



KSTM 2020-2021

8th Grade

Course Descriptions

Pre-Algebra (041641/041642)

This course is designed to meet the needs of the student who will benefit from a transition course which bridges the similarities of arithmetic and algebra. This course will contain spiraling reinforcement of basic algebraic concepts and topics in order to prepare students for successful placement in Algebra 1-2. This course will cover the content standards for pre-algebra, including operations on real numbers, conversions among fractions, decimals, and percents, solving linear equations and inequalities, graphing linear equations, working with polynomials, and using measures of central tendency to interpret data. ***This course meets for a full block every other day all year.***

Honors Algebra 1/2 (041661/041662)

This course is a first-year algebra survey. It covers traditional algebra topics including a study of the four basic operations dealing with signed numbers and polynomials, solution of first and second degree equations, verbal problems, systems of linear equations, graphing and writing linear equations and inequalities, and simplifying exponential expressions. ***This course meets for a full block every other day all year.***

Honors Geometry 1/2 (041671/041672)

This course is a complete study of geometry. Topics include congruence and similarity of figures, parallelism and perpendicularity, right triangle relationships, formal and informal proof, coordinate geometry, properties of polygons and circles, and perimeter, area, and volume of two- and three-dimensional figures. This course is the first semester of Geometry 1-2. Students enrolling in Geometry 1-2 should have passing grades in both semesters of Algebra 1-2. ***This course meets for a full block every other day all year.***

English Language Arts Grade 8 (010081/010082)

English Language Arts Grade 8 supports student mastery of eighth grade language arts standards and focuses on development and application of skills in grade level reading, writing, speaking, listening, and multiple literacies. Students will read a variety of literary and informational texts and write in a variety of modes using numerous tools and organizational frameworks. Students will also learn appropriate and safe use of digital tools related to research. ***This course meets for a full block every other day all year.***

Honors English Language Arts Grade 8 (010041/010042)

Honors English Language Arts Grade 8 supports student mastery of eighth grade language arts standards and focuses on development and application of skills in grade level reading, writing, speaking, listening, and multiple literacies. Students will read a variety of literary and informational texts and write in a variety of modes using numerous tools and organizational frameworks. Students will also learn appropriate and safe use of digital tools related to research. Tasks and/or projects will be completed that require rigorous and deep critical thinking skills as they apply to English language arts. ***This course meets for a full block every other day all year.***

Science 8 (060271/060272)

Science 8 engages students in the three dimensions (science practices, disciplinary core ideas, and crosscutting concepts) of learning as identified by the Nebraska College and Career Ready Standards for Science. The topics include forces and interactions, waves and electromagnetic radiation, energy, heredity: inheritance and variation of traits, biological evolution, space systems, and history of Earth. This course provides the foundations for other science coursework. ***This course meets for a full block every other day all year.***

Honors Physical Science 8 (060291/ 060292)

Honors Physical Science Grade 8 engages students in the three dimensions (science practices, disciplinary core ideas, and crosscutting concepts) of learning as identified by the Nebraska College and Career Ready Standards for Science. The topics include forces and interactions, waves and electromagnetic radiation, structure and properties of matter, energy, chemical reactions, space systems, weather and climate, and Earth's systems. This course provides a foundation for other science courses and meets the district requirement for Physical Science. Students enrolled in honor courses have additional experiences that require a more rigorous program of study. ***This course meets for a full block every other day all year.***

Social Studies 8 (030141/030142)

This course explores the life of our country during the time period between Independence to 1914. Instruction is organized around the themes of geography, history, economics, culture, and the elements of citizenship. Students investigate the key people, events and ideas of our country using textbooks, newspapers, novels, primary sources, and technology. ***This course meets for a full block every other day all year.***

Eighth grade students will select 2-4 semester-long electives:

Art 8 (110099)

This course allows students to be innovative and reflect on their own experiences as many American artists have and do today. American artists were and are on the forefront of shaping America's identity through recording the human experience in innovative ways. Throughout this course, students will continue to develop their artistic voice and style and explore how they do and will play a part in society. Students will examine art and artists throughout American history focusing on America's diversity and influence. Aesthetic theories of Instrumentalism, Expressionism and Formalism will be studied as well. ***This course meets for a full block every other day for one semester.***

Digital Media 8 (138051)

In this one-semester course students will continue their study of digital media and other topics including audio, video, graphics, text and animation tools. Concepts such as storyboards, scripts, media, color and presentation will be learned and used throughout the semester. Students will evaluate and operate media input hardware and A/V capture/edit software, and will demonstrate the ability to assemble audio/visual projects using various types of software and hardware, and will capture the projects to various media. ***This course meets for a full block every other day for one semester.***

iDesign 8 (137081)

In iDesign 8, students will study storytelling, animation and game layout design on the computer. ***This course meets for a full block every other day for one semester.***

Graphic Arts (131201)

In Graphic Arts, tools in drawing, desktop publishing, digital photography, and 3-D design software will be used to create projects that will enhance the student's ability in computer applications. ***This course meets for a full block every other day for one semester.***

Exploring Robotics-2(170081)

Exploring Robotics 2 is an introduction to robotics, engineering, programming, team dynamics and technical drafting.

Students will choose one year-long performance arts course:

Advanced Band (190551/190552)

This course is offered to students with advanced abilities secured through several years of instrumental music participation. Music introduced includes technique studies and selected concert music with full instrumentation appropriate to the classes and ability. Membership is achieved by the recommendation of the instructor. Performance is included as an extension of the classroom activities. ***This course meets for a half block every other day all year.***

Advanced String Orchestra (190741/190742)

This course is offered to eighth grade students who have demonstrated advanced ability in playing a string instrument. Technique studies and selected concert music advance both technical and musical understandings. The instrumentation includes violin, viola, cello and string bass. Membership is achieved by the recommendation of the instructor or successful completion of Intermediate Strings. Performance is included as an extension of the classroom activities outside of the school day. ***This course meets for a half block every other day all year.***

Chorus 8 (190101/190102)

Chorus 8 is available to eighth grade students who have special interests and abilities in choral singing. Choral music is introduced in two and three parts that include bass clef participation. Vocal emphasis is placed on the introduction of the male changing voice and greater extension of all voice ranges. Performance opportunities including the All-City Music Festival are an extension of the classroom experience. ***This course meets for a half block every other day all year.***

Music Exploration-8(190111)

This course extends the scope of previously learned musical concepts and skills. Students explore various aspects of singing, listening, creating, notating, and playing. The focus is on contemporary and popular music styles. Student performances are limited to classroom demonstrations. ***This course meets for a half block every other day for a semester and be paired with Anthropology.***

Anthropology MS 2(036062)

This course will focus on projects based on Ancient Civilizations through Medieval Civilizations. This course will integrate the following content standards throughout the school year: maps/globes, culture, history and geography, economics, citizenship, and government. This course will integrate electronic media and communication skills in its content. ***This course meets for a half block every other day for a semester and be paired with Music Exploration.***

Astronomy 8 (061121)

Students work within a rigorous framework of galaxy study and cosmology, the study of the cosmos. Much of the study will be done in the school planetarium. Students are encouraged to further their study of astronomy by using this course as a part of their Science Fair research and study. Students will be required to begin work on a digital portfolio for the class. ***This course meets for a half block every other day for a semester and be paired with PE.***

Physical Education 8 (070161/070162)

This is a survey course involving students in the development of personal fitness and participation in a variety of sports, games, and dance activities. ***This course meets for a half a block every other day all year.***

Students will be placed in the following enrichment classes based upon test scores, 7th grade course grades, and teacher recommendations.

Reading Skills 8A (011131/011132)

This course is designed for readers who have a foundation in decoding skills but experience difficulty comprehending grade-level material. The curriculum focuses on strengthening fluency, comprehension, and vocabulary skills. Placement is based on standardized test scores and teacher recommendation. ***This course meets for a full block every other day.***

Reading Skills 8B (011221/011222)

Students in this course will improve reading proficiency with explicit, direct instruction in fluency, vocabulary, and comprehension. Strategies for phonemic awareness and phonics will be taught as needed. Students will read leveled, high interest literature for both academic and recreational purposes. Placement is based on standardized test scores and teacher recommendation. ***This course meets for a full block every other day.***