

MATH DEPARTMENT Junior High School



Arts & Communications



Business, Management Marketing & Technology



Health Science



Engineering/Manufacturing & Industrial Technology



Human Services



Natural Resources & Agriscience

MATH 7 – E027	REQUIRED CLASS	7	1.0 credit
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This course stresses both the reading and application of mathematics. Arithmetic principles are consolidated and integrated with concepts from algebra and geometry. An emphasis is placed on problem-solving strategies. Focus is placed on pre-algebra skills in preparation for eighth grade math. **Placement in this class is based on criteria established by Utica Community Schools.**

ADVANCED MATH 7 – E127		7	1.0 credit
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This course is designed for students displaying a high degree of skill and interest in mathematics, enabling capable students to make the transition from elementary school mathematics to algebra in one year. It emphasizes pre-algebra skills and concepts, such as variables, equation solving and problem solving. The full range of topics needed for the successful study of Algebra is presented. This course will cover both Math 7 and Math 8 in one year. **Placement in this class is based on criteria established by Utica Community Schools.**

ALGEBRA I – E090		7, 8, 9	1.0 credit
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Students who were successful in Advanced Math 7 will be recommended for Algebra I. The course stresses both the structure of Algebra I and the development of computational problem-solving skills. Students study the structure and properties of real numbers, equations, inequalities, functions, and statistics. Applications of these ideas are used in solving problems which include uniform motion, multiple variables, inequalities, scatterplots and approximation, and exponential growth and decay. Completion of this course with a 70% or better fulfills 1 credit of a mathematics graduation requirement, but the grade will not be counted in the student's high school GPA. **Placement is based on criteria established by Utica Community Schools.**

MATH 8 – E028	REQUIRED CLASS	8	1.0 credit
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Mathematics 8 is a course designed to prepare students for Algebra I. Arithmetic principles are consolidated and integrated with concepts from algebra and geometry. An emphasis is placed on problem-solving strategies and calculator usage in the applications of mathematics.

GEOMETRY – E110	REQUIRED CLASS	9	1.0 credit
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Geometry is a full year course designed to meet the Michigan Merit Curriculum requirements for high school Geometry. Geometry builds on key concepts developed in the middle grades. In our ever-increasing technological world, a rich study of logic and mathematical proof is fundamental for reasoning and good decision making. The study of Geometry offers students the opportunity to develop skill in reasoning and formal proof. The content expectations include reasoning about number systems, measurement, mathematical reasoning, laws of logic, proofs, figures and their properties, relationships between figures, and transformations of figures in the plane. Geometric thinking is a powerful tool for understanding both mathematical and applied problems, and offers ways of reasoning mathematically, beyond Algebra, including analytical and spatial reasoning.

ACCELERATED GEOMETRY – E100		8, 9	1.0 credit
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Accelerated Geometry is a full year course designed for students who have successfully completed Algebra I. This course is designed to meet the Michigan Merit Curriculum requirements for high school Geometry. Geometry builds on key concepts developed in the middle grades. In our ever-increasing technological world, a rich study of logic and mathematical proof is fundamental for reasoning and good decision making. The study of Geometry offers students the opportunity to develop skill reasoning and formal proof. The content expectations include reasoning about number systems, measurement, mathematical reasoning, laws of logic, proofs, figures and their properties, relationships between figures, and transformations of figures in the plane. Geometric thinking is a powerful tool for understanding both mathematical and applied problems, and offers ways of reasoning mathematically, beyond Algebra, including analytical and spatial reasoning.

ACCELERATED ALGEBRA II – E130		9	1.0 credit
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Accelerated Geometry is a full year course designed for students who have successfully completed Algebra I. This course is designed to meet the Michigan Merit Curriculum requirements for high school Geometry. Geometry builds on key concepts developed in the middle grades. In our every-increasing technological world, a rich study of logic and mathematical proof is fundamental for reasoning and good decision making. The study of Geometry offers students the opportunity to develop skill in reasoning and formal proof. The content expectations include reasoning about number systems, measurement, mathematical reasoning, laws of logic, proofs, figures and their properties, relationships between figures, and transformations of figures in the plane. Geometric thinking is a powerful tool for understanding both mathematical and applied problems, and offers ways of reasoning mathematically, beyond Algebra, including analytical and spatial reasoning.