



Curriculum Review Update Components

- **Curriculum Review Update Presentation**
- **Science Core Curriculum Exemplar**
- **Digital Literacy Specialist and Exploratory Exemplar**
- **Program of Studies Tuning Protocol**
 - **Used collaboratively to create and align Program of Studies**



Hanover Middle School



Curriculum Review Update



Project Vision

- To examine, reimagine, and redesign our current middle school structure and curriculum to support a vision and climate of continuous growth and improvement.
- To embark on this ongoing work with proactive urgency and not reactive emergency.
- To provide the HMS community with a web-based and versatile program of studies that embodies this vision.



Current Progress

- Building a broader Culture of Collaboration - partnering with other districts, organizations, and institutions to share perspectives and practices
- Growing the HMS Culture of Collaboration - teachers and administrators collaborating on data analysis/interpretation, differentiation, and delivery of instruction
- Every course description has been updated by teachers to create a working document: Program of Studies Draft 1.0
- Curriculum maps are being evaluated and revised where needed



Current Progress

- Using a data driven Problem of Practice to focus our work on higher level thinking and task complexity
- Implementing research based common assessments for ELA and Math to inform our work to implement appropriate student supports
- CORE academics are being adjusted to match latest revisions to state standards
- Specialist and Exploratory courses are being reviewed for relevancy and student engagement and will be added to the Program of Studies



Opportunities

Extended Learning – Grades 5–8 (50 mins)

Objective: Scheduled instructional time to meet the individual needs of students: this may be enrichment, intervention – or both. Teachers use data to prioritize the needs of each student and adjust over time.

Academic Support – Grades 5 and 6 (30 mins)

Objective: Daily scheduled instructional time to provide support in all academic areas. This class may include content area support as well as time to assist students with executive functioning skills to more fully prepare them for success in the classroom as well as mastery in the core academic content areas.



"Under Construction" **2017-2018**

- Research and examination of team configurations in grade 5 allowing for greater flexibility in scheduling including potential revisions to ELA and Math times.
- Institute an Academic Excellence Advisory Council
- Convene a HMS study group/task force focused on writing
- Facilitate the formation of a Student Advisory Council (December 2017)
- Creation of Grade 8 Mentor Program (Winter 2018)
- Implementation of Entrepreneurship Program Grades 6-8 (Winter 2018)
- Implementation of Advanced Math Grade 5 (Winter 2018)
- Middle School Be Better Club (Active)



Exploration of Opportunities 2018-2019

- Provide High School Credit for Algebra 1 students (partner with HHS)
- Provide High School Credit for Foreign Language courses (partner with HHS)
- Create two tracks for French
 - 2 Year French
 - French 1A -All students
 - French 1B - Leveled by performance in 1A (Look to prepare more students to be ready for AP French at HHS)
- Create two tracks for Spanish
 - 2 Year Spanish 1A and 1B program (current configuration)
 - Spanish 1 in 7th grade and Spanish 2 in grade 8 (Look to prepare more students to be ready for AP Spanish at HHS)
- Create a World Languages and Cultures Exploratory option for grade 6



Ongoing Examination and Planning 2018-2019

- Create Community Service components; opportunities to promote integration of civic engagement experiences
- Creation of a Student Technology Assistance Team
- Explore opportunities for Advanced Art, Computers, or Engineering during specials
- Explore instructional shift in grades 5 and 6 social studies classes by explicitly utilizing the ELA curriculum standards and skills to instruct and assess social studies content.



Coming Attractions: June 2018

Instruction:

- Updated course descriptions and curriculum maps that clearly articulate and scope and sequence of standards
- Evaluation of data derived from Common Assessments and strategy to increase student supports based on skill level
- Consensus and implementation of grade level project based learning experiences (e.g: *Wonder* in grade 5, rockets in grade 6, Math Fair in grade 7, and catapults in grade 8)
- Common Writing assignments – (e.g: 8th grade history by term)

Science

Mission

The Hanover Middle School Science Department is committed to providing all students an environment to think, explore and behave like scientists. In order to fulfill this mission, the science department will implement standards and practices outlined in the Massachusetts State Science frameworks to maximize learning success for all students. The empowerment of our students will lead to actively engaged citizens that have developed the skills and competencies necessary to thrive in our ever-changing society.

21st Century Skills and Real-World Applications

Within the context of our science program, as well as the core state standards, students will engage in learning outcomes that prepare them to be a(n):

- Critical thinker
- Effective communicator
- Creative innovator
- Collaborative learner
- Globally responsible citizen
- Problem solver

Essential Scientific Practices

Within the context of our science program, students will combine a relevant practice of science, with a core disciplinary concept:

- Asking questions and defining problems
- Developing and using models
- Planning and carrying out investigations
- Analyzing and interpreting data
- Use mathematics and computational thinking
- Constructing explanations and designing solutions
- Engaging in arguments from evidence
- Obtaining, evaluating and communicating information

Scientific Inquiry

Students will apply the Skills of Scientific Inquiry in a variety of different ways, including, but not limited to the following:

- Interpreting and analyzing scientific graphs and illustrations.
- Making and using tables, graphs and models.
- Proper laboratory techniques.

Science

Grade 6

The integration of Earth and space, life, and physical sciences with engineering gives grade 6 students opportunities to problem-solve, highlighting the relationship between structure and function in the world around them. The overarching theme of the 6th grade curriculum is structure and function; through this lens, students analyze the macro- and microscopic world, such as Earth features and processes, the role of cells and anatomy in supporting living organisms, and properties of materials and waves. Students use models and provide evidence to make claims and explanations about structure-function relationships.

All Hanover 6th-graders create, test, and modify Water Rockets through the engineering design process; students research and write a Planet Book in the astronomy unit; they develop a Geologic Timeline in their study of geologic history; and they create and perform a Plate Tectonics play. Students relate the workings of a city to cell functions in their Cell City Project. All 6th-graders design and build fettuccine bridges, culminating in an all-grade Bridge Day event. Students use their math skills in their Mass, Volume, and Density Labs, as a culmination of the and Pure Substances experiments, which they record and present to the class. As a culmination of their research and text-based science writing skills, students author Waves Book.

Curriculum Overview:

Unit	Term 1	Term 2	Term 3
Scientific Inquiry • Steps of the Scientific Method • Lab Skills	x x		
Engineering Design Process--Rocket Building	x		
Earth Science • Astronomy • Geologic History • Continental Drift and Plate Tectonics	x x	x	
Life Science • Biological Evolution • From Molecules to Organisms (Cell Structure and Function)		x x	
Engineering Design Process--Bridge-Building			x
Physical Science • Mass, Volume, and Density • Mixtures and Pure Substances • Waves			x x x

Digital Literacy

Grade 8

Digital Literacy: Digital Literacy Applications for High School and Beyond

Students will gain an advanced knowledge of searching the Internet for credible and scholarly resources, and will utilize conventional MLA formatting for in-text citations, direct quotes, images, videos, music, and written content. In addition, students will understand their rights and responsibilities as a social media user and how responsible use affects their future high school, college, and career experiences. Finally, students will develop an advanced understanding of copyright and fair use laws as they relate to several different types of digital media, such as music, videos, and images. Applications such as [Google Slides](#), [WeVideo](#), and [Socrative](#) will be used to accomplish these objectives. Culminating projects include a [school proposal research project](#) that is presented to members of the school community, a [quiz](#) designed to teach others about the effects of social media behavior on future college and career aspirations, and a [video project and presentation](#) that analyzes how to fairly use digital content that is owned by others.

Grade 7

Digital Literacy: Digital Literacy and Social Media

Students will gain a deeper understanding of evaluating website sources for credibility and will understand safe, appropriate, and responsible practices when participating in online communities, such as blogs and social networking sites. Issues such as dealing with cyberbullies, privacy, and ownership rights of social media content will be addressed, and students will create and comment on Weebly [blogs](#) that teach viewers about these issues. Students will also create their own animated artwork using Google Drawings and [EZGIF.com](#). They will license their artwork using copyright and Creative Commons licensing tools, and will understand what others can legally do with content that they publish on the internet.

Grade 6

Digital Literacy: Digital Literacy and the Fair Use of Ideas

This course further develops students' ability to engage in responsible use of technology and laws regarding ownership of material/ideas, licensing, and fair use. Students will understand copyright laws related to digital media, and will understand how to search the Internet for media that can be used fairly for educational or personal use. A variety of web-based applications, such as [Screencastify](#), [Google Slides](#), and [WeVideo](#) will be used to accomplish these objectives. Students will also gain a basic understanding of their rights and the rights of popular social media companies in respect to anything that is posted on social media applications such as Instagram, Snapchat, and YouTube. Students will complete culminating projects that demonstrate their knowledge of [copyright and Creative Commons](#) law as well as a [video project](#) in which they use written and visual digital artifacts in a manner that is consistent with copyright law.

Grade 5

Exploratory Digital Literacy: Introduction to Internet Research

This course introduces students to intermediate research skills to create digital artifacts and attribute credit. Students learn strategies to evaluate the reliability and validity of internet resources, and apply these skills to selecting a website resource for a research project. Students also learn strategies to fairly use digital sources, such as paraphrasing and creating citations using digital tools such as [Easybib.com](#). Web-based applications such as [Google Docs](#) and [Weebly](#) website builder are used by students to demonstrate understanding of the above. Students will complete a culminating project in which they create an informational website about a local tourism location which will become part of a larger collection of local tourism information. A collection of sample projects can be viewed by clicking [here](#).



TUNING PROTOCOL: HMS PROGRAM OF STUDIES

FOCUSING QUESTIONS	OBSERVATIONS - NOTES
Is the description of learning targets and outcomes clear to other teachers?	
Would a student have a clear understanding of what they would learn & how?	
Does the description give parents a clear understanding of the expectations for what their child should be able to know and do in this course?	
Is it clear how content & instructional practices will be made accessible to all students?	
Does this course reflect a progression and alignment with other courses within the content discipline?	