

Hartland Middle School at Ore Creek Course Descriptions

Mathematics

Seventh Grade—Math (Full Year)

This course is aligned to the Michigan K–12 Standards for Mathematics for Grade 7 and emphasizes the development of proportional reasoning, rational number fluency, and foundational algebraic thinking. Students solve problems involving ratios, rates, and proportional relationships while strengthening skills with fractions, decimals, and integers. Instruction includes writing and solving expressions and linear equations, applying percent concepts such as tax, discounts, and simple interest, and analyzing geometric figures to determine area, surface area, and volume. Students also develop statistical reasoning by drawing inferences from data and exploring probability concepts. Throughout the course, emphasis is placed on problem solving, mathematical modeling, and communicating mathematical reasoning.

Seventh Grade—Pre-Algebra (Full Year)

This accelerated course is designed for students who demonstrate strong mathematical understanding and readiness for advanced study. The curriculum includes all Grade 7 Michigan Mathematics Standards and extends into significant Grade 8 content within one academic year. Students deepen their understanding of proportional and non-proportional relationships, solve multi-step equations and inequalities, and analyze linear relationships and functions. Additional topics include integer operations, rational expressions, the Pythagorean Theorem, transformations and similarity, and interpreting slope and rate of change in real-world contexts. The pace and rigor require independence, strong problem-solving skills, and consistent academic performance. Successful completion of this course prepares students for Algebra I in Grade 8. Placement is based on multiple criteria, including assessment data and teacher recommendation.

Algebra (Full Year) This course is a traditional study of mathematics with a good blend of integration. The lessons will be integrating algebra with geometry and statistics. The students will be using technology with the study of traditional mathematical concepts. Real life situations will be visited and students will be expected to communicate solutions verbally and in written form.

Eighth Grade—Math (Full Year)

This course is aligned to the Michigan K–12 Standards for Mathematics for Grade 8 and builds upon concepts developed in Grade 7. Students study linear equations, systems of equations, and functions, with an emphasis on understanding slope and rate of change. Instruction includes applying the Pythagorean Theorem, working with irrational numbers, and exploring transformations, congruence, and similarity. Students analyze bivariate data and use algebraic

and geometric reasoning to solve real-world problems. The course emphasizes conceptual understanding, procedural fluency, and mathematical communication, and it prepares students for Algebra I in high school.

Algebra (Full Year) This course is a traditional study of mathematics with a good blend of integration. The lessons will be integrating algebra with geometry and statistics. The students will be using technology with the study of traditional mathematical concepts. Real life situations will be visited and students will be expected to communicate solutions verbally and in written form.

Honors Geometry (Full Year) - This course includes an in-depth study of the forms and relationships of objects in the plane and space. It is designed to develop thinking, reasoning, and logic skills through organized, sequential, and systematic approaches to problem solving. Work is continued with algebraic equations and formulas.

English

The English curriculum focuses on reading, writing, speaking, and listening skills in order to develop effective communicators and critical, creative thinkers. Students will follow the Writer's Workshop process for several writing pieces.

Seventh Grade—English (Full Year)

Students use the writing process as a framework to develop various forms of communication through prewriting, drafting, peer editing, revising, and publishing. Literature is used to promote the enjoyment of reading and critical thinking and to enhance writing. Because effective communication is a Hartland Middle School student's goal, the areas of spelling, punctuation and grammar will be taught and reinforced.

Eighth Grade—English (Full Year)

Students continue their work with the writing process, literature, and developing effective communication skills.

Science

Seventh Grade—Science (Full Year)

7th grade science students will learn Life Science. Students will engage in science & engineering practices while learning about topics such as: Structure, Function, and Information Processing, Matter and Energy in Organisms and Ecosystems, Interdependent Relationships in Ecosystems, Growth, Development, and Reproduction of Organisms, and Natural Selection and Adaptations.

Eighth Grade—Science (Full Year)

8th grade science students will learn Physical science. It is an introduction to the fundamentals of chemistry and physics with emphasis on science & engineering practices through various laboratory procedures and techniques. Topics covered include: Waves and Electromagnetic

Radiation, Energy, Forces and Interactions, Chemical Reactions, and Structure and Properties of Matter. Students will have frequent opportunities to perform laboratory experiments.

Social Studies

Seventh Grade—Social Studies (Full Year)

Geography and map reading skills, economic development, and ancient cultures will be stressed during the year. Areas of study include Asia and Africa (eastern hemisphere). There will be emphasis throughout the course on research, writing, and presentation skills, with several group projects.

Eighth Grade—Social Studies (Full Year)

Eighth grade Social Studies is a general survey of American history from the ratification of the Constitution to the Reconstruction era following the Civil War (from the 1790's to the 1870's). Topics studied will include the birth of the Republic, early western movement, early industrialization, expansion to the Pacific, the growth of sectionalism, crisis and compromise, and the Civil War and reconstruction.