



2019-2020 MPS Middle School Course Descriptions

CORE CLASSES

ELA (ENGLISH LANGUAGE ARTS)

7 ELA

Students will be taught to write to inform, compose narratives, and present arguments. The course further seeks to teach students to present their ideas by making claims and while supporting them with relevant ideas and details. Writing is expected to be clear, coherent, in some cases collaborative, and when appropriate, composed using technology. Students are taught to conduct basic research and then proper methods of summarizing and paraphrasing. This is paired with students developing the ability throughout the year to write for short and extended tasks and a variety of content-specific purposes.

Students will participate in collaborative discussions. Students will be taught to present their knowledge and ideas both verbally and through multimedia presentations while adapting those presentations for a variety of audiences.

Reading will focus on literature and informational text. Students will learn to break down complex texts while gaining the ability to understand the author's purpose, point of view, and how he or she organizes a text. Finally, students learn to evaluate how two or more authors interpret and present information in similar and different ways.

8 ELA

Students will be taught to write to inform, compose narratives, and present arguments. The course seeks to expand upon ways students make strong claims with relevant support while raising academic rigor. Coherent writing becomes a clear focus as students are preparing for high school coursework. More thorough research is conducted, again focusing on summarizing and paraphrasing skills. Students are further taught to use technology as an avenue to conduct research, as well as creating short and extended content-specific writing tasks.

Speaking and listening is a key focus. Students will attain the ability not only to present their ideas, but to consciously listen to and reflect upon the thoughts and presentations of others.

Reading focuses on a variety of literature and informational texts. Students study more complex texts, which will help to expand upon their already strong ability to break down challenging readings. Students are taught to draw conclusions and make inferences, while gaining that information from a variety of sources, seeking to understand where they agree and disagree on key issues.

Pre-AP ELA

Pre-AP courses in 7th and 8th grades are intended to be a transition for students to PreAP and AP courses in high school. Students will receive a more intensive course of study through all elements of language arts, while further focusing on the expansion of creativity. While taking this course does not mean more work during the school year, it does require more dedication from students as teachers seek to implement higher-level thinking. Further, teachers will develop meticulous coursework appropriately challenging gifted learners. This course may require summer reading, writing, and/or projects.

MATH

7 Math

Students will read, write, represent, and compare rational numbers expressed as integers, fractions, and decimals. Students will calculate with integers and rational numbers with and without positive integer

exponents. Students will explain the relationship between absolute value of a rational number and the distance that number is from zero. Students will understand the concept of proportionality in mathematical situations. Students will represent and solve linear equations and inequalities. Student will use order of operations and properties to generate equivalent numerical and algebraic expressions containing rational numbers and grouping symbols. Students will calculate surface area and volume of rectangular prisms. Students will determine the area of trapezoids; as well as area and perimeter of composite figures. Students will use reasoning with proportions and ratios to determine measurements, justify formulas and solve mathematical problems involving circles and related geometric figures. Students will analyze the effect of dilations, translations, and reflections on the attributes of two-dimensional figures on and off the coordinate plane. Students will display and analyze data in variety of ways. Students will solve mathematical problems and perform basic operations with rational numbers including integers, decimals, and fractions. Basic four-function calculators are used regularly.

7 Pre-AP Pre-Algebra

Students will review and extend fundamental skills and concepts for rational numbers expressed as integers, decimals, and fractions. Students will calculate with integers and rational numbers with and without positive integer exponents. Students will explain the relationship between absolute value of a rational number and the distance that number is from zero. Students will understand the concept of function in real-world and mathematical situations, and distinguish between linear and nonlinear functions. Students will solve problems involving right triangles using the Pythagorean Theorem. Students will study equations, inequalities, number-theory, geometry, and rational numbers. Students will display and analyze data in variety of ways. Students will solve mathematical problems and perform basic operations with rational numbers including decimals, fractions and whole numbers. Basic four-function calculators are used regularly.

8 Pre-Algebra

Students will read, write, represent, compare, classify, and represent real numbers and use them to solve problems in various contexts. Students will understand the concept of function; distinguish between linear and nonlinear functions; as well as recognize and represent linear functions in mathematical situations. Students will generate equivalent numerical and algebraic expressions and use algebraic properties to evaluate expressions. Students will solve and graph equations and inequalities. Students will solve problems involving right triangles using the Pythagorean Theorem. Students will calculate surface area and volume of three-dimensional figures. Students will display and interpret data in a variety of ways, including using scatterplots and approximate lines of best fit. Scientific calculators are used regularly.

Pre-AP Algebra I

Students will review and extend the understanding of number and operations to include square roots and cube roots. Students will represent and solve problems using linear equations, absolute value equations, and systems of equations. Students will represent and solve problems using linear inequalities, compound inequalities and systems of linear inequalities. Students will generate equivalent algebraic expressions and use algebraic properties to evaluate expressions and arithmetic and geometric sequences. Students will analyze mathematical change involving linear equations in mathematical problems. Students will understand functions as descriptions of covariation in mathematical problems. Students will distinguish between relations and functions. Students will recognize functions and understand that families are characterized by their rate of change. Students will display, describe, and compare data. Scientific calculators are used regularly. *Student's course grade will be reflected on their high school transcript; however the credit they receive will not count towards their high school math requirements.*

Pre-AP Geometry

Students must have successfully completed Algebra I. This course is a study of transformational geometry as it relates to congruent and similar polygons as well as a study of points, lines, planes, geometric figures and their properties. This course develops a student's ability to reason logically and justify this logical thinking by geometric properties. This course includes formal proofs. The material covered also provides the student with a background in geometric properties used in higher mathematics courses. Scientific

calculators are used regularly. *Student's course grade will be reflected on their high school transcript, however the credit they receive will not count towards their high school math requirements.*

SCIENCE

7 Science

This course is aligned with the Oklahoma Academic Standards for Science (OAS-S) for 7th grade and is inclusive of the **three domains of science: Physical Science, Life Science, and Earth and Space Science**. The class focuses on **three-dimensional scientific teaching and learning**. Each **disciplinary core** idea will be approached from the **science and engineering practices** perspective which models methods scientists use in the real world. The standards' **cross-cutting concepts** will also be explored to determine their application across all domains of science.

Standards taught are from each scientific domain:

- **Physical Science** including:
 - Matter: Its properties and interactions
 - Motion and Stability: Forces and their interactions
 - Energy and energy transfer
- **Life Science** including:
 - Biological unity and diversity: Inheritance, Variation of Traits, Genetic Factors, Mathematical Probability of Traits, Energy Processing in Plants, Plant Behavior, Behavior Types, Interactions & Adaptations, Animal Reproduction and Development, Embryological Development, and Natural Selection vs. Artificial Selection
- **Earth and Space Science** including:
 - Earth's place in the universe (Earth, sun and moon cyclic patterns / Seasons)
 - Earth's systems (Weather and climate, atmospheric and oceanic patterns)

Coursework is taught through scientific inquiry to strengthen the students' understanding of science, technology, engineering and mathematics (STEM) to support them in everyday life. Assignments might include both classroom and outdoor activities such as, projects, outside reading, and hands-on design challenges. Each student will develop a vision of science as both a body of knowledge and an evidence-based model that is continually refined and expanded.

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Standards taught are from each scientific domain:

- **Physical Science** including:
 - Matter: Its structure, properties, interactions, and conservation
 - Motion and Stability: Forces and their interactions
 - Newton's Third Law
 - Relationships among mass, force and motion
 - Waves & Their Applications in Technologies for Information Transfer: Movement, absorption & transmission of waves
- **Life Science** including:
 - Biological unity and diversity: Fossils records, Existence, Diversity, Extinction and Change of life forms over time
 - From Molecules to Organisms: Structure & Processes – Energy transfer through chemical reactions to support growth

- **Earth and Space Science** including:
 - Earth's Systems: Rocks, Fossils, Continental shapes, Seafloor structures
 - Earth and Human Activity: Natural hazards, Catastrophic events, Human interaction, Technologies to mitigate their effects, Human population and per-capita consumption of natural resources and their impact on Earth's systems

Coursework is taught through scientific inquiry to strengthen the students' understanding of science, technology, engineering and mathematics (STEM) to support them in everyday life. Assignments might include both classroom and outdoor activities such as, projects, outside reading, and hands-on design challenges. Each student will develop a vision of science as both a body of knowledge and an evidence-based model that is continually refined and expanded.

Pre-AP Science

Pre-AP science classes are more challenging than regular science classes and are intended to prepare students for high school Pre-AP and AP courses as well as for college curricula. Pre-AP science courses focus on all three domains of science: Physical, Life, and Earth and Space. We approach each disciplinary core idea three-dimensionally concentrating on science and engineering practices as well as identifying how each concept is interrelated to other scientific disciplines. Coursework will be taught through scientific student-engaged inquiry to strengthen the students' understanding of science, technology, engineering and mathematics (STEM) to support them in everyday life. They are more challenging than regular-level classes and will likely have more rigorous assignments and assessments. Each student will develop a vision of science as both a body of knowledge and an evidence-based model that is continually refined and expanded.

SOCIAL STUDIES

7 Social Studies

Students will use geographic knowledge as a tool for understanding the concepts of economics and the impact of recent history on contemporary events. Students will focus on spatial patterns of human and physical characteristics of the world and its peoples, and will explore how these patterns form, change over time, and relate to one another in the Eastern Hemisphere. In addition to the regular geography curriculum, the students will begin to develop an understanding of primary and secondary sources as pertaining to the subjects covered in class.

8 History

Students will focus on the impact of the American Revolution through the Civil War era (1760-1865). In addition to the normal history curriculum, students will develop an understanding of our country's Government from approximately George III's succession to the British throne to the election of Abraham Lincoln as president.

Pre-AP

Pre-AP courses in 7th and 8th grade are intended to prepare students for the transition to Pre-AP and AP social studies courses in high school. Students will be challenged to think more broadly and analytically in social studies. Students will be challenged with course-work requiring a great depth of knowledge. Higher-level thinking will be expected from students throughout the year. This course may require outside reading and/or projects throughout the year.

ELECTIVE CLASSES

Bronco 101 *9 weeks course* *Required for 7th graders*

Is designed to help students develop life skills in critical thinking, decision-making, communications, managing feelings, stress management, time management, and goal setting. It will also help students adapt to middle school and learn effective strategies to help insure success in their upcoming school years.

Skills for Living *9 weeks course* *7th and 8th grade*

This 9-week elective course introduces the student to practical skills needed for everyday life. The two

major units of study are Foods/Nutrition and Sewing. Students will prepare several recipes and will complete a project using the sewing machine.

Spanish *9 weeks course* *Required for 7th grade / 8th grade can choose to take*

This course builds on vocabulary and grammar acquired in the 5th and 6th grade classes, and serves as a prerequisite for introductory high school level courses. Some of the primary topics/units include the following; basic greetings and closures, weather, numbers, countries and capitals of Central and South America, personal hobbies, expressing likes and dislikes, and conjugating verbs in present tense.

FINE ARTS

Art *9 weeks course* *7th and 8th grade*

Two and three dimensional art production are included in this course. Basic design drawing, painting, and sculpture techniques will be explored. A concentration on the principles and elements of design, incorporated with art history, will be integrated into various art projects throughout the course.

Art II *Semester course* *8th grade only (Art 1 prerequisite)*

This advanced art class expands upon the elements of art and the principles of design with continued exploration of basic art media and techniques, such as drawing, painting, graphic design, photography, ceramics, collage, printmaking and sculpture. This course is designed for the highly motivated art student. This course will consist of more in-depth study of art criticism, aesthetics, and art history. Students will develop an ability to talk about their work and the work of others in classroom critiques. Students are required to bring a sketchbook. Students will also have many opportunities to explore careers in the arts, as well as showcase their artwork in the community

Band

Concert Band I

Is open to students who have completed at least one year of band and have been selected by audition. Students selected will represent all sections of the band including; flute, oboe, bassoon, clarinet, bass clarinet, saxophone, French horn, trumpet, trombone, baritone, tuba, and percussion. Emphasis will be placed on the continuing development of fundamental skills while also exploring the combined performing aspect of the band setting. To enroll in Concert Band I students must have at least one year of instruction with band director approval.

Students in Concert Band I will perform in a minimum of two concerts per year as well as contest opportunities and both pep rallies and football games. Prerequisite: Successful completion of band in the prior school year and band director approval

Concert Band II

Is open to students who have completed at least one year of band and have been selected by audition. Students selected will represent all sections of the band including; flute, oboe, bassoon, clarinet, bass clarinet, saxophone, French horn, trumpet, trombone, baritone, tuba, and percussion. Emphasis will be placed on the continuing development of fundamental skills while also exploring the combined performing aspect of the band setting. To enroll in Concert Band II students must have at least one year of instruction with band director approval.

Students in Concert Band II will perform in a minimum of two concerts per year as well as contest opportunities and both pep rallies and football games.

Prerequisite: Successful completion of band in the prior school year and band director approval

Concert Band III

Is open to students who have completed at least one year of band and have been selected by audition. Students selected will represent all sections of the band including; flute, oboe, bassoon, clarinet, bass

clarinet, saxophone, French horn, trumpet, trombone, baritone, tuba, and percussion. Emphasis will be placed on the continuing development of fundamental skills while also exploring the combined performing aspect of the band setting. To enroll in Concert Band III students must have at least one year of instruction with band director approval.

Students in Concert Band III will perform in a minimum of two concerts per year as well as contest opportunities and both pep rallies and football games.

Prerequisite: Successful completion of band in the prior school year and band director approval

Concert Band IV

Is open to students who have completed at least one year of band and have been selected by audition. Students selected will represent all sections of the band including; flute, oboe, bassoon, clarinet, bass clarinet, saxophone, French horn, trumpet, trombone, baritone, tuba, and percussion. Emphasis will be placed on the continuing development of fundamental skills while also exploring the combined performing aspect of the band setting. To enroll in Concert Band IV students must have at least one year of instruction with band director approval.

Students in Concert Band IV will perform in a minimum of two concerts per year as well as contest opportunities and both pep rallies and football games.

Prerequisite: Successful completion of band in the prior school year and band director approval

Choir

Mixed Choir/Jazz Choir *Semester or Year course* *7th and 8th grade*

This auditioned choir for mixed voices will focus on more advanced vocal technique, sight-reading, and music theory. A variety of musical styles will be explored. Students will participate in concerts, and have the opportunity to audition for contests and music festivals. There will be degrees of financial obligations to participate in various activities offered. This course is offered for a year, and is by audition with the conductor only.

Select Women's Choir *Semester* *7th and 8th grade*

This auditioned choir will continue to focus on vocal technique, sight-reading, and music theory. A variety of musical styles will be explored. Students will participate in concerts, and have the opportunity to audition for contests and music festivals. There will be degrees of financial obligations to participate in various activities offered. This course is offered for a year, and is by audition with the conductor only.

Men's Choir, Seventh Grade Womens, Eighth Grade Women's Choir *Semester 7th and 8th grade*

This choir will concentrate on fundamental vocal technique, sight-reading, and music theory. A variety of musical styles will be explored. Students will participate in concerts, and have the opportunity to contests and music festivals. There will be degrees of financial obligations to participate in various activities offered. This course is offered for a semester and a year.

Theatre

Beginning Theatre 1

Beginning Theatre 1 is a performance-based class as well as a foundation-building class. Students will progress from large group non-speaking activities to individual speaking presentations and learn terminology. Coursework will involve pantomime, warm-ups, skits, duets, character analysis, and an introduction to improvisational theatre. Students will learn stage presentation techniques, be expected to memorize lines, and apply audience etiquette.

GRADE LEVEL: *7th & 8th grade*

LENGTH: 9 weeks

Beginning Theatre 2

Beginning Theatre 2 is a hands-on, performance-based class building upon the concepts and practices of Theatre 1. Students will participate in script writing, stage design, monologues, and character analysis, and limited technical theatre. Additionally, students will perform scenes for a live audience as well as delve deeper into improvisational skills, activities, and focus activities for performers. There may be degrees of financial obligations to participate in various activities offered.

Grade Level: *7th and 8th grade*

Length of Course: *9 weeks course*

Prerequisite: *Theatre 2 may be taken in the same year as Theatre 1*

Beginning Theatre 3

Beginning Theatre 3 builds on all aspects of theatre, including pantomime, facial expression, voice activities, group improvisation, duets, monologues, script writing, costuming, props, set design, memorization, and live performances during the school day and evenings.

Grade Level: *7th & 8th grade*

Length of Course: *9 weeks*

Prerequisite: *Theatre 1 & 2*

Beginning Theatre 4

Beginning Theatre 4 will allow use of all aspects of Beginning Theatre 1, 2 and 3 by spending 6-7 weeks producing a play. Memorization is expected. These plays will be performed for the student body. The plays will allow the Beginning Theatre 4 students to incorporate their knowledge in varied aspects of stage management, publicity/advertisement, and performing art skills. There will also be an introduction into speech and competitive theatre with the possibilities of attending OSSAA Novice competitions in collaboration with the high school Theatre/Debate students. Students MUST audition at the end of their 7th grade year to be considered. There may be degrees of financial obligations to participate in various activities offered.

Grade Level: *8th grade only*

Length of Course: *semester*

Prerequisite: *Beginning Theatre 1, 2, 3. Audition and instructor approval required.*

PHYSICAL EDUCATION

Outdoor Education (with Archery) *9 weeks course* *7th and 8th grade*

Students will be introduced to a variety of lifelong outdoor skills and activities. Programs that may be included in the course consist of Oklahoma Fishing in the Schools, National Archery in the Schools Program, Exploring Bow Hunting, Explore Bowfishing, boater safety, and hunter education. Students will have the opportunity to develop their physical skills in new and challenging situations as well as exercise important social skills such as teamwork and leadership. This is a high-interest class that complements similar programs at the elementary and high school levels.

PE *9 weeks course* *7th and 8th grade*

The middle school physical education program's purpose is primarily to equip students to develop the desire, knowledge, and skills to be engaging in regular lifelong physical fitness. The program has two primary focal points. The first is to equip students with levels of strength, agility, and motor skills to participate in lifelong activities. The second focal point is to equip students with knowledge to participate, monitor and manage their own health fitness levels. Students will have the opportunity to participate in team sports which may include: basketball, Bronco Ball, bucket ball, flag football, floor hockey, kickball, pickleball, soccer, softball, team handball, ultimate Frisbee, and volleyball.. Students may also engage in

individual sports and activities such as badminton, bowling, disc golf, table tennis, and track/field events. Students will engage in activities that help develop attitudes and behaviors that will assist in their ability to be contributors to their social constructs. Students grades will be determined with written and/or skills tests and daily participation.

Strength and Conditioning *9 weeks course* *7th and 8th grade*

This course will provide an opportunity for the development of strength and conditioning for various sports and fitness related activities. The activities in this course will be focused on the middle school athlete. Free weights, exercise machines and conditioning activities will be incorporated to promote improvement in strength, endurance, balance, agility, and speed. Proper technique, safety precautions and proper application of the Principles of Training will be emphasized. A plan to achieve goals will be developed and implemented.

Computers

Introduction to Computer Applications *9 weeks course* *required for 7th grade*

This class teaches basic computer fundamentals, proper typing technique and explores uses and functionality of Microsoft Office and Google Drive.

Computer Applications *9 weeks course* *8th grade*

This advanced class reviews the basic computer fundamentals and proper typing technique. Students will continue to progress in their knowledge of Microsoft Office and Google Drive.

Gateway To Technology PLTW

Automation and Robotics *9 weeks course* *7th and 8th grade*

Students trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students use the VEX Robotics® platform to design, build, and robots.

Design and Modeling *9 weeks course* *7th and 8th grade*

Students apply the design process to solve problems and understand the influence of creativity and innovation in their lives. Using design software, students create a virtual image of their designs.

Flight and Space *9 weeks course* *7th and 8th grade*

Students explore the history and science behind aeronautics and use their knowledge to design, build, and test different forms of flight technology. Simulation software also allows students to design and test different aeronautical designs such as balsa gliders.

STEM

STEM/Robotics *9 weeks or semester course* *7th and 8th grade*

This course will allow students to delve deeper into research and hands-on activities involving Robotics and technology used in the real world. Students will also be able to spend more time preparing for robotics competitions. This course is initially a 9 week course, but can be extended into a semester long course with acceptance to a competitive robotics team.

STEM I/Coding (ask Tracy) *9 weeks course* *7th and 8th grade*

Computational thinking is a valuable life skill, and this course can help inspire students to learn programming languages as well as problem solving skills.

STEM II/Advanced Coding (ask Tracy) *9 weeks course* *7th and 8th grade*

This course is for students that plan to pursue a career path in IT or computer science will have a class to challenge and prepare the students for the future.