# MIDDLE SCHOOL COURSE DESCRIPTIONS

## **CORE**

## **LANGUAGE ARTS**

### **Language Arts**

Language Arts curriculum encompasses all aspects of reading, writing, speaking, and listening through a gradual release and workshop model. Students will complete formal papers in narrative, informative (compare and contrast), and argumentative genres using the writing process. They will engage in shared inquiry discussions, partake in differentiated literature circles, learn roots and affixes using *Words Their Way* vocabulary program. Student's independent reading will be monitored and reading discussions will occur through a reader's workshop model. Students will learn how to think critically and practice critical thinking on a daily basis through reading various tests and genres of fiction, nonfiction, narrative, poetry and drama. Many interdisciplinary connections are made with other content areas.

### MATH

### Math 6

Sixth grade math continues to develop mastery of the concepts in each of the four Minnesota math curriculum strands: Algebra, Number Sense, Geometry and Measurement, Data and Probability. The goal of 6th grade Math is to build a solid foundation, enhance math skills and create success. There is a strong focus on operations involving fractions, percent and decimals. Students also practice converting among fractions, decimals and percents.

### Pre-Algebra

Pre-Algebra continues to develop mastery of the concepts in each of the four Minnesota math curriculum strands: Algebra, Number Sense, Geometry and Measurement, Data and Probability. Special focus is placed on the foundations for algebra. Students are introduced to integers and continue to develop mastery of beginning algebra concepts. There is a strong focus on proportions and rations, evaluating algebraic graphs and histograms, and mean, median and range.

### Algebra

Algebra is designed to give students the requisite skills that provide a foundation for all future mathematics courses with an emphasis on linear relationships. Students will deepen their understanding of the real number system, justify steps in generating equivalent expressions, distinguish between linear and nonlinear functions and translate linear functions from one representation to another, solve and interpret equations and inequalities symbolically and graphically, display, interpret, and draw conclusions about data using scatterplots, and express linear equations in various forms and convert between these forms. Throughout the course, mathematical concepts will be taught with an emphasis on real world application and technology interaction.

### **Algebra with Statistics**

This class includes an in depth study of the algebra of lines and expands number concepts to the real number system. Specific concepts in algebra include: understanding functions (both linear and noon-linear) an arithmetic and geometric sequences, graphing linear functions, slopes of parallel and perpendicular lines, solving systems of linear equations graphically and algebraically, and solving linear equations and inequalities. Students work with the Pythagorean Theorem and its converse and solve problems by using a line of best fit to make predictions. In addition, students complete concepts from the high school Intermediate Algebra with Statistics course and study nonlinear functions including: quadratic, rational, and exponential. Functions will be represented with symbols, verbal descriptions, graphs, and tables. Students will model real-world situations using functions and solve problems arising from these situations. Students will also study probability and analysis.

### **Geometry with Proof**

This class includes the study of Euclidean Geometry concepts and the development of formal and informal reasoning. It includes deeper development of concepts studied in earlier grades such as: area, surface area, volume, scale factors, Pythagorean Theorem and angle relationships and expands understanding of trigonometry, circle properties, train properties and proof. Students use tools of geometry to visualize geometric concepts.

#### **Math Lab**

Math Lab is a math intervention class designed to provide support for students to increase their math skill set and be successful in their grade level math course. Individual and small group instruction will focus on pre-teaching and re-teaching of course skills, additional practice and repetition of skills, test taking strategies, filling foundational gaps in math, building confidence, and developing advocacy skills to seek help when needed.

### **SCIENCE**

### **Physical Science 6**

Physical science serves as an introduction to chemistry and physics. This class explores the concepts of matter, motion, and energy through the context of engineering and technology. Students will engage in inquiry investigations scaffold throughout the year and will complete a project that investigates the impact engineering design has had on society. Topics include: scientific world view, the particle model of matter, changes in matter, forms of energy, energy conversions, force, and motion.

#### Life Science 7

Life science explores the concepts of structure and function in living systems, interdependence among living systems, and evolution in living systems, and human interactions with living systems. Thorough inquiry activities, students will learn how empirical criteria, logical argument, and skeptical review are critical to understanding the natural world. Topics include: nature of science, cells, heredity, evolution, simple life, human body systems, infectious disease, animals, plants, and ecology.

#### Earth Science 8

Earth science focuses on the structures and processes of the Earth, such as rocks, plate tectonics, meteorology, human interactions with Earth's systems, as well as astronomy focused on the solar system. Earth and space science explores the concepts of geology (earth structure and process), meteorology (interdependence within the earth system), astronomy (the universe) and human use of natural resources.

## **SOCIAL STUDIES**

### Minnesota Studies 6

Students study Minnesota history and its government, placing the state and its people within the context of national history. They engage in historical inquiry and study events, issues and individuals significant to Minnesota history, beginning with the early indigenous people of the upper Mississippi River region to the present day. Interpretation of graphs, tables and maps will assist students in developing content knowledge skills.

#### **US Studies 7**

In US Studies, students learn about people, issues and events of significance to this nation's history from 1800 to the current era of globalization. They examine the Declaration of Independence, the Constitution and Bill of Rights, and Supreme Court decisions for their lasting impact on the American people, economy and governance structure.

#### **Global Studies 8**

This class is designed to look at the world and its unique people and places. A world-regional approach to studying the planet and focus on five essential questions. How do geographers interpret and show information on maps? How do people interact with their environment? How did history affect these regions today? How do economies affect life in regions today? How do people preserve their traditional cultural while adapting to modern life?

## **ENCORE**

### **ART**

#### Art

Art class focuses on the foundations of art elements, principles, aesthetics, and art history. Students will create 2-D and 3-D media possibly including, but to limited to: drawing, painting, sculpture, pastels and mixed media. This studio class will provide hands-on experiences. Unit of studies include but not limited to: still-life, landscape, pottery, sculpture, cartooning and animals. Students will develop production skills to express individual ideas, thoughts, and feelings.

## **Critical Thinking**

### **Critical Thinking**

This class is a challenge based learning course where students collaboratively explore research to identify a problem or challenge that is important or of interest to them. Collaboration, communication, creativity and critical thinking skills are used to solve a problem or challenge which can be service oriented, direct, in-direct, advocacy or design orientated with the goal of creating a better version of a product or designing a new product to address the identified challenge. Students are challenged to develop 21st century skills in the areas of collaboration, communication and problem solving using critical thinking and creativity. Students will be empowered through opportunities in experiential learning, individual awareness and self-evaluation, collaboration, collection of evidence through exploration and individual choice.

## CCR: College and Career Readiness / AVID

## **CCR: College and Career Readiness**

The "Ramp up to Readiness" curriculum is a resource used in this course which explores academics, admission, career, financial, and personal and social readiness goals in preparation for High School, College and Careers. Students explore the correlation between learning styles and careers, examine how careers have transformed over time, discover college and explore postsecondary education incorporating the use of Naviance. Naviance is a comprehensive college and career readiness program for middle and high school students that helps align students strengths and interests to their postsecondary goals.

### AVID: Advancement via Individual Determination

AVID is a college readiness system for elementary through postsecondary that is designed to increase school-wide learning and performance. The AVID College Readiness System accelerates student learning and uses research based methods of effective instruction. AVID strategies include focused note taking through Cornell, two or three column, Socratic seminars, philosophical chairs and WICOR (Writing, Inquiry, Collaboration, Organization and Reading.) Students participate in student-led tutorology sessions on a weekly basis and interact with their notes and class learning targets.

## **Physical Education-Health**

### **Physical Education**

The goal of physical education class is to increase student's fitness level and skill development through a variety of movement activities and cooperative games including but not limited to: Soccer/Speedball, Flag Football/Capture/Ultimate Football, Floor Tennis, Fitness Testing (fall and spring), Basketball, Swim strokes, Badminton, Weight lifting, Dance, Volleyball, Water games, Floor Hockey, Archery, Lacrosse, Softball/Kickball.

Health curriculum is embedded into physical education classes. Health units of study include mental and emotional health, diseases and disorders, chemical use/abuse (tobacco, alcohol, drugs), CPR/First Aid, physical fitness, stress management and human growth, development and sexuality.

## **MUSIC**

### Choir

Choir is an ensemble-based course in which students work together as a team to develop their vocal skills. Choir members work on proper vocal technique, rehearsal skills and learn a well-rounded background in music fundamentals. Each student develops independent singing and reading skills to attain a high level of musicianship and confidence. Students will explore a variety of styles of music, including world music, art songs, contemporary music, and pop music. There may be times when students are placed in a gender specific choir to enhance the opportunities for developing voices. There will be opportunities for performances each year, including field trips for all singers.

#### **Band**

Band is for students who play an instrument and will learn to develop rehearsal, performance and music reading skills along with the fundamentals necessary to attain a high level of musicianship and confidence. Students will explore a variety of musical styles. There will be opportunities for performances each year, including field trips and small ensembles.

#### Orchestra

Orchestra is for students who play a stringed instrument. Students will develop rehearsal, performance and music reading skills and fundamentals necessary to attain a high level of musicianship and confidence. Students will explore a variety of musical styles. There will be opportunities for performances each year, including field trips.

### READING

### Reading

Reading is an intervention class designed for a small group of students who are not proficient in reading and is offered on a rotating basis. The BAS (Benchmark Assessment System) is used to determine the instructional level of students. This class utilizes small group instruction in reading fluently and confidently with a variety of texts for a numerous purposes. The integration of reading strategies, decoding skills, vocabulary development and reading stamina support a higher level comprehension of texts. This class provides students the opportunity for more independent reading practice at their instructional level.

### **Reading Zone**

Reading Zone is an intervention class designed for students who are one to two years below grade level. The class utilizes Scholastic's Read 180 curriculum. This curriculum involves whole-class instruction paired with three small group rotations through <u>software</u> (where students work on fluency, spelling, reading comprehension, and vocabulary), a <u>mini lesson</u> (where students receive targeted instruction or re-teaching), and <u>independent reading</u> (where they are reading and responding to books of their choice and at their level).

### **Reading Bridge**

Reading Bridge is an intervention class designed for proficient or nearly proficient students. Curriculum resources utilized are Scholastic's Expert 21 curriculum. The class is formatted with "themed" workshops where students have regular opportunities to reflect, respond, interact, react, analyze and assess. Students are prepared for literacy demands of the 21st Century by integrating technology and literacy along with strategies that reflect the inquiry-based instructional model. Students will have exposure to contemporary literature and daily opportunities to access technology to extend their skills with both informational texts and real-world writing opportunities.

## WORLD LANGUAGE

### Spanish I

Students will explore a variety of cultural themes through language and culture of the Spanish-speaking world, stressing the ability to ask for and give information and to describe situations in Spanish. You will be able to communicate in the following situations: meeting others, at school, shopping for clothing and food, ordering in a restaurant, describing the family and home, and sporting events. Develop skills in listening, speaking, reading and writing in Spanish, and increase your awareness of Hispanic culture. Students take Spanish for a trimester in seventh grade and a full year in eighth grade. To earn Spanish high school credit students must pass the reading, writing, listening and speaking Spanish I assessment in June of their eighth grade year.

## LEARNING TO STUDY EFFECTIVELY

### **Learning to Study Effectively**

In this class, students will explore a variety of organizational tools (iPad iCal, planner) and classroom management systems (Schoology, Google, Moodle) to learn how they can become more organized and increase their study skills. Students will practice taking focused notes (Cornell, two column, three column), apply time management, test-taking and research skills in their current classes. The use of Top 20 curriculum will provide support with respecting others, self, property and learning.