

English Workshop 10: Designed for students who are performing below two grade levels or more in reading and below in writing as determined by their standardized test scores and teacher recommendation. The course focuses on reading and writing shorter pieces. The course is for two year and technical college bound students. *At the end of the 10th grade course, if a student has achieved higher/lower testing marks and upon teacher recommendation due to the student's performance in grade 10, a student may move between courses.*

Grade 10 Courses

English Literature & Composition 10

Course Number: 3108

Length: Full Year: All

Prerequisite: Successful completion of English 9

Unit Credit: 1

Open to Grade: 10

Level: I & II

This course continues to focus on the skills students need to succeed in writing and reading. Writings include a variety of styles and formats in order to reinforce the writing process. The course materials promote reading comprehension, writing, vocabulary, and critical thinking. Proper citation of sources for MLA is taught in conjunction with writing literary pieces, including a literary research paper. Students study literature in all genres: short stories, novels, legends, poetry, and drama. Major readings may include *To Kill a Mockingbird*, *Lord of the Flies*, *Macbeth*, *The Old Man and the Sea*, *Everything Sad Is Untrue*, and *A Separate Peace*. Oral presentations emphasize critical thinking skills and confidence in public speaking.

English Workshop 10

Course Number: 3107

Length: All

Prerequisite: Placement based on standardized reading scores more than two levels below grade 10.

Unit Credit: 1

Open to Grade: 10

Level: III

Emphasis is on bolstering reading and writing skills. A range of writing experiences emphasizes organization, content, mechanics/usage, and spelling. Writing exercises include constructed responses and the development of the traditional literary essay; students will also practice and hone their research skills. Students will develop skills to help them understand drama, short stories, poetry, and novels as literary genres. Reading may include *Macbeth (modified)*, *The Art of Secrets*, *Inside Out & Back Again*, *Before The Ever After*, and *Classic Starts* books.

Reading & Writing Workshop 10

Course Number: 3110

Length: All

Prerequisite: Placement based on standardized reading test scores

Unit Credit: 1

Open to Grade: 10

Level: III

Using individualized small-group instruction, this course focuses on developing close reading skills to improve fluency, comprehension, and literary analysis. Elements of research based reading intervention programs will be integrated. An emphasis on understanding and identifying basic elements of literature will be reinforced. Literary works may include modified versions of *Touching Spirit Bear*, *A Monster Calls*, *Genesis Begins Again*, and *Skink: No Surrender*. Various short stories and works of nonfiction will also be integrated.

Additionally, the course focuses on the development of secondary level writing skills with an emphasis on mastering writing mechanics, improving spelling, achieving effective organization, and providing specific text support and elaboration for assertions. Weekly vocabulary studies will focus on using roots, prefixes, and suffixes to “unlock” new words and phonics review activities are integrated to improve fluency and comprehension skills.

Grade 11 Placement Information

Honors Humanities: Designed as a full year advanced English course for students who are performing at or above proficiency in reading and writing as determined by their standardized test scores and with grade 10 English teacher recommendation. It is recommended that the student earn a consistent C+ average in English 10. A student who has not met the above prerequisites, yet desires to be challenged by the work requirements, is encouraged to speak to the English Curriculum Coordinator about placement in the course. Honors Humanities serves in place of English Literature and Composition 11. The course may be taken for college credit through the Running Start Program with River Valley Community College. The course is for four year college bound students.

English Literature and Composition 11: Designed for students who are performing at grade level in reading but below in writing as determined by their standardized test scores and with teacher recommendation, if warranted.

The course continues to focus on critical thinking, close readings, and analytical writings throughout the year. The course is for four year and two year college bound students.

English Workshop 11: Designed for students who are trailing more than two grade levels below in reading and writing as determined by their standardized test scores and teacher recommendation. The course continues to require students to practice writing expository and persuasive pieces with supported information. The course is for two year and technical college bound students.

Grade 11 Courses

Honors Humanities (Dual Enrollment)

Course Number: 3106

Length: All

Prerequisite: Recommended “C+” average in grade 10 English, or approval of Curriculum Coordinator, and satisfactory completion of a summer reading/writing assignment.

Unit Credit: 1

Open to Grades: 11 & 12

Level: I

This course includes the study of major periods of thought in Western Civilization. The course combines the study of literature, philosophy, history, and art to investigate the connections. Eras studied include ancient Greece through Existentialism. Major works include *Oedipus Rex*, *The Bible* (excerpts), *The Inferno*, *The Canterbury Tales*, *Hamlet*, and *The Stranger*, as well as short stories, essays and poetry. Independent reading journals are required each quarter. Student generated research, discussion, and expository writing are emphasized. In conjunction, River Valley Community College offers dual enrollment for a fee. Upon successful completion of a C or better, three (3) college credits are awarded for Humanities in Western Civilization. The credits may go toward a college English or elective course.

English Literature and Composition 11

Course Number: 3102

Length: All

Prerequisite: Successful completion of English 10

Unit Credit: 1

Open to Grade: 11

Level: I & II

The course covers the study of American Literature featuring fiction and nonfiction prose and poetry. Selected pieces focus on the social and political impacts of its representative society. Through writing and class discussion, students apply specific literary techniques and themes to research-based analytical writings. American literary areas covered are Puritanism, Romanticism, Transcendentalism, Realism, and Naturalism, Modernism and Postmodernism. Major works may include *The Crucible*, *Huckleberry Finn*, *Spoon River Anthology*, *The Great Gatsby*, and *Sing, Unburied, Sing*.

English Workshop 11

Course Number: 3109

Length: All

Prerequisite: Successful completion of English Workshop 10 AND placement based on standardized reading scores more than two levels below Grade 11

Unit Credit: 1

Open to Grades: 11

Level: III

Emphasis is on bolstering reading and writing skills, including grammar and mechanics. In this course, students are expected to write literary essays and opinion papers. The readings for the course may include modified versions of American literature, such as *The Adventures of Huckleberry Finn*, *The Scarlet Letter*, and *The Red Badge of Courage*. Also studied are American and world fiction and nonfiction for short stories and poetry. A research-based assignment is required.

Reading & Writing Workshop 11

Course Number: 3112

Length: All

Prerequisite: Placement based on standardized reading test scores

Unit Credit: 1

Open to Grade: 11

Level: III

Using individualized small-group instruction, this course focuses on developing close reading skills to improve fluency, comprehension, and literary analysis. Elements of research based reading intervention programs will be integrated. An emphasis on understanding and identifying basic elements of literature will be reinforced.

Literary works may include *Full Tilt*, *Ghost Canoe*, *Scat*, and *Animal Farm*. Various short stories and works of nonfiction will also be integrated. Additionally, the course focuses on the development of secondary level writing skills with an emphasis on mastering writing mechanics, improving spelling, achieving effective organization, and providing specific text support and elaboration for assertions. Weekly vocabulary studies will focus on using roots, prefixes, and suffixes to “unlock” new words and phonics review activities are integrated to improve fluency and comprehension skills.

Grade 12 Placement Information

Seniors are required to choose one full year course to meet the 1 credit requirement.

AP English Literature and Composition: Designed as a full year advance English course for students who are performing at or above grade level in reading and writing. It is recommended that the student earn a consistent C+ average in an English 11 course. A student who has not met the above prerequisites, yet desires to be challenged by the work requirements, is encouraged to speak to the English Curriculum Coordinator about placement in the course. The course may also be taken for college credit through the Running Start Program with River Valley Community College. The course is for four year college bound students.

Research and Composition and Heroes and Villains: Designed as courses for all students. The courses are for four year, two year, and technical college bound students. Each course satisfies the senior English requirement.

English Workshop 12: Designed for students who are trailing more than two grade levels below in reading and writing as determined by their standardized test scores and teacher recommendation. The course continues to require students to practice writing expository and persuasive pieces with supported information. The course is for two year and technical college bound students.

Grade 12 Course Curricula

AP English Literature and Composition (Dual Enrollment)

Course Number: 3105

Length: All

Prerequisite: Recommended "C+" average in junior year English course or approval of Curriculum Coordinator, and satisfactory completion of summer reading/writing assignment.

Unit Credit: 1

Open to Grade: 12

Level: I

Students are involved in the advanced study of literature and writing styles. Students reflect analytically upon their readings through extensive discussion, writing, and re-reading. Writing assignments are frequent, and the reading is considerable. Major works include *Othello*, *Frankenstein*, *Things Fall Apart*, *Heart of Darkness*, *A Doll's House*, *The Awakening*, and independent diversity novels. Students assume considerable individual responsibility for their classroom performance. In conjunction, River Valley Community College offers dual enrollment for a fee. Upon successful completion of a C or better, three (3) college credits are awarded for College Composition 102R. The credits may go toward either a college composition course or transferable English credits. Students are not required to take the AP Literature exam in May. **(Students will be writing college essays in this class)**

Research and Composition

Course Number: 3127

Length: Full Year

Prerequisite: Successful completion of English 11

Unit Credit: 1

Open to Grade: 12

Level: II

The course's content includes various research methods and techniques to improve logical thinking and organized writing skills through extensive practice in planning, writing, revising, and editing. Students generate research topics and write appropriately cited research essays, literary analysis, expository, and persuasive essays. Students acquaint themselves with the style requirements of the MLA, APA, and Chicago. Extensive writing and rewriting are required. **(Students will be writing college essays in this class)**

Heroes and Villains

Course Number: 3128

Length: Full Year

Prerequisite: Successful completion of English 11

Unit Credit: 1

Open to Grade: 12

Level: All

This course is a study of Heroes and Villains as they appear in various forms of literature, running the gamut from fairy tales and mythology to the more modern incarnation of the anti-hero. Although most of the reading will be modern and contemporary literature, a study of the ancient and classical sources will be an important foundation for identifying Heroes and Villains through the window of history and culture. This course provides ample opportunity for writing both persuasive and expository essays. **(Students will not be writing college essays in this class)**

English Workshop 12

Course number: 3126

Length: Full Year

Prerequisite: Successful completion of English Workshop 11 AND placement based on Standardized reading scores more than two levels below Grade 12.

Unit Credit: 1

Open to Grade: 12

Level: III

This course is designed for seniors whose reading level trails their grade level by more than two years. Students continue developing their skills in writing, grammar, and reading comprehension.

In this course, students are expected to write literary essays and opinion papers. A research project is required. The readings in this class may include modified versions of British and world literature as well as contemporary short stories and novels by writers such as Chinua Achebe, Dean Koontz, and Stephen King. **(Students will not be writing college essays in this class)**

Reading & Writing Workshop 12

Course Number: 3111

Length: All

Prerequisite: Placement based on standardized reading test scores

Unit Credit: 1

Open to Grade: 12

Level: III

Using individualized small-group instruction, this course focuses on developing close reading skills to improve fluency, comprehension, and literary analysis. Elements of research based reading intervention programs will be integrated.

An emphasis on understanding and identifying basic elements of literature will be reinforced. Readings may include modified versions of *The Girl With All The Gifts*, *Semiosis*, *Lab Girl*, *The Soul of an Octopus*, and *The Teenage Brain*. Various short stories and other works of nonfiction will also be integrated. Additionally, the course focuses on the development of secondary level writing skills with an emphasis on mastering writing mechanics, improving spelling, achieving effective organization, and providing specific text support and elaboration for assertions. Weekly vocabulary studies will focus on using roots, prefixes, and suffixes to “unlock” new words and phonics review activities are integrated to improve fluency and comprehension skills. **(Students will not be writing college essays in this class)**

ENGLISH ELECTIVES

The following course does not count toward English Credit Requirements

Sports Journalism in Society

Course Number: 3129

Length: Semester

Prerequisite: Successful completion of English 11

Unit Credit: 1/2

Open to Grade: 12

Level: All

This course will look at the interplay between sports and society. Through the work of sports beat writers, feature writers and columnists, we will study the impact society has on sports and the impact sports has on society. Issues considered will include topics such as: athlete's rights, race and gender equality, International competition as a form of diplomacy, sports as cultural artifact, youth sports, and the commercialism of sports. Students will try their hands at each of the three forms of writing we will study.

Other Offerings by Teacher Recommendation
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English Language Learners

Course Number: 3125

Length: Varies

Prerequisite: Enrolled in the ELL Program

Credit: Varies

Open to Grades: 9-12

Level: Approval of Guidance and ELL Director

A student who qualifies for English Language Learners instruction based on Mascoma School District policy may earn credit toward graduation through an ELL individual education plan. Plan decisions as to the number of credits a student may earn and in what subject areas will be made by the English Language course.

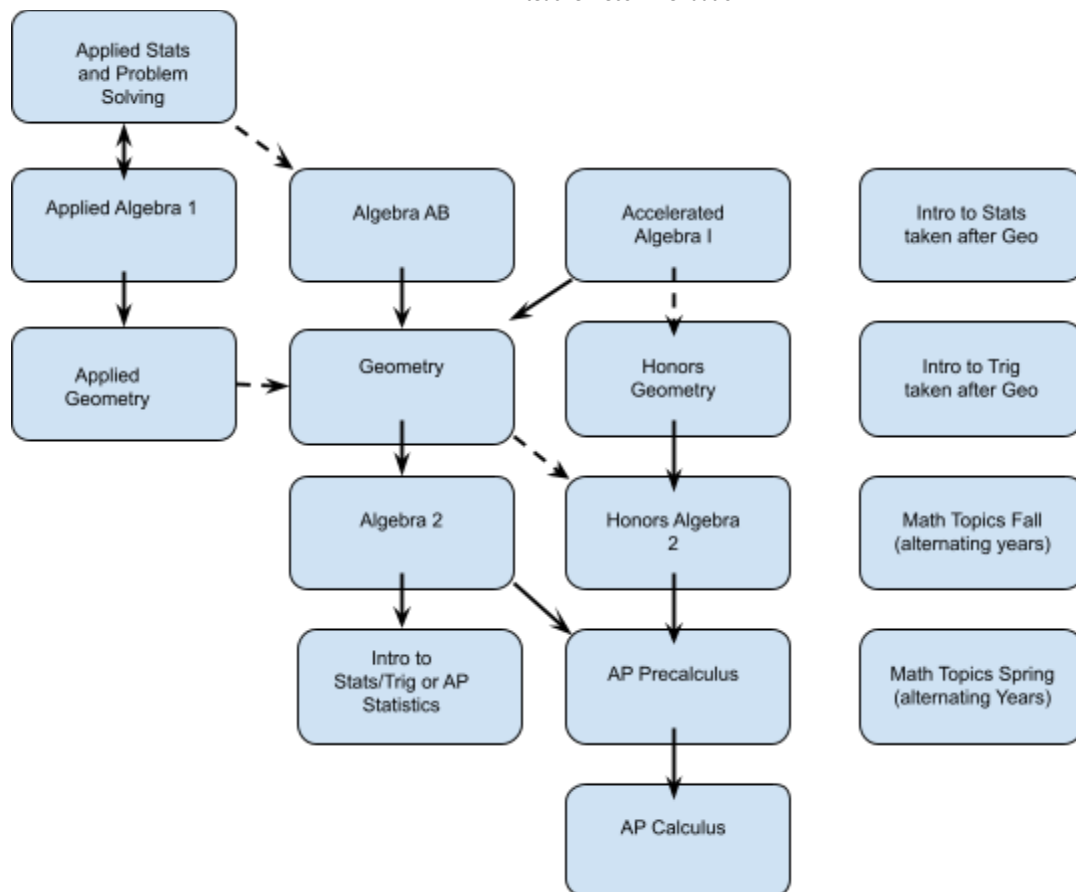
MATHEMATICS

Mathematics involves the study of numbers, shapes, patterns, logical reasoning and related concepts. It includes basic arithmetic, algebra, geometry, trigonometry, and analysis. The study of mathematics focuses on applications, problem solving, and the discovery of connections among its many varied topics. Students will be using TI 83 plus or TI 84 plus or NumWorks graphing calculators in all courses except Math Academy. Students must earn 4 mathematics credits for the graduating classes of 2027 through 2029 and 3 credits for the graduating classes of 2030 and later to be eligible for a high school diploma. One of these credits must be the equivalent of an Algebra credit. At MVRHS this will mean earning a passing grade in Algebra 1B, Applied Algebra 1, Algebra 1 and Algebra 1 Lab, Algebra AB or Accelerated Algebra 1. Students in the graduating classes of 2030 and later will also take 1 credit of geometry and at least a ½ credit of Data analysis and Statistics. Courses labeled Honors and AP will be more rigorous. Students enrolling in an Honors or AP class should be strong independent workers who can work at a fast pace. The goal of the mathematics program is to assure that every student has the opportunity to work toward mathematical competencies that meet his/her postsecondary goals and meet NH diploma requirements. To this end, you and your student should discuss his/her postsecondary goals. Students and parents should check individual college requirements to determine the mathematics courses required by that school.

Mascoma Mathematics Department Course Map

Solid Arrows show typical path for students

Dashed arrows show possible paths depending on student success **and** teacher recommendation



Grade	9th	10th	11th	12th	Total Credits
Some Sample Pathways	Honors Geometry	Honors Algebra 2	AP Precalculus	AP Calculus	4 core math credits
	Accelerated Algebra I	Geometry	Algebra 2	AP Precalculus	4 core math credits
	Accelerated Algebra I	Geometry Honors Algebra 2	AP Precalculus	AP Calculus	4 core math credits
	Accelerated Algebra I	Geometry	Algebra 2	AP Precalculus	4 core math credits
	Accelerated Alg I or Algebra AB	Geometry	Intro to Stats/Trig	Algebra 2 or math exposure	3 or 4 core math credits
	Algebra AB	Applied Statistics	Applied Geometry	Geometry or embedded	3 or 4 core math credits
	Applied Statistics	Applied Algebra I	Applied Geometry	Geometry or math exposure	3 or 4 core math credits
	Applied Algebra I	Applied Statistics	Applied Geometry	Geometry or embedded	3 or 4 core math credits
	Note that students entering in 2027 and later must take at least ½ credit in Statistics and must have meaningful math exposure each year of high school. The Statistics requirement can be met with Applied Statistics, Intro to Statistics, or AP Statistics. Math exposure can be met with several science, business or other elective courses as approved by administration.				

Applied Stats and Problem Solving

Course Number: 3024

Length: Full Year

Prerequisites: NWEA score below 228 and teacher recommendation.

Unit Credit: 1

Open to Grades: 9-12 with teacher recommendation

Level: III

1. Central Tendency: Mean, Median, Mode
2. Dot Plots and Histograms
3. 2-way Frequency Tables
4. Scatter Plots

5. Box and Whisker Plots
6. Creating and Conducting Surveys
7. Probability

Applied Algebra 1

Course Number: 3002

Length: Full Year

Prerequisites: Completion of Applied Statistics & Problem Solving or teacher recommendation.

Unit Credit: 1

Open to Grades: 10-11

Level: III

1. The student will learn to perform basic operations with integers and work with opposites, absolute values, and like terms.
2. The student will understand basic properties of math, basics of exponents, and simplifying expressions using order of operations.
3. The student will understand how to solve linear equations, inequalities and literal equations; including equations produced using the Pythagorean Theorem.
4. The student will understand how to simplify and manipulate exponent and radical expressions and solve equations with exponents and radicals.
5. The student will understand how to add, subtract, multiply and divide with polynomials.
6. The student will learn how to factor algebraic expressions up to the third degree.
7. The student will understand and use graph & write linear equations given various information. The student will understand how to solve systems of equations using graphing, substitution and elimination methods.

Algebra AB

Course Number: 3030

Length: Full Year, 2 periods per day

Prerequisites: Placement based on standardized math test score and teacher recommendation.

Unit Credit: 2

Open to Grades: 9-10

Level: II

This course provides students with extra seat time to practice and master algebraic concepts and skills. Students who successfully complete Algebra AB receive 2 credits. They may follow this course with Geometry, Applied Geometry or Applied Statistics with teacher recommendation.

1. The student will review the rules of arithmetic and be able to apply them with variables.
2. The student will review writing, solving and checking linear equations and linear inequalities.
3. The student will review the coordinate plane and be able to graph linear equations and inequalities.
4. The student will be able to solve systems of linear equations and systems of linear inequalities.
5. The student will understand how to simplify and manipulate exponents, exponential expressions and polynomials.
6. The student will understand and apply the rules for factoring.
7. The student will understand, check, solve and simplify rational expressions and equations.

Accelerated Algebra 1

Course Number: 3027

Length: Full Year

Prerequisites: Placement from standardized math test score and placement committee recommendation.

Unit Credit: 1

Open to Grades: 9

Level: I & II

1. The student will understand and accurately combine and check polynomial expressions.
2. The student will understand how to solve linear, proportion and absolute value equations and inequalities along with simplifying expressions and understand the difference between the two.
3. The student will understand and use interchangeably linear graphs, tables and equations along with solving linear systems.
4. The student will understand how to simplify and manipulate exponent expressions and solve equations with exponents.
5. The student will learn how to factor algebraic expressions up to the third degree by factoring rules.
6. The student will understand, check, solve and simplify rational expressions and equations.

Applied Geometry

Course Number: 3015

Length: Full Year

Prerequisites: Successful completion of Applied Algebra or teacher recommendation. Can be taken concurrently with Applied Algebra 1 with teacher recommendation.

The class will place emphasis on problem solving strategies for success with word problems and applications.

Unit Credit: 1

Open to Grades: 11 & 12

Level: III

1. The student will understand, create, interpret and apply basic univariate statistical graphs and summaries.
2. The student will be able to understand, create, interpret and apply basic logic problems.
3. The student will be able to solve basic vector problems.
4. The student will understand and apply concepts of parallel and perpendicular lines and their angles.
5. The student will measure and calculate one, two and three dimensional measures for basic geometric shapes (various polygons and circles) including angle measure, length, perimeter, area, volume.
6. The student will understand and apply the Pythagorean Theorem to solve problems.
7. The student will understand, create, interpret and apply the uses of the right triangle including trigonometric problems.
8. The student will utilize their understanding of geometric problems to create, interpret and solve real-life problems.

Geometry

Course Number: 3010

Length: Full Year

Prerequisites: Successful completion of Algebra AB or Accelerated Algebra I.

Unit Credit: 1

Open to Grades: 10-12

Level: II

1. The student will understand, use and apply the following terms: points, lines, planes, space, angles, parallel and perpendicular.
2. The student will understand the reasoning inherent to mathematics including number pattern and shape pattern recognition, basic logic structures and logic laws through interaction with basic shapes, symmetry and transformations, and basic proofs.
3. The student will understand the rigid structure of the triangle and the properties inherent to it.
4. The student will understand and apply the special properties of polygons.
5. The student will understand and apply right triangle trigonometry.
6. The student will understand and apply the properties of circles.
7. The student will find the perimeter, area, surface area and volume of any shape or solid.

Intro to Trigonometry

Course Number: 3017

Length: Semester

Prerequisite: Successful completion of Geometry.

Unit Credit: 1/2

Open to Grades: 11 & 12

Level: II

This one semester course covers right triangle trig, applications of right triangle trig, and introduces non-right triangle trig. Other trig concepts, such as the Unit Circle and basic trig properties will also be covered. Graphing calculators are required but can be loaned out by the school.

Intro to Statistics/Data Literacy

Course Number: 3018

Length: Semester

Prerequisite: Successful completion of Geometry.

Unit Credit: 1/2

Open to Grades: 11 & 12

Level: II

This one semester course covers data description, display, and collection. We examine uses of data and academic and business settings. Students will use linear regression to study relations. A Ti-84 graphing calculator will be required.

Honors Geometry

Course Number: 3003

Length: Full Year

Prerequisites: Placement from assessments and placement committee recommendation or completion of Algebra I and teacher recommendation.

Unit Credit: 1

Open to Grades: 9 & 10

Level: I

1. The student will understand, use and apply the following terms: points, lines, planes, space, angles, parallel and perpendicular.

2. The student will understand the reasoning inherent to mathematics including number pattern and shape pattern recognition, basic logic structures and logic laws through interaction with basic shapes, symmetry and transformations.
3. The student will understand the rigid structure of the triangle and the properties inherent to it.
4. The student will understand and apply the special properties of polygons.
5. The student will understand and apply non-right triangle trigonometry.
6. The student will understand and apply the properties of circles.

Algebra 2

Course Number: 3005

Length: Full Year

Prerequisites: Completion of Geometry or Honors Geometry and a C- or better in Algebra AB or Accelerated Algebra I.

Unit Credit: 1

Open to Grades: 10-12

Level: II

1. The student will understand the intricacies and uses of the various number systems and models.
2. The student will understand quadratic equations and their graphs and expressions, and their roots.
3. The student will understand translations, reflections and dilations of parent graphs.
4. The student will understand how to solve systems with 2 or more variables.
5. The student will understand functions.
6. The student will understand polynomial and root functions.

There will be an emphasis on solving algebraic word problems

Honors Algebra 2

Course Number: 3013

Length: Full Year

Prerequisites: Completion of Geometry and teacher recommendation or Honors Geometry.

Unit Credit: 1

Open to Grades: 10 & 11

Level: I

1. The student will be able to use technology to graph and analyze functions.
2. The student will be able to solve and graph linear functions and inequalities.
3. The student will understand how to solve systems with 2 or more variables.
4. The student will understand polynomial and radical functions and inequalities.
5. The student will understand conic sections, rational expressions and equations, exponential and logarithmic relations.
6. The student will understand trigonometric functions, graphs and identities.
7. The student will understand the intricacies and uses of the various number systems and models.
8. The student will understand translations, reflections and dilations of functions and graphs.

AP Precalculus (Dual Enrollment)

Course Number: 3788

Length: Full Year

Prerequisites: Completion of Algebra II and teacher recommendation or completion of Honors Algebra II

Unit Credit: 1

Open to Grades: 11 & 12

Level: I & II

1. Unit 1: Polynomial and Rational Functions
2. Unit 2: Exponential and Logarithmic Functions
3. Unit 3: Trig and Polar Functions
4. Unit 4: Intro to Calculus

AP Calculus (Dual Enrollment)

Course Number: 3001

Length: Full Year

Prerequisites: Completion of AP PreCalculus

Unit Credit: 1

Open to Grades: 11 & 12

Level: I

1. The student will understand, apply and evaluate sequences, series (finite and infinite) and limits while understanding the concept of continuity.
2. The student will conceptually understand the two major calculus topics—the derivative and integral.
3. The student will understand, through the rules for derivatives, how to calculate derivatives and learn the major fundamental applications of derivatives.
4. The student will understand and apply the basic anti-derivative/integral rules.

5. The student will understand and apply the uses of the derivative and integral.
6. The student will find differential equations numerically, graphically and analytically.

AP Statistics (Dual Enrollment)

Course Number: 3011

Length: Full Year

Prerequisites: Completion of Algebra II and teacher recommendation or completion of Honors Algebra II

This is a college level course that requires extensive reading and writing in order to be successful.

Unit Credit: 1

Open to Grades: 11 & 12

Level: I

1. The student will understand how to summarize and interpret univariate statistics and use those statistics to make decisions.
2. The student will understand how to graph, calculate, use and interpret bivariate statistics.
3. The student will understand how to design and conduct a survey or experiment.
4. The student will understand how to find the probability of complex events.
5. The student will understand distribution functions for individual data points and for samples.
6. The student will understand how to make firm statistical decisions based on inference.

Math Topics Fall

Course Number: 3028

Length: Semester

Prerequisite: Successful completion of Geometry or above.

Unit Credit: 1/2 (will be offered during the 2027-2028 school year)

Open to Grades: 10-12

Level: II

This one semester course explores math concepts to prepare for standardized tests.

Math Topics Spring

Course Number: 3029

Length: Semester

Prerequisite: Successful completion of Geometry or above.

Unit Credit: 1/2 (will be offered during the 2027-2028 school year)

Open to Grades: 10-12

Level: II

This one semester course explores math concepts to further understand how math evolved including a focus on algebra.

SCIENCE

Science education is the study of the impact, limitations, fundamental principles, and methods of science. It provides students with knowledge of the natural world through the application of logical thought processes such as observing, hypothesizing, experimenting, drawing conclusions, and communicating experimental results. In addition, it develops those attitudes and problem solving techniques essential for life in an increasingly complex technological society. As such, a wide range of skills across the curriculum will be required including math, English, technology, and art. All science students will be required to sign and follow a safety contract. Many science classes involve fieldwork for which appropriate behavior and dress is also required.

In order to meet the MVRHS graduation requirements, beginning with the class of 2023 students must successfully complete a minimum of three science credits, two of which must fulfill the state of New Hampshire biology and physical sciences requirements. Because mathematics is extensively integrated in high school science, pathways for meeting graduation requirements may look different depending on the student's level of competency in math when they enter high school. Starting with the graduating class of 2030, students will be required to successfully complete a minimum of 2 science credits.

Students entering high school will enroll in Physical, Earth & Space Science, one of the biology courses, and one additional science elective to meet their graduation requirements. Students entering high school with advanced math skills can choose to take Biology in grade 9 and then complete **both** a chemistry course **and** a physics course to meet their physical sciences graduation requirement.

It is strongly recommended that all students take four credits of science prior to graduation but it is especially important for students planning to pursue STEM (Science, Technology, Engineering and Mathematics) careers after graduation, and for those who want to graduate with the New Hampshire Scholars STEM emphasis. Refer to the course descriptions that follow for more information about elective science classes and their prerequisites.

Physical, Earth, & Space Science

Course Number: 3358

Length: Full Year

Unit Credit:1

Open to Grade: 9

Level: All

Physical, Earth, & Space Science is an integration of chemistry, physics, Earth, and space science and is devoted to investigating and explaining the interrelationships among the three. Concepts will include properties of matter, motion, energy, Earth processes, interrelationships in the universe, and science advancement through technology. Students will be challenged to gain scientific knowledge through inquiry based experiments – some of which will be student designed. Labs will include individual and collaborative efforts to experiment and communicate results. Students will use mathematical modeling to find and explain relationships. Reading & writing skills will also be incorporated throughout the course.

Honors Biology

Course Number: 3360

Length: Full Year

Prerequisite: “C” or better in Physical, Earth, & Space Science and teacher recommendation or concurrently enrolled in Geometry or higher.

Unit Credit: 1

Open to Grades: 9 & 10

Level: I

Honors Biology is an in depth life science course where students will explore the concepts of life science while conducting and designing experiments. Students will study the chemistry of life, the cell, taxonomy, ecology, genetics, and evolution. A variety of activities, including lab investigations, projects, and research assignments will be given throughout the course. Independent reading and writing will also be integrated throughout the course.

Biology

Course Number: 3359

Length: Full Year

Prerequisite: Successful completion of Physical, Earth, & Space Science and teacher recommendation.

Unit Credit: 1

Open to Grade: 10

Level: I & II

Biology is an introductory course that covers fundamental biological concepts and scientific techniques. Models, activities, and labs are done throughout the year. Topics studied will include the cell, classification, genetics, evolution, disease, and ecology. Participation is an integral part of this course.

Forensics

Course Number: 3303

Length: Full Year

Prerequisites: “C” or better in both biology and algebra (or equivalent) and currently enrolled in applied geometry or higher

Unit Credit: 1

Open to Grades: 10-12

Level: All

Forensic science is a hands-on course open to juniors and seniors. It is an integrated course that encompasses many science disciplines including anatomy, biology, chemistry, and physics. Forensic science includes a variety of activities, lab investigations, and research that will include the various science disciplines to aid in the solving of crimes. Critical thinking, collaborating with peers, and problem solving are some of the skills that will be used throughout the course.

Marine Biology

Course Number: 3312

Length: Semester

Prerequisites: Successful completion of biology or higher

Unit Credit: 1/2

Open to Grades: 10-12

Level: All

Dive into the fascinating world of marine biology in this engaging half-year course designed for students eager to explore the diverse ecosystems of our oceans. This course will cover the fundamental principles of marine science, including the study of marine organisms, their behaviors, and their interactions with the environment.

Students will investigate various marine habitats, such as coral reefs, estuaries, and deep-sea environments, while learning about the physical and chemical properties of seawater. Key topics will include marine biodiversity, the role of marine organisms in the ecosystem, and the impact of human activities on ocean health through hands-on activities, class discussions, and in depth research. Students will gain a comprehensive understanding of marine biology and the significant role our oceans play for life on our planet.

The Science of Survival

Course Number: 3313

Length: Semester

Prerequisites: Successful completion of biology or higher

Unit Credit: 1/2

Open to Grades: 11 & 12

Level: All

The Science of Survival is a hands-on, interdisciplinary high school course that combines the principles of biology, physics, and environmental science to explore how humans adapt and survive in extreme conditions. Students will investigate topics such as shelter building, water purification, first aid, navigation, and the physiological effects of stress on the body. The course will also explore how different animals have developed unique survival strategies through adaptations, and how these insights can be applied to human survival scenarios. Students will learn about the ways in which animals, such as hibernating mammals, migratory birds, or desert-dwelling creatures, survive harsh conditions, and consider how these strategies can inspire human solutions.

Through practical exercises, experiments, and simulations, students will learn to assess risks, solve problems, and apply scientific knowledge to real-life survival situations.

The course emphasizes critical thinking, teamwork, and self-reliance, equipping students with valuable skills for both outdoor adventures and everyday challenges. The integration of animal adaptations enhances the students' understanding of biological principles and offers an expanded perspective on how survival strategies evolve across species.

Environmental Science

Course Number: 3310

Length: Full Year

Prerequisite: "C" or better in Biology

Unit Credit: 1

Open to Grades: 11 & 12

Level: All

This engaging Environmental Science course for 11th and 12th graders invites students to delve into the intricate relationships within our local environment. Through hands-on activities and in-depth discussions, students will explore critical topics such as endangered species, the impact of invasive species, and the importance of biodiversity in our region.

Students will participate in unique projects which highlight the significance of local resources and sustainable practices. The course will also address pressing issues related to water availability and cleanliness, emphasizing the importance of protecting our vital water sources. By the end of the course, students will have a deeper understanding of environmental challenges and the role they can play in fostering a sustainable future for their local community and beyond.

Anatomy and Physiology

Course Number: 3311

Length: Full Year

Prerequisite: "C" or better in both Biology and Chemistry

Unit Credit: 1

Open to Grades: 11-12

Level: I

Human Anatomy and Physiology is a laboratory-based course that investigates the structure and function of the human body. Topics covered will include the basic organization of the body, biochemical composition and function, and major body systems, including the impact of diseases on certain systems. Students will learn through reading materials, homework, group work, projects, and labs. Throughout the course students will participate in the dissection of preserved specimens. This course has been designed to prepare students considering a career in the health professions for future coursework.

Chemistry

Course Number: 3300

Length: Full Year

Embedded Math Credit 1/2

Prerequisite: "C" or better in Geometry or concurrently enrolled in Honors Geometry

Unit Credit: 1

Open to Grades: 10-12

Level: I & II

Chemistry is designed to provide students with many opportunities to further develop their scientific reasoning, critical-thinking skills, and scientific literacy. Topics are theme based but include the key concepts of chemistry needed for further study of all sciences. These topics include matter, atomic structure, and bonding; molecular structure and properties; phase changes and behavior of gases, and stoichiometry and solution chemistry. This course incorporates many collaborative and hands-on activities.

Students will routinely analyze and draw conclusions from data in order to develop an understanding of chemistry. Reading, writing, and algebra skills will be used throughout the course, but there will be a greater emphasis on developing a conceptual understanding of chemistry than in the honors level course. Independent practice outside of the classroom is essential for successful completion of this course.

Honors Chemistry

Course Number: 3301

Length: All

Embedded Math Credit 1

Prerequisite: "B" or better in Geometry or higher.

Unit Credit: 1.5

Open to Grades: 10-12

Level: 1

Honors Chemistry is designed to continue the development of abstract reasoning, problem solving, and science process skills. Topics will include properties of matter and energy, development of the atomic theory, atomic structure, chemical composition and bonding, periodicity and trends, mathematics of chemistry, chemical reactions, gas laws and solution chemistry. There is a strong emphasis on problem solving and laboratory experiences, as well as writing and reading.

Students will analyze and draw conclusions from data they collect and will communicate experimental results using oral presentations, Google docs and spreadsheets, as well as detailed lab journals. Independent practice outside of the classroom is essential for successful completion of this course.

Students taking Honors Chemistry are likely to be pursuing a STEM major upon graduation and are expected to have strong mathematics skills, exemplary work habits, and enjoy a challenging academic environment. This course places a greater emphasis on laboratory experiences and applied mathematics than Chemistry. *(Please note this class includes a lab period every other day so it alternates between 7 and 8 periods per week..*

Advanced Placement Biology

Course Number: 3309

Length: Full Year blocked

Embedded Math Credit ½

Prerequisite: "B" or better in Biology and "C" or better in Chemistry.

Unit Credit: 2

Open to Grades: 11 & 12

Level: I

AP Biology is the equivalent of an introductory biology course and corresponding lab work typically taken by biology majors during their first year of college. Students must have completed both first year biology and chemistry prior to enrolling in AP Biology. AP Biology is designed so that students obtain a deeper understanding of biology concepts along with advancing their laboratory skills. It is built around 4 big ideas and 6 science practices. Units include chemistry of life, cell structure & function, cell energetics, cell communication and cell cycle, heredity, gene expression and regulation, natural selection, and ecology. The laboratory component of the course will incorporate several inquiry based labs, plus additional labs and activities that will introduce new topics and reinforce concepts. The laboratory component of this course will cover a minimum of 25% of instruction time.

Students are expected to present findings from labs and research both written and orally. AP Biology requires considerable time and effort. All students are required to take the AP Biology exam in May of 2027.

(Please note this class meets 10 periods per week)

Advanced Placement Chemistry

Course Number: 3317

Length: All blocked

Embedded Math Credit 1

Prerequisite: "B" or better in Chemistry or successful completion of Honors Chemistry and "B" or better in Algebra II or higher

Unit Credit: 2

Open to Grades: 11 & 12 (offered during the 2027-2028 school year)

Level: I

AP Chemistry is designed to be the equivalent of a college introductory chemistry course and the corresponding lab work usually taken by science majors during their first year of college. This course works toward equipping the student for more advanced chemistry throughout the sciences by focusing on lab skills as well as content mastery.

The course is built around the 4 big ideas and 6 science practices identified by the College Board AP chemistry framework. Unit topics include atomic structure and properties, molecular and ionic compound structure and properties, intermolecular forces and properties, chemical reactions, chemical equilibria, kinetics, thermodynamics, acids and bases, and applications of thermodynamics. The laboratory component of the course requires a minimum of 16 lab investigations, 6 of which must be inquiry based labs, that require students to apply the science practices and reinforce the 4 big ideas. Additional lab activities are incorporated as time allows but a minimum of 25% of instruction time is lab based. There is a strong emphasis on problem solving using applied mathematics in conjunction with in depth laboratory investigations. Students are expected to draw conclusions from data and justify their reasoning both orally and in writing.

AP Chemistry requires a considerable amount of time and effort and the College Board recommends that students taking AP Chemistry spend an additional 5 hours per week on individual study outside of the scheduled class time. All students are required to take the AP Placement Exam in May 2028.

(Please note this class meets 10 periods per week)

Physics

Course Number: 3316

Length: Full Year

Embedded Math Credit 1/2

Prerequisite: "C" or better in Algebra I and Geometry or Higher.

Unit Credit: 1

Open to Grades: 11 & 12

Level: I

Physics teaches mechanics, wave motion, optics, and electricity in a hands-on manner by relating physics principles to everyday situations.

There is an emphasis on developing a strong conceptual understanding of topics and then using applied mathematics to solve problems. Graphing calculators and computers are used to collect and analyze data. Students will draw conclusions from data they collect and will communicate experimental results through class discussion, Google docs and spreadsheets, LoggerPro software, and detailed lab journals. Students are expected to work cooperatively in small groups to discuss, investigate, and solve problems but independent practice outside of the classroom is essential for successful completion of this course.

Reading, writing, and algebra skills will be used throughout the course, but there will be a greater emphasis on developing a conceptual understanding of physics than in the honors level course.

Honors Physics

Course Number: 3302

Length: Full Year

Embedded Math Credit 1

Prerequisite: "B" or better in Algebra II or higher and concurrently enrolled in CP Pre-Calculus or higher.

Unit Credit: 1.5

Open to Grades: 11 & 12

Level: I

Honors Physics includes traditional concepts in mechanics such as one dimensional motion and forces, two dimensional motion and forces, rotational motion, conservation of energy and momentum, as well as sound and light waves, optics, and electricity. Throughout the year there is a strong emphasis on problem solving, laboratory experiences, and applied mathematics. Graphing calculators and computers are used to collect and analyze data. Students will draw conclusions from data they collect and will communicate experimental results using oral presentations, Google docs and spreadsheets, *LoggerPro* software, and detailed lab journals. Students are expected to work cooperatively in small groups to discuss, investigate, and solve problems. Students taking Honors Physics are likely to be pursuing a STEM major upon graduation and are expected to have strong mathematics skills, exemplary work habits, and enjoy a challenging academic environment.

This course places a greater emphasis on in depth laboratory work and applied mathematics than Physics. *(Please note this class includes a lab period every other day so it alternates between 7 and 8 periods per week.)*

SOCIAL STUDIES

Social Studies Education is the study of related knowledge and modes of inquiry selected from history, humanities and the field of social science, including economics, civics, sociology, psychology, philosophy, geography, and history.

It helps students acquire the knowledge, skills, and attitudes necessary for effective participation in the life of the community, the nation, and the world.

Social Studies Requirements for the graduating classes of 2027, 2028 & 2029 is 3 Credits

Required: Civics/Government ½ credit, World History ½ Credit, Economics ½ Credit, US History/NH History 1 Credit, Personal Finance ½ credit

Suggested sequence for graduating classes of 2027, 2028 & 2029:

9th Global Studies, 10th US History/NH History, 11th Civics/Government, 11th Personal Finance and 12th Economics

(World History ½ credit can be met through the following courses: Ancient World History, Geography, AP European History, History in Film and Global Studies).

Social Studies Requirements for the graduating classes of 2030 and beyond is 5 Credits

Required: 1 credit of Global Studies, ½ credit of US History, ½ credit of NH History, ½ credit of Civics, 1 credit of History, Government and Constitution of US and NH, and ½ credit of Economics, ½ credit of Financial Literacy, ½ embedded credit of Logic and Rhetoric.

Suggested sequence for the graduating classes of 2030 and beyond:

9th Global Studies, 10th US History/NH History, 11th Civics/Government & Law/Constitution, Financial Literacy, 10th-12th Economics, and embedded Logic and Rhetoric.

Global Studies

Course Number: 3130

Length: Full Year

Prerequisite: none

Unit Credit: 1

Open to Grade: 9 (graduating classes of 2030 and beyond)

Level: All

Global Studies will examine the major historical and social trends of the modern era, 1500 - today in an attempt to understand the nature and origins of the 21st century world. A primary emphasis of the course is on considering those historical events and processes that have had a lasting impact on our present day reality in order to help students make sense of the rapidly-changing world in which they live. Topics of emphasis could include the thematic topics of: Gender, Race, Religion, Technology, Communication and Globalization. In addition, we study the impact of evolving political and economic systems through a variety of voices in order to examine the spectrum of power and privilege throughout the world. We will be flexible to moving in any direction that our discussion and interest lead us.

The class will also focus on geographic knowledge. This will facilitate the understanding of the Global and World issues that the course will address. The Geography content will be a continent by continent survey of the world. Evaluation of location, human environment interaction, place, region, movement, and culture will also be conducted.

Core competencies will also include:

- Recognition of local, state, national, and global geography and how the different and unique perspectives of peoples are reflected.
- The understanding of important events marking world history and how those events have shaped cultural, political, and other aspects of civilization through multiple perspectives;

US/NH History - 1850's to present

Course Number: 3200

Length: Full Year

Prerequisite: None

Unit Credit: 1

Open to Grade: 10

Level: I & II

American History from 1860's to the present will be studied. Aspects of New Hampshire History and Government will also be included. Both topical and chronological approaches will be used.

Civics/Government

Course Number: 3217

Length: Semester

Prerequisite: None

Unit Credit: 1/2

Open to Grade: 11

Level: All

This one semester course examines the rights and responsibilities of US Citizens and the structure and functioning of Federal, state and local governments. Civics will also include a Community Service project to foster an understanding of civic engagement and participation. During this course the mandated State of New Hampshire 128 question USCIS Test will be taught, reviewed and administered to all students. This course meets the requirements for graduation in Civics for the state of New Hampshire.

Economics

Course Number: 3403

Length: Semester

Prerequisite: none

Unit Credit: 1/2

Open to Grade: 12

Level: All

Economics is the study of the allocation and utilization of limited resources to meet society's unlimited needs and wants, including how goods and services are produced and distributed.

This course will examine and analyze the process in which people seek to satisfy their needs and wants by making decisions. The course will focus on: supply and demand, business and labor, market structures, government, international and domestic challenges and personal finance. **Note:** Successful completion of Intro to Business Economics satisfies the ½ credit Economics requirement.

AP US History - 1492 to present

Course Number: 3209

Length: Full Year

Preference given to seniors, requires instructor approval

Prerequisite: Understanding of the rigors of an Advanced Placement course, similar to a college freshman course and satisfactory completion of a summer unit.

Unit Credit: 1

Open to Grades: 10 -12 (offered during the 2027-2028 school year)

Level: I

Advanced Placement US History is a college level course that will provide students with the opportunity to stretch their skills and knowledge in a class that will require them to develop, enhance and refine numerous college level skills. The class will cover U. S. history from 1492 to today. The class will utilize multiple types of source material and deep discussion of issues.

There will be multiple writing opportunities and significant reading assignments during this course. The class is designed to develop upper level thinking skills and enhanced analytical skills in the students.

Students successfully mastering the course material may earn college credit by attaining a high score on the annually administered AP US History Exam. The individual college or university determines how many, if any, credits will be granted for the AP exam score. Students taking this course are required to take the AP Exam. This course meets the state graduation requirement for United States History.

Senior Seminar

Course Number: 3016

Length: Semester

Prerequisite: None

Unit Credit: 1/2

Open to Grade: 12

Level: All

This course will focus on essential skills in research, time management, public speaking, as well as a capstone project that will cater to your individual strengths, career aspirations, and interests.

Additionally, topics such as resume building, job/post-secondary applications, and scholarships will be covered. The goal of this course will be to set you up to be as successful as possible in whatever post-secondary endeavors you may choose.

As a part of Senior Seminar will be the creation of a comprehensive Senior Portfolio that will be presented to a faculty committee at the end of the course. The largest component of this Senior Portfolio will be a Senior Project, which will be done either individually or as an approved group. It is expected that the Senior Project will be worked on over the course of the entire semester and shared at the end of the class.

Elective Social Studies Courses**AP European History** (Dual Enrollment)

Course Number: 3208

Length: Full Year

Preference given to seniors and requires instructor approval.

Prerequisite: Understanding of the rigors of an Advanced Placement course, similar to a college freshman course and satisfactory completion of a summer unit.

This course meets the required World History ½ credit to graduate

Unit Credit: 1

Open to Grades: 10 –12

Level: I

AP European History is a college freshman level course that provides students with an academic experience equivalent to a freshman college survey of western history. The course is specifically designed to provide students with an in-depth study of European history from the 15th century through the modern day.

In addition to course content, the course is specifically designed to enhance student analytical reading and essay writing skills. Advanced Placement European History is also intended to improve development of student critical thinking, document analysis, interpretive reading, information organization, synthesis and writing skills.

Students successfully mastering the course material may earn college credit by attaining a high score on the annually administered AP European History Exam. The individual college or university determines how many, if any, credits will be granted for the AP exam score. Students are required to take the AP Exam.

Archaeology

Course Number: 3233

Length: Semester

Prerequisite: None

Unit Credit: 1/2

Open to Grades: 11-12

Level: All

Archaeology is the bridge between social studies and the sciences, offering a window into the daily lives of ancient peoples. In this introductory course, students will step into the role of the archaeologist, learning not just what we know about past civilizations, but how we know it. The curriculum covers the ethics of digging, methods used in the field by archeologists, and the interpretation of finds through different historical eras. Students will develop critical thinking skills as they analyze artifacts and data to reconstruct lost histories, gaining a deeper appreciation for the diverse cultures that shaped our modern world.

Ancient World History

Course Number: 3219

Length: Semester

Prerequisite: None

This course meets the required World History ½ credit to graduate

Unit Credit: 1/2

Open to Grades: 10-12

Level: All

Ancient History will increase student awareness of our inheritance from the past, influences for both western and nonwestern cultures and the growing interdependence of cultures of the world. This course covers from the dawn of civilization to the Roman Empire and from the Early Empires of India and China and the Middle Ages of Europe.

Introduction to Philosophy

Course Number: 3221

Length: Semester

Prerequisite: Successful completion and recommended "C" average in two previous Social Studies courses.

Unit Credit: 1/2

Open to Grades: 10 - 12

Level: I

Introduction to Philosophy begins with an overview of the basic tenet of occidental philosophy. Western Philosophical ideas and problems are introduced. Students read and reflect on philosophical readings through discussions and writing assignments. Students should possess above average reading skills due to the complicated nature of philosophical readings.

History in Film

Course Number: 3215

Length: Semester

Prerequisite: None

This course meets the required World History ½ credit to graduate

Unit Credit: 1/2

Open to Grades: 11 & 12

Level: All

History in Film will look at how History has been and is being portrayed in Film. The purpose of this class is to develop critical thinking skills and an analytical and skeptical approach to the accuracy of History in popular films. The course will be structured to include multiple films covering a number of topics, not all of them American, or American films.

The class will be rigorous with discussion and participation being a graded factor. Each unit will culminate in the preparation of a Summative project, some individual and some in groups. There will be significant student choice over which topics to cover and the design and production of unit projects.

Law

Course Number: 3218

Length: Semester

Prerequisite: none

Unit Credit: 1/2

Open to Grades: 11 & 12

Level: I & II

Law for the secondary student is an in-depth examination of local, state, federal and international law. Students will study the history, purpose and operation of the law. Participants in the class will need to be able to present the facts in a variety of cases and argue the relevant legal issues. Students will learn about criminal and civil law, juvenile law, constitutional rights and contemporary legal issues and topics. A focus of the course will include the criminal justice system.

Sociology (alternating years with Psychology)

Course Number: 3222

Length: Semester

Prerequisite: none

Unit Credit: 1/2

Open to Grades: 11 & 12

Level: I

Sociology is a semester-long course that introduces and raises awareness of sociological concepts, theories and issues. Following an introduction to the major (functionalist, conflict, and interactionist perspectives) the focus of the course turns to an examination of culture, society, socialization, and individuals within those groups. Classroom activities may include lectures, films, readings, debates, presentations, criminal procedure background, mock trial and discussion. The course culminates with a group project that analyzes a current social issue/problem of the group's choosing.

Psychology (alternating with Sociology)

Course Number: 3220

Length: Semester

Prerequisite: none

Unit Credit: 1/2

Open to Grades: 11 & 12 (offered during the 2027-2028 school year)

Level: I

This course will examine how the various fields of psychology scientifically describe, predict and explain behavior and mental processes. We will survey a broad range of psychology topics and consider the several perspectives, or lenses, through which psychologists study and understand behavior. Course topics include history and methods, consciousness, learning, development, memory, personality and psychological disorders. Classroom activities will include discussion, direct instruction, videos, and group activities.

HEALTH

Health and Wellness Education

Course Number: 3512

Length: All

Prerequisite: None

Unit Credit: 1

Open to Grades: 9 – 12 *required to take it prior to graduation*

Level: All

The Health and Life Skills curriculum is an organized sequential curriculum for teaching students the skills they need to become health literate, maintain and improve their health, foster effective social skills, develop positive study habits and establish connections to resources and services in the Upper Valley. The curriculum is designed to help students understand that the decisions they make can affect the quality and quantity of their lives both now and in the future. Our health lessons and activities focus on the following National Health Standards that have been adopted by the NH Department of Education:

1. Students will *comprehend concepts* related to **health promotion** and **disease prevention**.
2. Students will *demonstrate the ability to access* **valid health information** and **health-promoting products** and **services**.
3. Students will *demonstrate the ability to practice* **health-enhancing behaviors** and **reduce health risks**.
4. Students will *analyze the influence of* **culture, media, technology** and other factors of health.
5. Students will *demonstrate the ability to use* **interpersonal communication** skills to enhance health.
6. Students will *demonstrate the ability to use* **goal setting** and **decision-making** skills to enhance health.
7. Students will *demonstrate the ability to advocate for* **personal, family** and **community** health.

These life skills are taught through the following health education content: Personal Wellness, Mental and Emotional Wellness, Nutrition/Fitness Wellness, Drug, Tobacco and Alcohol Prevention, Human Sexuality and Healthy Relations, Emergency First Aid/CPR review.

PHYSICAL EDUCATION

Once you have received your 1 credit physical education graduation requirement, you need administrative approval prior to taking any more physical education courses.

Physical Education IA & IB

Course Number: 3536 / 3537

Length: Semester

Prerequisite: None

Note: This course can be taken as a year course by signing up for both sections.

Unit Credit: 1/2

Required in Grades 9 & 10

Level: All

Physical Education IA begins with a unit on physical fitness. Students will develop individual conditioning programs based on a fitness evaluation in order to increase levels of cardiovascular conditioning, muscle tone, muscular strength and endurance. Throughout the year, activities will reinforce all aspects of physical fitness. Assessments are given throughout the semester based on the history, rules and sportsmanlike conduct for each activity performed. Students will participate in various types of group games, individual, dual and team sports, and outdoor and recreational activities, in 2-3 week intervals. Students are able to earn ½ credit for successfully completing each semester.

P.E. IA (3536)**Term 1**

Physical Fitness
& Initiatives
Flag Football
Soccer
Rugby
Weight Room

Term 2

Volleyball
Broomball
Basketball
Indoor Soccer
Badminton
Mountain Biking

P.E. IB (3537)**Term 3**

Pickleball
Weight Training
Wiffle ball
Softball
Physical Fitness
Sports Research Project

Term 4

Recreation
Track and Field
Aerobics
Field Games
TRX Workout
Cornhole

Strength / Nutrition / Wellness

Course number: 3529
Length: ½ semester

Unit Credit: 1/2

Open to Grades: 11 & 12
1 or 2 sport Athlete

Students participating in a sport (varsity or junior varsity, not for managers) in a given school year may take this course. Students will work directly with their coaches and develop personal strength/conditioning programs that will be done during season and out of season. Students will discuss:

Personal Fitness Program
Sport Psychology
Current events of the NHIAA
Extrinsic and intrinsic motivation
Team leadership skills
How to give feedback in sports

Responsibilities of being a team captain
8 Dimension of Wellness
Nutrition for athletes pre and post competition
Overall Nutrition Programs
Recovery/DOMS Delayed Onset Muscle Soreness
Playing at the college level

Fitness Experience IA and IB

Course Number: 3527/3528
Length: Semester
Prerequisite: Sneakers and loose pants

Unit Credit: 1/2-1

Open to Grades: 9-12
Level: NON-Competitive Class

Experience wellness, conditioning, group, and individual fitness topics that you would expect to find at a fitness center. Classes will focus on developing movement forms and sustaining an elevated heart rate for 30-40 minutes. Students will be assisted in assessing their level of daily physical activity and evaluating which fitness activities best contribute to a lifetime of physical fitness. Each student will learn how to conduct their own workout plan. Within the course, students will make personal goals to improve their own fitness.

When students complete this course they will be better prepared to define physical fitness concepts, increasing personal fitness levels and determine which activities can be performed for fitness beyond their high school years. This course is open to all grades, non competitive, and counts toward the MVRHS PE requirement.

Fit. Exp. Sess IA (1st sem.) (3527)

Into to Yoga	Advanced Yoga Poses
Pilates Mat	Standing Pilates
Muscular Endurance	Muscular Strength
Relaxation Techniques	Nutrition
Nature Walk	TRX Workout
Free Weights	Mountain Biking
Weight Room	Muscles of the Body

Fit. Exp. Sess. IB (2nd sem.) (3528)

Flow Yoga	Hi/Low Aerobics
Pilates for Strength	Outdoor Yoga
Step Aerobics	Body Toning
Core Strength	Fitness Concepts
Nutrition	Journaling
Personal Fitness	Fitness Research Project
Recreation Activities	

Outdoor Pursuits IA & IB

Course Number: 3519/3526
Length: Semester
Prerequisite: Warm outerwear, hats, boots, gloves, Jacket

Unit Credit: 1/2-1

Open to Grades: 9-12
Level: All

Recreating outdoors provides numerous benefits to the mind and the body. We apply information on preparing for hot, rainy, snowy, windy, sunny, or cold weather and what recreations are appropriate for the different kinds of weather we have in New Hampshire. Topics in this course include developing problem solving and leadership skills, cooperative games, hiking, outdoor sports and recreations, winter skills, and orienteering. This course is open to all grades, is non competitive, and counts toward your PE requirement. **Class can go outside in all weather so please be prepared to bring a change of clothes for wet weather and warm outerwear for winter days.**

Outdoor Session IA (3519)

Gearing up for Outdoor Activity	Pickleball
Team Building/Problem Solving	Trail Running
Basic Outdoor First Aid	Ultimate Frisbee
Snowshoeing	Hiking
Preparing for the Outdoors	Mountain Biking
LeaveNoTrace-OutdoorEthics	Weight Room-Personal Fitness

Outdoors Session IB (3526)

Preparing for Outdoors	Hiking
Orienteering	Sand Volleyball
Bocce Ball	Winter Skills
Horseshoes	Sledding
National Park Poster	Map Reading
Hiking Research Project	Cornhole

VISUAL ARTS

The Visual Art Program at Mascoma Valley Regional High School offers students a comprehensive and inclusive studio experience that develops technical skill, creative thinking, and personal artistic voice. Through a sequenced curriculum in drawing, painting, sculpture, ceramics, and mixed media, students explore both traditional and contemporary approaches to art-making. Emphasis is placed on creative problem-solving, visual literacy, craftsmanship, and self-expression, while encouraging risk-taking and thoughtful reflection. The program supports students at all levels—from introductory courses to advanced, portfolio-based study—and provides opportunities for exhibition, community engagement, and interdisciplinary connections, preparing students for continued study in the arts or creative thinking in any field.

Students may enroll in the NH Scholars Arts Pathway for special recognition at graduation. Students in the Arts Pathway must take 2 full credits or more of visual art electives in addition to the Core Course of Study and maintain a GPA of 3.2.

The Visual Arts courses are arranged in three levels:

First Level: Art Concepts is the foundation course for all subsequent art classes.

Second Level: Courses offer students more depth in pursuing their expression and skills: Ceramics, Drawing, and Painting classes.

Third Level: Courses for the serious art student looking to build their portfolio and study more specific areas of visual art not covered in prior classes: Drawing II, Painting II, Ceramics II, Art Portfolio, AP Art, and Junior/Senior Studio

VISUAL ARTS FIRST LEVEL

Art Concepts

Course Number: 3405
Length: Semester
Prerequisite: None

Unit Credit: 1/2
Open to Grades: 9-12
First Level Course

This hands-on studio course explores the Elements and Principles of Art through 2D and 3D experiences with a wide variety of media. Students will learn technical skills while working with the expressive possibilities of diverse media such as graphite, ink, acrylic paint, watercolor, and pastels. Students will also learn additive and subtractive sculpture methods working with 3D materials including wire, plaster, wood, clay, and found objects. Students will gain new problem-solving skills while learning how to work safely with appropriate use of tools and materials. An introduction to Art history including contemporary art will be part of the major units of study.

VISUAL ARTS SECOND LEVEL

Drawing

Course Number: 3578

Length: Semester

Prerequisite: Art Concepts

Unit Credit: 1/2

Open to Grades: 9-12

Second Level Course

This course is an introduction to drawing with a focus on working from observation. This class builds on drawing skills taught in Art Concepts class. Through a variety of media such as pencil, charcoal, pastel, illustration marker, and ink, students will gain the skills to render realistic drawings. Subject matter may include found objects, animals, portraits, landscapes, and the figure. Students will be encouraged to find their own drawing style while also learning to successfully draw from observation. No prior drawing experience is necessary.

Painting

Course Number: 3579

Length: Semester

Prerequisite: Art Concepts & Drawing I Class

Unit Credit: 1/2

Open to Grades: 10-12

Second Level Course

Painting class will investigate the aesthetics and techniques of painting while helping students discover their personal style. Basic painting techniques will be taught, including color theory and the use of paint as a medium (underpainting, blending, glazing, texture, layering, and surface control). Students will explore the use of color, light, form, composition, and various painting media including watercolor, ink, acrylic paint, and encaustic wax.

Ceramics

Course Number: 3406

Length: Semester

Prerequisite: Art Concepts

Unit Credit: 1/2

Open to Grades: 10-12

Second Level Course

Ceramics explores hand-building techniques with an introduction to wheelwork. Students will learn about various glazes and firing techniques while creating functional and sculptural pieces. Ceramic studio safety measures will be covered, including how to properly fire a kiln and recycle clay. Ceramic history from various cultures and their impact on ceramic work will be covered along with learning about local professional potters and ceramic studios.

VISUAL ARTS THIRD LEVEL

Drawing II

Course Number: 3580

Length: Half Year

Prerequisite: Students must have passed Drawing I with a grade of C or better to enroll.

Unit Credit: 1/2

Open to Grades: 10-12

Third Level Course

Drawing II builds on the foundational skills developed in Drawing I, guiding students toward greater skillful confidence and personal artistic voice. Through advanced studies in observation, composition, perspective, and a wider range of drawing media, students deepen their understanding of line, value, form, and expressive mark-making. Emphasis is placed on developing individualized bodies of work on a personal theme, exploring more complex subject matter, and refining craftsmanship. This course is designed for students who are ready to challenge themselves, expand their creative problem-solving skills, and continue building a strong foundation for advanced art study.

Painting II

Course Number: 3581

Length: Half Year

Prerequisite: Students must have passed Painting I with a grade of C or better to enroll.

Unit Credit:1/2

Open to Grades: 10-12

Third Level Course

Painting II builds on the techniques and concepts introduced in Painting I, helping students strengthen their technical abilities and develop a more personal artistic direction. Students explore advanced color theory, composition, and a wider range of painting media—including oils—while working with more complex subjects and expressive approaches. The course emphasizes refining technique, creating a cohesive body of work, and developing confident, independent studio habits. This class is ideal for students ready to push their creative abilities and deepen their understanding of painting.

Ceramics II

Course Number: 3582

Length: Half Year

Prerequisite: Students must have passed Art Concepts and Ceramics classes with a C or better to enroll

Unit Credit:1/2

Open to Grades: 10-12

Third Level Course

Ceramics II is an intermediate-level course that builds upon the foundational skills introduced in Ceramics, offering students the opportunity to deepen their technical knowledge and expand their creative voice in clay. Students further develop both hand-building and wheel-throwing techniques while exploring more complex forms, surface treatments, and construction methods. The course emphasizes craftsmanship, thoughtful design, and problem-solving throughout the ceramic process.

In addition to advanced forming techniques, students gain a stronger understanding of glazing, firing processes, and kiln operation, with continued focus on studio safety and responsible material use. Through guided projects and independent work, students are encouraged to experiment, take creative risks, and refine their ideas. Ceramics II supports students as they move toward greater technical confidence and artistic independence, preparing them for advanced study or portfolio development in ceramics.

Junior/Senior Art Studio

Course Number: 3569 full/3583 half year

Length: Half Year or Full Year

Prerequisite: Art Concepts and the successful completion of drawing and painting classes with a grade of B or better.

Unit Credit:1

Open to Grades: 11 & 12

Third Level Course

This course is designed for serious upper-level art students to pursue areas of visual art that are of personal interest. Students should be able to work independently and be highly motivated to create. Students will focus on building a body of work as they continue to develop skills in producing high-quality works of art. Emphasis is placed on creating more complex visual statements. A wide range of materials and processes will be further explored, and students will have the opportunity to focus on a chosen subject or medium.

*Students may sign up for one semester only, or a full year.

Art Portfolio

Course Number: 3567

Length: Full Year

Prerequisite: Art Concepts and the successful completion of drawing and painting classes with a grade of B or better.

Unit Credit: 1

Open to Grades: 11 & 12

Third Level Course

This studio class is for the highly motivated art student who has a sincere interest in pursuing their art at an advanced level. Students should be able to work independently and be interested in creating a body of work on a specific theme. This class will help prepare a student's art portfolio for college acceptance; as well as encourage each student to investigate their artistic process in a safe and supportive environment. Students will develop their style and technique in various media. A culminating public art exhibition in May will require each student to select, mat, hang, and present their work to the greater community.

AP Art

Course Number: 3568

Length: Full Year

Prerequisite: Art Concepts and the successful completion of drawing and painting classes with a grade of B or better.

Unit Credit: 1

Open to Grades: 11 & 12

Third Level Course

*Students will develop an AP portfolio within this class. It is the equivalent of a one-semester college course in art and culminates in the Advanced Placement Examination in either 2D or 3D Art and Design. Depending on the student's performance on this exam and on specific college guidelines, advanced placement college credit may be received. *An additional College Board processing fee is required from applicants in September. A well-presented portfolio (15 completed works on a unified theme) and photos of each work are required for submission along with additional paperwork, a well-developed sketchbook, and the student's thoughtful writing about each piece (due by the Spring deadline).

PERFORMING ARTS

The Music courses offered at Mascoma afford all students the opportunity to participate, appreciate, and create music according to his/her individual interests. Participation in the classes not only promotes awareness and basic understanding of music, but also provides students with an avenue of growth, creativity and communication, which will encourage a lifelong appreciation of music.

Concert Band

Course number: 3531

Length: Full Year

Prerequisite: Ability to play a musical instrument

Option of receiving a numerical grade or Pass/Fail which is not included in GPA

Unit Credit: 1

Open to Grades: 9-12

Level: All

Students interested in playing with this group should be able to play one or more of the standard band instruments; although a limited number of new students may be accepted depending upon availability of the instructor's time. Students will be required to maintain a level of instrumental proficiency consistent with the ability of the band and will be expected to practice at home and/or take private lessons.

Emphasis will be on individual musicianship and group participation. Instrumental technique, blend and ear training are just a few of the areas that will be covered. Periodically the band will hold evening rehearsals throughout the year. The band performs in a minimum of five performances throughout the year. All performances are mandatory.

Honors Band: Students that are sophomores or higher can sign up for honors band. Students will audition for All-State and do a solo performance in the spring. Students will be expected to meet with me individually once a month and practice regularly. Students will still be a part of the normal band.

Concert Choir

Course Number: 3530

Length: Full Year

Prerequisite: Desire to sing choral music

Option of receiving a numerical grade or Pass/Fail which is not included in GPA

Unit Credit: 1

Open to Grades: 9 -12

Level: All

The Concert Choir will explore, rehearse and perform a vast variety of choral music expanding many styles and cultures, ranging from classical, show tunes, rock, jazz, folk and ethnic music. Emphasis will be on individual musicianship and group participation. Vocal technique, vocal health, blend and ear training are just a few of the areas that will be covered.

Some musical numbers will be choreographed and staged. Periodically the chorus will hold evening rehearsals throughout the year. The choir performs in a minimum of five performances throughout the year. All performances are mandatory.

Honors Choir: Students that are sophomores or higher can sign up for honors Choir. Students will audition for All-State and do a solo performance in the spring. Students will be expected to meet with me individually once a month and practice regularly. Students will still be a part of the normal Choir.

Guitar Ensemble

Course Number: 3535
Length: Full Year

Unit Credit: 1

Open to Grades: 9-12
Level: All

This ensemble will rehearse and perform musical charts written specifically for the guitar. Members will need a basic understanding of how to read musical notation. Many musical styles will be explored, along with lead sheet interpretation and improvisation. The Guitar Ensemble performs in a minimum of five performances throughout the year. All performances are mandatory.

Music Theory

Course Number: 3533
Length: Semester
Prerequisite: None

Unit Credit: 1/2

Open to Grades: 9-12
Level: All

This course is offered every other year and is designed for students who have completed at least one year of Band, Chorus, Guitar, or equivalent private music lessons. The class will provide an in-depth understanding of music theory and help students improve their ability to create and analyze music. Topics include part writing, identifying and writing intervals, key signatures, scales, rhythms, and ear training. A solid understanding of music theory will also enhance students' performance skills on their primary instruments.

Percussion

Course Number: 3532
Length: Semester
Prerequisite: None

Unit Credit: 1/2

Open to Grades: 9-12
Level: All

This class is open to students of all levels and includes students that are currently studying percussion in band. Students will learn to play a variety of percussion instruments, including snare drum, bass drum, concert toms, drum kit, cymbals, xylophones, other mallet instruments, and auxiliary percussion. Students will perform as part of a percussion ensemble and alongside the band. Additionally, they will develop music-reading skills, starting with basic rhythms and progressing to more complex rhythms.

Music in TV and Film

Course Number: 3534
Length: Semester
Prerequisite: None

Unit Credit: 1/2

Open to Grades: 9-12 (offered next during the 2027-2028 school year)
Level: All

This class is open to all students and explores the relationship between music and film. Students will study the history of music in television and film, and learn how music enhances the emotional and narrative elements of visual media. Projects will involve students adding sound effects and composing original effects and composing original music for short films they create themselves.

Musical Theater

Course Number: 3525
Length: Semester
Prerequisite: Desire to perform on the stage

Unit Credit: 1/2

Open to Grades: 9-12 (offered next during the 2027-2028 school year)
Level: All

This course for the singer-actor provides foundational instruction in music theater performance skills: character development and portrayal, scene study, and audition skills. Students will study the history and context of music theater through the study of performances, and develop as performers through this study. The class requires weekly creative output in addition to reading and listening outside of class.

OPEN ELECTIVES

Yearbook I

Course Number: 3504
Length: Full Year
Prerequisite: None

Unit Credit: 1

Open to Grades: 10-12
Level: All

Students will participate in all aspects of creating the official Mascoma yearbook, The Royal Crown. Students will learn techniques of electronic publishing, digital and traditional photography, graphic layout, and advertising. Students are expected to be available to cover school events both during and after school hours. Students must participate in fundraising through the sale of advertising. Note: this course does not count toward English department requirements. The Yearbook course can be repeated for credit.

WORLD LANGUAGES

All students are encouraged to expand their cultural horizons by learning another language. In our World Language courses students engage in the study of linguistic and cultural aspects of their chosen language. This active investigation leads to a greater understanding and appreciation of cultures different from their own. In all language courses emphasis is placed on the development of the four basic language skills: listening, speaking, reading and writing. Four years of French and Spanish courses are offered sequentially to students in grades 9 through 12. While world language credits are not currently required for graduation in New Hampshire, three to four years of language study is highly recommended, if not mandatory, for college bound students.

Students in upper level courses may be offered an opportunity to participate in cultural exchange/travel experience in a target language country upon approval of the administration.

French I

Course Number: 3116
Length: Full Year
Prerequisite: "C" or better in English

Unit Credit: 1

Open to Grades: 9-12
Level: I & II

This course serves as an introduction to the French language and the French-speaking world. Students begin working immediately to develop strong listening and speaking skills as well as reading and writing skills. Emphasis is placed on communication of topics relevant to daily life so students will be able to converse about family and friends, school, food, sports, weather, etc. Students will also be introduced to varied cultural features of the Francophone world.

French II

Course Number: 3117
Length: Full Year
Prerequisite: "C" or better in French I

Unit Credit: 1

Open to Grades: 10-12
Level: I & II

Students continue to expand basic language skills acquired in French I, further communicating their ideas in the present, past, and future tenses.

Students also work to increase their vocabulary base to communicate about their life, family, friends, school, food, clothes, shopping, sports, weather, etc., as well as francophone topics. Students write in French about these subjects and other topics generated from selected film studies and reading assignments.

French III (Intermediate French A)

Course Number: 3118
Length: Full Year
Prerequisite: "C" or better in French II

Unit Credit: 1

Open to Grades: 11 & 12
Level: I

In French III students will briefly review topics from French II and expand their grasp of more complex linguistic details that lead to greater self-expression in the target language. Always emphasizing the 5 C's of language learning- communication, cultures, connections, comparisons and communities- students increase their vocabulary and use of commonly used verb tenses (present, past, and future) and pertinent grammatical structures that serve to frame their self-expression in French.

Also, students continue to gain awareness of francophone cultural characteristics, similarities, and differences, through selected readings, film studies and songs. Students are expected to converse in French during class activities and through their written assignments.

Students in Int. French III-IV may be offered an opportunity to participate in a student exchange program with our partner school in France.

French IV (Intermediate French B)

Course Number: 3119

Length: Full Year

Prerequisite: "C" or better in French III

Unit Credit: 1

Open to Grades: 11 & 12

Level: I

In French IV students continue to work on their 5C's of language learning- communication, cultures, connections, comparisons and communities.

More sophisticated linguistic topics are explored to include the use of the more complex verb tenses such as the conditional mood, the subjunctive mood, the use of participles, and other structural constructions that frame their effective expression in French.

Students will read, discuss, and critique a variety of *genres* of French texts - short stories, novels, theater, film, music and art that will serve as springboards for class activities, projects, and written critiques.

Students in Int. French III-IV may be offered an opportunity to participate in a student exchange program with our partner school in France.

Spanish I

Course Number: 3120

Length: Full Year

Prerequisite: "C" or better in English

Unit Credit: 1

Open to Grades: 9-12

Level: I & II

This is an introductory course that covers the basic language skills of listening, speaking, reading and writing Spanish as well as cultural aspects of the Spanish-speaking world. The course progresses from the alphabet, greetings, and numbers to subjects, verbs and sentence formation and structure. Emphasis will be placed on vocabulary, pronunciation, and communication.

Topics covered may include the family, food, sports, weather, clothing, health and school. Dialogues, poems, songs, videos, maps and pictures may be used to reinforce language skills and to teach culture.

Spanish II

Course Number: 3121

Length: Full Year

Prerequisite: "C" or better in Spanish I

Unit Credit: 1

Open to Grades: 10-12

Level: I & II

Students of the second level will continue to develop basic language skills acquired in Spanish I. The present tense of verbs will be reviewed, and the past tense will be introduced.

Previously-taught vocabulary will be reviewed and new vocabulary will be introduced. Students will be expected to be able to communicate in various situations, such as shopping at a clothing store or ordering food in a restaurant. Reading and listening comprehension skills, answering questions, grammar, verb conjugation and sentence structure will form a major part of classroom study and will be tested frequently. Activities may include hands-on projects and games, as well as songs and poems designed to teach vocabulary, pronunciation and grammatical structure.

Spanish III

Course Number: 3122

Length: Full Year

Prerequisite: "C" or better in Spanish II

Unit Credit: 1

Open to Grades: 11 & 12

Level: I

During the third year, students will expand their ability to speak and understand the Spanish language at a more sophisticated level. Communication will be emphasized in both writing and speaking skills, but the expectation would be that students apply more complex linguistic detail to their expression.

Spanish III is also the year in which the various tenses, other than the present and preterite (past) tenses, are introduced. The imperfect, present progressive, and commands are typically included in the curriculum.

Spanish IV

Course Number: 3123

Length: Full Year

Prerequisite: "C" or better in Spanish III

Unit Credit: 1

Open to Grade: 12

Level: I

This course is designed to expand one's ability to competently speak and understand the target language. Students at this level of study will be expected to express their opinions and have conversations about meaningful events or issues that they read or hear about in class. In order to improve verbal competency, students will be provided with practical vocabulary and challenged to respond to a variety of realistic situations.

While there is an emphasis on speaking and listening skills, reading and writing are also part of the course curriculum. Independent projects may focus on the culture of Spanish-speaking countries, and art and music and film may be utilized to increase cultural understanding.

FAMILY AND CONSUMER SCIENCES

This field is the study of social, scientific, technological, and economic principles as they relate to personal, home, and family life. It emphasizes the development of individuals into competent consumers and productive, well-adjusted members of families and society.

Child Care and Development

Course Number: 3408

Length: Semester

Prerequisite: none

Unit Credit: 1/2

Open to Grades: 9-12

Level: All

During their time in childcare and development, students will study conception, fetal development, physical, emotional, social, and intellectual development of children from birth to one year. Special units on effective parenting skills, exceptional children, child care, proper diet, childhood diseases, clothing, handling emergencies, safety, and infant care are covered. Teen parenting and the cost of having a baby are studied. Students participate in a 48 hour minimum Baby Think It Over experience.

Foods and Nutrition

Course Number: 3409

Length: Semester

Prerequisite: none

Embedded Math Credit 1/4 credit (If used as a math 1/4 credit, you will only receive 1/4 credit towards electives)

Unit Credit: 1/2

Open to Grades: 9-12

Level: All

This course is offered to all students interested in learning basic cooking skills and introductory nutrition. Students will use My Plate to plan meals and select healthy food choices.

Safety and sanitation in the kitchen are covered as well as proper techniques used in the kitchen. Students prepare a sit down meal. Students plan, prepare, budget, serve & clean up a complete meal. They demonstrate skills learned, including table setting, manners and meal appeal.

Advanced Foods and Nutrition

Course Number: 3299

Length: Semester

Prerequisite: Foods and Nutrition

Embedded Math Credit 1/4 credit (If used as a math 1/4 credit, you will only receive 1/4 credit towards electives)

Unit Credit: 1/2

Open to Grades: 9-12

Level: All

Advanced Foods is available to those who have completed Food & Nutrition and hope to further their cooking skills. During this semester-long course we will dive into various cooking techniques and experiment with new recipes from different regions of the world. Students will have the opportunity to explore their passion for cooking while gaining valuable experience in the kitchen.

Independent Living

Course Number: 3411

Length: Semester

Prerequisite: none

Embedded Math Credit ¼ credit (If used as a math ¼ credit, you will only receive ¼ credit towards electives)

Unit Credit: 1/2

Open to Grades: 11 & 12

Level: All

This course is a study of what your life might be like as a young adult. What is it like to be on your own, meeting the responsibilities and facing the problems that go along with living in our society today?

Students will simulate, as realistically as possible, what life might be like after "Mascoma". Major areas of concentration will be finding a job, drafting a resume and cover letter, interview skill building, selecting housing, managing money, making consumer decisions, and becoming aware of the day-to-day responsibilities to oneself, family, friends, and community.

Clothing & Textile

Course Number: 3407

Length: Semester

Prerequisite: none

Embedded Math Credit 1/4 credit (If used as a math ¼ credit, you will only receive ¼ credit towards electives)

Unit Credit: 1/2

Open to Grades: 11 & 12

Level: All

Clothing and Textiles is broken down into a number of units. These units consist of the fashion world, color and design, clothing care, and clothing in society. These units will allow students to learn the basics of sewing, including the use of a sewing machine, equipment and techniques used for clothing construction, reading a pattern, and pattern layouts. Students will be required to make a variety of projects building in skill and difficulty.

BUSINESS EDUCATION

Business Education is the study of business principles, practices, attitudes, and procedures basic to successful participation in the business world. It includes knowledge and understanding of the American free enterprise system, using machines for computation, development and application of communication skills, management and processing of information, and intelligent consumer use of the products and services of the business world.

Personal Finance

Course Number: 3400

Length: Semester

Prerequisite: None

Unit Credit: 1/2

Open to Grades: 11 & 12

Level: All

Students will learn to develop strategies and skills that promote personal and financial planning. Using K-12 Personal Finance Education National Standards, this course teaches students to make personal finance decisions, use a career plan to develop personal income potential, organize personal finances, and use a budget to manage cash flow.

Students will learn to maintain creditworthiness, borrow at favorable terms, manage debt, use cost-effective risk management strategies, and implement a diversified investment strategy that is compatible with personal goals. Topics covered are: financial responsibility, decision-making, income potential, careers, money management, credit vs. debt, insurance basics, saving, and investing.

Honors Business with Personal Finance

Course Number: 3540

Length: Full Year

Prerequisite: None

Unit Credit: 1

Open to Grades: 11 & 12

Level: All

Honors Business and Personal Finance introduces the student to the business environment and explores the impact of business activities upon our economy.

This course studies how various types of businesses are established, financed, operated, managed, and marketed. Principles of economics, accounting, business, entrepreneurship, personal finance, and careers in business will be discussed in length. Honors and Personal Finance can also be used to fulfill the necessary ½ credit in Economics for graduation requirements.

Students will also learn to develop strategies and skills that promote personal and financial planning. Using K-12 Personal Finance Education National Standards, this course teaches students to make personal finance decisions, use a career plan to develop personal income potential, organize personal finances, and use a budget to manage cash flow.

Students will learn to maintain creditworthiness, borrow at favorable terms, manage debt, use cost-effective risk management strategies, and implement a diversified investment strategy that is compatible with personal goals. Topics covered are: financial responsibility, decision-making, income potential, careers, money management, credit vs. debt, insurance basics, saving, and investing. The course will also fulfill the necessary ½ credit requirement for Personal Finance.

Accounting I

Course Number: 3499
Length: Semester
Prerequisite: None

Unit Credit: 1/2

Open to Grades: 10 -12 (offered next during the 2027-2028 school year)
Level: All

Open to those students who wish to explore the field of accounting as a possible profession. The basic principles of accounting are presented in this course. Basic business transactions are analyzed and recorded in a double-entry accounting system. Basic financial statements are prepared and interpreted. Simulations provide a summarization of skills learned at various points through the course.

Accounting II

Course Number: 3498
Length: Semester
Prerequisite: Accounting I

Unit Credit: 1/2

Open to Grades: 10 - 12 (offered next during the 2027-2028 school year)
Level: All

It is designed to give students a better understanding of basic accounting principles and to introduce partnership and corporation accounting principles. Simulations offer the students an opportunity to practice learned skills.

DIGITAL LITERACY

These courses meet the digital literacy graduation requirement (formerly known as ICT), not all of these courses will be offered every year.

- | | |
|---|---|
| 1. Introduction to Business and Economics | 7. Python 1 |
| 2. Graphics Communications | 8. Python 2 |
| 3. Website Design (Early College) | 9. AP Computer Science Principles Mobile App Development (Early College) |
| 4. Introduction to Computer Assisted Design | 10. AP CSA (Java Programming) (Early College) |
| 5. Advanced Topics in Computer Assisted Design | 11. Computer Science and AI Foundations |
| 6. Intro to Computer Science | |
| 12. Intro to Cybersecurity | |

TECHNOLOGY & DIGITAL COMMUNICATIONS

Hartford Area Career & Technology Center Candidates: Students who may be thinking about enrolling in a Technology Education-related Vocational Program at Hartford Area Career & Technology Center should explore many different technical fields in the Freshmen and Sophomore years. Technical Communications is a must in considering entry to any technical area of study.

Two-Year and Four-Year Technical and Engineering Preparatory: It is highly recommended that students pursuing a two-year vocational school, technical college, or a four-year engineering college, take Technical Communications. It is the communicative language of technical studies. Other areas of study will depend on interest areas and potential majors in post-secondary education.

Preparing for the "World of Work" or technical aspects of the Military: Those students who plan on entering the workforce or joining a military branch upon graduation should couple Technology Education with their general education at M.V.R.H.S.

Technology Communications should be one of your first choices, since reading and expressing yourself in technical terms is very important. This is followed by continued work in one or more of the clustered headings above.

Technology Education does not intentionally prepare you for a specific job, although this sometimes is possible. It prepares you by helping you understand various industrial functions, their organization, the related tools and machines, and the processes necessary in producing a product or providing a service.

Technology Education is the study of industry, technology, and their effects on our society.

It is a comprehensive action-based educational program concerned with the application of knowledge, tools and skills to solve practical problems and extend human capabilities. It provides planned learning experiences, which develop attitudes, knowledge, and skills related to communications technology, power, energy, transportation technology, and manufacturing technology.

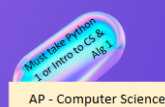
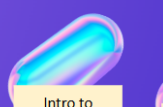
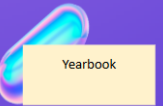
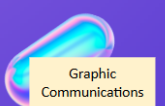
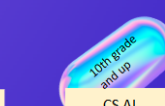


Freshmen Course Offerings

	Intro to Computer Science You will be introduced to block based Javascript & Basic Python to create animations and simple games	
	Python 1 In this course you will do Syntax programming for Input, Output, Animations, MicroControllers, and Games. Students need to have completed Alg 1	
	Intro to CAD You will use design software to create mechanical 3DPrint Parts - This class is best for students who have a solid understanding of x,y coordinate grid systems	



Course You Can Take in Grade 10-12

 College Website Design	 AP - Computer Science Principles Mobile App Development	 Intro to CyberSecurity	 Python 2
 Yearbook	 Graphic Communications	 AP CSA - Java Programming -	 CS AI Foundations

Python 1

Course Number: 3790
Length: Semester
Prerequisite - Alg 1 70% or better

Unit Credit: 1/2
Open to Grades: 9-12
Level: II

Computer Science Python Fundamentals is an introductory-level course for students brand new to programming and computer science. In this course, students will learn problem-solving strategies, software design, and the foundations of computer science using three key tools: the Project STEM programming environment, Firia Labs Code Space and CMU Academy. Not only will this course prepare students for continuing their studies in computer science (for example, by taking AP Computer Science A and AP Computer Science Principles), but it will also teach them how to think like a scientist and solve real-world problems, skills that are important to every 21st-century citizen. It's also recommended that students have familiarity with basic algebra principles before starting this course.

Python 2

Course Number: 3787
Length: Semester
Prerequisite - Python 1

Unit Credit: 1/2
Open to Grades: 9-12
Level: II

Computer Science Python Fundamentals is an introductory-level course for students brand new to programming and computer science. In this course, students will learn problem-solving strategies, software design, and the foundations of computer science using two key tools: the Project STEM programming environment, and CMU Academy. Not only will this course prepare students for continuing their studies in computer science (for example, by taking AP Computer Science A and AP Computer Science Principles), but it will also teach them how to think like a scientist and solve real-world problems, skills that are important to every 21st-century citizen. It's also recommended that students have familiarity with basic algebra principles before starting this course.

Introduction to Computer Science

Course Number: 3507
Length: Semester
Prerequisite: Concurrently enrolled in Algebra IA, Algebra AB, Algebra I w/lab, or higher. Meets the computer ½ credit requirement to graduate

Unit Credit: 1/2
Open to Grades: 9-12
Level: III

In this course students will learn about design thinking using algorithms in JavaScript, Python, App Development, & HTML & CSS. This course is project based where students will be creating animations, video games, Mobile Apps, and Websites as a survey course to lay various foundations for more advanced courses should they choose to pursue them. Students entering this course should be algebra ready as there will be math concepts such as coordinate grid systems, variables, and velocity that they will be working with throughout the course.

Introduction to Computer Assisted Design (CAD)

Course Number: 3589
Length: Semester
Prerequisite: Algebra I with lab, Accelerated Algebra I or Honors Geometry
Embedded Math Credit ¼ (if this is used as a ¼ math credit you only receive a ¼ elective credit)

Unit Credit: 1/2
Open to Grades: 9-12
Level: II

Meets the computer ½ credit requirement to graduate

Moving to a running start class option where students would be ready for a certification Exam at an industry standard using ONShape. By the end of this Onshape training course, your students will master the following skill sets required to pass the Onshape certification exam:

- Sketching
- Feature creation
- Multi-part modeling
- Making edits
- Mating parts
- Defining motion in an assembly

Standard content

General drawing knowledge

Onshape drawing workflows

Understanding of cloud-based collaboration and sharing tools for projects and assignments

Meets the computer ½ credit requirement to graduate

Introduction to Computer Assisted Design is a course within Visual Communications Technology. It is a common area of Technology/Engineering Education through measurements, planning and organizing, developing accuracy and dexterity with layout tools, and it is coupled with design problems and computer applications. Students will draw orthographic projections, pictorials, and a variety of other mechanical drawings using basic CAD. Students will take a basic design from a CAD drawing to a 3-D printed prototype. Introduction to Computer Assisted Design (is highly recommended) for those students who wish to take other technology education courses and it is essential for those students who plan to attend vocational, technical, or engineering schools.

Advanced Topics in Computer Assisted Design

Course Number: 3588

Length: Semester

Prerequisite - 70% or better in Intro to CAD

Embedded Math Credit ¼ (if this is used as a math ¼ credit you only receive a ¼ elective credit)

Meets the computer ½ credit requirement to graduate

Unit Credit: 1/2

Open to Grades: 10-12

Level: I

Students will work on a certification course for Fusion 360 which is an intermediate level CAD software program used in industry. Topics covered will include the following:

- ❖ Data Management
- ❖ Sketches
- ❖ Modify sketch tools
- ❖ Applying features
- ❖ Replicating Geometry
- ❖ Constructive Geometry
- ❖ Analysis
- ❖ Part Design Techniques
- ❖ Managing Bodies
- ❖ Forming Concepts
- ❖ and more ...

Computer Science and AI Foundations

Course Number: 3539

Length: Semester

Prerequisite - Sophomore Status and up

Unit Credit: 1/2

Open to Grades: 10-12

Level: II

The Computer Science and AI Foundations curriculum introduces students to the core principles and real-world applications of computer science. Designed for high school students with or without prior computer science experience, this course empowers learners with essential skills to provide a comprehensive understanding of our dynamic digital world! Students will cover the following topics: Problem Solving with AI, Foundations of AI Programming, AI & the Systems that Power It, The Fabric of the Internet & AI, Cybersecurity & Global Impacts, Insights from Data & AI.

Intro to Cybersecurity

Course Number: 3799

Length: Semester

Prerequisite - Sophomore Status and up

Unit Credit: 1/2

Open to Grades: 10-12

Level: II

Students will learn concepts in the framework including: Impacts of Computing, Computational Thinking, Networks & System Design, Cybersecurity, and Digital Literacy. Learning Environment: The course utilizes a blended classroom approach. The content is fully web-based, with students writing and running code in the browser. Teachers utilize tools and resources provided by Cyber.org to leverage time in the classroom and give focused 1-on-1 attention to students. Each unit of the course is broken down into lessons.

Lessons consist of video tutorials, short quizzes, example programs to explore, and written programming exercises, adding up to over 100 hours of hands-on programming practice in total. Each unit ends with a comprehensive unit test and project that assesses student's mastery of the material from that unit. Students will have labs on ethical hacking. Programming Environment: Students write and run programs in the browser using the cyber.org virtual machine online editor.

Graphic Communications

Course Number: 3505
Length: Semester
Prerequisite: None

Unit Credit: 1/2

Open to Grades: 10-12

Level: II

Can be used towards either an art ½ credit **or** a computer ½ credit but not both

Graphic Communications is designed to introduce students to the fundamentals of desktop publishing. Students will use computer design software (drawing, photo editing, and desktop publishing) to develop skills through hands-on activities. Students will learn to apply these skills to design simple to complex projects.

Some of the projects included but are not limited to creating flyers, booklets, posters, signs, tickets, newsletter, and others. Career exploration is incorporated throughout the course as well as continued portfolio development. All students will create a portfolio of their final work.

Graphic communications fulfills **either** your Art or Computer Literacy credit needed for graduation

AP CSA (Java Programming) (Dual Enrollment)

Course Number: 3801
Length: Full Year
Prerequisite - Algebra 2 & (Intro to CS or Python 1 or teacher permission)

Unit Credit: 1

Open to Grades: 11 & 12

Level: I

Computer Science A (CSA) curriculum is a full-year, rigorous curriculum that introduces students to software engineering and object-oriented programming and design using the Java programming language.

This curriculum covers a broad range of topics, including the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems.

AP Computer Science Principles Mobile App Development (Dual Enrollment) **Unit Credit: 1**

Course Number: 3414
Length: Full year
Prerequisite - Algebra 1 70 % or better & (Intro to CS or Python 1 or teacher permission)

Open to Grades: 10-12 (offered next during the 2027-2028 year)

Level: I

The Mobile Computer Science Principles course provides an introduction to the basic principles of computer science (CS) from the perspective of mobile computing, including programming in MIT App Inventor, a graphical programming language for Android and iOS mobile devices.

The lessons and materials used by students incorporate algorithms and programming while also integrating all other AP CSP big ideas: creative development, data, algorithms and programming, computing systems and networks, and impact of computing. The curriculum engages students and supports the development of problem solving skills, honing in on the computational thinking practices as indicated in the AP CSP curriculum framework. Students learn to create socially useful computational artifacts using MIT App Inventor as well as connect computing and learning about algorithms and data as they develop and analyze their programs. The curriculum also emphasizes communication and collaboration in a project-based approach. This course involves a strong writing component. Students will maintain a portfolio of their work, which will include several projects in the areas of programming and the impact of computing technology. Prerequisites (As described by the College Board)

It is recommended that a student in the AP Computer Science Principles course should have successfully completed a first-year high school algebra course with a strong foundation in basic algebraic concepts dealing with function notation, such as $f(x) = 5x^2$ and problem-solving strategies that require multiple approaches and collaborative efforts.

In addition, students should be able to use a Cartesian (x, y) coordinate system to represent points on a plane. It is important that students and their advisers understand that any significant computer science course builds upon a foundation of mathematical reasoning that should be acquired before attempting such a course.

Website Design (Dual Enrollment)

Course Number: 3413

Length: Semester

Prerequisite: Sophomore status and up

Unit Credit: 1/2

Open to Grades: 10-12 (offered next during the 2027-2028 year)

Level: I

Meets the computer ½ credit requirement to graduate

In this course, students will gain knowledge of the web development processes and learn how to develop and maintain web sites using the latest technologies and standards.

Students will learn to develop web sites for different web servers and browsers, developing familiarity with common web development tools and using emerging design considerations. Students will also incorporate text, graphical, and form components into web pages and will use text formatting, tables, and CSS for page layout and site design. Students will learn problem solving skills along with the validation of user input into web forms and basic layout and imaging for attractive, informative, and entertaining websites. Students will also work on creating websites using responsive design practices for mobile and tablet viewports.

INDUSTRIAL ARTS

Electrical Systems

Course Number: 3515

Length: Semester

Prerequisite: None

Embedded Math Credit ¼ (if this is used as a ¼ math credit you only receive a ¼ elective credit)

Unit Credit: 1/2

Open to Grades: 9-12

Level: All

Electrical Systems provides an opportunity for students to explore the broad field of electricity through electrical phenomenon, power generation, DC systems, automotive electrical troubleshooting, AC systems and basic home wiring.

Introduction to Woods

Course Number: 3513

Length: Semester

Prerequisite: None

Embedded Math Credit ¼ (if this is used as a ¼ math credit you only receive ¼ elective credit)

Unit Credit: 1/2

Open to Grades: 9-12

Level: I

Introduction to Woods is a part of manufacturing technology. It is designed for students without prior experience in working with wood. This course will introduce the student to basic hand tools and power tools in the woodworking field.

Layout tools, two and three view drawings, and measurement will be reviewed before any construction practice takes place. Safety and proper use of tools will be stressed. **Introduction to Woods will serve as a prerequisite to further woodworking courses.**

Advanced Woods

Course Number: 3514

Length: Semester

Prerequisite: Passing Grade in Introduction to Woods or instructor permission.

Embedded Math Credit ¼ (if this is used as a ¼ math credit you only receive ¼ elective credit)

Meets the art ½ credit requirement to graduate

Unit Credit: 1/2

Open to Grades: 9-12

Level: I

Advanced Woods can be taken multiple times for credit and is part of manufacturing technology. It is primarily designed to reinforce skills and knowledge in “Introduction to Woods.” More in depth projects will be constructed through the use of hand tools and machines. Safety and problem solving will be stressed throughout the course. Note: **Advanced woods also fulfills the art credit required for graduation.**

Building Construction

Course Number: 3520

Length: Semester

Prerequisite: None

Embedded Math Credit $\frac{1}{4}$ (if this is used as a $\frac{1}{4}$ math credit you only receive $\frac{1}{4}$ elective credit)

Unit Credit: 1/2

Open to Grades: 9-12

Level: I

Building Construction is a part of construction technology. It is designed to teach students the operations of the construction industry. Students will build model structures, build a full-scale structure that will be sold or used within the community. Safety, building design, and construction practice will be stressed throughout the course.

SPECIAL SERVICES PROGRAM

The special services program at Mascoma Valley Regional High School is designed to provide individualized educational placements for students who qualify according to Federal and New Hampshire State Guidelines. A range of educational programming is available, from full-time special services placement to supportive assistance for regular classes. Services received are dependent upon the students' individual needs. The special services program provides an opportunity for students to participate in regular classes to the fullest extent possible, and also to obtain individualized learning experiences through the resource room or special class.

The Pupil Evaluation and Placement Team, consisting of the student, parents, regular and special education teachers, school counselors, and school administration determine student eligibility for this program. Each student involved in the special services program will have an Individual Education Plan, detailing educational needs and specifics of one's program. Speech and language therapy, psychological evaluation, and consultation services are available through the special services program.

Families with a student experiencing difficulties learning in school should contact the student's teacher(s) and/or school counselor. They will be able to assist in determining whether a student should be referred for individual evaluation and possible special services placement. Parents may also make a referral directly, by calling the Director of Special Education for the Mascoma School District.

Tutorial and Curriculum Support Course

Course Number: 3978

Length: Semester

Prerequisite: Recommendation by Special Services Team
(Maximum Credits over 4 years: 4)

Unit Credit: 1/2-1

Open to Grades: 9-12

Level: All

Pass/Fail

The primary purpose of the Tutorial and Curriculum Support course is to provide support for individual learning needs and learning strategies, as well as supporting the core subject classes. The course will:

- supplement instruction and provide support for students' specific areas of need
- provide strategies for study skills and organization skills
- monitor student progress and provide support for core subject classes

Mini lessons in study skills and organization will be given weekly. Topics may include:

- Planning and Organization
- Study Habits
- Test Taking strategies
- Goal Setting
- Learning strategies
- Self Advocacy
- Writing Skills
- Life Skills
- Social and Emotional Learning
- Transition Activities

HARTFORD AREA CAREER & TECHNOLOGY CENTER

Autobody, Motorsports and Customs 3645/3650

Students will be introduced to the fields of Autobody, Motorsports and Customs (AMC). This subject requires a thorough understanding of how an automobile is constructed. Students in AMC use top-of-the-line equipment and technology such as the DeVilbiss semi downdraft paint booth, PPG Aquabase paint mixing system, and a commercial quality vinyl cutting machine. The curriculum focuses on mechanics, body repair and replacement, sanding, masking, painting, and use of high tech spray equipment. Students gain hands-on experience as they prepare for career opportunities in auto body repair, metal fabrication, painting, graphics, motorsports, restoration and customization of vehicles, and more, depending on student interests. With permission from the instructor, students may work on "live jobs" brought in by the local community. After completing this program, students have had success entering into the workforce or going on to post-secondary education. This program is ASE Education Foundation certified.

Embedded High School Credit: Math or Science

Concurrent Enrollment for College Credit: None at this time

Articulation Agreements: Nashua Community College

Industrial Certifications: Non-structural Analysis and Damage Repair ASE entry level certification; Maintenance and Light Repair ASE entry level certification; Painting and Refinishing ASE entry level certification; S/P2 online safety training; and WorkKeys National Career Readiness Certification (NCRC).

Automotive Technology 3600/3601

Automotive Technology trains and prepares students to be successful automotive technicians, have jobs in related fields, or for post secondary education through safe, honest, respectful and professional work habits in the classroom and shop. Units are aligned with the National Institute of Automotive Service Excellent (ASE), and students have the opportunity to take an ASE exam and earn an entry-level Industry Recognized Credential (IRC) at the conclusion of each unit. Students will be trained on HACTC shop vehicles. Students will utilize individual skills as well as team-based learning to become proficient at problem solving and time management. Qualified Level 2 students will have the opportunity for a Cooperative Education placement with local automotive employers.

Embedded High School Credit: Science

Concurrent Enrollment for College Credit: None at this time

Articulation Agreements: Universal Technical Institute; University of Northwestern Ohio; Lakes Region Community College

Industry Certifications: 9 ASE Entry Level Certifications; Lift it Right Certification; and WorkKeys National Career Readiness Certification (NCRC).

Building Trades 3609/3610

In Building Trades, students participate in a two-year program during which they construct a new home from start to finish. Students are exposed to all phases of construction, from planning to layout, estimating and building. This is a real world/life experience for students to safely practice and learn work ethic and a new skill set. Students review all building materials and their use in detail. We practice technical skills and methods, both new and old. Students also have the chance to work with subcontractors who are hired to work at the house throughout the building process. Safety is our goal 100% of the time. Students are also exposed to real world experiences on field trips, job shadowing and Cooperative Education learning experiences. Upon program completion, students are qualified to walk into most entry-level positions within the Building Trades arena, pursue apprenticeships, or further their education.

Embedded High School Credit: Math

Concurrent Enrollment for College Credit: None at this time

Articulation Agreements: Vermont State University - Randolph; Keene State College; Lincoln Technical Institute.

Industry Certification: National Center for Construction Education and Research (NCCER) Core and Carpentry Modules; OSHA-10; and WorkKeys National Career Readiness Certification (NCRC).

Business, Entrepreneurship and Marketing 3627/3628

Business, Entrepreneurship and Marketing (BEM) students develop their business and communication skills for use in a variety of contexts. This program leads students through all aspects of the business world, from accounting and personal finance to marketing and professional communications. Students develop their own business skills through individual and group projects, Cooperative Education placements, and guest lectures from industry professionals. BEM students have the opportunity to participate in Future Business Leaders of America (FBLA). They can also earn up to 12 college credits and four industry recognized credentials while building a professional business and communications portfolio.

Embedded High School Credit: English

Concurrent Enrollment for College Credit: River Valley Community College (RVCC): Introduction to Business, 3 credits; Small Business Management, 3 credits; Accounting I, 3 credits; Personal Financial Management, 3 credits.

Articulation Agreements: Vermont State University - Johnson; Keene State College

Industry Certifications: CareerSafe OSHA-10 Certification, Ergonomics, Quickbooks Online Pro Advisor, and WorkKeys National Career Readiness Certification (NCRC).

Career and Technology Exploration 3614, 3613, 3615

Career and Technology Exploration (CTE) is a unique program at the HACTC, open only to high school sophomores. Students are referred for admission to the CTE program by their school counselor. The CTE model offers a unique and holistic learning experience. Small groups and one-on-one instruction are at the heart of helping CTE students reconnect to their own educational experience. The more individualized, hands-on, and supported instruction is vital in helping students find success in school and their overall educational experience. The CTE program helps students earn high school credits while providing exposure to Career and Technical Education. Students cycle back and forth between CTE classroom time and placement in each of the HACTC technical programs, giving students a hands-on introduction to HACTC opportunities. Upon successful completion of the CTE program, students may select a HACTC program to apply to for their Junior year.

Embedded High School Credits: English (799), Math (801), Art (800)

Cosmetology 3603/3604

The HACTC Cosmetology program provides students the skills and experiences they need to become licensed Cosmetologists. Completing 1,000 hours of study, students will master skills in hair design, nail and skincare, personal appearance, communication, and business management. Students learn and put into practice these skills through demonstrations on mannequins and by working with fellow students in a salon setting. Students have the opportunity to earn their Cosmetology licensure in the State of Vermont by successfully completing this rigorous college-level program.

Embedded High School Credit: Science

Industry Certifications: Vermont Cosmetology Licensure; S/P2 Cosmetology Safety and Sanitation Certification; Barbicide Certification; Lucacide/Sol Certification; Pivot Point International Units of Achievement; Conover® Workplace Readiness; WorkKeys National Career Readiness Certification (NCRC).

Culinary Arts 3607/3631

Culinary Arts is a fast-paced learning environment grounded in food science, safety, sanitation, customer service and the basic principles of cooking. With our cafe-style restaurant named The Get-Away, students are exposed to a practical application of skills in a dynamic, rigorous curriculum. Students will demonstrate a basic knowledge of the food service industry, including: organizational flow, Hazard Analysis Critical Control Point (HACCP), sanitation practices, personal hygiene, equipment and utensil identification and use, basic first aid, nutrition, customer service, basic food and bakeshop techniques, as well as storage, handling of food and math applications.

Embedded High School Credit: Science

Concurrent Enrollment for College Credit: Lakes Region Community College: Culinary Fundamentals, 3 credits; Sanitation and Safety, 3 credits; Bakery Production, 3 credits.

Articulation Agreements: Culinary Institute of America; New Hampshire Culinary Institute (White Mountain Community College); Lakes Region Community College

Industry Certifications: American Culinary Federation Secondary Graduate Certification; ServSafe Manager; and WorkKeys National Career Readiness Certification (NCRC).

Design, Illustration & Media Arts 3622/3623

The Design, Illustration & Media Arts (DIMA) program at the HACTC is full of creative thinkers. Through this program, students explore the technology skills for a growing creative industry. Students use industry-standard Mac platform hardware with the most up-to-date Adobe software. Students work through projects that introduce them to many different aspects of digital illustration, digital video production, digital photography, 2-D animation, and motion graphics. Students also accept “live jobs” from the public sector and must learn how to create professional quality work products, follow real-world timelines and work with clients. Students will prepare themselves for their endeavors after high school by creating a professional online portfolio, resume, and cover letter that they can use for post secondary education or the workforce.

Embedded High School Credit: Art

Concurrent Enrollment for College Credit: Lakes Region Community College (LRCC): Introduction to Digital Photography, 3 credits; Digital Illustration, 3 credits; Foundations of Design, 3 credits; Design Software Essentials, 3 credits.

Articulation Agreements: Vermont State University - Lyndon; Vermont State University - Johnson

Industry Certifications: Adobe Photoshop CC; Adobe Illustrator CC; WorkKeys National Career Readiness Certification (NCRC); and Vermont Arts Portfolio.

Health and Human Sciences 3635/3636

Are you interested in helping people, working in healthcare, and making a difference in your community? Health and Human Sciences is a fast-paced, hands-on program where students will learn skills, explore careers, and earn both a license and certification before graduating high school. Students will have the opportunity to earn their Licensed Nursing Assistant (LNA) license and Phlebotomy certification. Students will practice skills in the classroom as both patient and provider, and in healthcare settings. This means students need to be comfortable being touched by peers, as well as using real needles to draw blood. Students may also earn college credits in each year of the program, and complete Cooperative Education rotations in various health care settings.

Embedded High School Credit: Science

Concurrent Enrollment for College Credit: River Valley Community College (RVCC): Introduction to Psychology, 3 credits; and Supportive Communication Skills, 3 credits.

Articulation Agreements: Vermont State University - Johnson; Keene State College.

Industry Certifications: Licensed Nursing Assistant (LNA); Certified Phlebotomy Technician (CPT); Basic Life Support (BLS) for Healthcare Providers; CPR and AED; First Aid; Bloodborne Pathogens; Stop the Bleed Certification; and WorkKeys National Career Readiness Certification (NCRC).

Industrial Mechanics and Welding 3629/3632

The Industrial Mechanics and Welding (IMW) program exposes students to a wide range of topics designed to instill general fabrication skills combined with technical subjects. The course prepares students for a variety of occupations ranging from welding, electrical, and machining to mechanical trades. Students routinely use math and science skills and interact with STEM, Automotive Technology, Natural Resources, and Autobody, Motorsports and Customs programs while working on projects. Students are prepared for a career or post-secondary education with technical skills as well as a positive attitude and a strong work ethic.

Embedded High School Credit: Science

Concurrent Enrollment for College Credit: None at this time

Articulation Agreements: University of Northwestern Ohio; Lincoln Technical Institute; Keene State College

Industry Certifications: S/P2 Environmental Safety Training Certification; American Welding Society 1G Structural Steel Certification; and WorkKeys National Career Readiness Certification (NCRC).

Information Technology (one-year IT course in the P.M.) 3651

The Information Technology program is designed for students who are interested in exploring a career in the growing tech industry. Over the course of the year, students will gain valuable hands-on experience in computer repair, user support, and networking and have the opportunity to obtain two valuable industry certifications as well as 6 college credits. Students will also explore careers across the field and practice the skills necessary to earn a job in this growing sector. Lastly, students will spend some time each week discussing topics of interest like cryptocurrency, big data, artificial intelligence and the impact these technologies have on our modern world.

High School Credit: 1 credit Technology, .5 credit English, 1.5 elective credits

Concurrent Enrollment for College Credit: Community College of Vermont (CCV): Concepts of PC Hardware, 3 credits; and Desktop Operating Systems, 3 credits

Articulation Agreements: None at this time

Industry Certifications: COMPTIA A+; WorkKeys National Career Readiness Certification (NCRC).

Software Engineering (one-year IT course in the A.M.) 3653

The Software Engineering Program gives students the foundational skills necessary to pursue a career in software development, testing, or dev ops. Students will be given a thorough introduction to Python, one of the world's most popular programming languages, and learn valuable software development skills along the way. At the end of the year, students undertake a substantial project where they will have the opportunity to learn a new technology or framework, taking an idea from requirements to implementation.

High School Credit: 1 credit Technology, .5 credit Math, 1.5 Elective credits

Concurrent Enrollment for College Credit: River Valley Community College: Introduction to Python, 4 credits.

Articulation Agreements: None at this time

Industry Certifications: WorkKeys National Career Readiness Certificate (NCRC).

Natural Resources 3624/3625

The Natural Resources program is a practical application of skills in a hands-on learning environment. Students will discover and explore the many careers that Natural Resources has to offer through field experiences, community projects and exposure to experts in various fields. Students will be prepared for a career or further education with technical skills, a positive attitude, and a strong work ethic. Qualified level two students will have the opportunity for Cooperative Education placements with local businesses.

Embedded High School Credit: Science

Concurrent Enrollment for College Credit: None at this time.

Articulation Agreements: None at this time.

Industry Certifications: Game of Logging 1 and 2 (for Level 1 students), Game of Logging 3 and 4 (for Level 2 students); and WorkKeys National Career Readiness Certification (NCRC).

STEM - Introduction to Engineering Design (one-year course in the P.M.) 3608

Introduction to Engineering Design (IED) students are introduced to the engineering design process and apply math, science and engineering standards to identify and design solutions to a variety of real problems.

They work both individually and in collaborative teams to develop and document design solutions using engineering notebooks, 2D and 3D modeling software, a laser engraver, a 3D printer, and a CNC router, as well as a host of traditional tools, in this year-long course. Students develop skills in problem solving, manufacturing, research and design process documentation and presentation. Prerequisite: completion of Algebra 1 (with a C- or better) or are concurrently enrolled in Algebra 1.

High School Credit Options: 1 credit Engineering, 1 credit Technology, 1 Physical Science

Concurrent Enrollment for College Credit: Introduction to Engineering Design, 3 credits, St. Cloud State University

Articulation Agreement: Keene State College

Industry Certifications: WorkKeys National Career Readiness Certification (NCRC)

STEM - Physics and Principles of Engineering (one-year course in the A.M.) 3626

Through problems that engage and challenge, students explore a broad range of physics and engineering topics, including mechanisms, the strength of structures and materials, and automation. Students continue to refine skills in problem solving, manufacturing, research and design, while learning strategies for design process documentation, collaboration and presentation in this year-long course. Prerequisite: completion of Algebra 2 (with a C- or better) or are concurrently enrolled in Algebra 2.

High School Credit Options: 1 credit Physics, 1 credit Engineering, 1 credit Technology

Concurrent Enrollment for College Credit: Principles of Engineering, 3 credits, St. Cloud State University

Articulation Agreement: Keene State College

Industry Certifications: WorkKeys National Career Readiness Certification (NCRC)

NON-DISCRIMINATION POLICY

(Mascoma School Board Policy - Revision adopted 4/28/20)

The Mascoma Valley Regional School District does not discriminate on the basis of age, color, disability, national origin, race, religion and sex in admission to, access to, treatment in or employment in its programs and activities. The Mascoma Valley Regional School Board designates the Superintendent of Schools to handle inquiries regarding the nondiscrimination policy (AC) and procedures.

All inquiries, complaints, and grievances should be directed to:

Superintendent of Schools - SAU #62
P.O. Box 789
Enfield, New Hampshire 03748
(603) 632-5563

Inquiries, complaints, and grievances concerning the application of nondiscrimination policy and procedures may also be referred to:

Peter Chan, Regional Manager
Office for Civil Rights
U.S. Department of Health and Human Services
Government Center
J.F. Kennedy Federal Building - Room 1875
Boston, MA 02203
Voice phone(800)368-1019
FAX (617) 565-3809

Academic Planning Chart Graduating Class of 2026, 2027, 2028 & 2029

		9 th	10 th	11 th	12 th
English	(4 Credits)				
Social Studies	(3 Credits)				
<i>Civics/embedded government ½</i>					
<i>Economics ½</i>					
<i>World History ½</i>					
<i>U.S. History/embedded NH History 1</i>					
<i>Personal Finance ½</i>					
Mathematics	(4 Credits)				
Science	(3 Credits)				
<i>physical science, biological science,</i>					
<i>elective science</i>					
Physical Education	(1 Credit)				
Computer Literacy	(½ Credit)				
Health	(1 Credit)				
Arts Education	(½ Credit)				
Open Electives	(6 Credits)				
*Total Credits	(23)				

(*) Indicates minimum Credits required for graduation

Career Interest: _____

Student Signature: _____ Date: _____

School Counselor Signature: _____ Date: _____

Academic Planning Chart Graduating Class of 2030

		9 th	10 th	11 th	12 th
English	(4 Credits)				
Social Studies	(5 Credits)				
<i>World History 1</i>					
<i>U.S. History/NH History 1</i>					
<i>Civics .5</i>					
<i>History, Government & Constitution US & NH 1</i>					
<i>Economics .5</i>					
<i>Financial Literacy .5</i>					
<i>Logic & Rhetoric .5 will be embedded</i>					
Mathematics	(3 Credits)				
Science	(2 Credits)				
<i>physical science 1</i>					
<i>biological science 1</i>					
Physical Education	(1 Credit)				
Digital Literacy	(½ Credit)				
Health & Wellness	(1 Credit)				
Arts Education	(½ Credit)				
Open Electives	(6 Credits)				
*Total Credits	(23)				

(*) Indicates minimum Credits required for graduation

Career Interest: _____

Student Signature:_____ Date:_____

School Counselor Signature:_____ Date:_____

NH Scholars Course Planning Page

Minimum requirements

Credits	COURSE	Grade 9	Grade 10	Grade 11	Grade 12	Total Credits
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CORE REQUIREMENTS FOR ALL NH SCHOLAR PATHWAYS

4 cr.	ENGLISH	EngLitComp 9	EngLitComp 10	EngLitComp 11	Research & Composition	
4 cr.	MATHEMATICS	Algebra I	Geometry	Algebra II	Math Elective	
3 cr.	LAB SCIENCE		Biology	Chem	Physics or alternative	
3.5 cr.	SOCIAL STUDIES/SOCIAL SCIENCE					
2 cr.	FOREIGN LANGUAGE (same language for both credits					

Additional courses for STEM pathway

1 cr.	LAB SCIENCE					
1 cr.	STEM RELATED COURSE					

Additional courses for ARTS pathway

2 cr.	ARTS RELATED COURSES					
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Additional courses for STEAM pathway

1 cr.	LAB SCIENCE					
1 cr.	STEM RELATED COURSE					
1 cr.	ARTS RELATED COURSES					

Additional courses for CAREER pathway

1 cr.	CAREER CREDIT					
1 cr.	WORK-BASED LEARNING ACTIVITY					
1 cr.	COLLEGE CREDITS, INDUSTRY-RECOGNIZED CERTIFICATE, OR POST SECONDARY HOURS					

For more information, please visit, www.snhscholars.org.