

# MIRMIHS

MONADNOCK REGIONAL MIDDLE HIGH SCHOOL



Program of Studies  
2022-2023

# MISSION STATEMENT

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

## Administrative Offices:

Lisa Spencer – Principal	Ext. 6703
Becky Russell – Assistant Principal	Ext. 6746
Kelsey Kilburn – Assistant Principal	Ext. 6765
Thomas Cote – Athletic Director	Ext. 6781
Barb Geiss – School Counselor	Ext. 6754
Bethany Maynard – School Counselor	Ext. 6713
Kathryn Schnare – Sped Ed. Coordinator	Ext. 6706
Lorna Watkins-Barth – School Counselor	Ext. 6709

## Division Leaders:

Heather Gigliello	Ext. 6814
Treveor Blanchard	Ext. 6798
Jerry Kuhn	Ext. 6735
Matt Caron	Ext. 6743
John Naso	Ext. 6767

Introduction	Page
Mission Statement/Contact/ Non-Discrimination	2
Message from Administration	3
Husky Habits & Introduction	4-8
Meeting Requirements, Promotion/Drop-Add Procedures	9
Early Graduation Procedures	10
Required Grade Level Courses & Additional Courses	11-14
Advanced Placement Program	15
Graduation Requirements	16
Six Tier Diploma Choices	17
Alternative & Additional Learning Opportunities	18-20
Arts and Humanities Division + Course Offerings	21-40
STEM Division + Course Offerings	41-60

## NOTICE OF NON-DISCRIMINATION

The School District of School Administrative Unit No.93 (Monadnock Regional School District) does not discriminate in its educational programs, activities or employment practices on the basis of race, color, national origin, age, sex, religion, marital status, or handicap under the provisions of Title VI and Title VII of the Civil Rights Act of 1964, the Age Discrimination Act of 1967, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Education of All Handicapped Children Act of 1975, the Individuals with Disabilities in Education Act of 1990, and the Americans with Disabilities Act of 1990. Any persons having inquiries concerning School Administrative Unit No. 93’s policies of compliance with the regulations implementing these laws may contact the Director of Special Services, SAU No. 93, 600 Old Homestead Highway, Swanzy, NH 03446, (603) 352-6955, FAX (603) 358-6708.

The School Districts of School Administrative Unit No. 93 will provide drug-free schools and workplaces in accordance with the Drug-Free Workplace Act of 1988 and it’s implementing regulations.<sup>2</sup>

## MESSAGE FROM THE PRINCIPAL

Monadnock Community,

The Program of Studies has been created to help assist you in your journey throughout your high school career. Whatever path you choose; whichever class you take; our Program of Studies will help guide you and answer your questions.

I strongly encourage you, and your parents/guardians, to read the following information and discuss it with your school counselor. They will be able to answer questions that you might have, and they will be able to assist you in choosing the appropriate course load for your upcoming year. While planning your schedule, please keep in mind all of your short-and-long term goals. The course you take now can pay huge dividends in the future.

At Monadnock, we encourage our students to be the best students, both academically and socially. Our scheduling process takes a significant amount of time and we take a lot of pride in what we are able to offer our students. Our courses are created with our student's interests and future in mind. Please read over our Program of Studies and feel free to email or call me if you have any questions.

Respectfully,

Lisa Spencer  
Principal, Monadnock Regional Middle High School  
[lspencer@mrsd.org](mailto:lspencer@mrsd.org)  
603-352-6575

# **Husky Habits**

**Communication** - The transfer of ideas and information

**Problem-Solving** - The application of previous learning to new situations

**Informational Literacy** - The ability to locate, analyze, evaluate, manage and synthesize information

**Wellness** - The creation of healthy environments for everyone to learn and grow

**Creativity** - The development of new and innovative ideas and artifacts

**Civic, Social, and Professional Readiness** - The successful navigation of life after Monadnock

# Communication:

## The transfer of ideas and information

	4 Advanced	3 Proficient	2 Improving	1 Beginning	0 No Evidence
<b>Communication</b>	<b>I can consistently</b>	<b>Most of the time I can independently</b>	<b>With coaching, I can</b>	<b>With direct assistance, I can</b>	
	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	

# Problem Solving:

## Applying previous learning to new situations

	4 Advanced	3 Proficient	2 Improving	1 Beginning	0 No Evidence
<b>Problem Solving</b>	<b>I can consistently</b>	<b>Most of the time I can independently</b>	<b>With coaching, I can</b>	<b>With direct assistance, I can</b>	
	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	

## Technology Literacy: Human innovation in action

	4 Advanced	3 Proficient	2 Developing	1 Beginning	0 No Evidence
<b>Technology Literacy</b>	<b>I can consistently</b>	<b>Most of the time I can independently</b>	<b>With coaching, I can</b>	<b>With direct assistance, I can</b>	
	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 Developing	1 Beginning	0 No Evidence
<b>Creativity</b>	<b>I can consistently</b>	<b>Most of the time I can independently</b>	<b>With coaching, I can</b>	<b>With direct assistance, I can</b>	
	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	

# Life and Career Skills:

## The successful navigation of life after Monadnock

	4 Advanced	3 Proficient	2 Improving	1 Beginning	0 No Evidence
<b>Collaboration</b>	<b>I can consistently</b>	<b>Most of the time I can independently</b>	<b>With coaching, I can</b>	<b>With direct assistance, I can</b>	
	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	
<b>Respect</b>	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	
<b>Self-Direction</b>	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	



# **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, interests and post-secondary plans.

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

1. Students must take all the courses listed as required.
2. Prerequisites of all courses must be met.
3. Students must earn the required state credits to graduate. Credit will be awarded when all course competencies have been met.
4. 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.
5. 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.
6. Students in grades 9, 10 and 11 must take at least six credited classes at MRMHS per semester.
7. Students in 12th grade must take at least five credited classes at MRMHS per semester.

## **MEETING REQUIREMENTS FOR COLLEGE ADMISSION**

As you plan, consider the guidelines below:

4 Year Colleges		2 Year Colleges, 3 Year Nursing Programs, Technical Schools	
English	4 credits	English	4 credits
Social Studies	3-4 credits	Social Studies	3 credits
Mathematics	4-5 credits, including at least Algebra II	Mathematics	3-4 credits, including at least Algebra II
Science	3-5 credits	Science	3-4 credits
World Language	2-5 credits in the same language depending on the college major	World Language	0-3 credits depending on college or major
*Electives should be chosen from those available based on personal interests, educational goal, and diploma type.			

## **Promotion Requirements**

Students will be promoted to the next grade but will be required to repeat any **state required courses** that they did not receive credit for. Any student who has not met the minimum graduation requirement of 21 credits by the end of the 4<sup>th</sup> year, will be retained and may be eligible to graduate the following year. (See reference page 11)

## **Drop/Add 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 schedule conflicts, they must be initiated within the first two weeks of a semester. No changes will be considered without extenuating circumstances and the approval of the principal. Teacher-initiated changes will be considered for placement considerations at any time during the year with permission of the parent, 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 transcript.

## **Early Graduation Procedure**

To be approved for early graduation, parent/guardian and their son/daughter must submit the following packet by July 1<sup>st</sup> (entering their final graduation year) to the principal.

### **Steps are:**

1. A letter written and signed by the parent/guardian and student stating their request and reason for early graduation.
2. Parent/guardian and student forwards the letter to their school counselor.
3. 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 Principal.
4. School Counselor submits a packet to the Principal containing parent/student letter, Counselor's letter and student transcript.
5. High School Principal makes final decision.

# **GRADE 9**

## **REQUIRED:**

English 9  
 Mathematics  
 Earth Science  
 History of World Civilizations  
 Physical Education I  
 World Language (for NH Scholars & Distinction Diplomas)  
 Art

## **Additional Courses**

<p><b>Business Technologies</b></p> <ul style="list-style-type: none"> <li>Accounting I</li> <li>Business Management</li> <li>Computers for College and Career</li> <li>Exploring Computer Science</li> <li>Introduction to Business</li> <li>Personal Finance</li> <li>Sports Management</li> </ul>	<p><b>Performing Arts</b></p> <ul style="list-style-type: none"> <li>AP Music Theory</li> <li>Band (Honors or College Prep)</li> <li>Chorus</li> <li>Guitar &amp; Piano Keyboard Studies</li> <li>History of American Music</li> <li>Jazz Ensemble</li> <li>Music Technology</li> <li>Music Theory I</li> <li>Pop Music &amp; the 21<sup>st</sup> Century</li> <li>Theater Arts</li> </ul>
<p><b>Engineering &amp; Technology Education</b></p> <ul style="list-style-type: none"> <li>Building Construction</li> <li>Graphic Design</li> <li>Home Maintenance</li> <li>Introduction to Electricity/Electronics</li> <li>Introduction to Welding</li> <li>Metals</li> <li>Publication Graphics</li> <li>Small Gas Engines</li> <li>Technical Drawing</li> <li>Woodworking</li> </ul>	<p><b>World Language</b></p> <ul style="list-style-type: none"> <li>French I, II</li> <li>Spanish I, II</li> </ul>
<p><b>Family &amp; Consumer Science</b></p> <ul style="list-style-type: none"> <li>Food &amp; Nutrition I</li> <li>Textiles, Fashion &amp; Apparel</li> </ul>	<p><b>Visual Arts</b></p> <ul style="list-style-type: none"> <li>Art I</li> <li>Art Survey</li> <li>Art History</li> </ul>

**\*\* Please note that some courses may not be offered on a given year based on student interest/enrollment.**

# **GRADE 10**

## **REQUIRED:**

<b>English</b>
<b>Mathematics</b>
<b>Biology</b>
<b>United States History, Part 1</b>
<b>Or AP European History</b>
<b>Or History of World Civilizations</b>
<b>Physical Education</b>
<b>Life Choices</b>
<b>World Language (NH Scholars &amp; Distinction Diplomas)</b>

## **Additional Courses**

<p><b>Business Technologies</b></p> <ul style="list-style-type: none"> <li>Accounting I</li> <li>AP Computer Science Principles Applications</li> <li>Business Management</li> <li>Computer Game Design</li> <li>Computers for College and Career</li> <li>Exploring Computer Science</li> <li>Introduction to Business</li> <li>Introduction to Programming</li> <li>Personal Finance</li> <li>Sports Management</li> </ul>	<p><b>Family &amp; Consumer Science</b></p> <ul style="list-style-type: none"> <li>Early Childhood Ed. &amp; Parenting</li> <li>Food &amp; Nutrition I</li> <li>Food &amp; Nutrition II</li> <li>Life Choices I</li> <li>Textiles, Fashion &amp; Apparel</li> </ul> <hr/> <p><b>Social Studies</b></p> <ul style="list-style-type: none"> <li>Criminal Justice</li> <li>Psychology</li> <li>Sociology</li> <li>AP European History</li> </ul>
<p><b>Engineering &amp; Technology Education</b></p> <ul style="list-style-type: none"> <li>Advanced Metals</li> <li>Advanced Technical Drawing</li> <li>Advanced Woodworking I</li> <li>Building Construction</li> <li>Graphic Design</li> <li>Home Maintenance</li> <li>Introduction to Electricity/Electronics</li> <li>Introduction to Welding</li> <li>Metals</li> <li>Publication Graphics</li> <li>Small Gas Engines</li> <li>Technical Drawing</li> <li>Welding II</li> <li>Woodworking</li> </ul>	<p><b>Performing Arts</b></p> <ul style="list-style-type: none"> <li>AP Music Theory</li> <li>Band (Honors or College Prep)</li> <li>Chorus</li> <li>Guitar &amp; Piano Keyboard Studies</li> <li>History of American Music</li> <li>Jazz Ensemble</li> <li>Music Technology</li> <li>Music Theory I</li> <li>Pop Music &amp; the 21<sup>st</sup> Century</li> <li>Theater Arts</li> </ul> <hr/> <p><b>Visual Arts</b></p> <ul style="list-style-type: none"> <li>Art I</li> <li>Art II</li> <li>Art Survey</li> <li>Art History</li> <li>Ceramics</li> <li>Digital Photography</li> <li>Paint and Print</li> <li>Jewelry</li> <li>Creative Studio Arts</li> </ul>
<p><b>World Language</b></p> <ul style="list-style-type: none"> <li>French I, II, III</li> <li>Spanish I, II, III</li> </ul>	

# **GRADE 11**

## **REQUIRED:**

<b>English</b>
<b>United States History, Part II</b>
<b>Or AP United States History</b>
<b>Mathematics</b>
<b>Science</b>
<b>World Language (for distinction diploma)</b>
<b>Economics</b>

## **Additional Courses**

<p><b>Business Technologies</b>                  All grade 9 &amp; 10 courses                  Independent Living                  Introduction to Marketing                  Business Management</p>	<p><b>Mathematics</b>                  Algebra II                  Business Math                  Math for “Laughs”                  Pre-Calculus                  Research Methods                  Statistics                  STEM Math                  Sports Analytics</p>	
<p><b>Engineering &amp; Technology Education</b>                  Advanced Woodworking II                  All grade 9 &amp; 10 additional courses                  CAD/Architectural Design                  CAD/Engineering Graphics                  Publication Graphics                  Small Gas Engines</p>	<p><b>Physical Education</b>                  PE II                  Weight Training</p>	
<p><b>English</b>                  Creative Writing                  Journalism</p>	<p><b>World Language</b>                  French I, II, III, IV                  Spanish I, II, III, IV</p>	<p><b>Science</b>                  Aquatic Biology                  Astronomy                  Chemistry                  Conceptual Physics                  Ecology                  Environmental Science                  Human Anatomy &amp; Physiology</p>
<p><b>Family &amp; Consumer Science</b>                  All grade 9 &amp; 10 additional courses                  Apartment Cooking 101</p>	<p>Marine Biology                  Physics (CP &amp; AP)                  Survey of Chemistry                  Topics in Science</p>	
<p><b>Visual Arts</b>                  All grade 9 &amp; 10 courses                  AP Studio Art</p>	<p><b>Performing Arts</b>                  All grade 9 &amp; 10 courses</p>	<p><b>Social Studies</b>                  Grade 10 additional courses                  Sociology of Deviance                  Forensic Science and the Law                  Abnormal Psychology                  AP European History                  AP US History</p>

# **GRADE 12**

## **REQUIRED:**

<b>English</b>
Senior Capstone Project
<b>Civics</b>
Or Introduction to Business
Or Personal Finance
<b>Mathematics</b>
<b>Science</b>
<b>Economics</b>

## **Additional Courses**

<p><b>Business Technologies</b>          Business Management          All grade 9-11 courses          Independent Living</p>	<p><b>Mathematics</b>          Algebra II          AP Calculus          AP Statistics          Business Math          Math for “Laughs”          Pre-Calculus          Research Methods          Sports Analytics</p>
<p><b>Engineering &amp; Technology Education</b>          Advanced Woodworking II          CAD/Architectural Design          CAD/Engineering Graphics          All grade 9-11 courses          Publication Graphics          Small Gas Engines</p>	<p><b>Physical Education</b>          PE II          Weight Training</p>
<p><b>English</b>          Creative Writing          Journalism</p>	<p><b>Science</b>          AP Chemistry          AP Physics          Grade 11 additional courses</p>
<p><b>Family Consumer Science</b>          All grade 9-11 additional courses          Apartment Cooking 101</p>	<p><b>Social Studies</b>          Grade 10 &amp; 11 additional courses</p>

# ADVANCED PLACEMENT PROGRAM

The Advanced Placement Program gives students a head start on college, allowing them to take college-level courses and exams in the supportive environment of a high school classroom. Each AP course has a corresponding exam that is administered in May and represents the culmination of AP course work. The AP exam grade is a combination of the student's score on the multiple-choice and essay sections. The final grade is reported on a 5-point scale. Students who attain a score of 3 or higher may be able to gain college credit and/or placement into advanced college courses after high school.

Admission to AP courses offered at MRMHS is determined by several factors including, teacher recommendations, grade point average, completion of summer assignments, and completion of prerequisite classes. The most successful AP students are self-directed learners, willing to accept the higher academic challenge. Students taking AP courses are expected to take the exam. Students are responsible for paying for the exam. The school may help defray some of the cost depending on available funds.

MRMHS offers the following eleven Advanced Placement courses in six academic disciplines. Students can earn one credit per year for each course. Course listings with complete course descriptions can be found under each specific academic discipline.

## BUSINESS

**AP Computer Science** – This course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes object-oriented design using the java language.

**AP Computer Science Principles** - Offered during alternate years. Next class runs 2019-2020 school year.

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

## ENGLISH

**AP English Language** – This course fulfills the English requirement for grade 11 students, and is equivalent to freshman college English.

**AP English Literature** - This course fulfills the English requirement for grade 12 students, and is equivalent to Freshman College English.

## VISUAL ARTS

**AP Studio Art** – This course is offered for students in grades 11 and 12. It may be repeated for credit. The course highlights portfolio development in Drawing, 2D Design and 3D Design. The AP exam features preparation and submission of the portfolio for evaluation.

**AP Music Theory**-This course is offered for students in grades 10-12. Designed to develop a student's ability to recognize, understand, and describe the basic materials and processes of music.

## WORLD LANGUAGE

**AP Spanish** – This course is part of a five-year sequential program, and is designed to help students demonstrate a higher level of oral-aural proficiency in the Spanish language.

**AP French** – This course is part of a five-year sequential program, and is designed to help student demonstrate a higher level of oral-aural proficiency in the French language.

## MATHEMATICS

**AP Calculus** – This course is designed as an introduction to college-level mathematics. Differential and integral calculus will be stressed.

**AP Statistics** - This course can be taken after successful completion of Algebra II.

## SCIENCE

**AP Chemistry** – This course can be taken after successful completion of chemistry.

**AP Physics** – This course can be taken after successful completion of physical science and biology.

## SOCIAL STUDIES

**AP European History** - This course fulfills the World History requirement for grade 10 students. The course covers the historical significance of modern Europe from 1450 to the present.

**AP United States History** – This course fulfills the US History requirement for grade 11 students. The course will encompass the American colonial period through current history, stressing concept and process.

## **Graduation Requirements**

Policy # IKF

### **IKF - GRADUATION REQUIREMENTS**

#### **Monadnock Regional Middle High School Six Tier Diploma**

Students will have the opportunity to earn:

- Monadnock Regional Middle High School New Hampshire State Standard Diploma
  - Evening Division
- Monadnock Regional Middle High School Diploma
- Monadnock Regional Middle High School New Hampshire State Scholars Diploma
- Monadnock Regional Middle High School New Hampshire State Scholars Art Diploma
  - Two credits in Art
- Monadnock Regional Middle High School New Hampshire State Scholars STEM Diploma
  - One credit STEM course
- Monadnock Regional Middle High School Diploma of Distinction
  - Minimum of four honors or advance placement (AP) leveled courses
- Monadnock Regional Middle High School does offer an Alternate Diploma for Students with Significant Cognitive Disabilities pursuant to MRSD Policy IKFC.

All six diplomas are **Monadnock Regional Middle High School Diplomas** with an additional official seal on the diplomas for the New Hampshire State Scholars Diplomas and Diploma of Distinction. The credit requirements are as follows:

Monadnock Regional Middle High School New Hampshire State Standard Diploma	20.00 Credits
Monadnock Regional Middle High School Diploma	21.00 Credits
Monadnock Regional Middle High School New Hampshire State Scholars Diploma	23.50 Credits
Monadnock Regional Middle High School New Hampshire State Scholars Art Diploma	23.50 Credits
Monadnock Regional Middle High School New Hampshire State Scholars STEM Diploma	23.50 Credits
Monadnock Regional Middle High School Diploma of Distinction	26.00 Credits

CP = College Prep, H = Honors, AP = Advanced Placement



## Monadnock Regional Middle High School Six Tier Diploma Choices

Required Subjects	Required subjects		Credits Required					
	NH Standard	MRHS	NH Scholars	NH Scholars Fine Arts	NH Scholars STEM	MRHS Distinction		
English: Grade 9, 10, 11 & 12 English	English: Grade 9, 10, 11 & 12	4	4	4	4	4	4 CP, H or AP	
Mathematics: Grade 9, 10, 11 & 12 Mathematics	Mathematics: Grade 9, 10, 11 & 12	3 Algebra I	4 Algebra I	4 Algebra I, Algebra II, Geometry	4 Algebra I, Algebra II, Geometry	4 Algebra I, Algebra II, Geometry	4 CP, H or AP	
Earth Sciences:	Earth Science:	1	1	1	1	1	1 CP, H or AP	
Biological Sciences:	Biological Science:	1	1	1	1	1	1 CP, H or AP	
Elective Sciences:	Elective Science:		2	2 Chemistry or Physics or HAP	2 Chemistry or Physics or HAP	3 Chemistry, STEM, or Physics or HAP	2 Chemistry or Physics or HAP	
Civics:	Civics:	0.5	0.5	0.5	0.5	0.5	0.5	
Economics:	Economics	0.5	0.5	0.5	0.5	0.5	0.5	
History of World Civilizations Or AP European History	History of World Civilizations: Or AP European History	0.5	1	1	1	1	1 CP, H or AP	
US History:	US History Part I:		1	1	1	1	1 CP, H or AP	
Social Studies Electives:	US History Part II: Or AP US History	1	1	1	1	1	1 CP, H or AP	
World Language:	World Language:			2	2	2	3	
Arts Education:	Arts Education:	0.5	0.5	0.5	2	0.5	0.5	
Information & Communication Technologies	Information & Communication Technologies	0.5	0.5	0.5	0.5	0.5	0.5	
Health Education:	Health Education:	0.5	0.5	0.5	0.5	0.5	0.5	
Physical Education:	Physical Education:	1	1	1	1	1	1	
Senior Capstone	Senior Capstone		1	1	1	1	1	
Electives:	Electives:	6	1.5	2	0.5	1	3.5	
<b>Total:</b>		<b>21</b>	<b>20</b>	<b>21</b>	<b>23.5</b>	<b>23.5</b>	<b>23.5</b>	<b>26</b>

## ADDITIONAL LEARNING OPPORTUNITIES

### ADVANCED AND DUAL CREDIT OPTIONS

Honors (H), Dual Enrollment Courses, or Advanced Placement (AP) courses provide the most challenging level of work for students.

- **Honors** courses are intended for accomplished students because these courses require serious academic commitment.
- **Running Start** courses may also earn dual credit. These courses are approved by NH Community Colleges and universities.
- **Advanced Placement (AP)** courses are designed to provide students with the analytical skills and factual knowledge necessary to be successful when taking AP exams. Students who earn a qualifying score (three or more) on an AP exam may receive college credit based upon the award by their chosen college or university. Students taking AP courses are expected to take the exam. The school may help defray some of the cost depending on available funds. Course listings with complete course descriptions can be found under each specific academic discipline.
- Monadnock Regional School Board policy provides up to \$300.00 per year per student toward funding college tuition costs (dual enrollment).

## **ADULT DIVISION PROGRAM**

ADP is a night school option for students. The courses are free to students residing in the district, and are under the age of 21. A brochure is available on the school web site (mrsd.org) and in the Guidance office.

## **W.I.N (What I Need)**

WIN block stands for What I Need. This block allows teachers to provide individualized or small group instruction to bring students to their next level. The goal of WIN is to provide interventions, supports, extensions, and enrichments throughout the day.

## **CREDIT RECOVERY SUMMER SCHOOL (Grades 9-12)**

### **Credit to be Determined**

Summer School provides an opportunity for students to recover lost credit and competencies from the most recent school year. Typical Summer School courses are offered in English 9, 10, 11 & 12, Algebra, Economics, American Democracy, History of World Civilizations, Physical Science and Biology. Summer School is considered an extension of the school year and a certified educator will provide the competencies.

## **CHESHIRE CAREER CENTER**

### **Credit to be Determined**

The Cheshire Career Center is one of 25 regional career and technical education centers located throughout New Hampshire. The Career Center offers 16 career track programs. The programs are Automotive Technology, Accounting, Computer Maintenance & Repair, Computer Science, Construction Trades, Cosmetology, Culinary Arts, Drafting and Design, Early Childhood Education, Health Science Technology, Horticulture, Machine Tool Processing, Marketing, TV Studio Production & Digital Filmmaking, Theater Arts and Fire Science.

## **ENGLISH TO SPEAKERS OF OTHER LANGUAGES (ESOL)**

THE ESOL English course is designed to be used by students who have been designated as English Language Learners. This course of study is based on an integrated skills approach with listening, speaking, reading, and writing and grammar components. It emphasizes those skills necessary for effective oral and written communication.

## **EXTENDED LEARNING OPPORTUNITIES (ELO)**

### **Credit to be Determined**

Students may participate in and earn credit for various activities outside of the classroom. A mentor may also work with the student to develop a proposal and monitor activities. An application which describes activities and methods for assessing student work is submitted to the ELO Coordinator's office for approval. Once approved, the student will work on his/her program at his/her pace. All ELO work must be completed in one calendar year from the approval date or by the deadline for senior grades.

## **LAW, PUBLIC SAFETY & SECURITY CAREER PATHWAY**

The Law, Public Safety, and Security Pathway (LPSS) is for students interested in the broad career areas of correction services, emergency and fire management services, security and protective services, law enforcement services and legal services. While all students (9-12) can apply into the program, most program requirements and electives are restricted to juniors and seniors. Formal membership into and graduation from the program require the completion of an application, one required course (Criminal Justice or Forensic Science and the Law), and at least four other specified electives. There are minimum grade requirements for those courses, and a senior project (or some other approved relevant activity) with some connection to the pathway can replace an elective. Pathway-sponsored trips and activities are available to LPSS Pathway members. LPSS applications are available upon request from Mr. Harrison or Guidance.

## **NH SCHOLARS**

New Hampshire Scholars is part of the State Scholars Initiative, a national program that uses business leaders to motivate students, beginning in grade 8, to complete a rigorous course of study in high school, one that will give them a boost in college and careers.

### **H.O.P.E (Healthy / Athletics Option for Physical Education)**

#### **.5 Credit**

Students may earn .5 PE credit by participating in a self-guided program while participating in athletics or a pre-approved out of school athletic activity. Requirements include weekly logs and reflection, with specific focus on meeting the 6 state physical education standards. Students are supported/ guided by the physical education teachers but the work is intended to be student driven and individualized. Upon conclusion of their season, or semester, students present their experience to a group and complete a written paper on the experience. The focus is on meeting the state standards in an out of the classroom experience.

Completion of PE1 is a prerequisite and approval from the PE teacher.

## **VIRTUAL LEARNING ACADEMY CHARTER SCHOOL**

### **Credit to be Determined**

The Virtual Learning Academy Charter School (VLACS) is New Hampshire's first statewide online virtual public high school and middle school where they offer students the opportunity to learn at their own pace from anywhere. As part of the public school system, they are free to all students living in New Hampshire. Their mission is to use latest technology to provide students with anytime, anywhere access to a rigorous, personalized education that helps students learn today, graduate tomorrow and prepare for the future. They offer courses in every traditional subject and many electives which will fulfill all graduation requirements for a MRMHS diploma. Visit the VLAC web site ([info@vlacs.org](mailto:info@vlacs.org)) to view their course catalog.

## **AMERICAN SCHOOL**

### **Credit to be Determined**

The American School distance learning institution utilizing the home study method, is dedicated to providing quality secondary instruction at a reasonable cost to those students who are seeking an alternative means of completing their high school education. They offer over 80 courses in three delivery styles: paper-based, paper-based with online exams and online courses. Visit American School web site ([americanschool.org](http://americanschool.org)) to view their course offerings.

## **Academic and Executive Skills for Life**

### **1 Credit**

Learn about executive functioning and why it is important; how the brain works, what are the best ways for organizing given your own brain and how it works, learn study skills and life skills needed for success in high school and beyond.

# ARTS AND HUMANITIES DIVISION

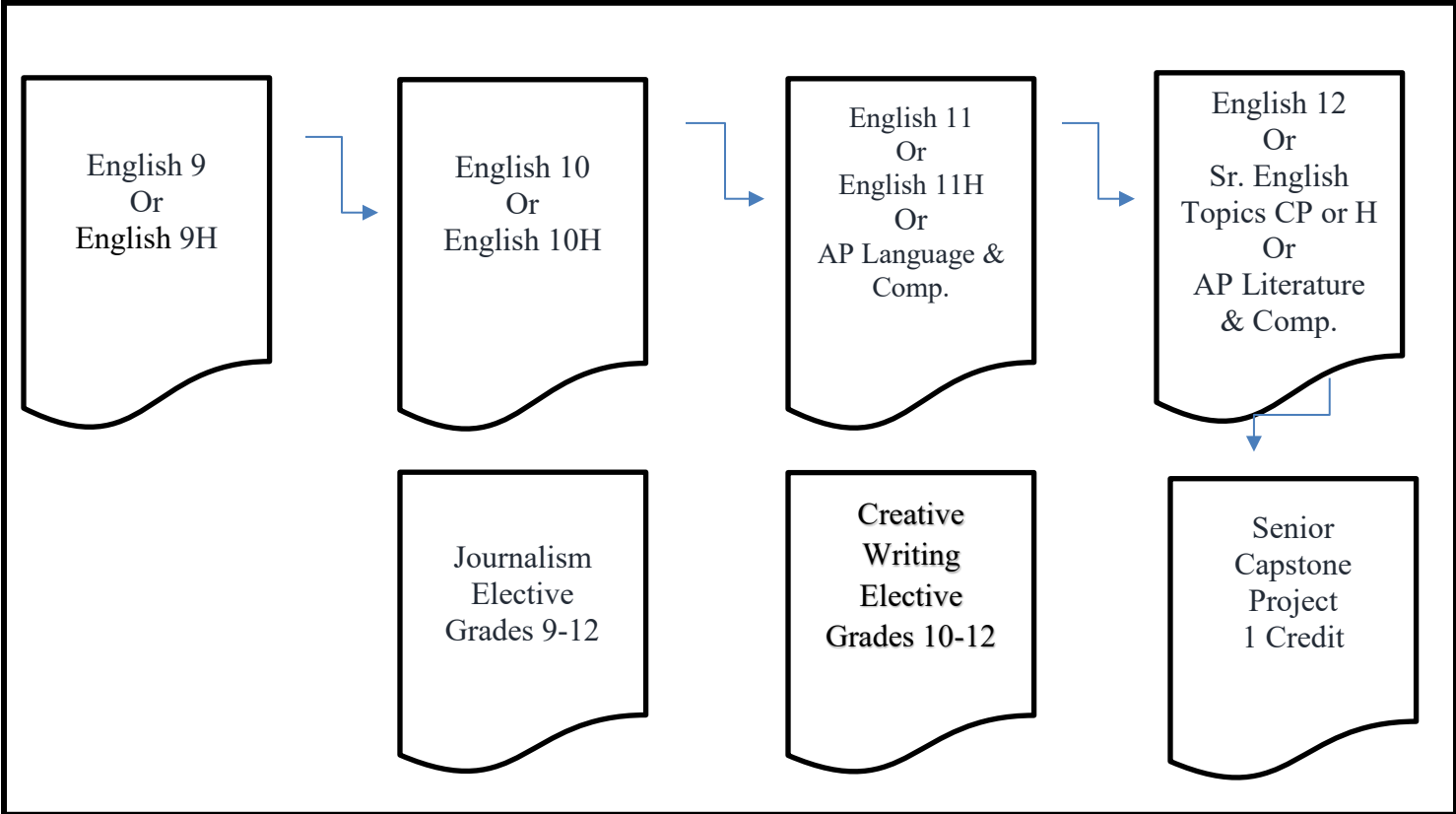
**Arts and Humanities at Monadnock (Including courses in English Language Arts, Fine/Performing Arts, Social Studies, World Languages, and Family and Consumer Science):**

From ancient times to the present day, people around the globe have raised fundamental questions about life through the arts, literature, and philosophy. In the **Arts & Humanities Division** at **MRMHS**, teachers and students explore the human experience across a broad range of subjects. By studying the world's literature, art, history, languages, cuisine, and cultures, students expand their horizons and prepare themselves for an increasingly multicultural world. Through rigorous exploration of complex arguments, students move beyond their own assumptions toward a deeper understanding of human life and its perplexities. Additionally, this process of discovery helps students open their imaginations to fresh perspectives of the world and develop their unique talents and identities. This innovative program helps our students acquire frameworks for understanding complex aesthetic, ethical, cultural, and historical issues, and the abilities to explore and communicate critically about them. We hope to inspire within our students a search for truth, sensitivity to our world, and the diverse cultures within it. In addition, we want our students to maintain healthy lifestyles and become critical thinkers.



# **ENGLISH COURSES – Scope & Sequence**

**Required: 5.0 credits (English 9, English 10, English 11, English 12, Senior Capstone Project)**



## **ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION (Grade 11)**

### **1 Credit**

The AP English Language and Composition course is designed to help students become skilled readers of prose written in a variety of rhetorical context. 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**

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.

## **COLLEGE COMPOSITION: CREATIVE WRITING (Grades 10-12)**

### **.5 or 1 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 prewriting 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.

\*Part of River Valley Community College's Running Start Program, students in this class will be able to earn college credit, as well as high school credit, for completing course competencies.

**\*This course does not meet English graduation competency requirements.**

## **ENGLISH (Grades 9-12) Required**

### **1 Credit (annually)**

English is intended to prepare students for college after High School 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.

## **HONORS ENGLISH (Grades 9&10)**

### **1 Credit**

The Honors English program is intended to prepare top-level college bound students for the Advanced Placement program in the high school. The goal of the grade 9 and 10 Honors English program is to teach students to carefully analyze a broad and challenging range of genres from different cultures and centuries. They will analyze and discuss how literature provides insights into the human condition. Students will write narrative, reflective, and research based assignments to support claims using information they have evaluated. 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. Additional summer reading and writing will be required of students in the Honors English program.

## **JOURNALISM (GRADE 9-12) (ELECTIVE)**

### **.5 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 does not meet English graduation competency requirements.**

## **SENIOR CAPSTONE PROJECT (Grade 12)**

### **1 Credit**

Senior Capstone will provide students with guided support for college and career plans. Students will be taught how to write a resume and a college essay. The college essay is an integral part of the college application package. Students will have the opportunity to submit several drafts for teacher feedback and participate in teacher-student conferences during the class time. Students will also be introduced to topics such as workplace skills, behavior, and ethics. In addition, students will receive support and time to work on their Senior Projects.

## **SENIOR ENGLISH TOPICS (COLLEGE PREP, HONORS)**

### **1 Credit**

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. Students will participate in the Monadnock Reads program over the summer.

### **Course Topics:**

- British Literature
- Children's Literature
- Film Studies
- Holocaust Studies
- Issues in Gender and Race in Literature and Media
- Journalism
- Literature of the Vietnam War
- Media Studies
- Monsters Within: A Survey of Crime and Justice in Literature and Media
- Science Fiction and Fantasy
- Sports Literature

## **BRITISH LITERATURE**

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: COURSE DESCRIPTION/OVERVIEW**

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.

## **MONSTERS WITHIN: A SURVEY OF CRIME AND JUSTICE IN LITERATURE AND MEDIA (GRADES 12) (LAW, PUBLIC SAFETY & SECURITY PATHWAY)**

*Monsters Within* 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. Students may also, put on a mock trial, debate current issues of law enforcement, justice and crime, as well as discuss current events and issues around recent laws or litigation to be voted on. The course will emphasize the recurrent themes of good and evil, justice, authority, and personal responsibility.

## **FILM STUDIES: COURSE DESCRIPTION**

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.

## **HOLOCAUST STUDIES**

While history and the social sciences provide the critical context of the Holocaust, other ways of representing the experience must be considered, specifically the fields of literature, film, and art. It is through this comprehensive approach that students may begin to question and find answers regarding silence, complicity, moral and ethical choices, and responsibility and action, prompting them to examine their roles as members of a global community. Senior English engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students 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.

## **LITERATURE OF THE VIETNAM WAR**

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 relationship 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**

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, understand the benefits and potential negative effects of media content, while identifying techniques to become more media literate.

The grade 12 Media Literacy elective will help students develop their media literacy and analytical skills. The primary focus of this course is to examine various forms of media in popular culture and to understand their impact on culture. The goal is for students to better understand media content, media industries, and how they affect society and ourselves. Assessments will be varied but will include projects, presentations, writing assignments, analysis assignments, and evaluation of different media sources.

## **ISSUES IN RACE AND GENDER IN LITERATURE AND MEDIA**

Racism, sexism, and classism continue to be in the forefront of the dilemmas concerning people in the U.S. This course will focus on issues of gender and sexuality, class, and race from a critical perspective based on several theories and cultural and multicultural studies. Students will then analyze how literature and media texts, such as advertisements, movies, songs, and sitcoms, may either contribute to or undermine the inequalities that still exist today. Students will be responsible for several interconnected reading and writing assignments on specific issues in race and gender.

## **SCIENCE FICTION & FANTASY**

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. Assessment will take the form of essays, literary and film analyses, research, contribution through class discussion, and critical responses.

## **SPORTS LITERATURE**

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 about proactive safety measures as well as reactive ones in the case of protection, a given injury, and/or emergency. Students will read a variety of literature that may include but is not limited to

# **VISUAL AND PERFORMING ARTS COURSES**

**REQUIRED .5 Credit**

**ALL ELECTIVES:**

## **ADVANCED PLACEMENT STUDIO ART (Grades 11-12)**

**1 Credit**

### **PRE-AP STUDIO ART (GRADE 11)**

**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, who expect to work on their portfolio in both junior and senior years, should take Pre-AP Studio Art as a junior. Students will select from the following portfolio offerings: Drawing or 2D Design.

**Prerequisite:** Art II

## **AP MUSIC THEORY (Grades 10-12)**

**1 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 are prepared to take the AP Music Theory Exam when they have completed the course. Students planning to major or minor in music in college may be able to enroll in an advanced music theory course, depending on individual colleges' AP policies. There is no prerequisite for this course; however, the ability to read standard notation is highly encouraged. This course may be taken more than once.

## **ART SURVEY (Grades 9-12)**

**.5 credit**

This is a one-semester course designed to introduce students to a variety of visual art 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. This course is not considered a prerequisite to advanced elective art courses: students wishing to take additional art courses in the future should opt for Art 1.

## **ART I (Grades 9-12)**

**1 Credit**

This year-long course builds on students' previous art experiences and explores the elements and principles of design through a variety of techniques and media. Students will have a chance to explore drawing, painting, sculpture, collage and printmaking. Students will study the history of art as well as its place in shaping our modern day society. This course is designed for students who have a curiosity for all aspects of art and wish to have the time to expand their knowledge and talent. This serves as a prerequisite for Art II.

## **ART II (Grades 10-12)**

**1 Credit**

This year-long course builds on the experience acquired in Art I, with emphasis on further development and refinement of artistic skills, encouragement of a personal style and creative interpretation. Students are introduced to more advanced techniques in drawing, painting, design, sculpture, collage, printmaking and illustration. Art appreciation and critical evaluation are also included in the curriculum. This course is for self-motivated students who truly enjoy art and are ready to delve in deeper. Students are encouraged to build a portfolio of work that may be used for future AP courses and/or college art programs. Art II serves as a prerequisite to AP Studio Art.

**Prerequisite:** Art I

## **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 throughout time. Students will spend class time discussing and analyzing, rather than creating art. Reading articles, note taking, and short written reflections 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 slideshows and a culminating art history game.

## **CERAMICS (Grades 10-12)**

### **.5 Credit**

This one-semester course is an opportunity for students to further develop their skills in clay and 3-D design. Projects will primarily focus on a variety of hand building techniques to produce functional and sculptural pieces. Students will have the chance to explore a variety of glazing and decorative techniques, to further enhance their designs. In addition to hand building, students will be introduced to creating vessels on a potter's wheel.

**Prerequisite:** Art Survey or Art I

## **CREATIVE STUDIO ARTS (Grades 10-12)**

### **1 Credit**

This eclectic class is an overview of crafts, 3-dimensional design and sculpture, and an exploration of painting techniques. Students may choose to focus more on a particular area, such as painting, or experiment with numerous approaches. This class introduces specialized art projects not offered in other art classes, which include metals, stained glass, fiber arts, ceramics, plaster, wood, and assemblage.

**Prerequisite:** Art Survey or Art I

## **DIGITAL PHOTOGRAPHY (Grades 10-12)**

### **.5 Credit**

This course is designed to help you become a more thoughtful, creative and visually aware photographer. We will explore composition, perspective, landscapes, portraits, semi-abstract images and telling visual stories. You will also learn how to use your images in other areas of art making using mixed media techniques. You will learn how to use a DSLR camera to take pictures in manual mode and will be expected to bring your own personal interests and creative expression to your work. A large part of your work will have to be done out of class, so you must be a motivated learner. You will use Canva to put together a process board and write about your experience. We will be using a digital darkroom to edit our photos. \*You must have access to a phone with a camera on it and/or a digital SLR camera.

**Prerequisite:** Art Survey

## **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 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. Emphasis is on marching skills and performance in the fall and concert repertoire beginning in late October. **MARCHING BAND IS REQUIRED OF ALL BAND MEMBERS.** All band performances are mandatory. Although performance oriented, band students are taught basic theory and history and are assessed through planning, written tests and projects.

**Prerequisite:** Ability to play a band instrument

## **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 choral production as well as the appreciation and enjoyment of music by means of participation. No voice testing is required and the chorus, which begins with informal group singing, is gradually trained in the finer points of choral techniques, intonation, harmony singing, posture, breathing, diction, and stage deportment. Fundamentals of music reading and basic theory are also taught during rehearsals.

## **HISTORY OR AMERICAN MUSIC (Grades 9-12)**

### **.5 Credit**

A general and introductory course offering students an overview of the diverse popular musical styles of the late 19th, 20th, and 21st centuries – from the “Blues” through current Rock and Roll to Film Music and Rap. No prior musical training or knowledge is required. The course will include a great deal of listening to analyze and compare the many styles.

## **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.

## **JEWELRY MAKING (Grades 10-12)**

### **.5 Credit**

This course enables students to apply elements of art and principles of design to aesthetically challenge them to create visually pleasing, functional pieces of jewelry. Students learn basic techniques of fabrication in sterling silver and copper, setting semi-precious gems, exploring enameling on copper, 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. Students may bring in their own metal, beads or gems if they so desire, however there will be a large selection of materials available to each student. There is **NO** fee associated with this class **UNLESS** students want to make multiples of projects or design a project on the side; then there may be a nominal fee charged depending on the amount of silver or semi-precious gems being used.

**Prerequisite:** Art Survey or Art I

## **MUSIC THEORY (Grades 9-12)**

### **.5 Or 1 Credit**

Music Theory is designed to give music students an introduction into the terms, structure, and function of music along with the basic skills necessary to sight sing music, hear written music parts without playing or singing and transcribe music that students are hearing for the first time. Major units of study will include: keys, scales, chords, and rhythms. This course is required for college entrance into any music major program and is very helpful to those who want to better understand the language of music. **\*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 understanding of 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.**

## **PAINT AND PRINT (Grades 10-12)**

### **1 Credit**

This class will explore the world of Painting and Printmaking as a means of creating playful, colorful art. We will work with all sorts of paint, including acrylic, oil and watercolor. The paint will be applied to a variety of surfaces including canvas. Along with painting, we will divide our time discovering printmaking. Students will learn the art of relief, monotype and intaglio printmaking to create bold posters and expressive designs. We will be making prints on a variety of surfaces such as paper, clay and fabric.

**Prerequisite:** Art Survey or Art I

## **THEATER ARTS (Grades 9-12)**

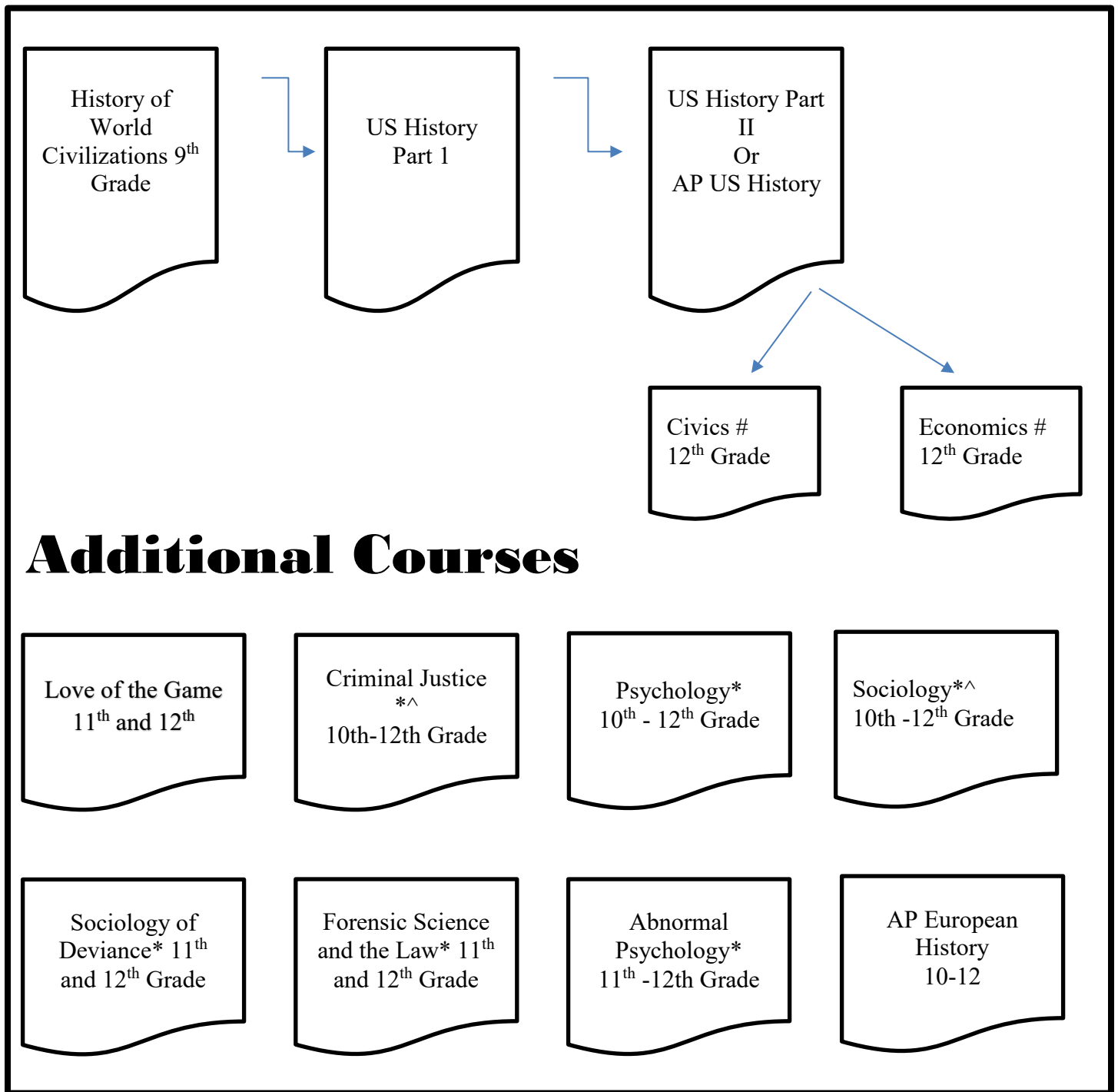
### **.5 Or 1 Credit**

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 theatre arts course is required.

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



# Social Studies – Scope & Sequence



# - Courses to fulfill the mandatory Civics and Economics graduation requirements as well as those seeking enrichment.

^ - Courses connected with River Valley CC. College credit can be earned.

\* - Courses connected with the Law, Public Safety & Security Pathway

## **ABNORMAL PSYCHOLOGY (Grade 11-12)**

### **.5 Credit**

Abnormal Psychology is a college preparatory class. The curriculum will cover psychological conditions and disorders that are relevant to the study of criminology. The topics included in this curriculum are mood disorders, anxiety disorders, personality disorders, impulse control disorders, and schizophrenia. We will also examine the social issues involved with releasing criminals suffering from mental illness into the community after they successfully received treatment in a facility. Students will be required to complete readings, research projects, and will be evaluated on their ability to share information with their peers.

## **AP EUROPEAN HISTORY (Grade 10-12)**

### **1 Credit**

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**

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 concept 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.

As pre-Civil War history is covered in the 10<sup>th</sup> grade curriculum, it is *strongly* recommended that students take Honors level US History as a prerequisite to AP US History.

## **CIVICS (Grade 11-12)**

### **.5 Credit**

**This course may be used to fulfill the Civics requirement for graduation.** 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 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.

## **CRIMINAL JUSTICE (Grade 10-12)**

**.5 Credit**

### **Running Start Program, 3 College Credits**

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 11 & 12)**

**.5 Credit**

**This course may be used to fulfill the Economics requirement for graduation.**

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 (Grade 11&12)**

**.5 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 hands. The class includes a variety of professional guest speakers and participation in a total processing of a mock crime scene as a final assessment.

## **HISTORY OF WORLD CIVILIZATIONS (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."

## **LOVE OF THE GAME (Grade 11 or 12)**

**.5 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 as well as class discussions.

## **PSYCHOLOGY (Grade 10-12)**

**.5 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 study of personality, human development, and an understanding of good mental health will be emphasized.



## **SOCIOLOGY (Grade 10-12)**

**.5 Credit**

### **Running Start Program, 3 College Credits**

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, multi-media, and other pertinent activities.

## **SOCIOLOGY OF DEVIANCE (Grade 11&12)**

**.5 Credit**

This college preparatory course will examine how deviant behavior can influence society. The basic aspects and root causes of deviance will be covered including some of the most commonly accepted social theories regarding deviance. Students will look at the differences between low level deviance and more severe cases of criminal deviance. The course will cover the means that our society uses to exert some control over deviant behavior. There is a high expectation of reading and writing as well as teacher and student driven class discussion.

## **UNITED STATES HISTORY PART I (1491-1865) (Grade 10)**

**1 Credit**

History at this level emphasizes 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 (1865-Present) (Grade 11)**

**1 Credit**

History at this level emphasizes the political, economic, intellectual, and social trends in America from the post-Civil War era until the present. Topics include industrialization, the global conflicts of the 20<sup>th</sup> 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.

**OR**

**ADVANCED PLACEMENT EUROPEAN HISTORY (Grade 10-12)**

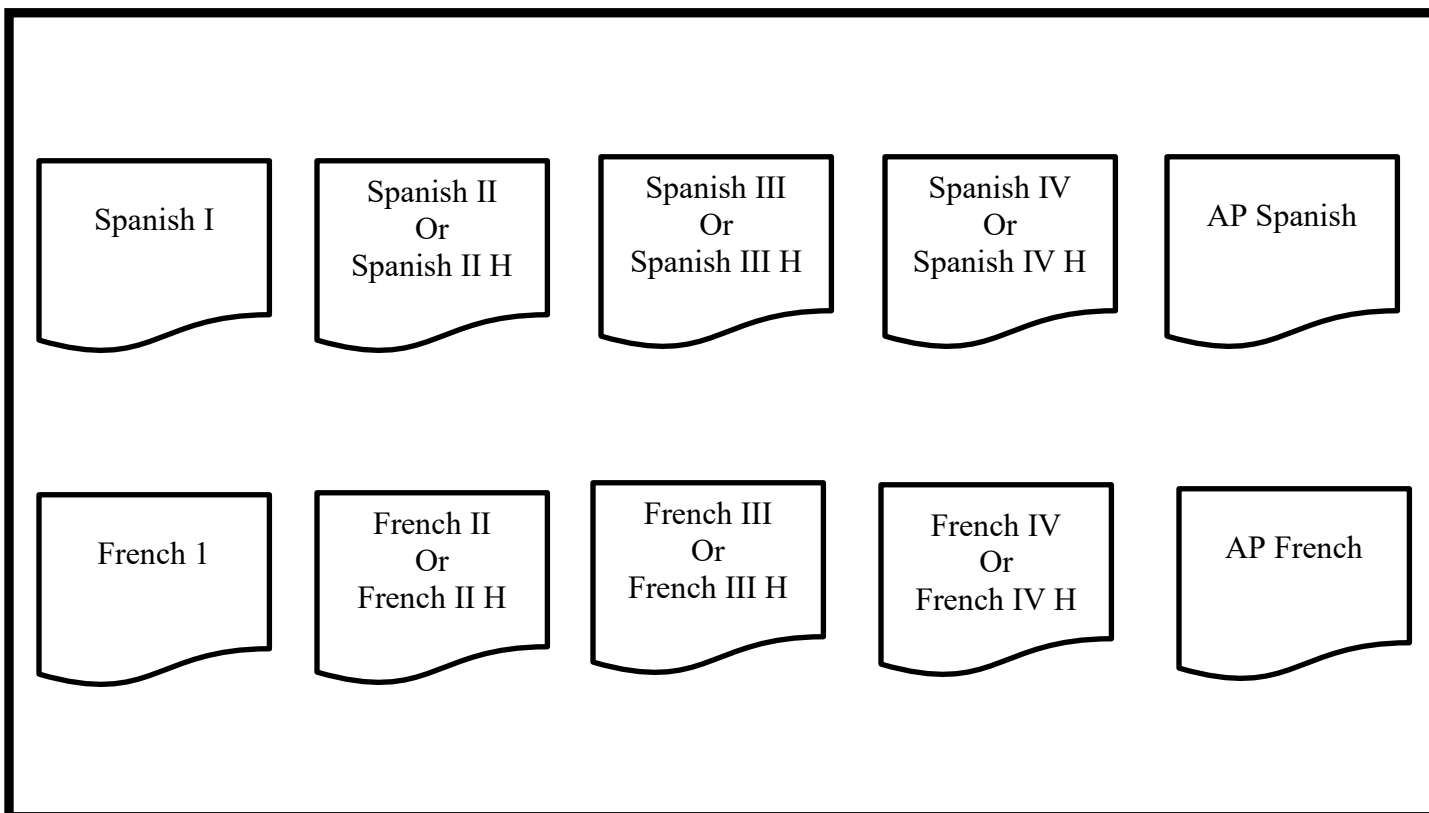
**1 Credit**

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.



# WORLD LANGUAGES – Scope & Sequence

ALL ELECTIVES



## **ADVANCED PLACEMENT FRENCH**

### **1 Credit**

The AP French Language and Culture course is meant to develop students' proficiency levels in French to the High Intermediate to Low Advanced range of the ACTFL Performance Guidelines. The course emphasizes interpersonal, interpretive, and presentational modes of communication, while incorporating the study of the six AP themes: Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, Families and Communities, and Beauty and Aesthetics. In their communication, students demonstrate an understanding of products, practices, and perspectives of francophone cultures, incorporate interdisciplinary topics, make comparisons between the English and French languages and francophone cultures, as well as using French in real-life settings. The language of the classroom is French and a variety of authentic francophone materials, such as films, TV clips, newspaper and magazine articles, literary and non-literary texts, music and podcasts, and internet sources are used. This year long course is designed to prepare students to take the AP French Language and Culture exam.

## **FRENCH I**

### **1 Credit**

French I students begin to develop communicative competence in French and to expand their understanding of the culture of the francophone people. Students will 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 French. They develop interpretive communicative skills by listening to, viewing, and reading simple French materials presented through a variety of media and based on familiar topics. They develop presentational communicative skills by presenting basic information in French 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 francophone cultures.

## **FRENCH II**

### **1 Credit**

French II students continue to develop their proficiency in the three modes of communication (interpersonal, interpretive, and presentational). Students focus on communicating in real-life contexts about their immediate world, such as their leisure and sports activities, daily routine and possible medical issues. Students 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 French on familiar topics and make short, directed oral and written presentations in French. Emphasis continues to be placed on the use of French in the classroom as well as the use of authentic materials about the francophone culture. Students demonstrate an understanding of the perspectives, practices, and products of francophone cultures and the ways in which these cultural aspects are interrelated.

## **FRENCH II HONORS**

### **1 Credit**

Students may enroll in the Honors option for French II. Students choosing this option will also be required to complete additional interpersonal, interpretive, and presentational activities, as well as to further explore the structure of the language.

## **FRENCH III**

### **1 Credit**

French III students continue to strengthen their communicative skills by interacting orally and in writing with other francophone speakers, in listening to and reading messages in French, and in making oral and written presentations in French. They are able to communicate on a variety of topics at a level commensurate with their study, using more complex structures in French, 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 French the interrelationships among the perspectives, practices, and products of francophone cultures.

## **FRENCH III HONORS**

### **1 Credit**

Students who elect to take French III as an honors class will be required to complete additional communicative interpersonal, interpretive, and presentational activities, as well as to further explore the structure of the language.

## **FRENCH IV**

### **1 Credit**

French IV students continue to strengthen their communicative skills by interacting orally and in writing with other francophone speakers, by listening to and reading texts in French, and by making oral and written presentations in French. 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 francophone cultures.

## **FRENCH IV HONORS**

### **1 Credit**

Students who elect to take French IV as an honors class will be required to complete additional communicative interpersonal, interpretive, and presentational activities, as well as to further explore the structure of the language.

## **ADVANCED PLACEMENT SPANISH**

### **1 Credit**

The AP Spanish Language and Culture course is meant to develop students' proficiency levels in Spanish to the High Intermediate to Low Advanced range of the ACTFL Performance Guidelines. The course emphasizes the three modes of communication (interpersonal, interpretive, and presentational) as defined in the Standards for Foreign Language Learning in the 21st Century, while incorporating the study of the six AP themes: Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, Families and Communities, and Beauty and Aesthetics. In their communication, students demonstrate an understanding of products, practices, and perspectives of Spanish-speaking cultures, incorporate interdisciplinary topics, make comparisons between the English and Spanish languages and Spanish-speaking cultures, as well as using Spanish in real-life settings. The language of the classroom is Spanish and a variety of authentic Spanish-speaking materials, such as films, TV clips, newspaper and magazine articles, literary and non-literary texts, music and podcasts, and internet sources are used. This year long course is designed to prepare students to take the AP Spanish Language and Culture exam which enables students to earn college credit for exceptional achievement in the study of Spanish.

## **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, person-to-person, communicative skills by exchanging simple spoken and written information in Spanish. They develop interpretive communicative skills by listening to, viewing, and reading simple Spanish materials presented through a variety of media and based on familiar topics. They develop presentational communicative 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 II HONORS**

### **1 Credit**

Students may enroll in the Honors option for Spanish II. Students choosing this option will follow the same syllabus and meet the same competency requirements as other Spanish II students, but will also be required to complete additional interpersonal, interpretive, and presentational activities, as well as to further explore the structure of the language.

## **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 III HONORS**

### **1 Credit**

Students who elect to take Spanish III as an honors class will be required to complete additional communicative interpersonal, interpretive, and presentational activities, as well as to further explore the structure of the language.

## 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.

## SPANISH IV HONORS

### 1 Credit

Students who elect to take Spanish IV as an honors class will be required to complete additional communicative interpersonal, interpretive, and presentational activities, as well as to further explore the structure of the language.





## STEM DIVISION

***STEM at Monadnock (Includes courses in Business Technologies, Math, Physical Education/Health, Technology Education and Science)***

**STEM** is an acronym for Science, Technology, Engineering and Math education. We focus on these areas together not only because the skills and knowledge in each discipline are essential for student success, but also because these fields are deeply intertwined in the real world and in how students learn most effectively. STEM education is an integrated, interdisciplinary approach to learning that provides hands-on and relevant learning experiences for students. STEM teaching and learning goes beyond the mere transfer of knowledge. It engages students and equips them with critical thinking, problem solving, creative and collaborative skills, and ultimately establishes connections between the school, work place, community and the global economy. STEM also helps students understand and apply math and science content, the foundations for success in college and careers.





# **BUSINESS TECHNOLOGIES COURSES**

**REQUIRED .5 credit in information/communication technologies.**

**The following courses may also fulfill the .5 credit requirement for economics:**

**Personal Finance, Introduction to Business, Introduction to Business Management and Independent Living.**

## **ACCOUNTING I (Grades 9-12)**

**1 Credit**

**This course may fulfill the fourth mathematics credit for graduation.**

### **Running Start Program, 3 College Credits(Grades 11 & 12)**

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 A (Grades 10-12)**

**1 Credit**

Offered during alternate years. Next class runs 2019-2020 school year.

This course provides college-level study in advanced data structures within the Java Object Oriented Programming (OOP) language. The course will cover text processing, simulation, dynamic memory allocation, recursion, trees, sorting/searching algorithms and analysis programming. Students will also be exposed to the social implications of computing.

**Prerequisites:** Successful completion of Intro to Programming or Computer Game Design AND Algebra II

## **ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES (Grades 11-12)**

**1 Credit**

Offered during alternate years. Next class runs 2020-2021 school year.

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 Running Start Program, (Grade 11 & 12)**

**This course may be used to fulfill the economics requirement.**

**This course may be used to fulfill the fourth mathematics credit for graduation.**

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.

## **COMPUTERS FOR COLLEGE AND CAREER (Grades 9-12)**

### **.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 productivity applications such as word processing software, spreadsheet software, and presentation software. This course also covers the Internet, ethics, security, privacy and emerging technologies. Students will acquire the kinds of essential skills needed success after high school graduation.

## **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.

Prerequisites: Geometry

## **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: the history of computing, human computer interaction, problem solving, algorithmic thinking, social and ethical issues regarding the internet, security, privacy, web design, and programming.

## **INDEPENDENT LIVING (Grades 11-12)**

### **.5 Credit**

**This course may be used to fulfill the .5 credit economics requirement for graduation.**

This course provides information to help students live on their own after high school. Topics include basic economic systems, money management, and credit, renting and furnishing an apartment, transportation, insurance and food shopping.

## **INTRODUCTION TO BUSINESS (Grades 9-10)**

### **.5 Credit**

**This course may be used to fulfill the economics requirement.**

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 21<sup>st</sup> century job market and global economy. The use of technology and internet-based resources will be implemented throughout the course.

## **INTRDUCTION TO MARKETING (Grades 11-12)**

### **.5 Credit**

Throughout this course, students will learn the fundamentals of business and marketing. This class focuses on current topics in business and marketing including the four P's, price, product, place and promotion. This class will also include topics on retail sales, management, entrepreneurship and careers in marketing, ethics, psychology of marketing and business and marketing plans.

## **INTRODUCTION TO PROGRAMMING (Grades 10-12)**

### **.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. **Prerequisites:** Algebra I

## **PERSONAL FINANCE (Grades 9-12)**

### **.5 Credit**

#### **This course may be used to fulfill the economics requirement for graduation**

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 21<sup>st</sup> 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. The student is also eligible to become a member of Future Business Leaders of America.

## **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.

# **FAMILY & CONSUMER SCIENCE (FACS) COURSES**

## **APARTMENT COOKING 101 (Grade 11 & 12)**

**.5 Credit**

**This course may fulfill the fourth mathematics credit for graduation per principal approval.**

Apartment Cooking 101 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). This class meets the math requirement.

## **EARLY CHILDHOOD EDUCATION (Grades 10-12)**

**.5 Credit**

This course prepares high schools student’s 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, boating and water safety, weather safety, workplace safety, fire safety and travel safety. Students will have the opportunity to earn American Red Cross Association Heart Saver First Aid, CPR/ AED certification.

**Prerequisite:** Life Choices and Biology. Course fee \$30.

## **FOOD AND NUTRITION I (Grades 9-12)**

**.5 Credit**

**This course may fulfill the fourth mathematics credit for graduation per principal approval.**

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. This class meets the math requirement.

## **FOOD AND NUTRITION II (Grades 10-12)**

**.5 Credit**

**This course may fulfill the fourth mathematics credit for graduation per principal approval.**

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 I (GRADES 10-12)**

### **.5 Credit**

**This class meets the .5 graduation requirement for Health Education.**

This course uses the 21<sup>st</sup> century learning skills of writing, reading, and viewing, 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.

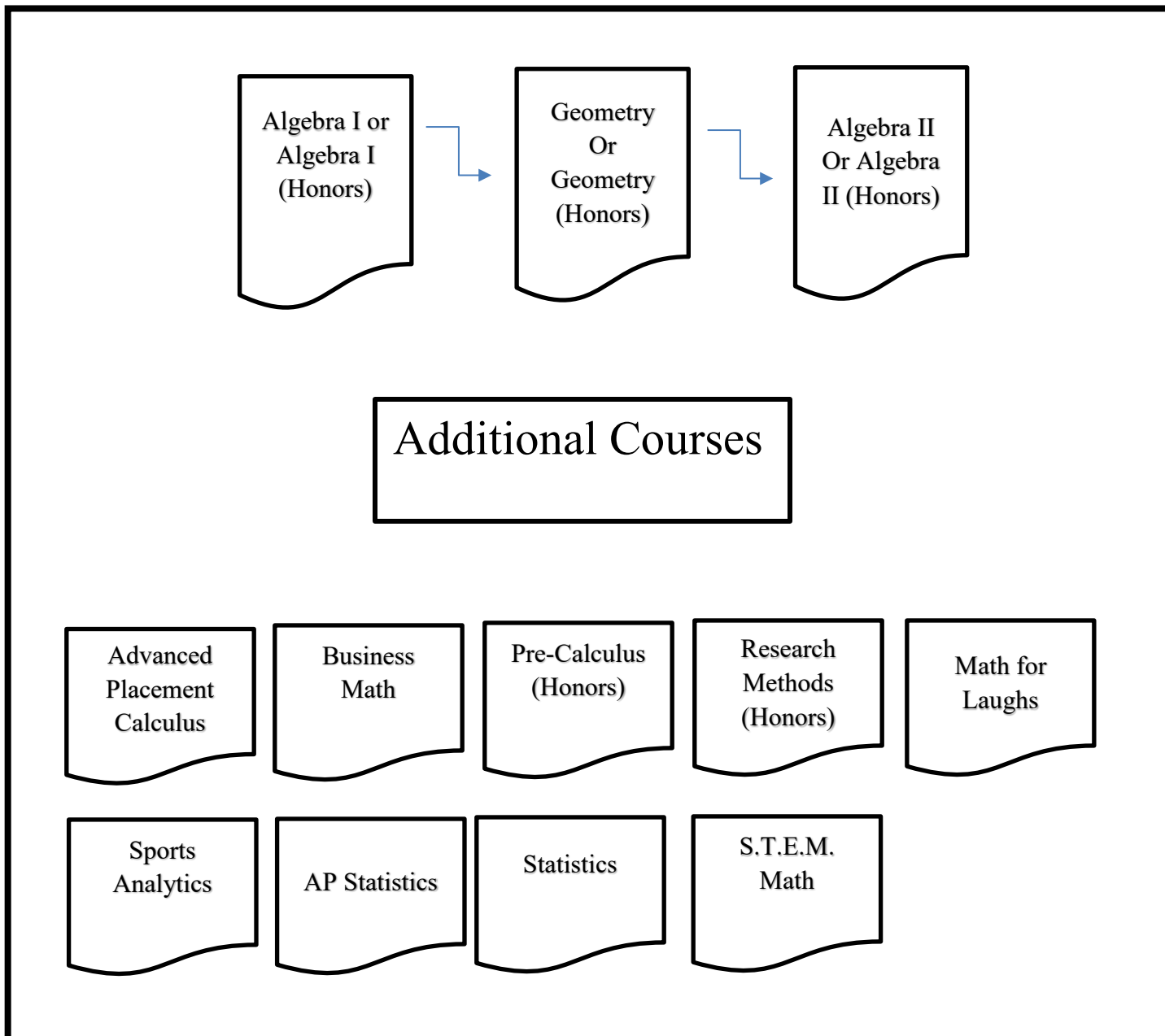
## **TEXTILES, FASHION AND APPAREL (Grades 9-12)**

### **.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.

# MATHEMATICS COURSES – Scope & Sequence

Require: 4 credits, including one with algebra related content.



## **ADVANCED PLACEMENT CALCULUS**

### **1 Credit**

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.

Prerequisites: Successful completion of Algebra I, Geometry, Algebra II (which includes analytic geometry and logarithms), and Pre-calculus (which includes elementary functions and trigonometry).

## **ALGEBRA I**

### **2 Credit**

Students in this course will participate in a comprehensive program which includes an emphasis on computational skill development and problem-solving. Students will encounter situations where they will need to be proficient in decimals, percent's, ratios, and proportions as they apply these skills to applications. Students will develop strategies both independently and cooperatively as they analyze data using integers, fractions, and decimals. Students will be introduced to the abstraction of algebra which include solving linear equations and elementary probability. Basic geometry skills and applications will be developed as they relate to Algebraic concepts. (This course will meet every day, and at the midpoint of the class will switch to a supported work period.)

## **ALGEBRA I CP**

### **1 Credit**

This is a course in academic algebra designed for college preparatory students. The structure of algebra as applied to the real number system will be developed. Problem solving will be emphasized. The course will cover linear and quadratic functions, polynomials, radicals, and an introduction to matrices and trigonometry.

## **ALGEBRA I HONORS**

### **1 Credit**

This is a course designed for students who have an interest in majoring in a math or science in college. The structure of algebra as applied to the real number system will be developed. A variety of problem-solving techniques will be modeled and students will apply these techniques to solve problems within and outside the field of mathematics. Theory will be stressed. Topics covered will be linear and quadratic functions, polynomials, radicals, rational functions, and an introduction to matrices and geometry.

## **ALGEBRA II**

### **1 Credit**

This course provides an incremental development to the topics in second-year algebra. It includes work involving complex numbers and basic trigonometry. The concepts of functions and graphic solutions utilizing graphing technology will be emphasized, as will problem-solving and critical thinking.

## **ALGEBRA II HONORS**

### **1 Credit**

This course is designed to provide a thorough introduction – at an accelerated pace – to the standard topics of second year algebra curriculum. The concept of function and graphic solutions utilizing technology will be emphasized whenever appropriate. Problem-solving and critical thinking are emphasized throughout the course.

## **BUSINESS MATH**

### **1 Credit**

This course will concentrate on application type business mathematics. Solving problems that deal with banking, simple and compound interest, payroll, depreciation, mortgages, percent's, inventory and overhead, taxes and other business statistics will be the majority of the topics covered. This is meant to be an elective and is eligible to be offered as a dual credit for high School and college credit.

## **DEFINED STEM MATHEMATICS**

### **1 Credit**

This course will utilize the Defined Stem resources related to math. Topics that will be covered include: algebra, data analysis, probability, geometry, measurement, numbers & operations, problem solving, and basic trigonometry. Small group projects and varied instructional techniques involving technology will be emphasized. Applications and connections to the real world will be established during this course.

## **GEOMETRY**

### **1 Credit**

This is a modern course in which plane geometry has been integrated with analytic and three-space geometry. Applied mathematics is stressed. Proofs in mathematics will be covered. Basic algebra skills are needed for this course.

## **GEOMETRY HONORS**

### **1 Credit**

This is a course in academic geometry designed for students who have an interest in majoring in mathematics or science in college. Both inductive and deductive reasoning will be utilized in the development and understanding of geometric concepts and proofs. Theoretical and practical applications of geometry will be studied.

## **MATH FOR “LAUGHS”(Life after you graduate high school)**

### **1 Credit**

Want more experience with math before heading to college or trade school? Math for “Laughs” (Life After You Graduate High School) 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.

Prerequisite: Algebra II

## **PRE-CALCULUS**

### **1 Credit**

This is a course dealing with algebraic, geometric, and trigonometric concepts, with considerable emphasis on problem-solving. The theory of factoring, structure of complex numbers, and solution of logarithmic equations are also covered. It prepares a student for first-year college mathematics. **Prerequisite:** Algebra II

## **PRE-CALCULUS HONORS**



### **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 HONORS (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**

#### **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 business, engineering, social and biological sciences. **Prerequisite:** Algebra II.

### **AP STATISTICS**

#### **1 Credit**

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.

# **PHYSICAL EDUCATION AND HEALTH COURSES**

**Required 1 Physical Education (PE) credit which may be met through any of the following:**

## **ADAPTED PHYSICAL EDUCATION: (Grades 9-12)**

### **.5 Credit**

Adaptive Physical Education provides an opportunity for participation in a physical education program by students who have the need for a physically adaptive PE.

## **HOPE (Healthy Options for Physical Education) (Grades 11-12)**

### **.5 Credit**

Students may earn .5 PE credit by participating in a self-guided program while participating in athletics or a pre-approved out of school athletic activity. Requirements include weekly logs and reflection, with specific focus on meeting the 6 state physical education standards. Students are supported and guided by the physical education teachers but the work is intended to be student driven and individualized. Upon conclusion of their season or semester students present their experience to a group and complete a written paper on the experience. The focus is on meeting the state standards in an out of the classroom experience. **Approval from the PE teacher is required.**

## **PHYSICAL EDUCATION I (Grades 9-10)**

### **.5 Credit**

The purpose of 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.

**\*PRE-REQUISITE FOR HOPE**

## **PHYSICAL EDUCATION II (Grades 11-12)**

### **.5 Credit**

P.E. II offers students the opportunity to participate in a program designed to meet the needs of the advanced physical education student. This class provides students with the chance to develop a personal fitness program designed to improve strength and cardiovascular conditioning. The class will also provide the opportunity to participate in and research fitness in terms of training, improving performance, and maintaining health. This course is designed for 11<sup>th</sup> and 12<sup>th</sup> grade student that have completed P.E. I demonstrating above average performance.

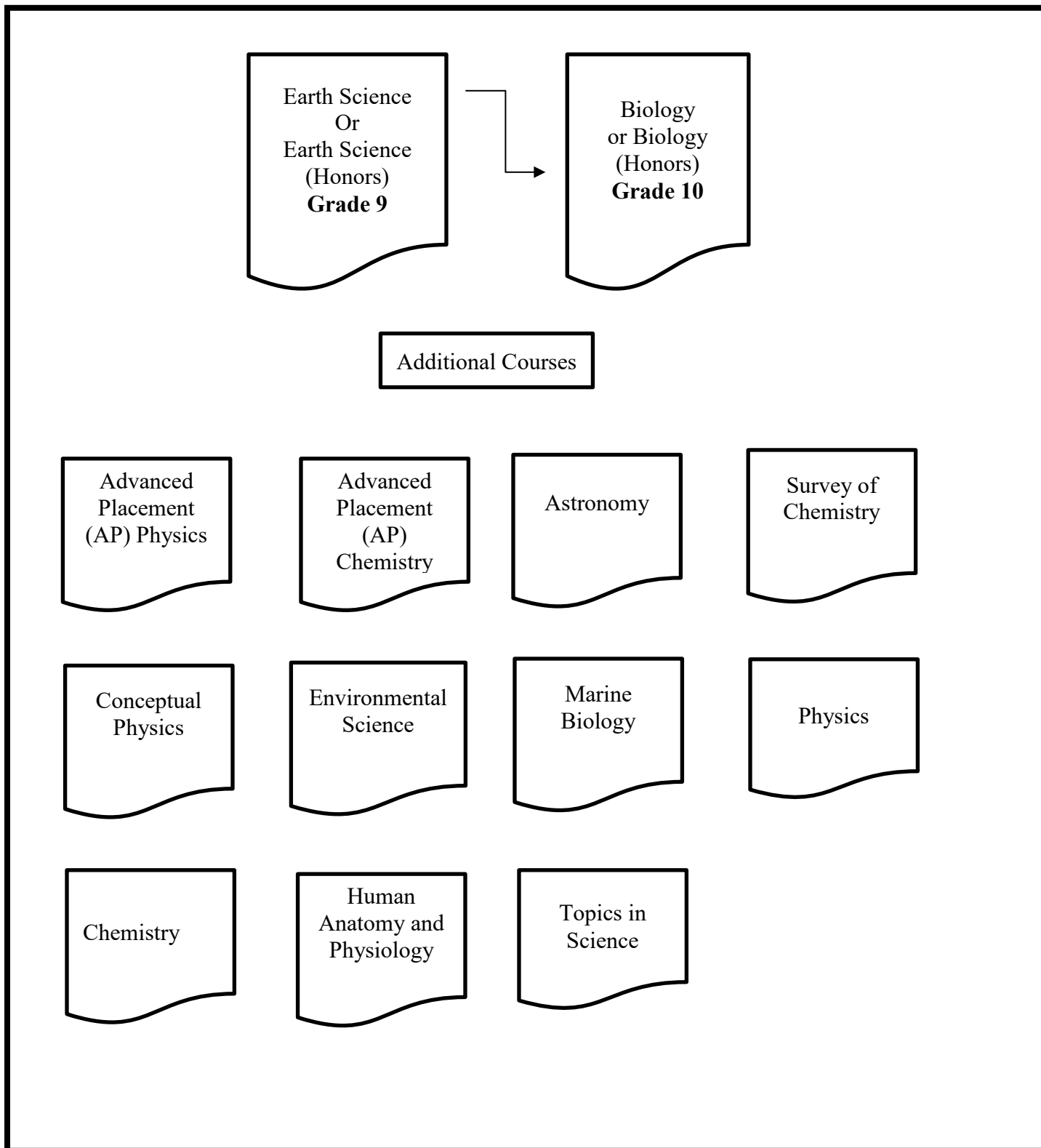
## **WEIGHT TRAINING**

### **.5 Credit**

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

**Prerequisites:** Complete at least 1 credit of High School Physical Education I.

# SCIENCE COURSES – Scope & Sequence



## **ADVANCED PLACEMENT CHEMISTRY (Grade 12)**

### **1 Credit**

AP Chemistry is a second year chemistry course that is designed to be the equivalent of an introductory college level chemistry course. It is for the motivated learner who is conscientious and self-directed. The course material and labs are based on the prescribed Advanced Placement curriculum and provide an in-depth study of these topics: atomic structure, chemical reactions, thermodynamics, chemical bonding and molecular structure, gases, kinetics, equilibrium, acid-base chemistry, and electrochemistry. Problem solving and application of chemical principles will be stressed; students will also engage in some self-instruction through study groups and independent work. It is the expectation that students selecting this course will take the nationally administered AP chemistry exam.

## **ADVANCED PLACEMENT PHYSICS (Grade 11 or 12)**

### **1 Credit**

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.

## **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 planets, 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, and reading and writing about current events in astronomy. Evening sky-gazing sessions with telescopes will be offered as well.

## **BIOLOGY (Grade 10)**

### **1 Credit**

This course is designed to provide students with a general background in the study of living organisms and the things that affect their success. It includes a survey of the kingdoms of life and basic anatomy and physiology of organisms from the simplest cells to more complex life forms. Other topics will include cell structure and function, classification, plant and animal reproduction, heredity, biochemistry and ecology. Hands-on individual and small group tasks will be favored as an instructional strategy.

## **BIOLOGY HONORS (Grade 10)**

### **1 Credit**

This course is designed to provide students with a background in the study of living organisms which will prepare them for more extensive work in the sciences in general and biology in particular. It includes a survey of the five kingdoms of life and emphasizes their interdependence and relationships with man. Basic anatomy and physiology of organisms from the simplest cells to more complex life forms will be detailed. The course will include such topics as plant and animal cells, taxonomic classification, plant and animal reproduction, heredity, and ecology. Participation in laboratory exercises is required and homework will be assigned regularly. Meeting the course expectations will provide the student with the entry-level requirements for post-secondary school study. Besides learning from a traditional lecture format, successful students will work collaboratively with peers in problem solving and case studies, applying concepts learned to real-life situations. Cooperative research projects will be an integral part of the experience in this class. Successful students will be able to present material both in writing and orally. Analysis of information presented in a variety of formats (graphs, charts etc.) will be required, as will the ability to create such instruments. Successful students will also apply modern technology to the study of science in this class.

## **CHEMISTRY (Grades 11 or 12)**

### **1 Credit**

**This course may fulfill the fourth mathematics credit for graduation.**

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 gases; 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.

## **CONCEPTUAL PHYSICS (Grades 11 or 12)**

### **1 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 course will cover motion and forces, energy, momentum, rotation, waves and sound, and electricity. The course emphasizes conceptual understanding but also requires some applications of basic math and algebra. All topics are introduced with laboratory experiences from which conclusions can be drawn and general relationships derived. In addition, students will experience simulations, demonstrations and classroom discussions, small-group problem-solving, and engineering-design projects.

## **EARTH SCIENCE OR EARTH SCIENCE HONORS (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.

## **ENVIROMENTAL SCIENCE (Grades 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.

**Prerequisite:** Physical Science

## **HUMAN ANATOMY AND PHYSIOLOGY (Grades 11 or 12)**

### **1 Credit**

This elective course is designed for students who enjoy biology and/or who plan to continue the study of biology beyond high school. It offers an in-depth study of the body's structures and their functions with special attention given to comparing and contrasting the cellular, tissue, and systemic levels organization. Emphasis is placed on how the body maintains a steady state and how diseases occur when homeostasis breaks down. Systems to be studied include the integumentary, muscle, skeletal, nervous, endocrine, circulatory, immune, respiratory, digestive, urinary, and reproductive systems. Students will undertake a number of classroom and laboratory activities which include a study of tissues and organ dissections. Students will develop the organizational and study skills required to be college and career ready.

## **MARINE BIOLOGY (Grades 11-12)**

### **1 Credit**

**This course may fulfill the fourth mathematics credit for graduation.**

Marine Science is an elective course that explores the major topics of ocean study. These include biological, chemical, physical, and geological oceanography and other topics such as nautical history, maritime literature, and folklore. The class is project-based and issues oriented, relying on real world data, scenarios, and case studies. Students will master the basics of marine science while exploring career opportunities in this exciting area.

## **PHYSICS (Grade 11 or 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.

## **Topics in Science (Grades 11-12)**

### **1 Credit**

This one credit introductory general level course provides students with the opportunity to explore current events in science. The class is project based and 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.



# **ENGINEERING & TECHNOLOGY EDUCATION COURSES**

## **COMMUNICATIONS TECHNOLOGIES ELECTIVES:**

### **ADVANCED TECHNICAL DRAWING (Grades 10-12)**

#### **1 Credit**

**This course may be used to fulfill the fourth mathematics credit for graduation.**

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- HONORS (Grades 11 or 12)**

#### **1 Credit**

**This course may fulfill the fourth mathematics credit for graduation.**

Computer Assisted Drawing/ 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 first learned in the Technical Drawing continuum. 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. Class size is limited to classroom workstations. **Prerequisites:** Advanced Technical Drawing or permission from Instructor or Principal.

### **CAD/ENGINEERING GRAPHICS HONORS (Grades 11 or 12)**

#### **1 Credit**

**This course may fulfill the fourth mathematics credit for graduation**

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. **Prerequisites:** Advanced Technical Drawing or permission from Instructor or Principal.



## **GRAPHIC DESIGN (Grades 9-12)**

**.5 Credit (Semester 1 only) or one credit may be repeated once for 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 9-12)**

**1 Credit**

The course "Yearbook Graphics" 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, architects 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.



# **MANUFACTURING TECHNOLOGIES ELECTIVES:**

## **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. **Prerequisite:** Metals with a grade of C or better.

## **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. **(Lab Fee for Materials)** **Prerequisite:** Woodworking

## **ADVANCED WOODWORKING II (Grades 11 or 12)**

### **1 Credit**

**This course may fulfill the fourth mathematics credit for graduation.**

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. **(Lab Fee for Materials)** **Prerequisite:** Advanced Woodworking I.

## **INTRODUCTION TO ELECTRICITY/ELECTRONICS (Grades 9-12)**

### **.5 Credit**

Introduction to Electricity/Electronics; designed for the hands-on student. Students work on individual and group projects. Assignments provide opportunity 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.



# **CONSTRUCTION TECHNOLOGIES ELECTIVES:**

## **BUILDING CONSTRUCTION (Grades 9-12)**

### **.5 Credit**

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. **Prerequisite:** Home Maintenance with a grade of C or better.

## **HOME MAINTENANCE (Grades 9-12)**

### **.5 Credit**

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 specified responsibilities and schedules.



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MRSD School Board approved: