## Mascenic Regional High School Program of Studies <br> 2023-2024



175 Turnpike Road
New Ipswich, NH 03071
Phone: (603)-878-1113 ~ Fax: (978)-386-4281
CEEB \# 300448
https://www.mascenic.org/o/mrhs

# Mascenic Regional High School Program of Studies 2023-2024 

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# mascenic Regional High School Statement of Core Values and Beliefs 

Mascenic Regional High School's mission is to create a respectful, secure, and engaging learning environment. Our goal is to motivate all students to become knowledgeable, independent, lifelong learners who will be ethical, effective 21stcentury citizens.

## Academic Expectations

## Students will:

- Develop the 21st century skills necessary to seek and obtain knowledge through self-directed inquiry, using technology.
- Apply effective decision-making, problem solving, and critical thinking skills, both independently and collaboratively.
- Connect with others through various modes of communication; specifically writing, oral communication, and visual representation.
- Acquire a broad base of interdisciplinary knowledge.
- Demonstrate responsibility for their academic endeavors through adherence to school policies and requirements by being committed, engaged participants in the classroom community.


## Civic Expectations

## Students will:

- Develop an ability to make intelligent and informed decisions as involved citizens within our democratic system.
- Honor commitments to groups, organizations, teams, and classes.


## Social Expectations

## Students will:

- Demonstrate respect for the individual.
- Act with integrity.


## NOTICE OF NON-DISCRIMINATION (RSA 354-A)

"It is the policy of the School Board that there will be no discrimination on the basis of age, race, creed, color, religion, marital status, sexual orientation, national ethnic origin, economic status or disability for employment in, participation in, admission/access to, or the operation and administration of any educational program, food nutritional program or activity in the Mascenic School District(SB Policy AC)." Any person having inquiries concerning any School Districts' compliance with the regulations implementing Section 504 (Office of Civil Rights), Title IX or the ADA (American with Disabilities Act) is directed to contact Kristen Tevepaugh, the Director of Student Services at 603-291-2011.

## DIPLOMA OPTIONS

## MRHS Diploma - Class of 2024

| SUBJECT | MINIMUM REQUIRED COURSES | CREDITS |
| :---: | :---: | :---: |
| English | English 9-12 | 4.0 |
| Mathematics | Algebra I, Two Math Electives | 3.0 |
| Science | Physical Science, Biology, One Science Elective | 3.0 |
| STEAM | Two electives designated as STEAM courses | 2.0 |
| Social Studies | World History, US History, Civics/Economics | 3.0 |
| Arts Education | Visual or Performing Arts | 1.0 |
|  <br> Technology | Information Technology <br> Personal Finance | 0.5 |
| Health Education | Health | 0.5 |
| Physical Education | Physical Education or Athletic PE | 1.0 |
| Electives | Electives from any discipline | 5.5 |
| TOTAL |  | $\mathbf{2 4}$ |

*Students in the graduating class of 2024 and beyond will need to pass the 2020 US Naturalization Test Exam with a 70\% or higher.

## MRHS Diploma - Class of 2025 and beyond

| SUBJECT | MINIMUM REQUIRED COURSES | CREDITS |
| :---: | :---: | :---: |
| English | English 9-12 | 4.0 |
| Mathematics | Algebra I, Two Math Electives | 3.0 |
| Science | Physical Science, Biology, Earth \& Space Science | 3.0 |
| STEAM | Two electives designated as STEAM courses | 2.0 |
| Social Studies | World History, US History, Civics/Economics | 3.0 |
| Arts Education | Visual or Performing Arts | 1.0 |
|  <br> Technology | Information Technology |  |
| Pearsonal Finance | 0.5 |  |
| Physical Education | Health | 0.5 |
| Electives | Physical Education or Athletic PE | 0.5 |
| TOTAL | Electives from any discipline | 1.0 |

**Student participation in the NH State Minimum Diploma begins with an application and written request from the student and parent/guardian submitted to the MRHS Counseling Center by May of their Junior year. The Mascenic Regional Superintendent must formally give written approval of any student pursuing the NH State Minimum Diploma option.

## SCHOOL COUNSELING SERVICES

The Counseling Center at Mascenic Regional High School provides a wide range of services for students, parents, and the community in direct reflection of the district's mission statement and through individual, small group, and classroom settings. Mascenic counselors make an organized effort to help students achieve their full potential in the school setting. The department assists students in developing an awareness of their strengths, weaknesses, interests, and needs. In addition, it strives to assist them with resiliency skills necessary to succeed in school and in society. It is a cooperative effort involving students, parents, educators, and community partners. Traditional services available include: academic advising (course selection, scheduling, study skills, credit attainment, testing interpretation, etc.); career planning (assessments, career/vocational exploration, college preparation, financial aid and scholarship information, military services planning, employment opportunities, skills development, and transition services); social and personal counseling (school adjustment, personal planning, interpersonal relationships, crisis intervention, consultation, and referral).

## DAILY SCHEDULE

Our schedule is a yearlong, seven (7) period hybrid rotating schedule. Periods 1 and 7 are seen five days a week for 48 minutes each. Periods 2-6 are 58 minutes and meet four times a week. Students are expected to take seven credits per school year and must be mindful of the 25 credits needed to graduate. Seniors are required to take a minimum of five credits of courses. Students planning to attend a college or university should maintain a full schedule.

## ACADEMIC SCHEDULING

The master schedule is driven by course requirements for graduation and student identified interest. Students may not be able to take every course they want in a given year: This most often occurs when students try to double-up within a discipline, take courses out of sequence, and/or take multiple $\mathrm{AP} /$ Honors level courses. It is important to remember that the courses that are listed in the program of studies may not necessarily run in any given year depending upon interest/enrollment.
Each year the counseling office will roll out their program of studies to students and review requirements. While this is done on a larger, class level, students also often meet $1: 1$ with a school counselor to review their path and course selections. Students should discuss their course selections with their parents, teachers, and school counselor before completing course selections for the following year. Students should take into account any prerequisites needed and their post-secondary plans. The schedule is considered complete and final once the school year begins. All desired schedule changes need to follow the procedure outlined below and are highly encouraged to be completed prior to the start of the school year.

## SCHEDULE CHANGE PROCEDURE

When changes to schedules occur after courses have begun, progress towards mastery and earning credits may be impacted. During the first days of a course, the foundation is being established for the remainder of the course. To attempt to succeed without the foundation in any subject is a precarious venture. Students and parent/guardian(s) are asked to give careful attention to selecting the full school year's schedule in order to avoid changes mid-course.

In a perfect world, all students would love their schedule and no changes would be necessary however there are circumstances where changes can be requested such as;

- Gaps or duplicate classes on a schedule
- The schedule does not reflect the course selections made by the student
- The student does not meet the prerequisite of the course
- The student needs to retake a failed course
- The teacher requests a level change for the student
- The administration requests a change of course in the best interest of the student

In order to maintain a balanced schedule that creates a school environment that best promotes learning, we will not make schedule changes or adjustments based on preference for a specific teacher, or requests to move classes for social reasons.

Changes to schedules are ideally made over the summer as these changes will have the smallest impact on the master schedule.

Once the school year begins, all schedule changes require the appropriate add/drop application found in the Counseling Center. Applications are only considered complete when they have school principal, parent/guardian(s), and teacher signatures. Completed applications must be returned to the Counseling
Center before a schedule change can take effect. Students are required to attend all classes and complete all coursework until their school counselor advises that their schedule is complete and all teachers have been notified.

Dropped courses will result in a Withdraw (WD) or Withdraw Fail (WF) on the report card/ transcript if the student has earned any grades in the class. A "WF" may be earned in cases where students have failed to report to a class and/or complete any work without following the above procedures. "WF' s" and "WD's" (especially in Honors/AP courses) may have a negative impact upon the college admissions process and should be considered carefully before planning to drop a course.

## AWARDING OF CREDIT

Credit is awarded at the completion of each course. Credit is not awarded when a course is not completed. Partial credit is awarded on a case by case basis by administration. Courses not completed will be assigned a Withdraw (WD) or Withdraw Fail (WF) by the teacher or an administrator. The entered grade value is based upon the current course average at the time of withdrawal, including unfinished work.

## COURSE LEVELS

Honors (H), Running Start (RS), or Advanced Placement (AP) courses provide the most challenging level of work for students. College Preparatory (CP) is the standard academic course offered at Mascenic Regional High School. Course Audits (AUD) carry no credit but full grade.

College Preparatory courses are intended to prepare students for all post-secondary learning, thus preparing students to be college and career ready.

Audit courses are intended to help students further develop skills in a course previously taken for credit. Students are expected to complete all the work and will be graded accordingly. The final letter grade will be reflected on the transcript.

Honors courses are intended for accomplished students because these courses require serious academic commitment.

Advanced Placement courses are designed to provide students with the analytical skills and factual knowledge necessary to be successful when taking Advanced Placement exams. Students who earn a qualifying score (three or more) on an Advanced Placement exam may receive college credit based upon the award by their chosen college or university or course advancement.

Running Start courses may earn college credit. These courses are approved by the Nashua Community College and the Community College System of New Hampshire. Students pay a fee, determined by the college granting the college credit; take the course in a traditional high school classroom, with a high school teacher approved by CCSNH. The curriculum is also approved by the CCSNH institution granting the credit.

## Courses are labeled on Transcripts as follows:

Running Start $=$ RS or $\mathrm{H} / \mathrm{RS}$ or AP/RS
Advanced Placement = AP
Honors $=$ Honors or H
College Preparatory = CP

## CREDIT RECOVERY

In an attempt to help all our students succeed, we allow and encourage students to participate in credit recovery options. All recovery options would typically be offered as a pass or fail option only and award subsequent credit upon successful completion. This does not replace the previously earned failing grade on the transcript. Credit recovery options do not calculate into GPA or class rank. Credit recovery course credit is not allowed as a replacement for classes not attempted. While there is typically no costs related to credit recovery, depending on the options taken, cost would be the responsibility of the family.
Final decisions on credit recovery are at the discretion of administration.

## NCAA COLLEGE FRESHMAN ELIGIBILITY STANDARDS

The NCAA requires that all student athletes planning to play at a Division I or Division II level must register with the eligibility center. The eligibility center will review a student athlete's academics and amateur status in order to verify that they are eligible to participate in athletics at Division I and Division II institutions. Division III colleges do not use the NCAA Eligibility Clearinghouse. Division schools each have their own policies on admission, financial aid, practice and competition. Student athletes are advised to begin the process at the end of their junior year. Eligibility is based on all four years of your high school career. Additional information can be obtained from the NCAA website. www.ncaa.org.

## POSTSECONDARY PLANNING AND COLLEGE PREPARATORY GUIDELINES

All students meet with their school counselor to discuss the many options available after high school graduation and to ensure their high school coursework prepares them to be college and career ready.

A student seriously motivated to attend a post-secondary institution should enroll in as rigorous a course load as is appropriate while attending Mascenic. While it is certainly not necessary to enroll in every Honors or AP course available, a student thinking about attending a selective college or university should consider choices in areas of particular interest or talent that align with a potential college major as courses at the Honors and or AP levels. Furthermore, colleges look at the rigor of schedule, progression of learning, and other factors related to schedules; therefore, it is important for students to meet with their counselor to go over plans and aspirations. Selecting appropriate levels to highlight one's individual potential, interests, and strengths is highly important. The chart on the following page helps to highlight very general suggestions for schedules that meet the minimum requirements for different types of colleges. Remember, exceeding the minimum standard helps make for strong candidates during the application process and the first year of college.

| Highly Competitive Colleges <br> - 4 years English (Writing and Literature) <br> - 4 years Math (Algebra $1 \& 2$; Geometry; Pre-Calculus; Calculus) <br> - 4 years Science (Biology, Chemistry, minimum 1 Lab Science elective <br> - 4 year Social Studies <br> - 3-4 years World Language <br> - 1-2 years of Fine Arts/Computer Education <br> College Prep or higher in all courses, <br> Honors and AP for as many as appropriate | Four-Year Nursing \& Allied Health <br> - 4 years English (Writing and Literature) <br> - 4 years Math (Algebra 1 \& 2; Geometry; Pre-Calculus; Probability and Statistics; Calculus) <br> - 4 years Science (Biology, Chemistry, minimum 1 Lab Science elective <br> - 4 year Social Studies (Psychology) <br> - 2-3 years World Language <br> College Prep or higher in all courses, Honors and AP for as many as appropriate |
| :---: | :---: |
| Most Four- Year Colleges <br> - 4 years English (Writing and Literature) <br> - 4 years Math (Algebra $1 \& 2$; Geometry; Pre-Calculus; or Probability and Statistics) <br> - 4 years Science (Biology, Chemistry, minimum 1 Lab Science elective <br> - 4 year Social Studies <br> - 2-3 years World Language <br> - 1-2 years of Fine Arts/Computer Education <br> College Prep or higher in all courses | Four-Year Business Program <br> - 4 years English <br> - 4 years Math (Algebra $1 \& 2$; Geometry, Pre-Calculus \& Probability \& Statistics) <br> - 4 years Science <br> - 4 years Social Studies <br> - 2-3 years World Language <br> - Related Business Courses <br> College Prep or higher in all courses |
| Four-Year Engineering \& Science <br> - 4 years English <br> - 4 years Math (Algebra $1 \& 2$; Geometry; Pre-calculus; Calculus) <br> - 4 years Science (Biology, Chemistry, Physics) <br> - 2-3 years World Language <br> - 1 year Computer Education <br> College Prep or higher in all courses | Four-Year Fine Arts College <br> - 4 years English <br> - 4 years Math (Algebra $1 \& 2$; Geometry, one math elective) <br> - 4 years Science <br> - 4 years Social Studies <br> - 4 years Art (one should be Advanced Studio Art) <br> - 2-3 years World Language <br> Art Portfolio required for admission |
|  <br> Technical Institutes <br> 4 years English <br> - 4 years Math (Algebra $1 \& 2$; Geometry) <br> - 4 years Social Studies <br> - 2-3 years Science <br> - Related Technology Courses (computer, accounting) | Note: Standards and admissions policies vary from School to School. Therefore, students are advised to review college catalogs for specific entrance requirements. See your counselor with questions. |

## ALTERNATIVE LEARNING OPPORTUNITIES

Alternative learning opportunities offer a variety of ways for students to earn credit, explore, and open up different opportunities. These options should be discussed with a school counselor as there are prerequisites and requirements they can help students work through.

Course Audit Grades 9-12 0 Credit Prerequisite: Interview with School Counselor and Instructor Approval. This course is not available during the course selection process.

An audited course may be used to meet a prerequisite and/or gain further knowledge and skill. Course audits yield no credits, however earned grades are posted on the transcript. Students are required to complete all homework and assessments in the course and may be given alternative options at the discretion of the instructor. Audit courses are not Pass/Fail and do not factor into GPA or class rank.

Extended Learning Opportunities (ELO) Grades 11-12 0.5-1.0 Credits Prerequisite: Interview with School Counselor, completed application, Administrator approval. This course is not available during the course selection process.
ELO's are student initiated learning plans that are developed by a student, the ELO Coordinator, and a highly qualified teacher (HQT). ELO's are intended to offer a self-directed learning experience for highly motivated students that could not be met through regular course offerings. ELOs cannot be used to fulfill a specific graduation requirement unless administrative approval has been given. Students must solicit and receive written approval of the Principal before the plan can be initiated. $\mathbf{1 3 5}$ hours=1 credit; $\mathbf{6 7 . 5}$ hours $=.5$ credit

Career and Technical Education (CTE) Grades 10-12 Prerequisite: application process, Administrator approval. Individual courses may have specific prerequisite requirements.

Region 14 Applied Technology Center Career and Technical Education programs offer students the opportunity to explore different career pathways, to earn industry certifications that make them career ready, and to be better prepared for life after high school. CTE programs are project-based, hands-on learning that allow students to use industry-standard technology in exciting ways. Students interact with professionals in the field and problem solve their way to new solutions. Students enrolling in a CTE program class must fill out the application located at the end of the Program of Studies.

Online Courses/VLACS Grades 9-12 0.5-1.0 Credits Prerequisite: Interview with School Counselor, completed application, Administrator approval. This course is not available during the course selection process. Beginning school year 2022-2023 these courses will be calculated into students GPAs. Students must meet with their school counselor before enrolling in a credit-bearing online course. Online courses cannot be taken to fulfill specific graduation requirements or in place of courses currently offered in-person at MRHS unless administrative approval has been given. Grades earned in online courses will appear on a student's Mascenic transcript exactly as they are awarded by the institution through which the course is completed. Grades earned through online courses will be included in the calculation of a student's GPA. A completed and approved application must be on file prior to enrolling in the course. Students who wish to replace MRHS class time with an online course will be assigned to a designated area for one period and will be required to be in that area for attendance purposes. Credit for the course will not be recognized until an official transcript has been submitted.

PLATO/Credit Recovery Grades 9-12, 0.5-1.0 Credits Prerequisite: Interview with School Counselor, completed application, Administrator approval. This course is not available during the course selection process.
Students may repeat a course that is failed or opt to take a PLATO/online credit recovery course. To be eligible for a credit recovery/PLATO course, a student must have completed and failed the course if they failed with a $50 \%$ or higher final average or have a school administrator approval. In PLATO, students must earn an 80 average or higher in all units and no lower than a 60 on the final exam to earn a pass ( P ) and credit for the course.

Early College or Dual Enrollment Grades 11-12 ** Credit
Prerequisite: Interview with School Counselor, family commitment to all associated costs and completed application. This course is not available during the course selection process.
College Study allows students to complete their final year(s) of high school while attending college full-time. Students may find opportunities at a variety of institutions including but not limited to Keene State College, the Community College System of New Hampshire, and/or Mount Wachusett Community College. College courses for simultaneous high school credit must be pre-approved through the School Counseling Center. The student is responsible for forwarding college transcripts at the end of each semester and no later than two weeks prior to graduation.

## CAREER \& TECHNICAL EDUCATION PROGRAMS

## MASCENIC CAREER \& TECHNICAL CENTER

All courses in this section require an application and are not available during initial signups for classes. Applications are available in the counseling center.

## 1855 Automotive I Grade 10-12, 2 credits

Prerequisite: Application and interview required AND successful completion of Algebra I.
Automotive service technology is a two-year program for juniors and seniors which provides students with the opportunity to develop basic to advanced level skills needed to inspect, diagnose, and just, and repair the systems of the modern automobile, including environmental and safety practices. The overall goal of the program is to provide a solid school-to-career transition for auto service technology students who are sincere about making this trade their chosen career. An industry standard curriculum, certified by the National Automotive Technician Educational Foundation (NATEF), provides first year students the training to succeed from the basic to advanced level technician in steering and suspension, electronics, brakes, state vehicle inspection, and engine performance. Second year instruction includes basic advanced level training in engine repair, drive train, air bag systems, and four-wheel alignment. Students must possess good reading, math, computer, and analytical skills in order to be able to read and study technical manuals and keep abreast of new technology. A valid driver's license and a good driving record are required. Mechanical aptitude is also essential.

## 1857 Automotive II Grade 11-12, 4 credits

## Prerequisite: Successful completion of Auto I.

In this second course, instruction includes basic advanced level training in engine repair, drive train, air bag systems, and four-wheel alignment. Students must possess good reading, math, computer, and analytical skills in order to be able to read and study technical manuals and keep abreast of new technology. A valid driver's license and a good driving record are required. Mechanical aptitude is also essential.
*Credits earned in both Automotive I and Automotive II can satisfy one Math Elective credit

## REGION 14 APPLIED TECHNOLOGY CENTER

All courses in this section require an application and are not available during initial sign ups for classes. Applications are available in the counseling center. Please see the ConVal Program of Studies for more information on each of the courses offered.

## BUSINESS MANAGEMENT/MARKETING

Business and Personal Law Grades 10-12 1 Credit (Semester)
Entrepreneurship Grades 10-12 1 Credit (Semester 2 only) Business Management Grades 10-12 1 Credit (Semester 2 only) Principals of Marketing Grades 10-12 2 Credits (Semester 2 only)

CAREERS IN EDUCATION I AND II~Running Start~ Grades 10-12 2 Credits (Full Year) COMPUTER \& INFORMATION TECHNOLOGY

Routing \& Switching Networks Grades 10-12 1 Credit
Software Programming Using C++* Grades 10-12 1 Credit
Software Programming \& Game Design Grades 10-12 1 Credit
Electronics and Microcontrollers Grades 10-12 1 Credit
CONSTRUCTION TRADES_(held at Conant High School)
Fundamentals of Construction Trades Grades 10-12 1 Credit
Construction Trades: Carpentry/Masonry Grades 10-12 1 Credit
Construction Trades: Electrical/Plumbing Grades 10-12 1 Credit
FILM/VIDEO AND PHOTOGRAPHIC ARTS
Digital Photography \& Video Arts I Grades 10-12 1 Credit
Digital Photography II Grades 10-12 1 Credit
Digital Video Arts II Grades 10-12 1 Credit

## PRE-ENGINEERING

Engineering Design I Grades 10-12 1 Credit
Engineering Design II Grades 10-12 1 Credit
Engineering Design III Grades 11-12 1 Credit
Engineering Design IV Grade 121 Credit

## FIRE SCIENCE/FIRE FIGHTING

Introduction to Firefighting I Grades 10-12 2 Credits
Emergency Medical Technician (EMT) Grades 10-12 2 Credits

## GRAPHIC DESIGN

Graphic Design I Grades 10-12 1 Credit
Graphic Design II Grades 11-12 1 Credit
Graphic Design III Grades 11-12 1 Credit

## LICENCED NURSING ASSISTANT

LNA Grades 11-12 1 Credit
MANUFACTURING TECHNOLOGY/TECHNICIAN
Manufacturing I Grades 10-12 1 Credit
Manufacturing II Grades 10-12 1 Credit
Manufacturing III or Internship Grades 10-12 1 Credit

## ENGLISH

The study of English language and literature promotes clear thinking and contributes to the knowledge, understanding, and skills of students who make up our society. Because the development of communication skills is a lifelong process, the English program emphasizes ongoing applied learning of essential proficiencies and competencies in reading, writing, speaking, listening, and critical thinking. Students are required to take all the core English courses in grades 9-12, sequentially, one per academic year. Core courses dedicated to one grade are not open to students of other grades without permission of the principal. Students may take enrichment electives open to their grade level in addition to core courses, if available.

## CORE ENGLISH COURSES

## All courses in this section meet the graduation requirements: choose one from each grade level.

## TBD English Foundations 9-12, 1 Credit

This course has been designed for those students who have a need for individual attention in the area of Language Arts. Special emphasis will be placed on reading comprehension, vocabulary development, visual literacy, listening, and critical thinking skills. The writing program stresses the structure of the sentence and development of the paragraph. Students also practice verbal communication skills by participating in class discussion and sharing information in regular, brief oral reports.

## 1060 English 9-CP Grade 9, 1 Credit

In this course, students will read and analyze fiction, literary non-fiction, informational texts, and articles and utilize other forms of media in an effort to develop literacy skills that are useful across the curriculum. Students will be guided in developing the structure of their writings, and students will be expected to use and refine writing conventions introduced at lower grades. This course will emphasize communication and listening skills of reading for key ideas and details, writing arguments to support claims using valid reasoning and sufficient evidence, and initiating and participating in a range of discussions on topics, tests and issues. Members of the class will be expected to take responsibility for completing some assignments outside of class and for coming to class prepared to work with the material under study.

1066 English 10-H Grade 10, 1 Credit
This honors-level course provides students with the skills necessary to advance to future honors-level or AP courses in the department. With a focus on issues that impact different societies, students will read and respond to works with themes related to ethics, culture, oppression, class structure, justice and more. Through these texts, students will have the opportunity to develop their own personal perspectives of the world in which they live, and apply them in their daily lives. Students will be expected to complete most of the assignments outside of class. This course will help strengthen their skills in literary analysis and there will be an emphasis on reading for key ideas and details, writing arguments to support claims using valid reasoning and sufficient evidence. Students in this course will use the writing process to write more often and more deeply about topics covered and as well as reflect on the processes they use.

1064 English 10-CP Grade 10, 1 Credit
This course gives students the opportunity to discover and explore issues facing humans in society. We will read and respond to works with themes related to ethics, culture, oppression, class structure, justice and more, in diverse times and places, with the goal of understanding traits which may either unite or divide us at times. Students will be expected to recognize and analyze the use of key ideas and details and to think critically as they formulate arguments in support of claims. Emphasis will be on reasoning skills and use of textual support and sufficient evidence in both written and oral responses to readings. Students will be expected to use writing conventions learned in lower grades as well as incorporate new skills and grow their vocabulary. They will take
responsibility for completing some assignments outside of class and for coming to class prepared to work with the material under study. Finally, students will be expected to practice the college- and career-ready habits of good attendance, engagement, and cooperation.

## 1070 AP Language and Composition through American Literature Grade 11, 1 Credit

This reading-and writing-intensive course combines advanced study of American literature and instruction in the different forms and functions of rhetoric. Course readings include American foundational documents, religious texts, literary non-fiction, fiction, poetry, music, visual texts, and drama. In order to sharpen students' argumentation, narration, exposition, analysis, and synthesis skills, the course places much emphasis on the study of rhetorical devices, rhetorical analysis, vocabulary, and Standard Written English, assessed through frequent writing tasks. Students are expected to complete numerous assignments outside of class and coming to class prepared to work with the material under study. Because of the collegiate level of the course, some topics covered are of a mature nature, requiring students to think and respond in a mature, independent manner. By achieving a passing score on the AP Language and Composition exam in May (at the student's own expense), students may have the opportunity to earn a college English credit while still in high school or to be exempted from introductory college English. Students should check with the institutions to which they plan to apply for each school's policy on AP credit.

## Summer work prior to the opening of school is required for this course.

NOTE: If due to low enrollment course 1070 is not offered, any interested student may take course 1030 and independently prepare for the AP English Language exam. If a student passes the AP exam with a score of 3 or above, as reported by the College Board in July, his or her transcript will be changed to indicate that the student completed English 11 at the AP level; weighted GPA will also be altered to reflect this achievement.

## 1030 English 11-H Grade 11, 1 Credit

In this challenging course intended for able, college-bound juniors, we will study works by American authors with the goal of better understanding both our country and ourselves.
This course offers to the highly motivated and able college-bound student a challenging study of America through its literature. The course will use literature to give students a context in which to examine and think critically about people, ideas, law, government, and power in the context of our country's history. The human element in literature will also play a role in our studies as we grapple with such topics as relationships, conflict, ethics, human nature and psychology, and decision-making/problem-solving. Student input will often be taken into account as we decide which ideas to emphasize and which specific works to read. Because of the advanced level of this Honors course, some topics covered are of a mature nature, requiring students to think and respond in a mature, independent manner. Students will practice verbal and written participation, analyzing rhetoric, synthesizing sources, and presenting arguments. Students will refine language and composition skills acquired at lower grades and add to their knowledge of writing forms and conventions. They will be expected to do many reading and writing assignments outside of class and come to class prepared to work with the material under study. Finally, students will be expected to practice the college- and career-ready habits of good attendance, engagement, and cooperation.

## Summer work prior to the opening of school is required for this course.

## 1068 English 11—CP Grade 11, 1 Credit

In this course, we will study works by American authors with the goal of better understanding both our country and ourselves. The course will use literature to give students a context in which to examine and think critically about people, ideas, law/government, and power in the context of the history of the United States. The human element in literature will also be incorporated in our studies as we engage with such topics as relationships, conflict, ethics, human nature and psychology, and decision-making/problem-solving. Student input will often play a role as we decide which ideas to emphasize and which specific works to read. Students will practice verbal and written participation, synthesizing sources, and presenting arguments. Students will refine language and composition skills acquired at lower grades and add to their knowledge of writing conventions. They will be expected to do some reading and writing assignments outside of class and come to class prepared to work with the material under study. Finally, students will be expected to practice the career-ready habits of good attendance, engagement, and cooperation.

## 1076 AP Literature and Composition Grade 12, 1 Credit

AP English Literature and Composition is a rigorous course that will prepare students for college level English courses. Through intensive reading of primarily, though not exclusively British texts, students will come to understand how writers use language to provide meaning and to answer the big questions in life. Students learn to closely analyze literature through a study of art, history, and philosophy. The course will ask students to compare the author's intent to historical interpretations all the way to our modern day. Text selections are at the collegiate level which means some course content will be geared to mature subjects, themes and issues. The culmination of the course is the AP Literature and Composition exam in May. Depending on the post-secondary institution attended, achieving a passing score on this exam may earn the student either a college English credit or placement out of an introductory-level course.

## 1074 English 12-H Grade 12, 1 Credit

This course offers the highly motivated and able college-bound student an in-depth study of Media Literacy. Students will deconstruct, analyze and evaluate various communication media. These print, electronic and visual media include literature, informational texts, advertisements, blogs, commercials, narrative films and documentaries. Students will apply critical thinking skills to better understand the methods of using language and images to influence an audience's emotions and thinking. By constructing their own arguments, informative/explanatory texts, and narratives, students will both synthesize and extend their understanding of media messages. Copious writing and discussion assignments will include in-depth literary and critical analysis, as well as multiple research-based papers. Depending on the interests and qualifications of the students and instructor, this course may also be combined with Running Start for dual-credit through Nashua Community College.

## 1072 English 12-CP Grade 12, 1 Credit

English 12 focuses on the study of Media Literacy. Students will deconstruct, analyze and evaluate various communication media. These print, electronic and visual media include literature, informational texts, advertisements, blogs, commercials, narrative films and documentaries. Students will apply critical thinking skills to better understand the method of using language and images to influence an audience's emotions and thinking. By constructing their own arguments, informative/explanatory texts, and narratives, students will both synthesize and extend their understanding of media messages. Writing and discussion assignments will include journal prompts, poetry explications, critical analysis essays, and a research paper.

## ENGLISH ELECTIVES

1036 Public Speaking and Debate Grades 10-12, . 5 Credit
This course will prepare students to express themselves effectively before an audience. This course covers multiple aspects of public speaking and gives the students practical experience through participation and the study of poise and the use of one's body and voice, skills that they may make use of in college and/or their careers. Course goals include increasing fluency and self-confidence as a speaker, and learning to recognize and use reputable sources in research. We will focus on topics relevant to today's world; students will be expected to perform investigative research to prepare for speeches and debates. In-person attendance is a crucial part of this course, as students not only participate by speaking but also by listening to their peers, providing critical commentary, and working as part of a debating team.

## 1036 Creative Writing: Poetry Grades $10-12$, .5 Credit

In this course, students will be introduced to the creative craft of written expression through poetry. Students will have the opportunity to create a variety of poems and will respond to exemplary published works. This is a writing intensive course that will be run in a workshop style where students are expected to share writing regularly. Students will study strategies to help conquer writer's block and develop new ideas for writing. At the end of the course, students will work toward creating a portfolio of revised pieces and learn the process for submitting work for publishing.

TBD Creative Writing: Storytelling Grades 10-12, .5 Credit
In this course, students will be introduced to the creative craft of written expression through storytelling. Students will have the opportunity to create nonfiction, fiction, and multigenre stories. This is a writing intensive course that will be run in a workshop style where students are expected to share writing regularly. Students will study strategies to help conquer writer's block and develop new ideas for writing. At the end of the course, students will work toward creating a portfolio of revised pieces and learn the process for submitting work for publishing.

## 1044 Journalism Grades 9-12, 1 Credit

Good communication skills are vital in order to succeed in the world today, whether you plan on going to college or entering the workforce. Journalism is not just writing. It's about talking to people, it's about listening to what people have to say. It's about presenting your ideas in a way that people can understand them. Yes, you will be doing a lot of writing, but you will also be doing a lot of talking and listening. You will also put yourself in uncomfortable situations, such as going up to people you may not know that well and asking them questions--this is also a life skill. Articles will be posted on a regular basis to a class-maintained website that the community can utilize as a practical source of information, as well as for entertainment purposes.

## SOCIAL STUDIES

Social Studies focus on inquiry of human social relationships, past and present. The primary objective of the Social Studies Department is to prepare thoughtful, active citizens who can function productively in a rapidly developing society. Since a democratic society depends upon responsible citizens to make rational decisions consistent with basic democratic values, the social studies classroom attempts to provide a setting in which students can ask questions, make decisions and think critically. In addition to the required, junior-level US History and senior-level Intro to Civics and Government, all students must choose a course that meets the geography requirement. These include: World History and World Geography. *Students in the graduating class of 2024 and beyond will need to pass the 2020 US Naturalization Test Exam with a $70 \%$ or higher.

## CORE SOCIAL STUDIES COURSES

## All courses in this section meet the graduation requirements: choose one from each grade level.

## 1121 World History-CP Grades 9-10, 1 Credit

World History is a study of our global community's past, emphasizing the people and events that changed past societies and how these changes affect our modern world. Through the use of historical thinking skills and geographical analysis, students will study the following topics: Early civilizations, such as Ancient Greece and Rome, the rise of Christianity and civilizations of the Americas, societies of the Middle Ages such as the Byzantine Empire, Russia and Eastern Europe, the Renaissance and Reformation, the start of the Global Age in Europe, Africa, Asia, and the Americas, the Age of Absolutism, the regional civilizations of Islam, Africa, and the spread of civilization in East and Southeast Asia.

## $\mathbf{1 1 2 5}$ World Geography-CPGrades 9-10, 1 Credit

This course provides students an opportunity to explore physical and human systems from a global perspective. Using the five themes of geography, students will deepen their understanding of their interconnectedness to individuals and ecosystems in all parts of the world. The course will provide students an opportunity to expand their multi-cultural knowledge and to understand the impact of their everyday decisions for the social and natural world in which they live. Students will develop an awareness of their civic and social responsibility in order to make ethical and informed decisions that benefit their local and global communities.

## 1154 US History -H/RS Grade 11, 1 Credit

This course will provide an overview of the political, social, economic, and cultural development of the United States from 1865 to the present. A wide range of topics will be explored including post-Civil War Westward Expansion, Industrialization, the emergence of the United States as a world power, the Progressive Movement, the First World War, the Depression, World War II, the Cold War Era, the expansion of civil rights, and recent trends. In addition, this course will introduce students to a variety of essential skills such as discerning frame of reference in primary and secondary sources, hypothesis formation using the historical method of inquiry, writing persuasive essays, and documenting sources. Students may opt to take this class as a Running Start course, for college credit) through Nashua Community College (see page 7 for more information on Running Start courses).

## 1104 US History-CP Grade 11, 1 Credit

This course will focus on U.S. History from Westward Expansion to the present day. There will be analyses of the political, economic, and social factors that made the U.S. the nation it is today. In addition, students will learn to develop historical thinking skills including document analysis, hypothesis formation and writing historical arguments using historical sources. This course will meet the graduation requirement for US History.

## 1143 Civics and Economics-H Grades 10-12, 1 Credit

This course is divided into two parts. The government portion will examine the structure, process, particulars, and political machinations of federal, state and local governments and how they affect freedom and American life. The economics portion will look at market forces, supply and demand, economic systems, the business cycle and measures of economic performance, factors of production, business organizations, fiscal and monetary policy, world trade, and select aspects of personal finance. Current societal issues and events will also be evaluated in light of their connection to elements of government and economics.

## 1141 Civics and Economics-CP Grades 10-12, 1 Credit

This course is divided into two parts. The government portion will examine the structure, process, particulars, and political machinations of federal, state and local governments and how they affect freedom and American life. The economics portion will look at market forces, supply and demand, economic systems, the business cycle and measures of economic performance, factors of production, business organizations, fiscal and monetary policy, world trade, and select aspects of personal finance. Current societal issues and events will also be evaluated in light of their connection to elements of government and economics.

## SOCIAL STUDIES ELECTIVES

1119 History through Film Grades 9-12, .5Credit
This course will use film as a tool for exploring many aspects of history. Students will examine the purpose, the audience perception, the historical accuracy, and the cultural context of historical films. We will study these concepts by watching and analyzing films that fall under these categories: Triumph vs. Trial, Heroes vs. Villains, Racism in America, Why War, Raise Your Voice, Prejudice Turned Genocide, Sports in History, Law and Society, and Music and Media.

## 1152 Nazi Germany and the Holocaust CP/H Grades 10-12, 1 Credit

This course will examine the rise of Nazism in post-World War I Germany, along with the mass murder and genocide committed by the Nazi regime from 1939-1945. Through the use of lectures, group activities, class discussions, research, literature and film, students will not only explore the historical content of this catastrophic event in modern history, but also develop an understanding of the ramifications of prejudice and stereotyping in any society. Students will explore additional instances of genocide throughout history and discuss their own ethical responsibility in responding to prejudice and hatred.

## 1131 Genocide in the Modern World-H/RS Grades 11-12, 1 Credit

*Offered only in years beginning with an even number (i.e. 2022-2023)
The 20th century saw mass violence on a scale unprecedented in human history. Among the most horrifying forms this violence took was the attempt to systematically exterminate whole religious/ ethnic/ national groups, which Raphael Lemkin coined the term "genocide" to describe. This course will focus on genocide in the 20th and 21 st century by first investigating the definition and possible origins of genocide. Then we will examine major cases of genocide including (but not limited to) the Armenian Genocide, the Holodomor, Cambodia, Bosnia, Rwanda, and Darfur. The class will include a focus on current genocide
and human rights violations and what each of us can do to prevent its reoccurrence. Students may opt to take this class as a Running Start course, for college credit) through Nashua Community College (see page 7 for more information on Running Start courses).

## 1111 Psychology Grades 11-12, 1 Credit

This course provides the student with an opportunity to deepen their understanding of individual and social behavior through the exploration of the human body and mind. Students will gain insight into human behavior through the examination of various perspectives used in psychology. Content and skills learned in this course will allow students to navigate their social world with a clear under
standing of their own behavior and the behavior of others.

## 1126 Criminal Justice Grades 10-12, 1 Credit

This course will introduce and examine many topics that fall under the umbrella of America's Criminal Justice System. These include citizen and suspect rights, application of criminal laws and legal procedure, causes of crime, crime data, history and aspects of policing, the court system, stages of a criminal trial, and the corrections system. Current societal issues and events will also be evaluated in light of their connection to elements of the criminal justice system.

## 1160 19th and 20th Century Military History Grades 9-12, .5 Credit

Students will learn about warfare in the 19th and 20th centuries. We will look at the causes of war, the weaponry it was fought with, and the strategies and tactics military and political leaders used to both gain support for and win wars. We will start with the Napoleonic Wars, continue through the Civil War and the Franco-Prussian wars, and look at both World Wars, with particular focus on the Pacific Theater of WWII. We will also explore how the outcomes of the wars impacted future conflicts and explore the long-term effects on participating nations. Information will be explored through a variety of methods including film, primary and secondary sources, simulations, and debates.

## TBD Ancient-Medieval Military History Grades 9-12, .5 Credit

Students will learn about ancient and medieval warfare, its causes, the weaponry it was fought with, and the strategies and tactics some of the greatest military leaders used. Starting with Ancient Greece and continuing through Persia, China, Rome, and continuing through the Middle Ages and the Crusades, students will be able to see how warfare changed over time, how conflict can lead to more conflict, and how wars impacted the human geography of today's world. Information will be explored through a variety of methods including film, primary and secondary sources, simulations, and debates.

## 1165 Sports and Society Grade 9-12 .5 Credit

Sports and Society cover such topics as Title IX, NCAA, the Olympics, Air Jordans, and other historical and current sports events. In this course, students will examine the development of sports through historical and sociological perspectives. There will be an emphasis on sport as a form of social interaction that reflects, reinforces, and helps create basic societal norms, values, attitudes, and beliefs. The impact of sport on the social institutions of family, church, school, government, and economics in the United States and the world. Students will examine the historical context and the significance of gender, race, ethnicity, and social class in sports.

## MATHEMATICS

The study of mathematics focuses upon the use of numbers and symbols to examine and study quantities, forms, sizes, and their relationships. A strong knowledge and use of computation is essential to all fields of study and work. The basics of algebraic functions are also essential in a technological age.

Note: Students enrolled in all mathematical courses are encouraged to purchase a scientific calculator. A TI-83 Plus (or better) graphing calculator is expected for Algebra II with Trigonometry, Probability and Statistics, Pre-Calculus, and Advanced Placement Calculus (AB).

## CORE MATHEMATICS COURSES

All courses in this section meet the graduation requirements: choose one from each grade level.

## 1228 Pre-Algebra Grade 9, 1 Credit

This course is an entry-level course designed to prepare students for Algebra I. Topics include: order of operations, variables, integers, solving both equations and inequalities, and graphing. The typical student who takes this course will most likely follow it with Algebra I, Geometry followed by a math elective in their senior year to complete their three-credit mathematics graduation requirements.

## 1202 Algebra I - CP Grade 9-10, 1 Credit

This course deals with math topics in a more general, broad, application based approach. Topics include: number sets, variables, properties of real numbers, linear equations, functions, relations, polynomials, and graphs. Algebra Is a requirement for graduation, as well as students pursuing post secondary education, including college, and those interested in a career in the Armed Forces.

## 1201 Algebra I -H Grade 9, 1 Credit

This course builds upon the Algebra I in middle school experience and ensures all topics are covered in depth to prepare students for the Honors math track toward Calculus Advanced Placement. Topics include: number sets, variables, properties of real numbers, linear equations, functions, relations, polynomials, and graphs. Algebra is a requirement for graduation, as well as students pursuing post-secondary education, including college, and those interested in a career in the Armed Forces.

1206 Geometry-CP Grades 10-12, 1 Credit Prerequisite: Successful completion of Algebra $I-C P$. This course is designed to improve the student's understanding of Geometry and how it helps us to represent, describe, and make sense of the world around us. Students will extend their basic knowledge of geometric concepts from prior courses to develop an understanding of geometric ideas, properties, and relationships, using labs and applications to the working world, as well as appropriate technology.

1206 Geometry-H Grades 10-12, 1 Credit Prerequisite: Successful completion of Algebra $I-C P$ with a minimum grade of $B$-.
This course is designed to improve the student's understanding of Geometry and how it helps us to represent, describe, and make sense of the world around us. Students will extend their basic knowledge of geometric concepts from prior courses to develop an understanding of geometric ideas, properties and theorems, and will develop their ability to reason, solve problems, and justify solutions. Spatial reasoning and the appropriate use of technology will be emphasized.

## 1209 Algebra II - CP Grades 11-12, 1 Credit Prerequisite: Successful completion of Algebra I and

 Geometry.This course deals with math concepts in a traditional, rigorous approach concerning proofs, models, and theory. Algebra II topics include, but are not limited to: solving equations, linear and nonlinear functions, absolute value, inequalities, matrices, polynomials, rational expressions, rational and irrational numbers, complex numbers, polynomial functions, quadratic relations, as well as exponential and logarithmic functions.

1208 Algebra II-H Grades 10-12, 1 Credit Prerequisite: Successful completion of Algebra I and Geometry with a minimum grade of $B$-.
This course deals with math concepts in a traditional, rigorous approach concerning proofs, models, and theory. Algebra II topics include, but are not limited to: solving of equations, linear and nonlinear functions, absolute value, inequalities, matrices, polynomial, rational expressions, rational and irrational numbers, complex numbers, polynomial functions, quadratic relations, as well as exponential and logarithmic functions. The trigonometry component of this course emphasizes concepts and applications in the areas of trigonometric functions as well as finite and infinite series/sequences.

## MATHEMATICS ELECTIVES

1299 Senior Math Grade 12, 1 Credit Prerequisite: Successful completion of Algebra I and Geometry. This course is designed to prepare students to be effective real-world problem-solvers. Students will be encouraged to think and work together to find solutions that can be applied to new situations. The course will cover: area/volume, angles and trigonometry, and additional mathematical concepts. There will be an emphasis on test-taking strategies to help students be successful on standardized tests such as the Accuplacer, SAT and ASVAB. Students enrolled in this course will be prepared to go on to a technical school or a two/ four-year college.

1217 Probability and Statistics-CP Grades 11-12, 1 Credit Prerequisites: Successful completion of Geometry and Algebra II, with a B- or better
This course for students in grades 11 and 12, will allow students to learn various concepts in the area of probability and statistics. During the probability portion of the class, students will cover such topics as basic rules of counting, permutations, combinations and various distributions. During the statistics portion of the class, students will learn how to collect, display, summarize, and analyze data. Students will also be exposed to the techniques of sampling, estimation, and hypothesis testing. Emphasis will be placed on how students should interpret the statistics they will encounter outside the educational arena and to question the validity of statistics. The instruction will be "hands-on" and students should expect many projects, as well as traditional exams.

1210 Pre-Calculus-CP/H Grades 11-12, 1 Credit Prerequisites: Successful completion of Algebra II with a minimum grade of $B$-.
This course emphasizes concepts and applications in the areas of linear equations, quadratic equations, logarithms, exponential functions, polynomials, imaginary numbers, graphing inequalities, trigonometric functions, limits as well as finite and infinite series/sequences. This course is designed to help students succeed in the Advanced Placement Calculus (AB) course.

## 1211 Calculus-H Grade 12, 1 Credit Prerequisite: Successful completion of Pre-Calculus.

This course is an introductory course in calculus for students with a good aptitude for mathematics, have above average achievement, and plan to pursue a course of study in mathematics, computer technology, science, or engineering. The course will cover many of the topics normally studied during the first semester of college calculus. Emphasis will be placed on forming a solid foundation in topics of functions, limits,
methods of differentiation and applications of derivatives, techniques of integration and applications of the integral.

1226 Calculus-AP Grade 12, 1 Credit Prerequisite: Successful completion of Pre-Calculus with a minimum grade of $B$-.
As part of the advanced placement program of the College Board, students will explore concepts and application in the areas of definite integral limits, the derivative, and rules of differentiation, integration of algebraic functions, exponential functions, logarithmic functions, trigonometric functions, and their inverses. Special attention will be given to these concepts and their applications in business, economics, science, and engineering. At the conclusion of this course, students will take an AP exam.

## MATH ORIENTED ELECTIVES

The following courses may be taken for math elective credit:
Woodworking \& Advanced Woodworking
CADD I \& II
Automotive I \& II

## SCIENCE

Courses offered in the Mascenic Science Department are guided by the Next Generation Science Standards (NGSS). They are designed to strengthen students' science and engineering practices using various areas of scientific study. Training in investigations provides students with an opportunity to develop curiosity, problem solving skills and graduate as scientifically literate citizens. Most courses are offered at the CP level however opportunities for Honors credit are available.

## CORE SCIENCE COURSES

All courses in this section meet the graduation requirements: choose one from each grade level.

## 1301 Physical Science-CPGrade 9, 1 Credit

This course introduces topics in physics and chemistry with emphasis on the NGSS and good science practices. Methods of instruction will include discussion, problem solving, demonstrations, lab activities, and projects. Students will be assessed using alternative forms of assessment including lab reports, projects and products and oral reports. Traditional methods of assessment, such tests, will also be used. This course is required for graduation and a prerequisite for Biology.

## 1303 Biology - CP Grade 10-12, 1 Credit Prerequisite: Successful completion of Physical Science

This course is an introduction to the study of biology guided through the key principles from the Next Generation Science Standards, while building a strong foundation in preparing students for future college preparatory sciences. Topics include the nature of science, cell structure and function, photosynthesis and respiration, inheritance and variation of traits, natural selection and evolution, and ecology. Laboratory work includes dissections, microscope work, and projects. Assessment tools include tests, quizzes, lab reports, and web quests.

## 1304-Earth \& Space Science-CP Grades 10-12, 1 credit (Elective 2022-2024, required graduating class

 2025 and beyond)In this course we will focus on five overarching themes that explain the world around us: Space Systems, the History of Earth, Earth Systems, Weather and Climate and Human Interactions. Space Systems will look at the processes, formation and evolution of the solar system and the universe. History of the Earth will look at planet makeup and development along with the concepts of geologic time and the evidence and age of life on the planet. Earth Systems will look at what the Earths made up of, and how its make up drives processes that are constantly reshaping what we see. Weather and Climate looks at how the atmosphere works and how that drives local weather and long range climatic conditions. Human Interactions looks at how our presence on the planet affects the world around us and how we have an effect on it as well.

## SCIENCE ELECTIVES

Members of the Classes of 2023-2024 will choose two additional credits from this area to meet the graduation requirement. Chemistry and Earth \& Space Science run every year while the other electives run every OTHER year. Please see note in course description to check availability.

1306 Chemistry-CP/H Grades 11-12, 1 credit Prerequisite: Successful completion of Physical Science, Algebra I and Biology.
This course is an NGSS aligned introductory course of chemistry that will prepare students for an advanced high school chemistry course, introductory college chemistry courses, and/or the workforce. This course focuses on the composition and properties of elements and compounds, the states of matter, atomic structure, chemical bonding and interactions and lastly, how all these topics work together to teach students an understanding of the interaction of matter and energy in the world around us. This course includes a laboratory portion that will place emphasis on hand-ons learning, proper use of scientific equipment, how to conduct chemical experiments whilst obtaining accurate data/measurements and use of technology. Overall, this course will teach students the necessary information to understand the basics of chemistry, as well as solve problems, reason abstractly and learn to think critically.

## 1304 -Earth \& Space Science-CP Grades 10-12, 1 credit (Elective 2022-2024, required 2025 and beyond)

In this course we will focus on five overarching themes that explain the world around us: Space Systems, the History of Earth, Earth Systems, Weather and Climate and Human Interactions. Space Systems will look at the processes, formation and evolution of the solar system and the universe. History of the Earth will look at planet makeup and development along with the concepts of geologic time and the evidence and age of life on the planet. Earth Systems will look at what the Earths made up of, and how its make up drives processes that are constantly reshaping what we see. Weather and Climate looks at how the atmosphere works and how that drives local weather and long range climatic conditions. Human Interactions looks at how our presence on the planet affects the world around us and how we have an effect on it as well.

## 1308 Environmental Science-CP Grades 10-12, 1 Credit

## Prerequisite: Successful completion of Physical Science, Biology and Algebra I.

The intent of the Environmental Science course is to educate students about the impacts of human activity on earth and its natural systems. Unit topics include World Population and Food Resources, Ecosystems, Natural Resource Management, Energy, Air Resources, Water Resources and Stewardship. Topics will include global populations, food resource issues, deforestation, urban development, recycling, sustainable resource use, alternative energy, land conservation, global climate change and other environmental issues in the news. As a project based course, students will be tasked with designing solutions for a variety of issues facing us in the future. Each until will have a STEM based project along with a writing assignment and a critical thinking problem, as well as labs, tests and end of unit questions from the text.

## 1321 Physics-CP/H Grades 11-12, 1 Credit

Prerequisite: Successful completion of Algebra II and Physical Science.
This academically rigorous course is designed to give students a good understanding of all of the major topics in physics, ranging from kinematics, forces, energy, momentum, circular motion, thermodynamics, waves and light, electricity, and magnetism. Curriculum is driven heavily through the physical science components of next generation science standards. Emphasis will be placed on conceptual understanding and mathematical problem solving skills, with extensive use of algebra and trigonometry. Students will be assessed through problem sets, tests, quizzes, and lab reports. Additional alternative assessments will be employed, including designing labs, a research paper, designing a physics demonstration, and other
projects. Students considering a four-year degree program in science or engineering should take this course.

## 1316 Anatomy and Physiology_CP Grades 11-12, 1 Credit (Runs every other year) Prerequisite:

## Successful completion of Biology.

Anatomy and Physiology is an NGSS guided course that focuses on the structure and function of the human body. In this course, students will learn about the levels of organization which demonstrates how the human body is formed from cells to tissues, tissues to organ, organ to organ system and organ systems to organism. The levels of organization allow students to understand the human body at a micro- and macro- level and how it all needs to work together for the human body to function. Students will also learn a minor portion of pathology, the study of causes and effects of injuries and diseases. The laboratory portion of this course focuses on hands-on learning through the use of dissections, simulated blood and urine chemical experiments, case studies and use of technology. Furthermore, students will learn how to properly and safely use laboratory equipment and accurately measure and record data.

## TBD Natural History of New Hampshire-(CP/H) Grades 9-12, . 5 Credit

Fall Semester: In Natural History of New Hampshire students learn about their state through the lenses of history of the land, forest, marine, freshwater, mammals \& more, and the interactions of these ecological zones, climate \& weather, with human culture.
Students will be outside throughout the semester and are expected to dress accordingly. This is a lab-based course. All students are expected to learn common names and Honors level students are expected to learn common and scientific species identification. Students are required to keep a science journal throughout the course.

## TBD Natural Disasters-(CP/H) Grades 9-12, . 5 Credit

Spring Semester: Natural Disasters explores blizzards \& ice storms, hurricanes, wildfires, earthquakes \& tsunamis, floods \& landslides, volcanoes \& limnic eruptions, and tornadoes. Topics will focus on specific historical events, New Hampshire related natural disasters, and predicting \& mitigating future events. Students will explore the science, engineering, and human element of each natural disaster. Teaching and assessments will be research, activities, engineering projects, and public service announcements.

## WORLD LANGUAGES

Languages are the most fundamental expression of culture. Therefore, the study of a world language offers students an opportunity to become well informed, to be culturally aware members of the multi -lingual world, to converse in another language, and to read literature and daily publications written in a world language. Minimum of two credits of a world language is a requirement for students wishing to attend most four-year colleges and in some cases, other post-secondary pursuits.

## SPANISH

## 1421 Spanish I-CP Grades 9-12 1 Credit

This course is intended for college preparatory students. It will focus on the development of basic language proficiencies. Speaking and understanding, reading and writing skills will be stressed. Students are also introduced to various aspects of Hispanic and Spanish culture and geography.

## 1422 Spanish II-CP Grades 10-12 1 Credit

This course provides a refinement on the basic listening, writing and speaking skills introduced in Spanish I, as well as a strong focus on grammatical and syntactical skills.

## 1403 Spanish III—H Grades 11-12 1 Credit Prerequisite: Successful completion of Spanish II with a

 minimum grade of a $C$.Third level Spanish reviews and reinforces skills in speaking, listening, reading and writing acquired in earlier courses. Spanish III introduces more advanced grammar that is reinforced by class discussion and short compositions. Vocabulary is greatly expanded upon and readings that are more sophisticated are read and discussed in Spanish while integrating culture. At the end of the course, students are expected to be able to express themselves in Spanish with a greater degree of fluency and accuracy.

1424 Spanish IV—H Grades 11-12 1 Credit Prerequisite: Successful completion of Spanish II with a minimum grade of a $C$.
This course exposes students to more authentic readings in Hispanic literature. Vocabulary and structure are expanded and more complex grammar is continued. Music and film are used increasingly. Students will continue refining their Spanish and will gain higher levels of proficiency in the four skill areas.
**Any other language that students are interested in taking would be through VLACS. Please speak to a school counselor to learn more about this process.

## BUSINESS AND TECHNOLOGY

The Business and Technology Department provides course selections to prepare students with the 21st century skills needed for success in post-secondary educational pursuits, as well as employment in today's rapidly changing workplace.

## 1604 Information Technology Grades 9-12 0.5 Credit

Students will master word processing and spreadsheets. Word processing skills include document layouts, formatting, use of templates and complying with proper research paper conventions. Spreadsheet skills include data entry, creating formulas, using functions, formatting spreadsheets for presentation and creating charts. This is a required foundation course that prepares students with the necessary skills for the rest of their high school career and post-secondary options, including college and career tracks.

1647 Personal Finance Grades 11-12 . 5 Credit
Did you know that you can start building wealth in high school? Individual choices directly influence occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will design personal and household budgets utilizing checking and saving accounts, gain knowledge in finance, debt and credit management, and evaluate and understand insurance and taxes. This course will provide the keys to your financial independence. This course can be counted as a math elective!

## BUSINESS AND TECHNOLOGY ELECTIVES

## 1616 Photoshop Grades 10-12 1 Credit

Prerequisite: Successful completion of Information Technology with a minimum grade of a C or instructor per mission.

Students will learn the fundamentals of digital editing using Adobe Photoshop. They will learn basic image design elements, destructive and non-destructive editing techniques, and the use of layers, layer enhancements, and filters. Wherever possible, students will use photos that they have taken.

1605 Accounting I-CP Grades 10-12 1 Credit
Prerequisite: Successful completion of Information Technology with a minimum grace of a C.
What are you worth (financially, that is)? Accounting covers the concepts that help you determine your net worth. Learn about assets, liabilities and capital and the role each one plays in determining if you will get a loan or not. Find out how a business can have cash on hand and still lose money. You will learn how to write transactions and use them to create basic financial statements. All accounting work is done using spreadsheets. This course prepares students for both college and direct entry to the job market. Depending on interest, Accounting II will be offered 2024/2025.

## 1608 Marketing I-CP Grades 10-12 1 Credit

Prerequisite: Successful completion of Information Technology with a minimum grade of a C.
Introduce yourself to the exciting world of marketing! Learn how products are brought to market from the idea stage to consumers. Create new products and learn how to market them efficiently. This is a "hands on" creative course with practical and fun activities: Developing ad layouts, creating displays, analyzing television, radio and internet ads as well as exploring advertising and visual merchandising. Students develop creative billboard ads, direct-mail brochures and explore media careers. Depending on interest, Marketing II will be offered 2024/2025.

1610 Web Design I Grades 10-12 .5 Credit
Prerequisite: Successful completion of Information Technology with a minimum grade of a C.
Ever notice how all Facebook accounts have the same basic design elements and layouts? Web Design I will teach you how to create your own web pages. You will master the tools necessary to create basic websites, including structural elements such as images, hyperlinks and master style sheets. This course allows you to apply the principles of design in order to create a unique experience on the internet.

1613 Web Design II Grades 11-12 . 5 Credit (will be run in 2024-2025)
Prerequisite: Successful completion of Web Design I with a minimum of a C.
Students will use advanced CSS to control positioning and be introduced to interactive web pages and learn the basic principles of client-side programming by incorporating scripts into their web design.

1509 General Business Grades 9-12 1 Credit
Prerequisite: Successful completion of Information Technology with a minimum grade of a C.
Learn to succeed in a business-driven world as a competent employee, manager or entrepreneur. This class introduces business ownership, operations, ethics and technology. The course uses current events to illustrate practical examples of business principles at work in the real world. Students will learn communication, problem-solving and decision-making skills and are provided with a solid foundation for all other business courses.

## TECHNOLOGY AND INDUSTRIAL ARTS

Technology education provides a broad base understanding of industry and technology for all students. Laboratory experiences involve the students in conceiving, designing, and producing projects using materials, tools, and processes that are useful throughout life.

Note: In certain courses, students will be expected to assume the cost for projects that exceed the basic requirements.

## 1620 Woodworking Grades 9-12 1 Credit

Woodworking is an introductory course in the fundamentals of woodworking with instruction in basic hand and machine tool processes. This course will emphasize the selection, care and proper use of hand tools, the identification of various woods, together with the procedures and practices common to small wood project construction. Project layouts and design, construction techniques, basic machine operation and safety are stressed. The student will assume the cost of the projects beyond the basic requirements.

1622 Advanced Woodworking Grades 10-12 1 Credit Prerequisite: Woodworking
Advanced Woodworking will continue to build on the traits of Woodworking I introducing larger and more complex projects. Students will work in groups with leaders and deadlines to meet. Individual projects will run simultaneously as students learn to manage their time more efficiently. Advanced tool use, critical thinking, leadership, time management, work ethic, and community awareness are a few of the key components of this program. As always, safety is paramount. Students may be charged a lab fee for projects that extend beyond the classroom requirements.

## 1624 Computer Aided Drafting and Design (CADD) Grades 10-12 1 Credit Prerequisite: Information Technology with a C+ or better

In this course, students will learn how to create technical drawings using AutoCAD. Students will compile a portfolio of 2D and 3D drawings. Students will use drawings as a vehicle for documenting and communicating ideas. Students may pull from a variety of disciplines for drawing subjects including woodworking, mechanical, civil, electrical maritime, aerospace, architectural, fashion, landscaping or other relevant areas for quarterly and final projects.

## FAMILY CONSUMER SCIENCE AND HEALTH

The Family and Consumer Science Department provides courses of study that are designed to help students keep pace with rapidly changing patterns of living in today's world. As the roles, demands, and interests of all members of the family are undergoing change, students need preparation for assuming a multitude of responsibilities as cooperative family and community members.

This class encourages the understanding of human development in the areas of physical, intellectual, socio-emotional development. The course content will deal with major phases of the life cycle, from prenatal to aging. Sensitive subjects such as child and elderly abuse as well as death and grieving will be addressed.

## 1649 Food and Nutrition Grades 9-12 1 Credit

The focus of this course is on the fundamentals of food preparation, safety/sanitation, and meal planning, as it relates to nutrition and healthy eating habits. This course also includes an exploration of ethnic and regional foods, as well as baking and pastries.

1631 Housing and Interior Design Grades 9-12 1 Credit
While analyzing influences on architectural and design, the evaluation of the use of products in meeting specific design needs within the housing and interior furnishing industry will be explored throughout the entirety of this course. Demonstration of design ideas through visual presentations will be expected in order to prepare the student for their desired career path.

## FINE ARTS

Art courses strive to enhance creativity, to instill an appreciation for visual beauty, and to develop skills that will be useful to all students. These courses are also designed to prepare students who intend to pursue art activities beyond high school either in college, as a career, or as a hobby. Through these courses, students are given the opportunity to develop a professional level of competence in one or more areas of artistic expression. Individual projects involving materials and equipment that is not in general use may involve nominal laboratory expenses.

1516 2D Studio Art-CP Grades 9-12, 1 Credit

Students experiment with the media and techniques used to create a variety of two-dimensional art works through the development of skills in drawing, painting, printmaking, collage, and/or design. Students practice, sketch, and manipulate the structural elements of art to improve mark making and/or the organizational principles of design in a composition from observation, research, and/or imagination. Through the critique process, students evaluate and respond to their own work and that of their peers. This course incorporates hands-on activities and consumption of art materials.

## 1517 3D Studio Art Grades 9-12, 1 Credit

Students experiment with the media and techniques used to create a variety of three-dimensional artworks through the development of skills in figurative or non figurative sculpture, ceramics, assemblage and 3-D fabric/fiber arts. 3D Design is intended for highly motivated students who are seriously interested in sculptural issues. The artistic focus in this course is the development of individual expression through the use of creative visual problem solving. Experimentation with different techniques, compositional approaches, and media will be encouraged. Emphasis will continue to be placed on the elements and principles of art and design, basic artistic concepts, and "periods of art history.

## 1520 Advanced Studio Art-H Grades 10-12, 1 Credit

Studio Art is designed for students who are seriously interested in the practical experience of art. Studio Art students submit portfolios for evaluation at the end of the semester and explore careers in the arts. The artistic focus in this course is the development of individual expression through the use of creative visual problem solving. Experimentation with different techniques, composition approaches, and media will be encouraged. Emphasis will continue to be placed on the elements and Principles of Design.

## 1683 Introduction to Drama Grades 9-12, 1 Credit

Students will learn about theater history while learning and practicing acting, directing, and technical theater skills. Students will participate in improvisation and theater games, analyze the works of famous playwrights, and learn about set design and construction, the application of stage make-up, how to operate lights and sound equipment, and how to perform confidently on stage. Students will be afforded the opportunity to also work towards individual theater goals. Students will be expected to help produce a Drama Night with performances such as monologues, short scenes, and one-act plays.

## ART ORIENTED ELECTIVES

The following courses may be used as an Art oriented elective:

## Chorus

Band
Guitar
Piano
Woodworking

Photoshop
CADD

## PHYSICAL AND HEALTH EDUCATION

1703 Health Grades 9-12, 0.5 Credit
Health is the study of the social, mental, emotional, and physical factors influencing one's total wellness. Issues relevant to the students are discussed, and the student is actively engaged in the learning process. The goal is to give the student the interpersonal skills and background of knowledge needed to make well-informed decisions, in order to promote a healthy lifestyle.

1700 Physical Education I Grades 9-12, 1 Credit
Introduction to a variety of team and individual sports to include: fitness testing, soccer, field hockey, flag football, volleyball, basketball, softball, track and field, lacrosse, floor hockey, weight training, and selected racquet sports. Emphasis will be on skill development and technique. A portion of the course will be used to implement a fitness program, involving cardiovascular and muscular exercises.

1701 Physical Education II Grades 10-12, 1 Credit Prerequisite: Successful completion of Physical Education I.
Students learn sports, such as archery, golf, Frisbee, volleyball, bowling, and cross-country skiing. In addition, students will be encouraged to increase their skill and knowledge in select team and individual sports. Students implement their own fitness program from previously learned knowledge.

1702 Athletic Physical Education Grades 9-11, 1 Credit Students will need to have the Athletic Director sign an application for credit.
Any student who successfully completes two seasons on a Mascenic Regional High School athletic team will be awarded one credit of Physical Education toward the graduation requirement. This credit can only be received once. Additionally, Athletic PE credit MUST be completed by the end of the junior year. Seniors do not qualify for Athletic PE credit.

## MUSIC

## 1680 Concert Band-H Grades 9-12, 1 Credit

All band course requirements are implemented, as it runs concurrent with the band course, in addition to an honors curriculum. This course requires both ensemble and solo activities, which are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature, and integration of other applicable disciplines. Experiences include improvising, playing by ear, sight-reading, and researching music. Students are required to accomplish the following and more:

- Audition for Monadnock Valley Music Festival
- Audition for All-State Band or Choir
- Practice and perform individual etudes or pieces from an instrumental/choral workbook
- Perform in a chamber ensemble or solo at performances
- Compose music or write research papers for their primary instrument or voice
- Develop a multi-layered portfolio of audio, video, and written samples of their work

1559 Concert Band Grades 9-12, 1 Credit Prerequisite: Previous formal instrumental music experience (at Boynton or otherwise) or approval from the music director.
This ensemble focuses on the concert, marching/pep, and chamber styles of music performance. Students will study and perform a variety of standard and contemporary literature. Ensemble studies develop independence in the reading and performance of music. The combined ensemble will perform at concerts, festivals, and school and community functions. Performances and rehearsals are required, as well as participation in one monthly combined full band rehearsal after school.
1681 Concert Choir-H Grades 9-12, 1 Credit
All choir course requirements are implemented, as it runs concurrent with the band course, in addition to an honors curriculum. This course requires both ensemble and solo activities, which are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature, and integration of other applicable disciplines. Experiences include improvising, playing by ear, sight-reading, and researching music. Students are required to accomplish the following and more:

- Audition for Monadnock Valley Music Festival
- Audition for All-State Band or Choir
- Practice and perform individual etudes or pieces from an instrumental/choral workbook
- Perform in a chamber ensemble or solo at performances
- Compose music or write research papers for their primary instrument or voice • Develop a multi-layered portfolio of audio, video, and written samples of their work

1551 Concert Choir Grades 9-12, 1 Credit
This class is open to all students who desire to experience quality choral music in a daily classroom setting. Students will work on improving their musicianship skills while exploring a variety of musical styles, with and without accompaniment. Students enhance their understanding of music and improve technical skills while participating in the thrill of singing with a group. Students perform a variety of musical styles, as well as perform in concerts, contests, as well as, school and community functions. Performances and rehearsals are required.

## 1542 Intro to Guitar Grades 9-12, .5 Credit

This course is open to students who are curious about music and wish to learn how to play the guitar. It will introduce students to the basics of music through exploring various forms of music and styles. Through the study of literature, exercises, activities, and small group playing, students are expected to progress and continually refine their technique through daily practice. Growth as a player will be assessed according to individual performing skills and practice time spent. Students will also study famous guitar players as well as musical styles throughout history. They will obtain a basic understanding of music theory as it applies to the guitar.

TBD Guitar Grades 9-12, .5 Credit Prerequisite; Intro to Guitar or ability to demonstrate understanding of concepts covered in Intro to Guitar.
This course is a continuation of Intro to Guitar. Students will build on the skills acquired in Intro to Guitar to be able to apply music theory in creating their own music.

## 1551 Piano Grades 9-12, 1 Credit

This course is open to students who are curious about music and wish to learn how to play the piano. It will introduce students to the basics of music through exploring various forms of music and styles. Through the study of literature, exercises, activities, and small group playing, students are expected to progress and continually refine their technique through daily practice. Growth as a player will be assessed according to individual performing skills and practice time spent. Students will also study famous piano players as well as musical styles throughout history. They will obtain a basic understanding of music theory as it applies to the piano.

## 1553 Music Theory and Appreciation Grades 9-12, 1 Credit

This course is open to anyone interested in music. Students in this course will develop an appreciation for the music they listen to by studying the history of pop and rock music throughout the 20th and 21st centuries. It is an active study of how music influences our culture and who we are as human beings. Students will learn about the structure of music and basic compositional skills through the study of music theory, including note reading, rhythms, scales, key signatures, chords, tonality, and compositional techniques. Students will learn how to take all of these theory skills and apply them to writing their own music, through an online compositional program.

