

STEM SCHOOL

HIGHLANDS RANCH

MIDDLE SCHOOL 2025-2026

ACADEMIC PLANNING GUIDE

A group of four diverse middle school students are gathered around a table, smiling and focused on constructing a complex wooden structure made of sticks. One student in the center is wearing glasses and a blue patterned shirt. Another student on the right is wearing a dark baseball cap with a red and white logo. The background shows a workshop or classroom setting with various materials and tools.

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OUR MISSION

NEVER STOP INNOVATING

OUR VISION

WE ENVISION A WORLD OF EXPONENTIAL POSSIBILITIES WHERE EVERY CHILD DEVELOPS THE INNATE KNOWLEDGE, SKILLS, CREATIVITY, AND CHARACTER TO THRIVE, LEAD, AND SUCCEED IN AN EVER-CHANGING FUTURE.



MIDDLE SCHOOL EXPECTATIONS

Availability of Classes

While every effort will be made to provide the classes a student has requested during registration, some classes may not be available due to student enrollment numbers, staffing, and budget.

Adding/Dropping a Middle School Class

School counselors are responsible for, and make, ALL possible schedule changes. Schedule changes are allowed within the first 10 days of the semester. Changes after this date are considered on an individual basis. Additionally, our counselors will provide schedule change dates in late July for families to receive schedule changes prior to the start of school.

Reasons for Schedule Changes Include:

- Missing required classes
- Level changes if appropriate
- Teacher Request

To request a schedule change, please use our schedule change form located on our website.

High School Credit for Middle School Students Compliance with DCSD Policy IKF-R-2

A student may earn credits towards a Douglas County School District high school diploma prior to the official start of the 9th grade year.

1. Credit will automatically be awarded for earning an "A" in:
 - a. Any Douglas County School District high school summer session content course(s) completed preceding the start of the 9th grade year
 - b. Any Mathematics course(s) which exceeds the expectation of an Algebra 1 course
 - c. Any World Language course(s), which exceeds the expectations of Level 1
 - d. Any content area course meeting Board of Education criteria, and which exceeds the expectations of a typical Douglas County 9th grade course, as approved by the high school building administration.

Core Class Placement

Students are automatically placed in standard classes. For accelerated course placement, students must meet the course qualifications located here, and have a teacher recommendation.

Accelerated Course Placement Criteria

- High Academic Achievement
- Self motivated and self discipline
- Good organizational skills
- Follows STEM's attendance policy
- Maintains high standards of academic integrity

Please note, we strive to make placements that are in the best interest of the students. If a student does not maintain their academics in a course, they might be moved from an accelerated course to an on level course.

Course Descriptions for High School Courses

Please see the High School Academic Planning Guide at www.stemk12.org.

Fees

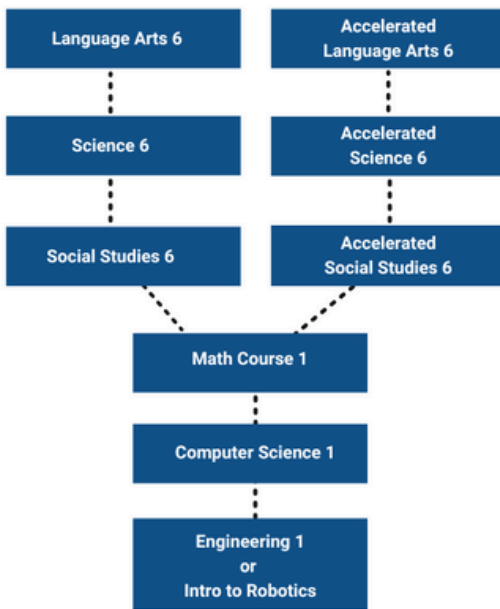
Course Fees –As per STEM Charter Board policy, where additional charges are required for specific courses, the costs will be noted in the course description. *Fees are subject to change.

Math Progression

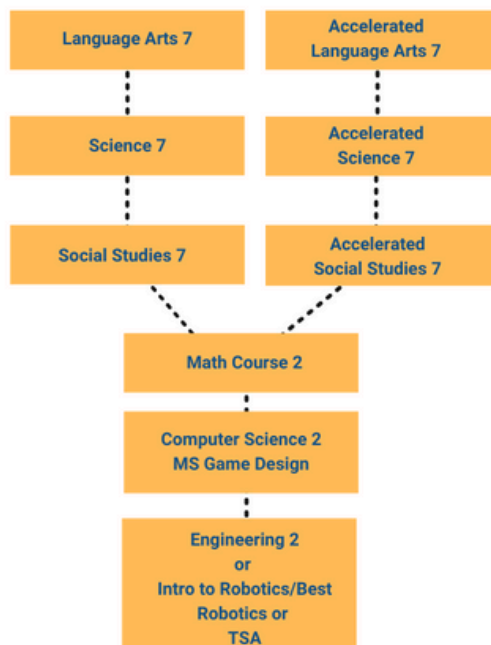
- 6th and 7th grade students in Algebra 1 or higher will need to earn an 80% or higher to move on to the next class.
- Course I, Course II, and Pre Algebra students in above grade-level classes will not be recommended to move on without a 70% or higher in that class.
- Students in Algebra I, Geometry, Algebra II, or higher will not be recommended to move on without an 80% or higher in that class.

COURSE REQUIREMENTS

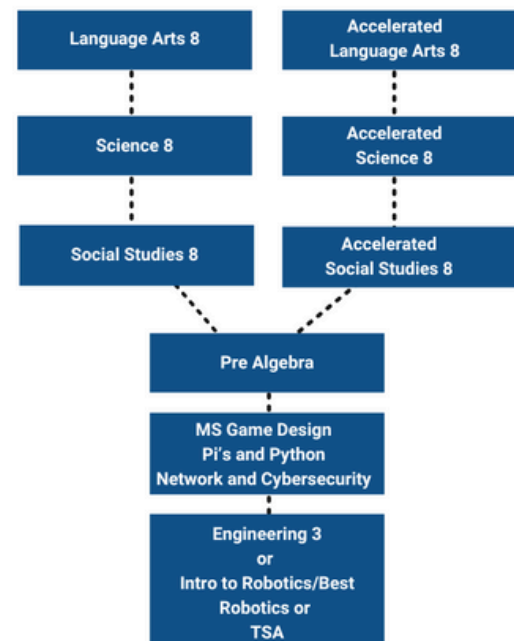
6TH GRADE



7TH GRADE



8TH GRADE



General Electives

Art, Music, PE, Theatre, World Languages, Speech & Debate

- Students will have the opportunity to choose general electives beyond the required courses.
- Students seeking math acceleration must complete a math placement exam given by the STEM School Highlands Ranch Math Department. When determining accelerated math placement the students' body of evidence, which includes iReady scores, teacher recommendations, previous math courses and the STEM math placement test, will be reviewed.

SAMPLE COURSE INTERPRETATION

	Course Title	Grade Level		Prerequisites
	English 1	Grade	Fee	Prerequisites
Course Duration	Year long Course 1.0 Credit	9th grade	No fee, Although students will be asked to supply required novels throughout the year	No prerequisite, required course.
High School Credits Earned				



COURSE DESCRIPTIONS BY DEPARTMENT

LANGUAGE ARTS

GRADE 6

LANGUAGE ARTS 6			STEMMS016S1/S2
Year long course	6th grade	Students will be asked to supply required novels throughout the year	Required course
<p>Following the Colorado Academic Standards, emphasis is on communication through a systematic integration of grammar, writing structure, vocabulary, and reading comprehension. Short stories, writing, novels, plays, poetry, grammar, and vocabulary are the building blocks of this course</p>			

OR

LANGUAGE ARTS 6- ACCELERATED			STEMMS016HS1/S2
Year long course	6th grade	Students will be asked to supply required novels throughout the year	Required course Must meet qualifications for this course
<p>Following the Colorado Academic Standards, this is an accelerated course with emphasis on communication through a systematic integration of grammar, writing structure, vocabulary, and reading comprehension. This course is intended for students capable of a challenging curriculum, and it provides the foundation for further Honors and Advanced English courses. Short stories, the writing process, the reading of novels, plays, and poetry are taught, in addition to grammar and vocabulary.</p>			

GRADE 7

LANGUAGE ARTS 7		STEMMS017S1/S2	
Year long course	7th grade	Students will be asked to supply required novels throughout the year	Required course
<p>Following the Colorado Academic Standards, emphasis is on communication through language, composition, literature, and the development of reading skills and strategies. Students develop language, vocabulary and speech skills; they develop in composition by writing paragraphs and essays. Literacy skills are utilized and strengthened through reading short stories, poems, and novels. Foundational grammar and standard usage are taught in an integrated approach alongside composition and the reading of literature.</p>			

OR

LANGUAGE ARTS 7- ACCELERATED		STEMMS017HS1/S2	
Year long course	7th grade	Students will be asked to supply required novels throughout the year	Required course Must meet qualifications for this course
<p>Following the Colorado Academic Standards, emphasis is on communication through language, composition, literature, and the development of reading skills and strategies. Students develop language, vocabulary and speech skills; they develop in composition by writing paragraphs and essays. Literacy skills are utilized and strengthened through reading short stories, poems, and novels. Foundational grammar and standard usage are taught in an integrated approach alongside composition and the reading of literature.</p>			

GRADE 8

LANGUAGE ARTS 8		STEMMS018S1/S2	
Year long course	8th grade	Students will be asked to supply required novels throughout the year	Required course
<p>Following the Colorado Academic Standards, emphasis is on communication through composition of well-structured sentences, poems and paragraphs. Short stories, novels, plays, and poetry are the building blocks of the course. Foundational grammar and standard usage as well as vocabulary are taught alongside reading and literature, as well as through the continuation of grammar practice.</p>			

OR

LANGUAGE ARTS 8 - ACCELERATED		STEMMS018HS1/S2	
Year long course	8th grade	Students will be asked to supply required novels throughout the year	Required course Must meet qualifications for this course
<p>Following the Colorado Academic Standards, this is an accelerated class with emphasis on communication through composition of well-structured sentences, poems and paragraphs. This course is intended for students capable of a challenging curriculum and it provides a strong foundation for subsequent Advanced Placement English classes. Short stories, novels, plays, and poetry are the building blocks of the course. Foundational grammar and standard usage as well as vocabulary are taught alongside reading and literature, as well as through the continuation of grammar practice.</p>			

MATH

MATH COURSE SEQUENCE

Students progress through mathematics courses in the order indicated below.

Math Course I → Math Course II → Pre-Algebra → Algebra I → Geometry → Algebra II

NOTE: *If your student is in Geometry or higher, please refer to the HS Planning Guide for course descriptions*

MATH COURSE 1		STEMMS026S1/ S2
Year long course	6th grade	Required course
<p>This course introduces students to numbers and operations, algebraic representations, integers, measurement, estimation, fractions, decimals, percentages, and negative numbers. Students will touch on some basics of geometry and statistics.</p>		

OR

MATH COURSE II		STEMMS027S1/S2
Year long course	6th - 7th grade	Required course Must meet qualifications for this course
<p>This required course is designed to reinforce, and expand upon, concepts and skills introduced in the previous course work. The curriculum spans a wide-range of proficiencies which include reasoning, connecting, operations with rational numbers including integers, evaluating expressions, solving 2-step equations, circumference and diameter, proportional reasoning with scale drawings and percents, appropriate use of calculators, probability, statistics, and graphing.</p>		

PRE ALGEBRA		STEMMS028S1/S2
Year long course	6th-8th grade	Required course Must meet qualifications for this course
<p>This course is an introduction to the arithmetic skills needed to succeed in Algebra I. Students will be exploring the fundamentals of arithmetic as well as the topics of number theory and basic equations, inequalities, and ratios through an emphasis on problem solving, computation, and mathematical applications.</p>		

OR

MIDDLE SCHOOL ALGEBRA 1		STEMMS029S1/S2
Year long course	6th - 8th grade	Required course Must meet qualifications for this course
<p>This course introduces students to solving problems by using variables to represent unknown quantities and then solving for those unknown quantities by writing equations and inequalities. Course topics include a review of the order of operations with integers, solving equations, inequalities and absolute values equations. Students will work extensively on solving and graphing linear system/inequalities and quadratic equations . Additional topics will include rules of exponents ,simplifying and factoring quadratics, operations with polynomial , radicals, and the quadratic formula. Students who successfully complete this course with an 85% or higher will be prepared to move on to Geometry.</p>		

SCIENCE

GRADE 6

SCIENCE 6		STEMMS036S1/S2	
Year long course	6th grade		Required course
<p>The sixth grade science course provides students with an understanding of the general concepts of earth science. It is a full year course in which students study the structure and composition of space and earth sciences including astronomy, earth’s atmosphere, oceans, surface waters, landmasses, and interior. Students investigate the dynamics of the earth’s changing surface and the role that energy plays in earth systems. Students learn how the earth’s ecological systems support life through environmental relationships and natural cycles. Students develop an understanding of ecological resources and wildlife conservation. Students relate the flow of matter and energy within an ecosystem. Through “hands-on” investigation, students learn to conduct scientific investigations, think scientifically, and use scientific tools and technologies. Students learn to communicate scientific information and processes, and understand how developments in science and technology affect society and the environment. The depth and breadth of concepts are determined by course length.</p>			

OR

SCIENCE 6- ACCELERATED		STEMMS036HS1/S2	
Year long course	6th grade		Required course Must meet qualifications for this course
<p>In this accelerated course, greater emphasis is placed on scientific inquiry and methods. The material and pacing of the course is accelerated, as well.</p>			

SCIENCE 7		STEMMS037S1/S2	
Year long course	7th grade		Required course
<p>The seventh grade science course provides students with a general understanding of the concepts of life science. Students can use the full range of science and engineering practices to make sense of natural phenomena and solve problems that require understanding how individual organisms are configured and how these structures function to support life, growth, behavior and reproduction. Students investigate the evolutionary structure, function, and processes of living things. Students learn how cells divide, grow, and convert matter and energy to sustain life. They learn how organisms reproduce and pass hereditary characteristics from one generation to the next. Students investigate similarities and differences in living organisms, and how living things have changed over time. Students learn about the human body systems, focusing on the nervous system, and look at factors that are responsible for maintaining human health. Students learn to conduct scientific investigations, think scientifically, and use scientific tools and technologies. Students learn to communicate scientific information and processes, and understand how developments in science and technology affect society and the environment.</p>			

OR

SCIENCE 7 - ACCELERATED		STEMMS037HS1/S2	
Year long course	7th grade		Required course Must meet qualifications for this course
<p>In this accelerated course, greater emphasis is placed on scientific inquiry and methods. The material and pacing of the course is accelerated, as well.</p>			

GRADE 8

SCIENCE 8		STEMMS038S1/S2	
Year long course	8th grade		Required course
<p>This course is designed to introduce students to topics dealing with the non-living, natural world. Physical science is generally divided into two main categories: Chemistry and Physics. Topics to be examined in Chemistry include properties of substances, chemical changes, matter, and the structure of matter. Topics to be examined in Physics include Mechanics (motion, force and energy) waves and electromagnetism.</p>			

OR

SCIENCE 8 - ACCELERATED		STEMMS038H S1/S2	
Year long course	8th grade		Required course Must meet qualifications for this course
<p>In this accelerated course greater emphasis is placed on scientific inquiry and methods. The material and pacing of the course is accelerated as well.</p>			

SCIENTIFIC METHODS		STEMMS0313	
Semester long course	6th-8th grade		Elective
<p>This course introduces students to solving problems by using variables to represent unknown quantities and then solving for those unknown quantities by writing equations and inequalities. Course topics include a review of the order of operations with integers, solving equations, inequalities and absolute values equations. Students will work extensively on solving and graphing linear system/inequalities and quadratic equations . Additional topics will include rules of exponents ,simplifying and factoring quadratics, operations with polynomial , radicals, and the quadratic formula. Students who successfully complete this course with an 85% or higher will be prepared to move on to Geometry.</p>			

SOCIAL STUDIES

SOCIAL STUDIES 6		STEMMS046S1/S2	
Year long course	6th		Required course
<p>Following the Colorado State Standards, 6th Grade Social Studies will focus primarily on the continents of North & South America. After beginning with a unit on world geography, the class will then explore the origins, cultures, and economies of Native American civilizations. Students will learn to use geographic tools to understand location, see the unique cultural creations of the Americas, and understand the everyday lives of Native Americans. The Maya, Aztec, Inca and other ancient Meso American civilizations will receive attention. Along with other various Indigenous tribes of the future United States.</p> <p>In the 2nd Semester, we will see the arrival of the European Explorers and how they interacted with the Indigenous cultures. We will explore the origins of our current interconnected world economy that started with Columbus, then see how the growth of this economy influenced the outbreak of the American Revolutionary War, where we will end the year.</p>			

SOCIAL STUDIES 6 - ACCELERATED		STEMMS046HS1/S2
Year long course	6th grade	Required course Must meet qualifications for this course
<p>Following the Colorado State Standards, 6th Grade Social Studies will focus primarily on the continents of North & South America. After beginning with a unit on world geography, the class will then explore the origins, cultures, and economies of Native American civilizations. Students will learn to use geographic tools to understand location, see the unique cultural creations of the Americas, and understand the everyday lives of Native Americans. The Maya, Aztec, and Inca civilizations will receive particular attention along with the various tribes of the future United States. In the 2nd semester, we will see the arrival of European explorers and how they interacted, both positively and negatively, with the Native cultures. We will explore the origins of our current interconnected world economy that started with Columbus, then see how the growth of this economy influenced the outbreak of the American Revolutionary War, where we will end the year.</p>		

OR

SOCIAL STUDIES - 7		STEMMS04 7S1/S2
Year long course	7th grade	Required course
<p>Following the Colorado State Standards, 7th grade History will cover the period of history surrounding the United States from the late nineteenth century until the end of WWII. The following topics and their influences on modern society will be analyzed: U.S. Geography, The rise of the United States as an up and coming world superpower, the political and military forces that created WWI and the Russian Revolution, the Roaring Twenties, the Great Depression, and the New Deal, the rise of totalitarianism in Europe and the events and causes of WWII through 1945. Cross-curricular integration projects with Science, Technology, Engineering, Math and Language Arts are emphasized.</p>		

GRADE 7 & 8

SOCIAL STUDIES 7- ACCELERATED		STEMMS047HS1/S2	
Year long course	7th grade		Required course Must meet qualifications for this course
<p>Following the Colorado Academic Standards, 7th grade accelerated History will cover the period of history surrounding the United States from the late nineteenth century until the end of WWII. The following topics and their influences on modern society will be analyzed: U.S. Geography, The rise of the United States as an up and coming world superpower, the political and military forces that created WWI and the Russian Revolution, the Roaring Twenties, the Great Depression, and the New Deal, the rise of totalitarianism in Europe and the events and causes of WWII through 1945. The Honors-level course provides a more accelerated, in-depth analysis of the topics, with a focus on primary source reading, historical research and essay writing, and at least one historical novel. Cross-curricular integration projects with Science, Technology, Engineering, Math and Language Arts are emphasized</p>			

OR

SOCIAL STUDIES-8		STEMMS048S1/S2	
Year long course	8th grade		Required course
<p>8th Grade Social Studies integrates history, geography, economics, personal financial literacy and civics into a single course based on U.S. history from the Revolutionary War era through Reconstruction. The course adheres to the Colorado Academic Standards with a focus on early U.S. history, although our subject matter at times includes other countries and time periods to enhance understanding and perspective. We cover the origins and events of the American Revolution; the war's aftermath and the constitutional convention; the rise of political parties; economic transformation, early industrialization and resulting social change; the expansion west and competition for resources; the rise of sectional conflict; slavery and the origins of the Civil War; and Reconstruction and the related transformation of our constitutional system of government. We also address skills critical for students to succeed in social studies and flourish in our ever changing society and economy.</p>			

GRADE 8

SOCIAL STUDIES 8 - ACCELERATED		STEMMS048HS1/S2	
Year long course	8th grade		Required course Must meet qualifications for this course
<p>8th Grade Social Studies - Accelerated integrates history, geography, economics, personal financial literacy and civics into a single course based on U.S. history from the Revolutionary War era through Reconstruction. The course adheres to the Colorado Academic Standards with a focus on early U.S. history, although our subject matter at times includes other countries and time periods to enhance understanding and perspective. We take an in depth view of the origins and events of the American Revolution; the war's aftermath and the constitutional convention; the rise of political parties; economic transformation, early industrialization and resulting social change; the expansion west and competition for resources; the rise of sectional conflict; slavery and the origins of the Civil War; and Reconstruction and the related transformation of our constitutional system of government. We also address skills critical for students to succeed in social studies and flourish in our ever changing society and economy.</p>			

COMPUTER SCIENCE

COMPUTER SCIENCE 1		STEMMS106	
Semester long course	6th grade		Required course
<p>The primary goal of this course is to provide students with a variety of computer skills that will be useful throughout the remainder of their education and into their lives beyond school. An emphasis is placed on developing high-level thinking skills and creating knowledge and skills that will be used in everyday lives inside and outside of the educational setting. Computer skills and knowledge such as word processing, basic formatting and formulas in spreadsheets, exploring file systems, managing online storage drives and creating slide presentations.</p>			

COMPUTER SCIENCE 2		STEMMS107	
Semester long course	6th-8th grade		Required course
<p>The primary goal of this course is to provide students with a variety of computer skills that will be useful throughout the remainder of their education and into their lives beyond school. An emphasis is placed on developing high-level thinking skills and creating knowledge and skills that will be used in everyday lives inside and outside of the educational setting. Computer skills and knowledge such as computer hardware, web design (HTML5 and CSS3), 2-D image manipulation, 3-D modeling, and more will be covered in this course. Please note this will be a very hands-on course, you will be required to work in teams for some of the projects.</p>			

OR

MS GAME DESIGN		STEMMS110	
Semester long course	6th-8th grade		Requires Computer Science 2
<p>This course is an introduction to game design and development using the JavaScript language in students' choice of text or block-based code format. Students will design projects of increasing complexity related to animation and interactive game objects based on their interests. Students will learn how to use variables and control structures in JavaScript to implement, test, and troubleshoot their designs. The online platform students will use is available from anywhere and has a wide variety of well-vetted and high quality images, sound effects, and example projects for students to use to enhance their own projects as they progress through the course.</p>			

MS NETWORK AND CYBERSECURITY		STEMMS109	
Semester long course	7th-8th grade		Required course
<p>In Introduction to Networking and Cyber Security, students will learn a wide gamut of IT skills such as the basics of networking and network security, operating system troubleshooting, scripting, cyberethics and safety. In addition to the technical skills, students will be learning the soft skills necessary to effectively communicate in the digital age and assess risks. Lastly, students will learn about what cyber careers are available. This course requires completion of MS Computer Science I and MS Computer Science II.</p>			

OR

MS PI'S AND PYTHON		STEMMS1012	
Semester long course	7th-8th grade		Requires Computer Science 2
<p>This semester-long course is open to 8th graders, who are interested in working with Linux, open source, and the Raspberry Pi. We will endeavor to develop real world system skills through building Pi based projects, learning virtualization and operating system concepts while applying that knowledge through bash and python scripts to the Internet of Things. Please note this will be a very hands-on course, you will be required to work in teams for some of the projects.</p>			

ENGINEERING

ENGINEERING 1		STEMMS216	
Semester long course	6th - 8th grade		
<p>This is a hands-on inquiry based and project driven class. Students will learn how to utilize the Engineering Design Process, the process of engineering, to design and build their projects. While learning about different materials and processes, students will also learn how to safely choose and operate the correct tool or machine for the job at hand. Students will learn to document their projects and solutions in an Engineering Notebook, and produce a presentation for each project.</p>			

OR

ENGINEERING 2		STEMMS217	
Semester long course	6th- 8th grade		
<p>This is a hands-on inquiry based and problem/project driven class. Students will learn how to utilize the Engineering Design Process, critical thinking, and problem solving skills, to design and build projects. While learning about different materials and processes, students will also learn how to safely choose and operate the correct tool or machine for the job at hand. Students will learn to document their projects and solutions in an Engineering Notebook, and produce a presentation for each project. Students will learn about technical sketching and drawing, how to apply mathematical principles to their design, and then use various tools and materials to bring their 3D projects to life. Projects may include, but are not limited to: Simple Machines and mechanisms, Mousetrap and Rubber band powered vehicles, Catapults, and CO2 Dragsters</p>			

ENGINEERING 3		STEMMS218	
Semester long course	6th- 8th grade		
<p>Students will learn about technical sketching and drawing, how to apply mathematical principles to their design, and then use various tools and materials to bring their 3D projects to life. This is a hands-on inquiry based and problem/project driven class. Students will learn how to utilize the Engineering Design Process, critical thinking, and problem solving skills, to design and build projects. While learning about different materials and processes, students will also learn how to safely choose and operate the correct tool or machine for the job at hand. Students will learn to document their projects and solutions in an Engineering Notebook, and produce a presentation for each project.</p>			

OR

MS TSA (TECHNOLOGY STUDENT ASSOCIATION)		STEMMS217	
Year long course	7th-8th grade		
<p>Students will learn about technical sketching and drawing, how to apply mathematical principles to their design, and then use various tools and materials to bring their 3D projects to life. This is a hands-on inquiry based and problem/project driven class. Students will learn how to utilize the Engineering Design Process, critical thinking, and students will also learn how to safely choose and operate the correct tool or machine for the job at hand. Students will learn to document their projects and solutions in an Engineering Notebook, and produce a presentation for each project. problem solving skills, to design and build projects. While learning about different materials and processes.</p>			

INTRO TO ROBOTICS		STEMMS219	
Semester long course	6th- 8th grade		
<p>Students will learn to program, design and build a robot to meet specific challenges using the VEX IQ system, with a strong emphasis on use of sensors and autonomous movement. Students will work in partners and be expected to collaborate, as well as share ideas and methods with other groups. Most challenges will be based on the VEX IQ STEM Labs and competitions. This is a great preparation for entry in First or BEST robotics.</p>			

OR

MS BEST ROBOTICS		STEMMS2112	
Semester long course	6th- 8th grade		
<p>Students will continue development of more advanced robotic concepts by designing, building and programming a robot to meet BEST robotics challenges and competitions. Students will learn basic fabrication and work on customized designs and builds. Students will work in groups and be expected to collaborate, as well as share ideas and methods with other groups. This class will have a greater focus on developing text-based coding skills for robotic programming, such as Python and C++.</p>			

PHYSICAL EDUCATION

6TH GRADE PHYSICAL EDUCATION		STEMMS086
Semester long course	6th	
<p>This two component class includes physical education and health. In physical education, students have the opportunity for physical development in the areas of strength, flexibility, coordination, endurance, balance, agility, range of motion, and power. Students are introduced to the fundamentals of team and individual sports, which include skills, rules, and game strategy. This diverse program allows students the opportunity to develop individual skills and to be introduced to new, enjoyable experiences for lifelong physical fitness and well-being. The health curriculum content provides students with the information needed to make healthy decisions.</p>		

OR

SPORTS AND GAMES		STEMMS090
Semester long course	7th- 8th grade	
<p>Concentrates on the different skills, rules and strategies of individual and team sports/games. Teamwork and competition are emphasized. Students will learn the skills necessary to play each sport/game, rules and terminology associated with the sport/game and offensive/defensive strategies peculiar to the sport/game. Sportsmanship and competitiveness are learned and practiced, along with leadership.</p>		

MS PE		STEMMS087
Semester long course	7th- 8th grade	
<p>This two component class includes physical education and health. In physical education, students have the opportunity for physical development in the areas of strength, flexibility, coordination, endurance, balance, agility, range of motion, and power. Students are introduced to the fundamentals of team and individual sports, which include skills, rules, and game strategy. This diverse program allows students the opportunity to develop individual skills and to be introduced to new, enjoyable experiences for lifelong physical fitness and well-being. The health curriculum content provides students with the information needed to make healthy decisions.</p>		

OR

MS HEALTH 1- MIND AND BODY		STEMMS088
Semester long course	6th- 8th grade	
<p>This course is an introduction to health and is a prerequisite to Teenage Wellness. Topics include an introduction to health and the concepts of advocacy, hygiene, prevention, relationships and interpersonal skills, conflict management, expressing difficult feelings, boundary setting, seeking help, pro-social behaviors, bullying, suicide awareness and personal safety.</p>		

OR

MS- HEALTH 2- TEENAGE WELLNESS		STEMMS089
Semester long course	7th- 8th grade	
<p>Concentrates on the different skills, rules and strategies of individual and team sports/games. Teamwork and competition are emphasized. Students will learn the skills necessary to play each sport/game, rules and terminology associated with the sport/game and offensive/defensive strategies peculiar to the sport/game. Sportsmanship and competitiveness are learned and practiced, along with leadership.</p>		

WORLD LANGUAGE

*Any 8th graders new to World Language will be placed in Level 1 not Level 1A. 8th graders also have the option of taking American Sign Language 1 as their foreign language.

FRENCH 1 A		STEMMS066FS1/S2	
Year long course	6th- 7th grade		
<p>Students will learn the basic skills of speaking, listening, reading and writings as well as cultural information. Students will study present, future and past tense verb conjugations, vocabulary, gender of nouns, adjective use and sentence structure. This course is designed to present students with the solid knowledge base necessary at intermediate and advanced language levels.</p>			

OR

FRENCH 1 B		STEMMS067FS1/S2	
Year long course	7th- 8th grade		
<p>Students will continue to learn the grammatical structures, which will allow them to communicate on a simple level in the foreign language. The students will begin to use the past tense and talk and write about events that have already happened. The study of vocabulary continues to be of utmost importance through all levels of language study. Students will practice all skills through speaking, reading, writing, and listening.</p>			

SPANISH 1 A		STEMMS066SS1/S2	
Year long course	6th- 7th grade		
<p>This course will prepare students to speak, read, write, and listen in the chosen language as well as learning cultural information. Students will study simple grammar structure, which includes present tense verb conjugations, gender of nouns, adjectives use and sentence structure. All skills will be practiced through speaking, writing, listening and reading.</p>			

OR

SPANISH 1 B		STEMMS067SS1/S2	
Year long course	7th- 8th grade		
<p>Students will continue to learn the grammatical structures that will allow them to communicate on a simple level in the foreign language. The students will begin to use the past tense and talk and write about events that have already happened. The study of vocabulary continues to be of utmost importance through all the levels of language study. Students will practice all skills through speaking, reading, writing and listening.</p>			

FINE ARTS

ART 1		STEMMS056
Semester long course	6th- 8th grade	
<p>The class will focus on using mixed media to create works of art. Mixed media is essentially the use of two or more art mediums in a single work of art. Students will experiment with charcoal, pencil, paint, printmaking and collage. Emphasis will be placed on risk taking in art making and experimentation. Class discussions will be held on the history of art and art as a form of self-expression.</p>		

OR

ART 2		STEMMS057
Semester long course	6th- 8th grade	
<p>The class will begin with observational drawing skills and techniques. As we progress we will include painting techniques. The major emphasis of the class focuses on the skills and knowledge required to draw well. We will build on those skills and explore creative and inventive ways to express ourselves using drawing and painting mediums. Students will learn the history of drawing and painting, and discuss how society influences art and how art is used as visual communication.</p>		

ART 3		STEMMS058	
Semester long course	7th - 8th grade		
<p>Students will explore the mediums of painting, drawing, sculpture, graphic design and digital photography. The course is designed as an introduction to the high school curriculum. As with all art classes at STEM, Creativity, problem solving and experimentation are areas of focus. Students will use the elements and principles of design to analyze and evaluate their work and the work of their peers, research historical art and create visual forms of self-expression.</p>			

OR

ART 4- MS DRAWING AND PAINTING		STEMMS059	
Semester long course	7th- 8th grade		Must have completed Art 3 or have recommendation from Art Department
<p>Students will explore the mediums of painting & drawing. The course is designed as an introduction to the high school curriculum. As with all art classes at STEM, Creativity, problem solving and experimentation are areas of focus. Students will use the elements and principles of design to analyze and evaluate their work and the work of their peers, research historical art and create visual forms of self-expression.</p>			

THEATER I		STEMMS226
Semester long course	6th - 8th grade	
<p>A comprehensive beginning theater class. The purpose of the course is to give students an overview of Theater in general. We learn the tools of theater in mind, body, and voice which include the following: Scene work, monologues, improvisation, and pantomime. Major emphasis of the class is on developing beginning acting skills, teamwork, and self esteem.</p>		

OR

THEATER II		STEMMS229
Semester long course	6th - 8th grade	Must have completed Theater I
<p>Theater II helps students develop experience and skill in one or more aspects of theatrical production. Advanced courses concentrate on extending and refining dramatic technique, by expanding students' exposure to different types of theatrical techniques and traditions and increasing their participation in public productions. Theater II Curriculum is performance based. It has been developed to expand and deepen the students' skills as an artist. They will do so by building on material covered in Theater I curriculum, with units in: Character Analysis, Monologue Analysis, and writing, Shakespeare Performance, and Design. The curriculum will culminate in a performance.</p>		

THEATER TECH		STEMMS231	
Semester long course	6th- 8th grade		Must have completed Theater 1
<p>Drama is a discipline that requires collaboration, visioning, compromising, leading, and following. Without all these moving parts, it doesn't work. That's why technical theater is important: it is the unsung hero of our industry, where the actors and directors are celebrated. How can a solid, holistic drama program exist if all members do not experience all the moving parts?</p> <p>Technical theater will give you the opportunity to introduce lighting, sound, costuming, staging, stage management, and makeup into our program.</p> <p>The great thing about this class is that it gives an opportunity for those who are not interested in performing an opportunity to be in the theater - behind the scenes.</p>			

OR

THEATER PERFORMANCE		STEMMS230	
Semester long course	7th- 8th grade		Must have completed Theater I and Theater II
<p>Theater Performance courses provide students with experience and skill development in one or more aspects of theatrical production, by allowing them to concentrate on acting and performance skills. Introductory courses explore fundamentals, while advanced courses extend and refine technique, expand students' exposure to different types of theatrical craft and traditions, and increase their participation in public productions.</p>			

BEGINNING BAND		STEMMS0521S1/S2
Year long course	6th- 8th grade	Audition for appropriate placement is required. Student must have own instrument.
<p>This year-long course is an introduction to performing music in the concert band setting for students with limited or no musical experience. This is a great follow-up course to the Fundamentals of Music class. Instruments taught in this course are flute, clarinet, trumpet, trombone, baritone, saxophone, and percussion (bell kit and snare drum), which can be expanded on in subsequent advanced instrumental band ensembles. STEM does not supply instruments but our instructor will help you determine the best option for obtaining the required materials before the year begins. Instrument maintenance, playing technique, and musical theory are all taught as you perform a variety of music with a group. We will perform as a band during concerts throughout the year.</p>		

OR

INTERMEDIATE BAND		STEMMS0522S1/S2
Year long course	6th- 8th grade	Audition for appropriate placement is required. Student must have own instrument.
<p>This year-long repeatable course is the intermediary between STEM's Beginner Band and Concert Band Ensembles. We will perform classical transcriptions and arrangements of popular music for multiple concerts and school events. Members must be able to perform three-four major scales of their choice with characteristic tone, a portion of the chromatic scale, and sightread notated music that feature rhythms such as half notes, quarter notes, quarter rests, and eighth notes. Instrumentation for Intermediate Band is flute, clarinet, trumpet, trombone, baritone, saxophone(s) (alto and/or tenor), tuba, and french horn, percussion (Snare, Bass drum, Keys, Aux).</p>		

CONCERT BAND		STEMMS0522S1/S2
Year long course	6th- 8th grade	Audition for appropriate placement is required. Student must have own instrument.
<p>This year-long repeatable course is the Advanced Band Ensemble. Instrumentation for this Band ensemble is: flute, clarinet, trumpet, trombone, baritone, saxophone(s) (altos, tenor, baritone), euphonium, tuba, piccolo, french horn and percussion (Snare drum, Bass Drum, Bell kit and Auxiliary percussion). We will perform classical transcriptions and arrangements of popular music for multiple concerts and school events. Members must be able to perform six or more major scales of their choice with a characteristic tone, a portion of the chromatic scale, and sightread notated music that feature rhythms such as half notes, quarter notes, quarter rests, and eighth notes, eighth rest sixteenth notes, doted half and dotted quarter and dotted 8th notes.</p>		

OR

ORCHESTRA		STEMMS0520S1/S2
Year long course	6th- 8th grade	Audition for appropriate placement is required. Student must have own instrument.
<p>This year-long repeatable course is a large String Ensemble. They will perform classical transcriptions and arrangements of popular music for multiple concerts and school events. Members must be able to perform four or more major scales of their choice with correct intonation, a portion of the chromatic scale, and sightread notated music that feature rhythms such as half notes, quarter notes, quarter rests, and eighth notes, eighth rest sixteenth notes Doted half and dotted quarter and dotted 8th notes. Instrumentation for this String ensemble is: Violin, Viola, Cello, Double Bass</p>		

CHOIR		STEMMS0522S1/S2	
Semester long course	6th- 8th grade		
<ul style="list-style-type: none"> · Students learn proper breath support and vocal production · Students perform at concerts and events · Students learn to read music as it applies to vocal scores · Students write, produce and perform an original musical 			

OR

MUSIC FUNDAMENTALS		STEMMS0513	
Semester long course	6th- 8th grade		
<p>This semester-long repeatable course will cover music appreciation, music history, and basic music theory. We will cover how to read and write musical notation along with musical harmony to help deepen the understanding of how rhythm, pitch, dynamics, tempo, and timbre develop the melody, harmony, and form when creating music. Hopefully leading to musical exploration with the use of singing, key instruments, string instruments, wind instrument instruments, and technology. This class will provide a strong foundation for the second semester music production class.</p>			

MUSIC PRODUCTION		STEMMS0514
Semester long course	6th- 8th grade	Music Fundamentals is required
<p>This advanced semester-long (Spring) repeatable course focuses on the application of the fundamental course's use of composition, song creation and recording using high level equipment and a cloud based recording software. Other skills built are live recording, sound design, and music theory as an avenue to self expression and creation. In order to succeed in this class, you must be able to describe/demonstrate: basic harmonic progressions, the basics of rhythmic notation, musical form (in both classical and popular styles of writing), and be able to create simple melodies vocally or instrumentally. You will produce multiple pieces of music and you will build skills that allow you to more fluently express yourself through musical creation.</p>		

GENERAL ELECTIVES

MATH EXPLORATION AND PROBLEM SOLVING		STEMMS0213
Semester long course	6th- 8th grade	Students must have completed Math Course II or higher.
<p>This math elective is designed for middle school students who wish to analyze and solve challenging mathematics problems. Through this course you will have the opportunity to delve deeper into math topics not often covered in most middle and/or high school courses. The overall goal is to build an appreciation of mathematics by exploring high-level math topics while solving and analyzing national level mathematical competition problems. We will use MATHCOUNTS as our main source of problems. The open-ended curriculum allows for a student centered approach. The only requirement is that you must love math!</p>		

MS SPEECH AND DEBATE		STEMMS050
Semester long course	7th- 8th grade	
<p>Speech & Debate is a one-semester long interdisciplinary course, taught in the fall and spring semesters, designed to teach students the skills of public speaking and public debate. Students will learn the fundamentals of effective oral communication, including diction, pronunciation, meter, gestures, and stage presence; the elements of effective argument; effective research techniques and how to avoid plagiarism; counterargument, rebuttal and cross-examination; and how to think and communicate effectively on one's feet with little to no preparation.</p>		

OR

MS STUDY HALL		STEMMS221S1/S2
Semester long course	6th- 8th grade	
<p>Supervised class period devoted to completing assigned class work or projects.</p>		

MS MATH ENRICHMENT		STEMMS228
Year long course	6th- 8th grade	Placement is based on iReady scores. Teacher recommendation required.
<p>This is a course designed to help students who have historically struggled in their math classes. This course will provide extra support for any lagging skills, in addition to serving as a place for students to get help in their core math class.</p>		

OR

MS ENGLISH ENRICHMENT		STEMMS227
Year long course	6th- 8th grade	Placement is based on iReady scores. Teacher recommendation required.
<p>This course is designed to help students strengthen their literacy skills. Students will work on focused reading and writing skills in small groups, as well as receive additional support on existing literacy work in all classes. Students can take the course with a teacher referral.</p>		

STEM SCHOOL

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