Monadnock Regional Middle High School

The community of Monadnock Regional Middle High School is dedicated to engaging all students in personal, civic and academic growth.

PROGRAM OF STUDIES 2026-2027

Administrative Offices:

Brett Gottheimer- Principal
Becky Russell - High School Assistant Principal
Catlin McLaughlin - Middle School Assistant Principal
Kathryn Schnare - Special Education Administrator
Shannon Topa - Athletic Director

School Counselors:

Lindsey Charron - Middle School Counselor
Samantha Sestito - High School Counselor (A-K)
Bethany Maynard - High School Counselor (L-Z)

Division Leaders

Linda Minickiello - ELA and Social Studies
Erin Condap - FACS and Technology
Trevor Blanchard - Math
Matt Caron - PE, World Language, Fine and Performing Arts
John Naso - Science

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

The goals of NEASC Accreditation are effectiveness, improvement, and public assurance. Unlike popular websites, this does not involve comparing or ranking schools, but rather establishes a level of acceptable quality for all Accredited schools. Accreditation has two faces: quality assurance and school improvement. Attention to the former has proved essential defending the independence of schools and providing relief from external regulation.

The primary function of NEASC Accreditation, however, is school improvement. Every independent school accredited by NEASC is assessed using the same protocols and materials, thus assuring that the school is faithful to its missions, conducts its programs appropriately to meet its goals, and fulfills the Standards of Accreditation established by the Commission on Independent Schools.

Table of Contents

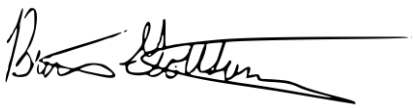
Dear Monadnock Students,

The MRMHS Program of Studies has been created to support you throughout your high school journey. Whatever path you choose and whichever courses you take, this guide is intended to help answer questions and provide direction as you plan for the future.

I strongly encourage students and their families to read this information carefully and to discuss it with their school counselor. Counselors are an important resource and can help answer questions, talk through options, and assist students in selecting an appropriate and balanced course load for the upcoming school year. As you plan your schedule, keep both short and long-term goals in mind. The courses you choose can have a meaningful and lasting impact on future opportunities.

At Monadnock, our programming is intentionally designed with student interests, strengths, and future goals in mind. At the heart of all we do is a focus on student learning and achievement, regardless of the specific path or courses students choose. Please do not hesitate to reach out to me, other members of the administrative team, or your school counselor if we can be of support.

Brett Gottheimer



Principal
Monadnock Regional Middle High School

Introduction to the Program of Studies

The Program of Studies at Monadnock Regional Middle High School is designed to provide a description of courses to help students make informed decisions about their course selection. The Program of Studies meets the academic needs of students for their goals, interest and post-secondary plans.

Please follow the guidelines below so the best possible program can be scheduled to suit each student's four-year and post-secondary goals.

- Students must take all of the courses listed as required.
- Students must earn the required state credits to graduate. Credit will be awarded when all course competencies have been met.
- The school will make every effort to honor students' requests, but in the event of scheduling conflicts, students will be given the opportunity to choose other subjects whenever possible.
- After the first two weeks of a course, requests for schedule changes will not be honored except in cases of extenuating circumstances and with Principal approval.
- Students in grades 9, 10 and 11 must take at least six credited classes at MRMHS per semester.
- Students in the 12th grade must take at least five credited classes at MRMHS per semester.

Promotion Requirements

Students will be promoted to the next grade but will be required to repeat any required courses that they did not receive credit for. Any student who has not met the minimum requirement of 21 credits and specific graduation requirements by the end of the 4th year, will be retained and may be eligible to graduate the following year.

Add/Drop Procedure

Students are encouraged to finalize their schedules prior to the first day of school. If changes need to be made due to placement issues or scheduling conflicts, they must be initiated within the first two weeks of a semester. No changes will be considered without extenuating

circumstances and with Principal approval. Teacher initiated changes will be considered for placement considerations at any time during the year with permission of the parent, School Counselor and Principal. Two weeks after the first progress report, the letter grade at the time of the drop will be posted on the student's official transcript.

Early Graduation Procedure

To be approved for early graduation, the parent/guardian and their child must submit the following packet by July 1st (entering their final graduation year) to the Principal.

Step 1: A letter written and signed by the parent/guardian and student stating their request and reason for early graduation.
Step 2: Parent/Guardian and student forwards the letter to the appropriate School Counselor.
Step 3: The School Counselor writes a letter outlining:

- Student's credits earned to date
- Student's courses needed to complete High School diploma
- Student's post-secondary plans
- Final recommendation to the Principal

Step 4: The School Counselor submits the packet to the Principal containing parent/student letter, School Counselor's letter and student transcript.
Step 5: The Principal makes the final decision and will reach out to the student, family and School Counselor with the decision.

Academic Levels

Monadnock's courses are designed to suit students' academic abilities. Advanced Placement, Honors, College Prep (CP), and General vary in pace and depth. This allows teachers to use differentiation techniques to meet individual students' needs. At Monadnock, a number of our courses are categorized into those four academic levels: Advanced Placement, Honors, College Prep and General.

Suggested Course Progression for Class of 2027-2029

9th grade			**10th grade**	
English 9	1 credit		English 10	1 credit
Algebra • 9th grade students who have successfully earned Algebra credit in 8th grade will not need to repeat Algebra in 9th grade. Students will be placed in a Geometry course.	1 credit		Geometry	1 credit
Earth Science	1 credit		Biology	1 credit
History of World Civilization	1 credit		US History 1 • In addition to taking USH 1, students may also elect to take AP European History.	1 credit
Physical Education	1 credit		Life Choices	.5 credit
Elective course(s)	1+credits		Elective course(s)	1.5 credits
11th grade			**12th grade**	
English 11	1 credit		English 12	1 credit
Mathematics (Algebra II)	1 credit		Mathematics	1 credit
Physical Science	1 credit		Science Elective	1 credit
US History 2	1 credit		Civics • Students must pass the NHSAS naturalization examination developed by the 2020 United States Citizen and Immigration Services, with a 70 percent or better, in order to graduate.	.5 credit
Elective course(s)	2+ credits		Economics	.5 credit
			Elective course(s)	1+ credit

Suggested Course Progression for Class of 2030 and Beyond

9th grade			10th grade	
English 9	1 credit		English 10	1 credit
			Writing	.25 credit
Algebra I • 9th grade students who have successfully earned Algebra credit in 8th grade will not need to repeat Algebra in 9th grade. Students will be placed in a Geometry course.	1 credit		Geometry	1 credit
Earth Science	1 credit		Biology	1 credit
History of World Civilization	1 credit		NH Government/Civics, History, & Constitution	1 credit
			Logic and Rhetoric	.5 credit
Physical Education	1 credit		Life Choices	.5 credit
Digital Literacy	.5 credit		Art	.5 credit
Elective course(s)	.5+credits		Elective course(s)	1+ credit(s)
11th grade			**12th grade**	
English 11	1 Credit		English 12	1 Credit
Writing	.25 Credit		Writing	.5 Credit
Mathematics (Algebra II)	1 credit		Mathematics	1 credit
Physical Science	1 credit		Science Elective	1 credit
US History	1 credit		Civics • Students must pass the NHSAS naturalization examination developed by the 2020 United States Citizen and Immigration Services, with a 70 percent or better, in order to graduate.	.5 credit
Personal Finance	.5 credit		Economics	.5 credit
Elective course(s)	1.5+ credits		Elective course(s)	1+ credit

Graduation Requirements for Class of 2027-2029

Required Subjects	***MRMHS***	***NH Scholars***	***Distinction*** (4+ classes must be H)
English:	**4.0 Credits**	**4.0 Credits**	**4.0 Credits** (Must be CP, H, or AP)
Mathematics:	4.0 Credits (at least one credit algebra related content)	4.0 Credits (Algebra I & II, Geometry)	4.0 Credits (CP, H, AP)
Sciences:	4.0 Credits (All must include 1 Credit physical **and** 1 Credit biological sciences)	4.0 Credits (All must include 1 Credit physical **and** 1 Credit biological sciences)	4.0 Credits (CP, H, AP) (All must include 1 Credit physical **and** 1 Credit biological sciences)
Civics:	.50 Credit	.50 Credit	.50 Credit
Economics:	.50 Credit	.50 Credit	.50 Credit
World History	1.0 Credit	1.0 Credit	1.0 Credit (CP, H, AP)
US History:	2.0 Credit	2.0 Credit	2.0 Credit (CP, H, AP)
World Languages:		**2.0 Credits** (Consecutive Years)	**3.0 Credits** (Consecutive Years)
Arts Education:	.50 Credit	.50 Credit	.50 Credit
Information & Communication Technologies:	.50 Credit	.50 Credit	.50 Credit
Health Education:	.50 Credit	.50 Credit	.50 Credit
Physical Education:	1.0 Credit	1.0 Credit	1.0 Credit
Electives:	2.50 Credits	**3.0 Credits**	**4.50 Credits**
Total:	***21 Credits***	***23.5 Credits***	***26 Credits***

Graduation Requirements for Class of 2030 and Beyond

Content Area	***MRMHS***	***NH Scholars***	***Distinction*** (4+ credits must be H or AP)
English	**5.0 Credits** (4 Credits in ELA and 1 credit in Writing)	**5.0 Credits** (4 Credits in ELA and 1 credit in Writing)	**5.0 Credits** (Must be CP, H, or AP) (4 Credits in ELA and 1 credit in Writing)
Mathematics	**4.0 Credits** (1 credit Algebra, and .5 credit in Statistics or Data Analysis)	**4.0 Credits** (1 credit Algebra, and .5 credit in Statistics or Data Analysis and must include Algebra I, II, & Geometry)	**4.0 Credits** (Must be CP, H, or AP) (1 credit Algebra, and .5 credit in Statistics or Data Analysis and must include Algebra I, II, & Geometry)
Sciences:	**4.0 Credits** (4 Credits which must include 1 Credit in physical **and** 1 in biological sciences.)	**4.0 Credits** (4 Credits which must include 1 credit in physical **and** 1 in biological sciences.)	**4.0 Credits** (Must be CP, H, or AP) (4 credits which must include 1 credit in physical **and** 1 in biological sciences.)
Social Studies	**4.5 Credits** (.5 Credit Civics, .5 Credit Economics, 1 Credit World History, 1.0 Credit NH Government/Civics/ History and Constitution, .5 Credit Logic and Rhetoric, 1 Credit US History)	**4.5 Credits** (.5 Credit Civics, .5 Credit Economics, 1 Credit World History, 1.0 Credit NH Government/Civics/ History and Constitution, .5 Credit Logic and Rhetoric, 1 Credit US History)	**4.5 Credits** (.5 Credit Civics, .5 Credit Economics, 1 Credit World History, 1.0 Credit NH Government/Civics/ History and Constitution, .5 Credit Logic and Rhetoric, 1 Credit US History)
World Languages:	Not required	**2.0 Credits** (Consecutive Years)	**3.0 Credits** (Consecutive Years)
Arts Education:	**.50 Credit**	**.50 Credit**	**.50 Credit**
Digital Literacy	**.50 Credit**	**.50 Credit**	**.50 Credit**
Health Education:	**.50 Credit**	**.50 Credit**	**.50 Credit**
Physical Education:	**1.0 Credit**	**1.0 Credit**	**1.0 Credit**
Financial Literacy	**.50 Credit**	**.50 Credit**	**.50 Credit**
Electives:	**2.0 Credits**	**2.5 Credits**	**4.0 Credits**
Total:	***22.5 Credits***	***25 Credits***	***27.5 Credits***

Husky Habits

All courses at Monadnock Regional Middle High School are designed around essential knowledge and skills described by the following school-wide Husky Habits. These are the skills that we believe all students will need in order to be successful in the 21st century. All students must be college or career ready by the time they graduate from high school. Even if a student chooses not to attend post-secondary institutions upon graduation, they must have the knowledge and skills which will enable them to succeed in whichever direction they decide to pursue.

The requirements to work in today's world are constantly changing. Most careers demand continuous training. Most employers will require their employees to continue to learn to further their knowledge-base and to learn new skills. The technology and work processes in the 21st century continue to develop, improve, and change. Part of our job at Monadnock is to help ensure our students become successful young citizens that are prepared to adapt to the ever changing world.

The following Husky Habits are what we embed in our curriculum at Monadnock. We believe that these skills are important to have in order to help students become successful adults in the future. Please take a moment and look over our Husky Habits and their rubrics.

LIFE AND CAREER SKILLS:

The successful navigation of life after Monadnock

	4 Advanced	3 Proficient	2 Improving	1 Beginning	0 No Evidence
	I can consistently:	Most of the time I can independently:	With coaching, I can:	With direct assistance, I can:	
Collaboration	1. Listen to others and share resources and ideas 2.Demonstrate flexibility 3. Accept and fulfill roles in a group	1. Listen to others and share resources and ideas 2.Demonstrate flexibility 3. Accept and fulfill roles in a group	1. Listen to others and share resources and ideas 2.Demonstrate flexibility 3. Accept and fulfill roles in a group	1. Listen to others and share resources and ideas 2.Demonstrate flexibility 3. Accept and fulfill roles in a group	
Respect	1. Follow classroom expectations 2.Demonstrate courtesy to others	1. Follow classroom expectations 2.Demonstrate courtesy to others	1. Follow classroom expectations 2.Demonstrate courtesy to others	1. Follow classroom expectations 2.Demonstrate courtesy to others	
Self-Direction	1. Initiate work and stay on task 2. Ask for and use feedback 3. Meet deadlines	1. Initiate work and stay on task 2. Ask for and use feedback 3. Meet deadlines	1. Initiate work and stay on task 2. Ask for and use feedback 3. Meet deadlines	1. Initiate work and stay on task 2. Ask for and use feedback 3. Meet deadlines	

PROBLEM-SOLVING:

Applying previous learning to new situations

4 Advanced	3 Proficient	2 Improving	1 Beginning	0 No Evidence
I can consistently:	Most of the time I can independently:	With coaching, I can:	With direct assistance, I can:	
1.Understand and evaluate the problem or issue 2. Identify strategies based on sufficient and reliable resources 3.Implement a strategy with justification 4. Analyze and evaluate the results of a strategy to determine the solution	1.Understand and evaluate the problem or issue 2. Identify strategies based on sufficient and reliable resources 3.Implement a strategy with justification 4. Analyze and evaluate the results of a strategy to determine the solution	1.Understand and evaluate the problem or issue 2. Identify strategies based on sufficient and reliable resources 3.Implement a strategy with justification 4. Analyze and evaluate the results of a strategy to determine the solution	1.Understand and evaluate the problem or issue 2. Identify strategies based on sufficient and reliable resources 3.Implement a strategy with justification 4. Analyze and evaluate the results of a strategy to determine the solution	

COMMUNICATION:

The transfer of ideas and information

4 Advanced	3 Proficient	2 Improving	1 Beginning	0 No Evidence
I can consistently:	Most of the time I can independently:	With coaching, I can:	With direct assistance, I can:	
1. Use media fluently 2. Understand and analyze the essential parts of the topic 3. Choose media appropriate for the audience/ message 4. Listen/read attentively and respectfully	1. Use media fluently 2 .Understand and analyze the essential parts of the topic 3. Choose media appropriate for the audience/ message 4. Listen/read attentively and respectfully	1. Use media fluently 2. Understand and analyze the essential parts of the topic 3. Choose media appropriate for the audience/ message 4. Listen/read attentively and respectfully	1. Use media fluently 2.Understand and analyze the essential parts of the topic 3. Choose media appropriate for the audience/ message 4. Listen/read attentively and respectfully	

TECHNOLOGY LITERACY:

Human innovation in action

4 Advanced	3 Proficient	2 Improving	1 Beginning	0 No Evidence
I can consistently:	Most of the time I can independently:	With coaching, I can:	With direct assistance, I can:	
1. Use and manage technological systems and resources appropriately 2. Use technological systems safely	1. Use and manage technological systems and resources appropriately 2. Use technological systems safely	1. Use and manage technological systems and resources appropriately 2. Use technological systems safely	1. Use and manage technological systems and resources appropriately 2. Use technological systems safely	

CREATIVITY:

The development of new and innovative ideas and artifacts

4 Advanced	3 Proficient	2 Improving	1 Beginning	0 No Evidence
I can consistently:	Most of the time I can independently:	With coaching, I can:	With direct assistance, I can:	
1. Generate original ideas 2. Combine ideas in the creation of an original artifact	1. Generate original ideas 2. Combine ideas in the creation of an original artifact	1. Generate original ideas 2. Combine ideas in the creation of an original artifact	1. Generate original ideas 2. Combine ideas in the creation of an original artifact	

Program of Studies - Key

Icons indicate whether a course counts toward or fully fulfills a graduation requirement, and whether Advanced Placement or college credit options are available.

AP	**Advanced Placement Class**
	**College Credit Option Available**
	**Counts toward English requirement**
	**Meets the Fine Arts Requirement**
	**Meets the Digital Literacy Requirement**
	**Meets the Health Requirement**
	**Meets the Personal Finance Requirement**
	**Counts toward Social Studies Requirements**
	**Counts toward Math Requirements**
	**Meets a World Language Requirement**
	**Counts toward Physical Education requirement**

High School Course Descriptions

Business Technology

Accounting I (Grades 9-12)

1 credit

This class is part of the "Running Start" College Credit Program and may be taken for 3 college credits. Forms of business studied will be single proprietorship, partnerships, and corporations organized as service, merchandising, and manufacturing businesses. The class will cover topics such as journalizing, posting, financial statements, taxes, payroll, business ethics, concepts, accounting as a career, and legal issues facing accountants. The use of computer software and several business simulations supplemented by college materials will be used to enhance the student's educational experience.

Advanced Placement Computer Science Principles (Grades 11-12)

1 credit

Offered during alternate years. This college-level course offers a multidisciplinary approach to teaching the underlying principles of computation. The 'project-based' course will introduce students to the creative aspects of programming, as well as covering abstractions, algorithms, data sets, the Internet, cybersecurity concerns, and computing impacts on society. Students will have the opportunity to use current technologies to create individually designed artifacts for both self-expression and problem solving.

Prerequisites: One other computer course

Introduction to Business Management (Grades 9-12)

.5 credit

This course provides a framework for understanding business organizations and the relationships that exist for an owner in the areas of accounting, management, marketing, human resources, and production and distribution. The course focuses on the inter-relationship of the components and their role in the business process. This course is part of the College Credit Running Start Program and may be taken for 3 college credits. It is strongly recommended for students that are planning on attending a post-secondary school for studies in general business, economics, accounting or management administration. All four areas will be covered in this course.

Digital Literacy

.5 credit 💻

This one-semester course is intended as a practical, hands-on guide to help you understand the basic computer skills required during your college education and/or when pursuing a career. Each lesson contains one or more lesson activities. We will cover basic computer hardware and software and study the history of the Internet to use its capabilities more effectively. Students will explore some of today's most

powerful tools and computer applications. Students will acquire the kinds of essential skills needed for success after high school graduation. **This course fulfills the digital literacy requirement.**

Computer Game Design (Grades 10-12)

.5 credit

This course will give you the chance to create multiple computer based games of your own design. Your creativity and passion for games will come together with your new coding skills to create new game prototypes. You will analyze, brainstorm and create solutions using the design process and learn through a media-rich learning environment. No previous experience in coding is required. Just your excitement for creating games and a willingness to learn the coding to do it.

Exploring Computer Science (Grades 9-12)

.5 credit

This course provides a broad introduction to computer science, focusing on the fundamental concepts of computer science, rather than a specific programming language. The goal of this course is to develop the computational thinking skills of problem solving and computing through the exploration and study of a wide range of computer science topics: human computer interaction, problem solving, algorithmic thinking, social and ethical issues regarding the internet, security, privacy, web design, and programming.

Introduction to Business (Grades 9-10)

.5 credit

This course will introduce students to the fundamental structure of business within the American economy and the free enterprise system to increase skills as consumers, workers, and citizens. Small business management and entrepreneurship topics, including business plans, will be studied. Various consumer topics such as consumerism, credit, investments options and money management will be covered to prepare students for the 21st century job market and global economy. The use of technology and internet-based resources will be implemented throughout the course.

Introduction to Programming (Grades 9-10)

.5 credit

Explore programing methods and algorithms. Learn why Java is the vehicle for implementing computer based solutions to enhance dynamic web pages, modern day business problems and video game production. Class exercises will further develop your ability to problem solve and your understanding of creative uses of a GUI (Graphical User Interface) and will focus on proper programming techniques that incorporate manipulating images, sounds and objects.

Personal Finance (Grades 10-12)

.5 credit 

This course will help students to better understand how to manage personal and family finances and increase awareness of workplace related issues. Students will be exposed to real-life applications of consumerism in the 21st century economy and workplace. The course will focus on consumer topics that

include; money management, credit, investments, workplace topics, tax preparation, housing options and insurance. Technology will be integrated in the curriculum to allow students to see real-world connections. **This course will fulfill the personal finance requirement.**

Sports Management (Grades 9-12)

.5 credit

Sports management is a course that is designed to introduce the field of sport management to prospective business students in high school. This course will prepare students who want to go into the field of sports management or study business management. This course will help prepare students for college level business programs and introduce them to an area of business with which they may not be familiar.

Engineering and Technology

Advanced Technical Drawing (Grades 10-12)

1 credit

Advanced Technical Drawing is an independent study course that will enable the student, through a series of guided exercises and individual projects, to further develop problem-solving and communications competencies first learned in the Technical Drawing courses. This course may be used to complete the study of the Technical Drawing continuum, and/or to introduce students to an in-depth exploration of topics covered in Technical Drawing. These topics can include advanced dimensioning techniques, advanced mechanical drawing techniques, or an introduction to civil, electrical or electronics drafting. While topics chosen will be covered with a goal at introducing the student to the vocabulary, tools and techniques of the given subject, the ultimate aim will be the achievement of competency in each subject.
Prerequisite: Technical Drawing

CAD / Architectural Design (Grades 9-12)

1 credit

Architectural Design class is an independent study course that will enable the student, through a series of guided exercises and individual projects, to further develop problem solving and communications competencies. At the same time, they will develop creativity and innovation skills through independent projects focused on residential construction, and architectural styles. This course will focus on the basic concepts and methods used to design the human environment, and students will research local architecture, design a single family residence and build a model of their design. This class is highly recommended for students interested in a career in Architecture, Interior Design or Civil Engineering, retail sales, or general homeowners.

CAD / Engineering Graphics (Grades 11-12)

1 credit

Computer Assisted Drawing/ Engineering Graphics is an independent study course that will enable the student, through a series of guided exercises and individual projects, to further develop and focus the problem-solving and communications competencies they first learned in the Technical Drawing continuum. At the same time, they will develop creativity and innovation skills through independent design projects. This course will focus on the basic concepts and methods needed to use the computer to create geometry which can then be used as output for graphic designs, engineering drawings, or manufacturing processes. This class is highly recommended for students interested in a career in Engineering. Class size is limited to classroom workstations.

Graphic Design (Grades 9-12)

.5 credit

This course will introduce students to the elements and principles of Graphic Communication and Design through different processes and media. These processes will include hand building and digital techniques including the use of color theory, typography, desktop publishing, illustration, digital photography and

photo editing. The goal of this class is to develop students' problem-solving, creativity and communications competencies while increasing the students' visual and technological literacy.

Yearbook Publication (Grades 10-12)

1 credit

The course is designed to provide an opportunity for students to learn about the publishing process by designing, building and marketing "The Pandorian", the school's annual historical document. Students will work on developing skills in: graphics, desktop publishing, computer design, photography, and marketing. They will be challenged to graphically capture important moments in the school year. They will research, organize, and verify information for accuracy and relevancy. They will develop creative ideas to present this information, and organize their work to meet deadlines. They will also market their publication in the school and in the larger community. Potential students should be aware that this course requires out of class work during and after school, some weekends and during special events throughout the school year, including the possibility of some summer work. Selection of students should be based on a demonstration of proficiency in communication, problem solving and creativity, organization and self management, and an ability to work with others in a team environment.

Technical Drawing (Grades 9-12)

.5 or 1 credit

The Technical Drawing classes will enable the student to develop competencies that will allow them to solve visualization challenges and effectively model and communicate technical information. This will be accomplished through a graded series of guided exercises and individual projects. The Technical Drawing classes will introduce students to the visual language used by engineers and other designers throughout history, both as a problem solving tool and as a means of communication. Students will use a variety of tools, including both traditional tools and the computer, to produce technical graphics and models demonstrating the different methods of visualization.

English

Advanced Placement English Language and Composition (Grade 11)

1 credit📖, **AP**

The AP English Language and Composition course is designed to help students become skilled readers of prose written in a variety of rhetorical contexts. Students will become skilled in composing for a variety of purposes. Both their writing and their reading should make the students aware of the interactions among a writer's purpose, audience expectations, and subjects, including the way generic conventions and the resources of language contribute to effectiveness in writing. The course is designed as a suitable basis for a college semester's credit in English and will also prepare students for the Advanced Placement (English Language) examination. Students will participate in the Monadnock Reads program over the summer. Additional summer reading and writing will be required of students in the AP English program.

Advanced Placement English Literature and Composition (Grade 12)

1 credit📖, **AP**

The AP English Literature and Composition course is designed to engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students can deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students should consider a work's structure, style, and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. The course is designed as a suitable basis for a college semester's credit in English and will also prepare students for the Advanced Placement (English Literature) Examination. Students will participate in the Monadnock Reads program over the summer. Additional summer reading and writing will be required of students in the AP English program.

English (Grades 9-12) (Offered as General, College Prep or Honors)

1- 1.5 credits 📖

English is intended to prepare students for college or career after graduation. The reading in English ranges in genres, culture, and centuries. Students will independently read and comprehend complex literary and informational texts. Students will analyze and discuss how literature provides insights into the human condition. Students will write narrative, informative, and argumentative essays. Each year, students will conduct a major research based assignment using information they have evaluated to support their claims. They will also participate in class discussions and individually present information to an audience. Students will participate in the Monadnock Reads program over the summer.

Progression for Class of 2030 only:

English 9 (1 credit)
English 10 (1.25 credits, .25 will be a pass/fail research writing class)
English 11 (1.25 credits, .25 will be a pass/fail research writing class)
English 12 (1.5 credits, .5 will be a pass/fail research writing class)

Creative Writing (Grades 10-12)

.5 or 1 credit - **Elective Credit**

In this extensive course, students learn to write clearly and effectively for defined audiences through a variety of strategies. Emphasis is on the writing process from pre-writing through drafting, revising, and editing, using the small group method to guide understanding and growth. Students will study the genres of children and young adult literature, creative fiction, creative nonfiction, and poetry, culminating in a portfolio of their own work at the course's end. This is a chance for students to engage seriously with the writer artist and to evolve as an artist in their own right.

***This course is an elective and does not meet English graduation competency requirements.**

Journalism (Grades 9-12)

.5 credit - **Elective Credit**

In this course, students will study how various media have been used to send messages to the general public. Topics will include the history of journalism, law ethics, reporting, writing, editing, photography, management, teamwork, advertising, and design. Students in this class will also be responsible for producing the news articles for the MRHS student newspaper, The Pawprint, which may be produced by the Publication Graphics class. This course emphasizes Common Core Standards related to writing and language. **This course may be repeated for credit.**

***This course is an elective and does not meet English graduation competency requirements.**

Senior English Electives

The Senior English Topics program focuses on college and career readiness. All topics classes will integrate and evaluate multiple sources of information presented in complex literary and informational text and media. Students will evaluate sources, cite material, and write reflective, narrative, and research based essays. Students will also have several opportunities to participate in whole class and group discussions. Their ability to listen and collaborate will be crucial. Students will also be required to speak to an audience on a particular topic. All students will participate in the Monadnock Reads program over the summer. Below you will find a list of Senior course topics and their descriptions.

***Please note: Seniors must be enrolled in a senior English course each semester.**

Nightmare and Vision

.5 credit 📖

Nightmare and Vision is a course designed for students to explore the origins and components of the horror genre around the globe, focusing on the three subcategories of classic horror, gothic horror, and contemporary literary horror/social horror. The horror genre is often a vehicle to demonstrate the darker side of the human experience and call attention to injustice, ugliness, or potential danger often normalized by society. Students will explore the concept of otherness, the unknown, morality, and vulnerability through this lens. Students will learn to sharpen critical thinking and literary analysis skills as they identify and contemplate themes, events, and concepts in fiction and reality. Students will also learn the

author's craft in creating suspense, mood, and plot lines, befitting the horror genre by constructing their own horror story.

British Literature

.5 credit 📖

British Literature focuses on authors and works from the Anglo-Saxon era through the twentieth century. Lessons emphasize links between literature, culture and history. In addition, students will learn appropriate vocabulary and literary terms.

Children's Literature

.5 credit 📖

This elective is a concentrated reading course designed to impart the knowledge necessary for an appreciation and understanding of children's literature and its use. In addition to reading the classics and the critically acclaimed works of both fiction and nonfiction by modern writers, students will study poetry, folklore, and mythology and examine the relationship between illustration and text.

Survey of Crime and Justice

.5 credit 📖

This elective deals with the philosophical foundations of right and wrong, good and evil and crime and justice as they appear in conditions and circumstances of life. In both fictional and non-fictional works, as well as case studies, students will have the opportunity to learn how authors reflect the times, ideas, and social issues of the period, and see how ideas of justice have evolved and changed throughout Western history. Students will analyze world literature through the lens of law, public safety and security by reading, writing, speaking, and critical viewing.

Holocaust

.5 credit 📖

While history and the social sciences provide the critical context of the Holocaust, other ways of representing the experience must be considered, specifically film, art, music, and literature in the form of prose, drama, and poetry. Through this comprehensive and chronological approach, students form questions and contemplate answers to matters of silence and complicity, resilience and resistance, trauma and healing, faith and doubt, dignity, and memory. Students will engage in critical thinking and analysis through viewing, close reading, and reflection.

Film Studies

.5 credit 📖

Film Studies will introduce the history and development of film as well as survey significant film genres. Students will view representative films from the twentieth and twenty-first centuries to see how film storytelling and techniques have evolved. In addition to learning specific critical viewing strategies, students will write several film analysis papers and film reviews.

Literature of the Vietnam War

.5 credit 📖

This course will provide students with a deeper understanding of the texts based on the Vietnam War, including representations from different sides of the war. The course will also increase students' awareness of historical, political, and social ramifications of the war and will explore the relationships of events to artistic depiction of those events (film, music, literature). Students will be required to write several short papers, present findings on different aspects of the 1960s era, and critically view reports and film.

Media Studies

.5 credit 📖

This course is designed to help students develop an informed, critical, and practical understanding of media including analysis of digital media. We will explore the goals and methods of various media industries, identify the effects media has on us as individuals and a society, and understand the benefits and potential negative effects of media content, while identifying techniques to become more media literate.

Science Fiction and Fantasy

.5 credit 📖

This course will introduce students to the history and evolution of the science fiction and fantasy genres throughout English and British history. Students will study several themes and study how history, philosophy, linguistics, religion, the rise of technology and the loss and gain of freedom are cemented in the fundamentals of humanity. Students will use a variety of implementations to study science fiction and fantasy, including literature, film, art, and music, while employing varying methods of analysis. Students will become familiar with textual, technological, and literary vocabulary as well as studying rhetorical devices as a means for further understanding.

Sports Literature

.5 credit 📖

Through this course, students will explore and learn about a variety of sports that they are familiar with such as soccer, baseball, and hockey and sports that seem extreme and or unconventional such as rock climbing, telemark skiing, and white water rafting. Students will also write about their own experience with sports, and learn techniques for reporting about sporting events, local, national and world wide. Students will also research proactive safety measures as well as reactive ones in the case of protection, a given injury, and/or emergency.

Family and Consumer Sciences

Apartment Cooking (Grades 11-12)

.5 credit

Apartment Cooking is designed for juniors and seniors beginning life on their own emphasizing flexibility, time-management and independent living. The course will concentrate on life readiness skills including healthy meal preparation for one or two people, budgeting, grocery shopping, recycling, food sanitation, and equipping a kitchen. Students will develop a portfolio of recipes using the "speed-scratch" cooking method- the use of convenience foods along with basic ingredients for easier meal preparation. There will be written assignments in addition to the lab work. A quarterly project will be required (example- the planning and preparation of foods to entertain a themed gathering).

Early Childhood Education (Grades 10-12)

.5 credit

This course prepares high school students to become competent in the full spectrum of childhood education, from birth to age 8. History, curriculum, program development, unit plans, appropriate learning environments, principles of child development, and trends and issues in early childhood education will be discussed.

First Aid and Safety (Grades 11-12)

.5 credit

Students in First Aid and Safety will study the techniques of emergency first aid, CPR, AED and various first aid topics including, but not limited to: knowledge of body functions, assessing a victim, weather safety, workplace safety, fire safety and travel safety. Students will have the opportunity to earn American Red Cross First Aid, CPR/ AED certification.

Prerequisite: Life Choices and Biology.

Food and Nutrition I (Grades 9-12)

.5 credit

This course is designed for students who are interested in understanding the principles of nutrition as a basic human need, and its link to wellness in maintaining a healthy lifestyle, as related to individuals and families, across the lifespan. Students will develop life skills needed in a wide variety of Food and Nutrition related careers. Emphasis will be given to the economic, cultural, scientific, health and local agricultural connections to food, using 21st Century learning skills. Students will demonstrate various food selection, safety, sanitation, and preparation skills; terminology, principles, and techniques. Knowledge of kitchen equipment and accurate measurement will be applied, when designing delicious, nutritious, and aesthetically pleasing food presentations.

Food and Nutrition II (Grades 10-12)

.5 credit

Food & Nutrition II is designed for students who would like to continue their studies of nutrition and food preparation skills. Students are given the opportunity to gain knowledge of and apply skills in organizing and planning, time management and consumer applications. Topics include technology in food science, protein foods, fast foods, kitchen design and equipment as well as regional foods of the United States and other countries. Careers in the food industry will be discussed. There will be written assignments with projects and buffets with guests in addition to the lab work.

Prerequisite: Successful completion of Food & Nutrition I

Life Choices (Grade 10)

.5 credit 

This course uses the 21st century learning skills of writing, reading, viewing, and listening to explore the positive and negative consequences of personal health decisions. Topics will include respect for oneself and others, nutrition, various relationships and communication skills, current health issues, stress, personal care, physical activity, reproduction, maintaining good mental health and environmental health concerns. The topics are covered using a problem solving approach in relation to the impact they have on the health triangle, which includes the domains of physical, mental and social health. **This course meets the health education requirement.**

Textiles, Fashion and Apparel (Grades 9-12)

.5 credit

This is an introductory course that will familiarize students with careers in the textile, fashion, and apparel industries and will help them understand personal suitability for success. Students will identify and obtain a working knowledge of fibers, methods of textile construction, and finishing through technology, instruction, discussion, and experimentation. Students will explore past history and current trends. Students will creatively utilize the elements and principles of design to recognize well-designed and constructed textiles as well as explore reasons, identify methods, and demonstrate skills needed for altering, repairing, recycling, and redesigning apparel and/or textile products. This course will also provide opportunities for students to apply communication, leadership, management, and critical thinking skills to all areas of textile development and merchandising. By coordinating classroom theory with hands-on experiences, students develop and enhance their creativity, critical thinking and problem solving skills necessary to be innovative and productive members of society.

Manufacturing Technologies

Advanced Metals (Grades 10-12)

1 credit

This course is offered to students who wish to continue their studies of manufacturing technologies centered on metals as a design material. The focus in this class will be on developing the student's workplace skills as well as their abilities in the processes studied previously. (E.g. sheet metal, machine tool processes, computer-aided manufacturing). Life and career skills will be emphasized as this course blends with 21st century core courses in critical thinking and problem solving. Students will need to recall skills learned in the Metals class and expand on that knowledge.

Advanced Woodworking, I (Grades 10-12)

1 credit

The Advanced Woodworking I course builds on the competencies developed in Woodworking. Students will develop competency with more sophisticated manufacturing systems, processes and techniques as they advance their skills in woodworking, cabinetry and design. Students will be introduced to a Computer Numeric Control (CNC) machine. These skills will be developed through the construction of guided assignments.

Prerequisite: Woodworking

Advanced Woodworking, II (Grades 11-12)

1 credit

The Advanced Woodworking II course builds on the competencies developed in Woodworking I. Students will develop competency with more sophisticated manufacturing systems, processes and techniques as they advance their skills in woodworking, cabinetry and design. Students will select, design and construct personalized projects with a focus on cabinetmaking and furniture production. Students will perform community service projects within the district and SAU. **Prerequisite: Advanced Woodworking I**

Building Construction (Grades 9-12)

.5 credit (2nd semester)

This course focus is on residential building technique and application. Students learn how to use a transit, what building codes are, skills with shop equipment, as well as identify and understand architectural structure. Safety will be stressed throughout the process and expected outcome before students are able to build. Students will gain professional experience through this project which can be used throughout life. Note: Students enrolling in this class recognize they are required to participate in the on-site assembly of the structures constructed in class. These field trips are treated as final exams, and attendance is mandatory.

Home Maintenance (Grades 9-12)

.5 credit (1st semester)

Students will become familiar with the varied roles and responsibilities associated with repairing and maintaining a home or apartment. Short term goals and objectives are set for the students while they work in a laboratory environment. A hands-on approach will focus on varied activities ranging from framing to drywall. Students will work in a collaborative work environment with specific responsibilities and schedules.

Introduction to Electricity (Grades 9-12)

.5 credit

Introduction to Electricity/Electronics; designed for the hands-on student. Students work on individual and group projects. Assignments provide opportunities for students to further develop problem solving skills. Students will be introduced to both residential wiring and electronic circuit building. This course is recommended for students who are considering Electronic Communications at Cheshire Career Center, Construction, or in Engineering.

Introduction to Welding (Grades 9-12)

.5 credit

This course introduces the student to the principles and practical application and methods of welding. The student will demonstrate a basic working knowledge of torch brazing, oxy-acetylene welding, gas metal arc welding, shielded metal arc welding and oxy-fuel cutting through individual laboratory usage with goal oriented outcomes. Students will be introduced to the process of plasma arc and tungsten inert gas welding and identification of the appropriate use of metal. This course is recommended for those students who are interested in careers that include Metal Fabrication, 3 dimensional art or Automotive Body Technology.

Metals (Grades 9-12)

.5 credit

The Metals course will develop student competencies in technology, critical thinking and problem solving by introducing them to various manufacturing systems and processes used to safely work with metals. Life and career skills will be emphasized through a series of guided projects that include working in sheet metal fabrication, machine tool processes, and manufacturing. Teamwork and personal responsibility will be emphasized as students work with others to fabricate projects.

Small Gas Engines (Grades 9-12)

.5 credit

Small Gas Engines is designed to be both classroom and hands on with small engines, engine theory and service are covered on L-head, overhead valve, and overhead cam engine design. The course begins with shop safety, and the foundation of basic engine theory. Various systems are covered that are required to make an engine function; the mechanical, ignition, fuel and air induction, lubrication, and cooling systems. Students will learn how to apply that knowledge in the maintenance, diagnosis, repair, and

rebuilding of engines. It is recommended for students interested in taking the automotive course at either the Cheshire Center, or a career in engineering.

Welding II (Grades 10-12)

.5 credit

Welding II allows the student to practice the principles of welding with a more in depth approach. The student can excel their skills with their prior working knowledge of torch brazing, oxy-acetylene welding, shielded metal arc welding, oxy-fuel cutting and tungsten inert gas welding for non-ferrous metals and the process of gas metal arc welding, and plasma arc. This will be encouraged to broaden their knowledge of different metal applications. Students will gain a background knowledge in identifying and selecting metals for a given application.

Woodworking (Grades 9-12)

.5 credit

Woodworking helps students develop competencies in design, problem-solving, communications and technology by introducing them to the principal, tools and practices of general woodworking. The class will cover an introduction to the safe and appropriate use of hand and machine tools and the application of technological processes and systems. Students will demonstrate competency of basic hand and power tools and processes through the construction of a series of guided assignments.

Mathematics

Advanced Placement Calculus (Grades 11-12)

1 credit  , **AP**

AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions

Advanced Placement Statistics (Grades 11-12)

1 credit  , **AP**

An introduction to the basic ideas and techniques of probability and statistics. Topics may include numerical and graphical descriptive measures, probability, random variables, the normal distribution, sampling theory, estimation, hypothesis testing, correlation and regression. The curriculum is aligned with the expectations of the College Board AP Statistics course.

Algebra I (Grade 9)

1 credit 

An introduction to the structure of Algebra as applied to the real number system. Students will develop a variety of problem solving techniques and apply them to problems within and outside the field of mathematics. Mathematical modeling will be stressed. Topics covered will include single variable equations and inequalities, linear and quadratic functions, polynomial expressions and more.

Geometry (Grade 9 or 10)

1 credit 

This course is an introduction to academic geometry. Both inductive and deductive reasoning will be utilized in the development and understanding of geometric concepts and proofs. Theoretic and practical applications of geometry will be studied as well as basic ideas on trigonometry.

Algebra II (Grades 10-12)

1 credit 

This course provides a thorough introduction to the standard topics of the second year Algebra curriculum. Topics include quadratic and other nonlinear functions, irrational and complex numbers and more. The concepts of functions and graphic solutions will be emphasized as well as problem solving and critical thinking. Utilizing technology will be involved whenever appropriate.

Business Math (Grades 10-12)

1 credit 

This course will concentrate on applications of mathematics. Solving problems that deal with banking, interest, depreciation, mortgages, taxes, and statistics will be the majority of the topics covered along with a review of basic math concepts.

Math for Life (Grades 10-12)

1 credit 

Want more experience with math before heading to college or trade school? Math for Life is designed to help improve problem solving skills and mathematical communication. This course will improve your math skills by developing solid conceptual foundations that could alleviate the need for remediation in college. During the course, students will look at real-world applications and problem-solving tasks. Students will leave the course prepared to engage in college-level math or apply essential skills in the workplace. This course serves as a review for concepts covered in Algebra I, Geometry, and Algebra II.

STEM Mathematics (Grades 10-12)

1 credit 

STEM represents blended learning that provides students an opportunity to apply their knowledge using project based experiences that actively engage students in hands-on activities. This course will utilize STEM resources related to math and is designed to help students develop skills and techniques to identify and create solutions to problems through project-based learning. Analytic skills and the use of scientific and engineering methods will be used to investigate problems. Small group projects and varied instructional techniques involving technology will be emphasized. Students must be comfortable working independently and in groups to complete in-class activities and projects, including an end-of-project presentation consisting of a written essay and a presentation of the data collected.

Pre-Calculus (Grades 11-12)

1 credit 

This course deals with advanced algebraic and trigonometric concepts with significant emphasis on the theory of functions. The solution of advanced equations is pursued using both technologic and algebraic methods. A broad variety of topics are presented, building a strong foundation for the future study of Calculus and Analysis.
Prerequisite: Algebra II

Research Methods (Grades 11-12)

1 credit 

Explore the principles of research methods and their direct application to the behavioral and social sciences like psychology, sociology, and economics. Students will master various statistical analyses, learn experimental research methodology, employ ethical research practices, and learn to understand, analyze, and synthesize information from existing research articles published in scholarly journals.

Students will utilize this information to investigate a topic of their choice, design their own experiments, collect and analyze data, and write an original scholarly article to contribute to current literature.
Prerequisite: Algebra II

Sports Analytics (Grades 11-12)

1 credit 

Sports analytics refers to the use of data and quantitative methods to measure performance and make decisions to gain advantage in the competitive sports arena. This course will cover researching, storing, and analyzing statistical information used in various sports. Skills students will be using include critical thinking, mathematical modeling, statistical analysis, predictive analytics, game theory, optimization and simulation. These skills will be applied to sports in this course, but are equally useful in many other areas.

Statistics (Grades 11-12)

1 credit 

Statistics acquaints students with the major concepts and tools for collecting, analyzing, and drawing conclusions from data. This course will emphasize techniques and applications that are useful in future careers.

Physical Education

General Physical Education (9-12)

.5 Credit 💪

The purpose of general physical education is to expose students to a variety of physical activities. The course will promote an appreciation for, and an understanding of, the various physical, mental, and emotional benefits derived from physical exercise as it relates to a healthy lifestyle. Additionally, the physical education program will assist in developing an understanding of teamwork, the discovery of individual talents and capabilities, a respect for others, and a healthy appreciation for athletic competition.
This course can be repeated for credit.

Weight Training (9-12)

.5 Credit 💪

Weight Training Class will provide students the opportunity to explore the benefits, types, and science behind weight training. Students will explore different apparatuses that can include machines, dumbbells, barbells, kettlebells, and other types of equipment. Students will research and apply various training principles and study strength training anatomy along with the science of exercise.
This course can be repeated for credit.

Lifetime Fitness (9-12)

.5 credit 💪

The Lifetime Fitness course is designed for students to develop skills and gain knowledge in improving overall health wellness. Focus of units will allow students to improve muscular endurance, flexibility and mental health. Units can include yoga, pilates, weight training, walking, and other individual fitness pursuits and sports.
This course can be repeated for credit.

Team Sports (9-12)

.5 credit 💪

Team Sports provides students with a deeper understanding of movement and fitness within a variety of team sports. Students will also learn concepts involved in coaching and sports leadership.
Prerequisite: Completion of General Physical Education, Weight Training, or Lifetime Fitness.
This course can be repeated for credit.

Adapted Physical Education (9-12)

1 credit 💪

Adapted Physical Education provides a modified general physical education curriculum for students who qualify for the course.
Prerequisite: By recommendation of the IEP team.

Science

Advanced Placement Chemistry

1 credit 🔬 **AP**

AP Physics 1 is equivalent to a first-semester college course in algebra-based physics. Units covered include kinematics, force and translational dynamics, work, energy and power, linear momentum, torque and rotational dynamics, energy and momentum of rotating systems, oscillations, and fluids. Students will take the AP Physics I exam, which may earn college credit with a score of 3 or higher. This class follows an inquiry-based modeling methodology, where students plan investigations to answer questions and support claims with data and graphical relationships. Students will do lab reports, problem sets, and assessments using AP multiple choice and free response questions, as well as an individual research project. Students should be fluent in algebra and right triangle trigonometry.

Advanced Placement Physics

1 credit 🔬 **AP**

AP Physics 1 is equivalent to a first-semester college course in algebra-based physics. Units covered include kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion, electric charge and force, DC circuits, and mechanical waves and sound. Students will take the AP Physics I exam, which may earn college credit with a score of 3 or higher. This class follows a modeling methodology, where students plan investigations to answer questions and support claims with data and graphical relationships. Students will do lab reports, problem sets, and assessments using AP multiple choice and free response questions, as well as an individual research project. Students should be fluent in algebra and right triangle trigonometry. This class will fulfill the physical science graduation requirement.

Astronomy (Grades 11-12)

1 credit 🔬

This is an elective course designed to explore the major topics in introductory astronomy. Using an inquiry based approach, students will investigate motions of the sky, the sun-earth-moon system, the solar system, the scientific tools of astronomy, stars, and the universe as a whole. Not only will students learn about the universe and the objects within it, but they will also learn how scientists investigate phenomena and build scientific knowledge. Course requirements will be met through simulations and laboratory activities, research and presentations, reading and writing about current events in astronomy, and using remote telescopes. Local evening sky-gazing sessions with telescopes will be offered as well.

Biology (Grade 10)

1 credit 🔬

This course builds upon students' middle school science foundations and provides a comprehensive

introduction to the biochemical basis of life. Students will review key concepts in biological classification and fundamental principles of chemistry before moving into deeper exploration of biomolecules, cellular structures, and cellular functions, including energetics, protein synthesis, DNA replication and genetics. Instruction will combine hands-on investigation with active learning. Students will engage in individual and small-group laboratory tasks, simulations, and collaborative problem-solving activities. These experiences will be supported by traditional academic practices, including structured note-taking, vocabulary development, organization of materials, and maintaining a course binder. By the end of the course, students will have a solid foundation for further study in the life sciences and related fields.

***Note:** The honors level of this course offers dual enrollment through Southern New Hampshire University (SNHU). Students who successfully complete the course with a grade of C– or higher may earn 4 college credits.

Chemistry (Grade 11-12)

1 credit 

Chemistry is the study of the structure, composition, and behavior of matter. Students study a variety of topics that include: characteristics of matter; energy transformations during physical and chemical changes; atomic structure; periodic table of elements; behavior of gasses; bonding; stoichiometry; chemical equations; properties of solutions; acids and bases; and chemical reactions. Student investigations emphasize accurate observations, collection of data, data analysis, and the safe manipulation of scientific apparatus and materials during field and in the laboratory. This course is a qualitative and quantitative course in chemistry and is recommended for college bound students as preparation for entry into engineering, health, environmental and applied science programs. This class will fulfill the physical science graduation requirement.

Environmental Science (Grade 11-12)

1 credit 

Environmental Science is a full year one credit course intended provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them.

Earth Science (Grade 9)

1 credit 

Earth Science is a course focusing on the study of space, geologic structures and forces, the waters on our planet, and the atmospheric forces that shape our world. Students will learn about scientific inquiry, measurement and mapping, oceanography, geology, meteorology, astronomy, and the geologic time scale.This course explores the complex interactions between Earth's spheres—the geosphere, atmosphere, hydrosphere, and biosphere—through the lens of modern data science. Students will move beyond traditional observation to become "Earth Data Scientists," using real-world datasets to investigate planetary processes.

Human Anatomy and Physiology (Grade 11-12)

1 credit 🔬 🎓

This rigorous elective course is intended for students who have successfully completed and enjoyed Biology and/or who plan to pursue advanced studies in the life sciences beyond high school. The course provides an in-depth exploration of human anatomy and physiology, with a strong focus on the relationship between structure and function at the cellular, tissue, and systemic levels. Students will examine how the body maintains homeostasis and investigate how disruptions in this equilibrium contribute to disease.

Major body systems studied include the integumentary, muscular, skeletal, nervous, endocrine, circulatory, respiratory, digestive,and urinary systems. Learning experiences will incorporate a variety of classroom and laboratory activities, including microscopic studies of tissues and hands-on organ dissections. Through this work, students will strengthen the organizational, analytical, and study skills essential for college and career readiness.

Note: This course offers dual enrollment through Southern New Hampshire University (SNHU). Students who successfully complete the course with a grade of C– or higher may earn 4 college credits.

Physics (Grades 11-12)

1 credit 🔬

This course is designed for motivated students who are interested in the laws of nature. Specific topics include one- and two-dimensional motion, forces and Newton's laws, work, energy, and power, impulse and momentum, circular motion and gravitation, and torque and rotation. Using a modified modeling method, students will collect data and derive equations with graphs and class discussions, as well as apply these equations to subsequent lab challenges. Problem-solving is emphasized and practiced both in and out of the classroom. Physics requires that students are fluent in algebra and are willing to apply those skills to new situations. In addition to laboratory investigations, students will experience simulations, demonstrations and classroom discussions, small-group problem-solving, and engineering-design projects. This physics course will benefit anyone who might major in science in college and fulfill the physical science graduation requirement.

Topics in Science (Grades 11-12)

1 credit 🔬

This introductory general level course provides students with the opportunity to investigate how science works. The class examines themes across multiple science disciplines to allow students to develop an understanding of the nature of science and how science impacts our lives. Students will increase their science literacy while developing critical thinking, problem solving, and technology skills. Upon completion of this course, students will be capable of investigating, analyzing, and evaluating scientific data and claims. These skills will allow them to be informed citizens and voters in a complex world.There are no course prerequisites but students will be expected to be engaged, capable of self-advocacy and direction, and have a willingness to approach ideas with an open mind.

Survey of Chemistry (Grades 11-12)

.5 credit 

Chemistry is the study of matter and the interactions of matter. This course is designed for students needing exposure to chemistry prior to attending a technical college, a vocational school or entering an allied health field. The course is designed to expose the student to the way chemistry relates to practical situations and current scientific issues. The emphasis will be on problem solving and investigation. Topics may include metric measurement, basic atomic structure, chemical reactions, and applications of chemical principles to common substances (food, water etc.), forensics, and nuclear chemistry. This course, with Survey of Physics, will fulfill the physical science graduation requirement.

Survey of Physics (Grade 11-12)

.5 credit 

This course is designed for students who are interested in the laws of nature but who may not have a strong mathematical background. The three units for this semester class include optics and light, waves and sound, and electricity. The course emphasizes conceptual understanding but does require some applications of basic math and algebra. All topics are introduced with hands-on laboratory experiences. In addition, students will experience simulations, demonstrations and classroom discussions, basic problem-solving, and individual design projects. This course, with Survey of Chemistry, will fulfill the physical science graduation requirement.

Social Studies

AP European History (Grades 10-12)

1 credit - Elective Credit, **AP**

The AP European History course focuses on developing students' understanding of European history from approximately 1450 to the present. The course has students investigate the content of European history for significant events, individuals, developments, and processes in four historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides five themes (interaction of Europe and the world, poverty and prosperity, objective knowledge and subjective visions, states and other institutions of power, and individual and society) that students explore throughout the course in order to make connections among historical developments in different times and places.

AP United States History (Grade 11)

1 credit 🌎, **AP**

Advanced Placement US History is intended to be representative of college history classes. This course will encompass the post-Civil War era through current history stressing concepts and process. Ideas that have shaped our country, social and cultural developments, and political evolution, and cause and effect relationships will structure this course. A required summer reading list may be included. This course will also stress high level study and research skills and will introduce students to college-level writing assignments. Students will be required to do additional reading during the year which will include primary and secondary sources. In addition, students need to look at sources in an analytical way and be encouraged to become critical thinkers. Students will also be introduced to historiography during the year. The course is designed to prepare students for the Advanced Placement U.S. History examination.

History of Western Civilization (Grade 9)

1 credit 🌎

In this course students will examine the history of world civilizations beginning with the Agricultural Revolution and ending with the Enlightenment. The focus will be on the important people, major events, and contributions from several prominent civilizations and time periods, including but not limited to early river civilizations, ancient Greece and Rome, the Middle Ages, and Renaissance thinkers. Throughout the course, students will make connections between these historical peoples and their impact on the development of the United States of America and on their modern day impact on our society.

United States History I (Grade 10)

1 credit 🌎

This course will emphasize the political, economic, intellectual, and social trends in early American history. Areas of study begin with the European colonization of North America, the American Revolution and development of the American system of government. Examining the presidencies of Washington

through Lincoln, students will gain an understanding of western expansion, the industrial revolution, and the sectional differences leading to the Civil War. As all the past is prologue, historical parallels will be drawn with current events as they apply. Core areas include social, cultural, economic, military, and political topics. An understanding of the past and recurring themes will prepare students for current and future global situations. Core skills stressed will include reading, writing, public speaking, group work skills, note taking, research, problem solving, critical thinking, and personal initiative. We will incorporate projects, internet, films, media, periodicals, primary and secondary sources, and higher level writing assignments in our examination of American history.

United States History II (Grade 11)

1 credit 🌎

This course will emphasize the political, economic, intellectual, and social trends in America from the postCivil War era until the present. Topics include industrialization, the global conflicts of the 20th century, and the expansion of civil rights. This course is designed to heighten a student's awareness and appreciation of history as well as the role of America in the scheme of global History. Emphasis is placed on drawing historical parallels with current events as they apply. Knowledge of current events and staying current on what is happening is a vital part of our curriculum. Core areas include social, cultural, economic, military, and political topics. An understanding of the past and recurring themes will prepare students for current and future global situations. Core skills stressed will include reading, writing, public speaking, group work skills, note taking, research, problem solving, critical thinking, and personal initiative. We will incorporate projects, internet, films, media, periodicals, primary and secondary sources, and higher level writing assignments in our examination of American history.

Civics (Grade 12)

.5 credit 🌎, 🎓

Civics is a non-leveled required class for all students at MRHS. The course emphasizes the basis and inner workings of our Federal Government; including the major branches of government, voting and elections, and the basis and responsibilities of citizenship. It will encourage students to develop the ability to think critically, to articulate their opinions in written and oral form, and to identify and understand both the nation's strengths and shortcomings. Pursuant to NH state graduation requirements, in addition to passing a Civics course students must also pass the US Citizenship test. This course will focus on the content of this test, and it will be administered over the course of the semester.

***Required credit for graduation. Students must pass the Civics final exam and naturalization exam administered in the NHSAS system in order to graduate in the state of NH.**

Criminal Justice (Grades 10-12)

.5 credit

This class is designed to introduce students to the study of crime. The curriculum will cover criminal theory, individual rights, law enforcement and detective work, forensics, the criminal mind, the court

system, and the American system of incarceration and rehabilitation. The course work will require a great deal of reading and writing as well as daily open class discussion.

Economics (Grade 12)

.5 credit 🌎, 🎓

This course will enable students to better understand the significance of economics in their daily lives, and the basic economic problems that all societies face. Topics include basic economic concepts, supply and demand, market structures, fiscal policy and taxation, financial markets, international trade, economic cycles and comparative economic systems. Students will learn to make reasoned decisions on economic issues as citizens, workers, consumers, business owners, managers and members of civic groups.

Forensic Science and the Law (Grades 11-12)

.5 credit - Elective Credit

This course is designed to provide students with the basics of forensic science and its application to law and criminal justice. The course will be taught in a multidisciplinary format and will be student-driven. There is a high expectation of reading and writing using a wide variety of resources. There will be ample labs and real crime case studies. The class includes a variety of professional guest speakers and participation in a total processing of a mock crime scene as a final assessment.

Love of the Game (Grades 11-12)

.5 credit - Elective Credit

In this course students will examine the development of sports through various historical perspectives. There will be an emphasis on helping students gain a better understanding of the inner relationship that sport has on social, economic, cultural, and political forces that are at work in the United States as well as the world. Students will examine the historical context as well as the significance of gender, race, ethnicity and social class through readings, primary sources, audio and visual materials, and class discussions.

Geography & Current Events (10-12)

.5 Credit - Elective Credit

This half year class for 10-12 will focus on the ongoing and current events in America and across the world during the given semester. Although some discussions and units will be determined by the events of the day, the course will specifically discuss and attempt to explain the conflicts in the Middle East, South and East Asia, Sub-Saharan Africa, Eastern Europe, and Latin America. Domestically, we will look at political, demographic, and cultural changes the US is going through.

New Hampshire History (11-12)

.5 credit - Elective Credit

This half-year class for juniors or seniors will specifically look at New Hampshire history: the native and colonial influences, immigrant groups, agriculture and industrialization, and important historical figures. In addition to New Hampshire-specific events, it will look at national events and how each affected New

Hampshire. It will also specifically look at the history of the Monadnock Region and Cheshire County.

Power and Panic in Colonial America (10-12)

.5 credit - Elective Credit

This semester-long course examines the Salem Witch Trials of 1692 as a complex intersection of religion, law, politics, psychology, and community life in colonial New England. Through analysis of primary sources, historical scholarship, and sociological perspectives, students will explore the causes, events, and lasting consequences of the crisis. The course emphasizes critical thinking, the evaluation of evidence, and the ways societies respond to fear and uncertainty. Students will also investigate how the Salem Witch Trials have been remembered, interpreted, and represented over time, and will connect the episode to modern examples of mass hysteria and social panic.

Psychology (Grades 10-12)

.5 credit - Elective Credit

Psychology is the study of human behavior. The purpose of this course is to develop an understanding of how individuals develop and why they exhibit the behaviors that they do. The topics included in this curriculum include the history of psychology, psychological research methods, the parts of the brain, memory and learning, and personality. Students will also learn about the various professions related to psychology, and how the study of psychology is relevant to our world today. Students will be required to keep an organized notebook, complete relevant readings, and demonstrate their mastery of the topics through projects, tests, and class discussions.

Abnormal Psychology (Grades 11-12)

.5 credit - Elective Credit

The curriculum will start with a basic understanding of what abnormal psychology is and the symptoms of a mental disorder. Students will review and investigate psychological conditions and disorders from the *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition. The topics included in this curriculum are anxiety disorders, obsessive compulsive and related disorders, dissociative disorders, somatic symptom disorders, mood disorders, schizophrenia, personality disorders, trauma and stress disorders, and substance related and addictive disorders. Students will identify and examine the criteria for these disorders through notes, case studies, videos, and published articles. Students will also learn about treatment options for these disorders and how they can interfere with a person's ability to function in daily life. Some units will involve discussing the relationship between various mental disorders and criminology in addition to other relevant social issues. The course will discuss sensitive and sometimes traumatic content, such as suicide, self-harm, physical and sexual abuse, and other mature topics.
Prerequisite: Psychology

Sociology (Grades 10-12)

.5 credit Elective Credit 🎓

This is a college preparatory class designed to introduce students who are interested in the field of sociology. Sociology is the study of society and its institutions. This course will develop an understanding

of group relationships and how group behavior affects the patterns of behavior and thinking of people in all societies. Instruction will involve note-driven discussion, multimedia, and other in-class activities.

Visual and Performing Arts

Advanced Placement Studio Art (Grades 10-12)

1 credit 🎭 **AP**

AP Studio Art can be taken for credit both junior and senior years. It is a year-long course for serious art students and any student who needs to develop a visual art portfolio for college applications. AP Studio Art offers the opportunity to focus on intense development of artistic skills and personal vision by completing a portfolio, which is submitted to AP. Typically, students do not submit a portfolio during their junior year, but are required to submit a portfolio in May of their senior year. Students will select from the following portfolio offerings: Drawing or 2D Design.
Prerequisite: PRE-AP ArtP

PRE-AP Studio Art (Grade 10-12)

1 credit 🎭

AP Studio Art is a yearlong course for serious art students and any student who needs to develop a visual art portfolio for college applications. AP Studio Art offers the opportunity to focus on intense development of artistic skills and personal vision by completing a portfolio, which is submitted to AP. Students in PRE-AP Art will begin working on their portfolio during their junior year.
Prerequisite: Prior completion of 2 credits of art.

Art Foundations (Grades 9-12)

.5 credit 🎭

This is a one-semester course designed to introduce students to a variety of visual arts concepts and techniques, including drawing, painting, printmaking, sculpture, and design. Emphasis is on the exploration of various materials and ideas that may help increase student confidence and range of artistic experience.

3D Art (Grades 9-12)

1 credit 🎭

Keep your hands busy in this year-long course where students will build 3D art. 3D art will be created using a variety of materials like cardboard, clay, stain glass, plastic, fiber arts, etc. You will learn how to screen print a design onto t-shirts. **This course may be repeated for credit.**

Art History (Grades 9-12)

.5 credit 🎭

This is a one-semester course focused on developing an appreciation for art through the study of paintings, sculpture, and architecture. Students will spend time in class discussing and analyzing, therefore any art created will be to reinforce their knowledge of an artist or artistic style. Reading articles, note taking, and short written assignments will be required of students. Specific artists and art movements

will be explored in class through web quests, virtual museum tours, videos, and articles. In class, students can expect to show their learning through the creation of posters, slideshows, projects, and art history games.

Fun with Clay (Grades 9-12)

.5 credit 🎭

Let your creativity soar in this one-semester course where you will make creatures, animals, and other decorative pieces using clay. Students will use hand building techniques and explore a variety of glazing methods. Functional pieces like bowls and vases will also be made by students. **This course may be repeated for credit.**

Jewelry Making (Grades 9-12)

.5 credit 🎭

This one semester course teaches you how to create wearable pieces of jewelry. You'll learn basic techniques of fabrication in sterling silver and copper, setting semi-precious gems, exploring enameling, polymer clay, and fiber-based jewelry methods. This class is for self-motivated students that are excited about designing jewelry to reflect their own personal style. **This course may be repeated for credit.**

Sketchbook Mania (Grades 9-12)

1 credit 🎭

Do you love to draw? This year-long course is all about drawing using a variety of mediums. You'll practice skills guided by the teacher as well as have plenty of independent drawing time. Listen to some music and lose yourself in your sketchbook. You'll also learn how to take a sketchbook and turn it into an idea book with lessons on visual journaling. **This course may be repeated for credit.**

Paint Everywhere! (9-12)

.5 credit 🎭

This class will explore the world of painting as a means of creating playful, colorful art. Students will use watercolor and acrylic paint on a variety of surfaces. For example, projects could include painting chairs or working to complete a school mural.

Guitar and Piano Keyboard Studies (Grades 9-12)

.5 credit 🎭

Guitar and Piano Studies is designed for students with an interest in the performance and study of acoustic guitar, bass guitar and piano. Students will learn to perform a selected repertory from a variety of styles and forms of music for their selected instrument such as: pop, jazz, modern, classical, and an array of other styles. Students will read and understand standard musical notation and tablature (for guitar). They will explore essential components of music theory, compositions, and experience exercises in musical

sight-reading and interpretation. They will study the history of the classroom musical instrument, and their importance and influence as a solo instrument, in ensembles, and in the musical world. Concert and musical performance is mandatory.
***This course may be repeated for credit.**

High School Band (Grades 9-12)

1 credit 🎭

The goal of the band program is to improve musical abilities and repertoire through performance and to reinforce and further musicianship through applied theory. Students are encouraged to extend their musical learning experiences by auditioning in statewide Band/Orchestra auditions and festivals. MARCHING BAND IS REQUIRED OF ALL BAND MEMBERS. All band performances are mandatory. Basic theory and history are assessed through performance, written tests and projects.
***This course may be repeated for credit.**

High School Chorus (Grades 9-12)

1 credit 🎭

This course is designed to introduce a large, non-selective group of students to the fundamental principles of vocal production as well as the appreciation and enjoyment of music by means of participation. No voice testing is required. The chorus is trained in choral techniques, intonation, harmony singing, posture, breathing, diction, and stage deportment. Fundamentals of music reading and basic theory are also taught during rehearsals.
***This course may be repeated for credit.**

Jazz Ensemble (Grades 9-12)

1 credit 🎭

Jazz Ensemble is a select group of musicians who will study and perform all types of jazz, rock and popular literature. Some training will be given in technical and improvisational skills. An emphasis will be given to performance, with participation in concerts and festivals required. Instrumentation is limited and auditions may be used to determine membership. Concurrent membership in Concert Band is required. Jazz Ensemble meets weekly for 90 minutes beyond the school day throughout the school year.
***This course may be repeated for credit.**

Music Theory (Grades 9-12)

1.0 or .5 credit 🎭

This course is designed to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. Students planning to major or minor in music in college are encouraged to take this course. There is no prerequisite for this course; however, the ability to read standard notation is highly encouraged.
***This course may be repeated for credit.**

Music Technology (Grades 9-12)

.5 credit 🎭

High School Music Technology is designed for students with an interest in exploring a variety of subjects relating to music technology which include audio engineering, the use of music composition software, and how to set up and run lighting systems for a theatrical production. In these studies, students will be introduced to the hardware and software relating to these fields and exploration of the technical, mathematical, and language of these systems. The class will be geared to "hands-on" activities that will focus on refining your listening skills while providing both the technical and artistic aspects of these subjects. Students will explore recording software, such as Pro Tools essentials, which relates to any of the other computer programs on the market while helping them better understand the concepts presented in "stand-alone" digital workstations, setting up and running a recording studio or a home recording system. Students will be exposed to music composition software (such as Sibelius and Finale) and learn about the field of music publication. Students will also explore the process of preparing, setting up and controlling lights for theatrical and other musical productions.

***This course may be repeated for credit.**

Theater Arts (Grades 9-12)

1 credit 🎭

Students will focus on building acting skills and techniques involving the body, voice and mind by utilizing improvisational tools, and by participating in dramatic games and scene work. Work will include creating characters, developing sense and emotional memory, understanding the notion of subtext, exploring stage directions and using critique. Students will also employ production skills, including those related to technical theater and design. Specific attention will be given to the role of a director in developing scenes, and in production. No prior theater arts course is required.

***This course may be repeated for credit.**

World Language

Spanish I

1 credit 🌐

Spanish I students begin to develop communicative competence in Spanish and to expand their understanding of the culture of the Spanish-speaking people. They learn to communicate in real-life contexts about topics that are meaningful to them, such as themselves, their preferences, activities, and their family. Students develop interpersonal communicative skills by exchanging simple spoken and written information in Spanish. They develop interpretive communication skills by listening to, viewing, and reading simple Spanish materials presented through a variety of media and based on familiar topics. They develop presentational communication skills by presenting basic information in Spanish orally and in writing, using a variety of familiar vocabulary, phrases, and structural patterns. Students also develop an awareness of the perspectives, practices, and products of Spanish-speaking cultures.

Spanish II

1 credit 🌐

Spanish II students continue to develop their proficiency in the 3 modes of communication (interpersonal, interpretive, and presentational). They focus on communicating in real-life contexts about their immediate world, such as their leisure and sports activities, daily routine, and possible medical issues. They begin to show a greater level of accuracy when using basic language structures, and are exposed to more complex features of the language, such as communicating about past events. They practice listening to and reading authentic materials in Spanish on familiar topics and make short, directed oral and written presentations in Spanish. Emphasis continues to be placed on the use of Spanish in the classroom as well as the use of authentic materials about the Spanish-speaking culture. Students demonstrate an understanding of the perspectives, practices, and products of Spanish-speaking cultures and the ways in which these cultural aspects are interrelated.

Spanish III

1 credit 🌐

Spanish III students continue to strengthen their communicative skills by interacting orally and in writing with other Spanish speakers, in listening to and reading messages in Spanish, and in making oral and written presentations in Spanish. They are able to communicate on a variety of topics at a level commensurate with their study, using more complex structures in Spanish, such as talking about the future and what they would do, and moving from concrete to more abstract concepts. They are able to comprehend the main ideas of culturally authentic materials on new topics in familiar and unfamiliar contexts and are able to identify significant details when the topics are familiar. Students will examine in Spanish the interrelationships among the perspectives, practices, and products of Spanish-speaking cultures.

Spanish IV

1 credit 🌐

In Spanish IV students continue to strengthen their communicative skills by interacting orally and in writing with other Spanish speakers, by listening to and reading texts in Spanish, and by making oral and written presentations in Spanish. They are able to exchange and support opinions on a variety of topics related to contemporary and historical events and issues at a proficiency level commensurate with their study. They comprehend spoken and written texts from a variety of authentic sources as well as produce compositions containing well-developed ideas on various topics. Students use the target language to access information to analyze how various perspectives reflect the practices and products of Spanish-speaking cultures.

Middle School Course Descriptions

- In order to provide a supportive student-centered environment, the middle school is made up of three teams of teachers and students. Students belong to a team whose teachers provide the core academic subjects. The team structure enables teachers to personally monitor the progress of the students on their team.

- Middle school offers a variety of Vocational Exploration (VEX) and Year Long-Elective classes. These courses are designed to catch the interest of the middle school student and offer opportunities to explore new or developing interests. VEX classes run at 4-5 week intervals, providing two VEX courses a quarter for students.

Grade 7 – Required Core Courses

English

Grade 7 English classes are heterogeneously grouped in the middle school. The seventh grade curriculum is based on the seventh grade competencies and is aligned with the eighth grade competencies and the Common Core State Standards. Grade 7 English is designed to provide students with a fundamental background in the language arts. Instructional units will be organized around reading, writing, speaking, listening and viewing. Teachers will use a variety of strategies, including differentiated instruction, to reach all students. The material for all English classes will be presented in a variety of ways including teacher lectures, class discussions, readings from novels, textbooks and other reference materials, cooperative learning activities, interactive activities utilizing computer software, audio-visual presentations, and review and reinforcement materials. All students are expected to complete all of their school assignments on time.

Math

All grade 7 students will be taught the New Hampshire Frameworks and Math Standards utilizing Illustrative Math program as a primary text.
Grade 7 math is a rigorous course in pre-algebra designed for those students who have already mastered basic computational skills and who have demonstrated a strong work ethic and aptitude in mathematics. The class emphasis will be on problem solving, mathematical communication, the use of formulas and other algebra skills such as solving and graphing equations.
All math classes will emphasize reinforcing computation skills as related to whole numbers, decimals and fractions. A strong emphasis will also be placed on problem solving, percents, statistics, geometry and many essential pre-algebra topics. All students are expected to complete all of their schoolwork on time and to the best of their ability.

Science

All grade 7 students will study Chemistry and Earth Science. Earth Science is a fascinating program which focuses on a more conceptual approach to geology, meteorology and astronomy. Within these topics students work toward the application of and understanding of scientific models and experimental data. During Chemistry the topics of atoms, molecules and the periodic table will be introduced. Students will be asked to solve problems using the scientific method and also to participate in creative problem-solving activities. The material for all science classes will be presented in a variety of ways.

There will be teacher lectures, class discussions, readings from reference materials, laboratory activities, cooperative learning activities, interactive activities utilizing computer software, audio-visual presentations along with review and reinforcement materials.

Social Studies

Social Studies in 7th grade will begin with basic geographical concepts, like physical features, map and globe skills and cultural geography. This includes latitude and longitude, times zones, economics, major world religions and types of government. Units in the United States, Canada, Mexico, Central America, the Caribbean and South America will follow. These units will focus on the culture, history, economics and physical features of the regions and nations. Additionally, current events (local, national and international) will be covered for students to have an increased knowledge of the world around them. Skills of using graphics and resources, compare and contrast, identifying cause and effect and defending opinions will be developed.

Grade 8 – Required Core Courses

English
Grade 8 English classes are heterogeneously grouped in the middle school. The eighth grade curriculum is based on the eighth grade competencies and is aligned with the high school competencies and the Common Core Standards. Grade 8 English is designed to provide students with a fundamental background in the language arts. Instructional units will be organized around reading, writing, speaking, listening and viewing.
Teachers will use a variety of strategies, including differentiated instruction, to reach all students. The material for all English classes will be presented in a variety of ways including teacher lectures, class discussions, readings from novels, textbooks and other reference materials, cooperative learning activities, interactive activities utilizing computer software, audio-visual presentations, and review and reinforcement materials. All students are expected to complete all of their schoolwork assignments on time.

Math
All grade 8 students will be taught the New Hampshire Frameworks and Math Standards utilizing Illustrative Math program as a primary text. All math classes will emphasize reinforcing computation skills as related to whole numbers, decimals and fractions. A strong emphasis will also be placed on problem solving, percents, statistics, geometry and many essential pre-algebra topics. All students are expected to complete all of their schoolwork on time and to the best of their ability.

Algebra I Honors (Grade 8) is a rigorous course in algebra designed for students who have demonstrated a strong work ethic and aptitude in mathematics. Not only will advanced problem solving, mathematical communication and algebraic theory be stressed, but the course will set a solid foundation in working with negative numbers and proceed to introduce algebraic concepts of variables, functions, relations, polynomials, systems of equations and inequalities, rational exponents, and quadratic equations. **A recommendation from a 7th grade math teacher is required.** All math classes will emphasize mathematical terminology, problem solving, mathematical communication, use of formulas, geometric concepts and many algebra skills such as solving and graphing equations. Students will also be continuing to practice geometric concepts, percents, statistics and an introduction to integers and basic algebraic concepts. All students are expected to complete all of their schoolwork on time and to the best of their ability.
****This course earns 1 high school credit upon successful completion.**

Science
All grade 8 students will study Life Science. Grade 8 science is designed to provide students with a fundamental background in the study of living things. Students will learn about classification, cells, viruses and bacteria, protists and fungi, plants, animals, heredity and change, the human body and ecology. Students will be asked to solve problems using the scientific method and also to participate in creative problem-solving activities. The material for all science classes will be presented in a variety of ways. There will be teacher lectures, class discussions, readings from reference materials, laboratory activities, cooperative learning activities, interactive activities utilizing computer software, audio-visual presentations and review and reinforcement materials.

Social Studies
Social Studies in 8th grade will begin with a review of basic geographical concepts like physical features, map and globe skills and cultural geography covered in 7th grade. Units on Europe, Africa, the Middle

East, South Asia, East Asia and Australia/Oceania will follow. These units will focus on culture, history, economics and physical features of the regions and nations. Additionally, current events (local, national and international) will be covered for students to have an increased knowledge of the world around them. Skills of using graphics and resources, compare and contrast, identifying cause and effect and defending opinions will be developed. The 8th grade social studies curriculum also includes integrated, developmentally appropriate instruction on the Holocaust and genocide, examining historical and contemporary cases, the causes and consequences of mass atrocities, and the role of civic responsibility, democratic values, and individual choice, in alignment with New Hampshire Ed 306.49 requirements.

Year Long Electives

Chorus Elective Course
Middle School Chorus is designed for students with an interest in singing and musical performance. Students will learn to sing a variety of songs with two and three harmonies. They will learn how to read, understand, and write musical notation. They will experience exercises in musical sight-reading and interpretation. Musical performance and group cooperation will be encouraged. Middle School Chorus combines all grade 7 & 8 choral students into one class.

Band - Elective Course
The Middle School band is open to all seventh and eighth grade students with prior instrumental experience. Focus is on developing all aspects of ensemble playing and appreciation of music through the large group experience and performing a wide variety of music arranged for the band. Several performances are presented each year and are required of those who enroll in band. Opportunities for honors band and solo experience are available to those who are motivated to pursue them. Middle School Band combines all grade 7 & 8 instrumental students into one class.

Spanish I - Elective Course (grade 8 only)
In Spanish I students begin to develop communicative competence in Spanish and to expand their understanding of the culture of the Spanish-speaking people. They learn to communicate in real-life contexts about topics that are meaningful to them, such as themselves, their preferences, activities, and their family. Students develop interpersonal, person-to-person, communicative skills by exchanging simple spoken and written information in Spanish. They develop interpretive communication skills by listening to, viewing, and reading simple Spanish materials presented through a variety of media and based on familiar topics. They develop presentational communication skills by presenting basic information in Spanish orally and in writing, using a variety of familiar vocabulary, phrases, and structural patterns. Students also develop an awareness of the perspectives, practices, and products of Spanish-speaking cultures.
****This course earns 1 high school credit upon successful completion.**

Vocational Exploration - VEX (Electives)

Required VEXes

Art 7th & 8th

7th and 8th grade art classes are based on the New Hampshire K-12 Curriculum Frameworks for the Arts. Classes focus on developing skills to safely use and apply appropriate media, techniques, and processes such as painting, ceramics, and sculpture, printmaking and drawing techniques. Students will solve visual problems and communicate meaning through selecting and applying a range of subject matter, symbols, and ideas. Students learn to identify and apply the elements of design through hands-on projects. There is an emphasis on encouraging students to do their best work and promoting a positive attitude toward the visual arts.

Physical Education 7th & 8th

The purpose of Middle School Physical Education is to expose 7th and 8th grade students to a variety of physical activities. The course will promote an appreciation for, and an understanding of, the various physical, mental, and emotional benefits derived from physical exercise as it relates to a healthy lifestyle. Additionally, the physical education program will assist in developing an understanding of teamwork, the discovery of individual talents and capabilities, a respect for others, and a healthy appreciation for athletic competition. This course is required for all middle school students each school year.

Health 7 & 8

Health classes are made up of heterogeneous groupings. Students will be required to take Health in 7th and 8th grade. The curriculum is different for each grade and is required of all middle school students. Assessment of student's performance in Health class will be measured through a variety of homework, quizzes, tests and projects, along with class discussion and participation.

Vocational Exploration (VEX) Options

Designing Minds
An introduction to the design and communications process used in creating photos, logo's, T-shirts and other media or graphic design for visual media.

Drama
This introductory class is open to seventh and eighth graders. Students will explore basic acting techniques involving the body, voice, and mind by utilizing improvisational tools, and by participating in dramatic games and simple scene work.

Food and Nutrition
Students will gain knowledge of basic nutrition to analyze their own eating habits. An assortment of food labs with a concentration of safety in the kitchen, recipe reading, proper measuring techniques, cooking terms and proper use of various cooking equipment will be emphasized.

General Music
MS General music is a survey of multiple topics pertaining to musicology, music history, and music theory. Students will explore their own thoughts about different topics and be able to have nuanced discussions about them.

Genius Hour
Genius Hour is a project based learning class. The goal of the class is to promote lifelong learning with the potential to find career related interests, work on communication and research skills along with other 21st Century Skills.

Illustrating & Inventing
An introduction to the design and communication process used in creating all the human-made things we use in our lives; and introduction to technical communications for engineering and architecture.

Need for Speed
An exploration and opportunity for students to learn about the processes and knowledge related to technology that is needed to solve problems and extend human capabilities. Through the problem-solving process, students learn to research, study, create and evaluate in technology content areas of transportation Power and Energy through designing, building and racing.

Personal Finance
Personal Finance will teach the fundamentals of financial literacy concepts to help introduce middle school students to personal economics and help prepare students for high school economics. Various online activities and projects will be used. Most of the work will be done in class using computers extensively. Students will organize and participate in a parent evening.

Production
The production class is a semester-long, hands-on, active class where students explore and learn about performance elements of musical theater by rehearsing and putting on a production. All students are involved in dancing, singing and acting as they work towards the goal of producing a musical theater performance for the end of the semester. This class is for motivated students who want to work together toward an exciting end.

Robotics & Programming
This class will introduce students to the fundamentals of programming and robotics. No programming experience is necessary. The lessons start with programming games using Scratch from M.I.T. Later students apply their programming skills to command Lego Robots. Finally, working in teams the class concludes with the exciting *Husky Robot Challenge* competition. Prizes are awarded.

Spanish A
A cultural introduction to Spanish and offered for a quarter as a vex elective to middle school students in 7th or 8th grade.

STEM Connections
This class will incorporate technology for students to design a variety of projects. Students will use Science, Technology, Engineering and Mathematics in their projects.

Wood Chucks
An exploratory, project based, hands on introduction to wood working. General shop safety is stressed when using both hand and power tools. Students will use the tools and techniques taught to make useful objects of wood.

Textiles & Fashion
The textiles portion of the course allows students to select a project, read sewing patterns, know and apply the terminology and use the equipment of successful construction of a project. Appropriate safety practices must be followed at all times.