

# 2026 – 2027



## 6<sup>th</sup> Grade Course Description

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The following courses will be offered at Pattonville Heights Middle School in the sixth grade. Students will be grouped according to specific criteria and recommendations for math classes and assigned to core classes in Science, English Language Arts and Social Studies. They will also be placed in PE. Students will have elective courses two periods per day, which may be semester and/or year courses. Students may pick 2 year long electives in the performing arts, one year long elective and 2 semester electives, or 4 semester electives. Most elective courses are open to 6th grade during their elective periods but in some cases 7th grade students may be combined resulting in combined grade level classes.

### **ENGLISH LANGUAGE ARTS 6 (ELA)**

(Required, Full Year)

6th grade English Language Arts is a year-long course which builds on a continuum of skills in reading, writing, and listening and speaking. Units of study include both fiction and nonfiction reading, writing, research, figurative language, listening and speaking, and grammar and mechanics. Students will learn the standards through exploration of various themes including childhood, animal allies, self-exploration/reflection, imagination, and technology.

### **SOCIAL STUDIES 6**

(Required, Full Year)

The 6th grade curriculum initiates an in-depth study of world geography and cultures to Pattonville students, with a focus on applying the five fields of Social Studies to the study of the world. Students will learn basic map skills and about the history, geography, cultures, economics, and governments of the Americas, Africa, Europe, Asia, Australia, and Antarctica. Emphasis is placed on students becoming responsible citizens of the United States and the world.

## **SCIENCE 6**

(Required, Full Year)

Students will engage in use of engineering design and problem-based learning to investigate and develop understanding and proficiency of the following scientific concepts: matter, cycles on Earth, geologic time, evolution, and thermal energy.

## **MATHEMATICS**

(Required, Full Year)

### **Mathematics 6**

Mathematics 6 is focused on four critical areas: (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking.

### **Challenge Mathematics 6**

This course is an accelerated course that merges Math 6, Math 7, and Math 8 skills and concepts. Students reason mathematically with rates and ratios; analyze proportional relationships; and extend understanding of number systems. The course will require students to write; interpret; and use expressions, polynomial operations, and linear equations; and develop understanding of statistical probability. Students will also study geometric topics including surface, area, volume, and perimeter of polygons and circles. Students must meet district criteria to take this course.

## **PHYSICAL EDUCATION/HEALTH**

(Required, Full Year)

The 6th grade physical education course is a combination of selected activities with emphasis on fundamentals. The activities will be both individual and team nature. Physical fitness, cardiovascular health, and basic fitness principles will be taught. This course will also offer a variety of health education topics to help the students understand the relationship between physical activity and healthy lifestyle choices and how it relates to their overall well being.

Health is taught to each grade level for a total of six weeks during physical education class.

## **ELECTIVE PROGRAM**

(Semester)

Students will be able to take two elective courses per semester unless their academic team recommends that they take other appropriate courses.

### **Explore Lab: 6-8**

Explore Lab is an inquiry-based class where students can explore different topics which will be of interest for future courses at Heights. Topics can and will rotate throughout the year with different teachers exploring those different interests. Topics which students will learn more about will vary but may include any of these and more: yearbook, journalism and tv newscasts, nature, astronomy, leadership, service learning, digital citizenship through social media, drama and theater, math games, and any number of interests which students may take as a future developed course. Students will be given a pass/fail grade as they explore new interests.

### **2D Design: 6-8**

The purpose of this course is to introduce students to a variety of art mediums while gaining a strong understanding of the Studio Habits of Mind. Students will learn new approaches to drawing, painting, collage, and printmaking including but not limited to, Studio Habits of Mind, contour line drawing, art elements and principles, portraiture, color theory, and art history and criticism. They will choose materials from a range of studios to best express their ideas; these studios include drawing, painting, collage and printmaking. Students will choose materials from a range of studios to best express ideas. This course is intended to expose students to a variety of types of art and art mediums and provide foundations for Middle School Advanced 2D Art.

### **3D Design: 6-8**

This introductory course offers students the opportunity to learn a variety of ceramic and sculpture techniques and terminology while providing a strong understanding of the Studio Habits of Mind. The primary focus of this class is on the art of ceramics but will also incorporate sculpture. Students may use a variety of mixed media including clay, paper mache, plaster, wire, woodcarving, and glass as this course prepares students for Middle School Advanced 3D Art.

### **Digital Media I: 6-8**

In this basic course, students will learn to create, manage, and store different types of digital media including music, podcasts, photos, still images, and a website. Students will learn the basics of photography and digital camera and scanner usage.

### **Introduction to World Cultures and Languages: 6-8**

Students in this course will explore each of the languages offered in Pattonville-- French, German, and Spanish-- and will also be introduced to cultures, both current and historic, in order to better understand the impact of culture in their community and the world. To prepare students to be productive citizens in a global society, students will learn about different perspectives to cultivate an appreciation for diversity. Students will also explore their own

interests through a variety of choice activities and research projects investigating different cultures and languages.

### **Computer Applications: 6-8**

Students will implement a variety of technology resources to create multimedia projects and presentations. They will experience the excitement of using a digital camera, scanner, Internet application, and CD-ROMs to enhance all aspects of computer created work. Applications include, but are not limited to: True Basic, PowerPoint, Microsoft Word, Excel, DreamWeaver, HyperStudio, and iMovie.

### **FACS I: 6-8**

This course is the first course of three leading to various career pathways in Family and Consumer Sciences. Topics of study include basic food preparation, introductory sewing skills, peer and family relationships and introductory consumer education. Students will use problem-solving and cooperation skills as they individually and collectively to complete projects within these units.

### **Industrial Technology: 6-8**

Industrial Technology is a class for students who like to use their hands and minds to build and create things. It challenges them to apply their creativity and technical ability. Following the process of research and design, students will construct CO 2 Car projects using technology, as well as hand and power tools. Students will then have the opportunity to move into the Structural Engineering unit where they will be able to design, build, and test their own bridge. Safety, individualized work, and problem solving will be emphasized.

## **Project Lead the Way - PLTW**

(Semester)

### **Flight and Space: 6-8**

In Flight and Space students become engineers as they design, prototype, and test models to learn about the science of flight and what it takes to travel and live in space. Students first learn about forces and their impact on aviation and then the fundamentals of flight. Students then begin a study of space. Students learn about rocket science and how humans safely navigate and survive in space. Lastly students solve real-world aviation and space challenges as they plan a mission to Mars.

### **Medical Detectives: 6-8**

In the Medical Detectives, students play the role of real-life medical detectives as they collect and analyze medical data to diagnose disease. They solve medical mysteries through hands-on projects and labs, measure and interpret vital signs, dissect a sheep brain, investigate disease outbreaks, and explore how a breakdown within the human body can lead to dysfunction.

## **PERFORMING ARTS**

(Full Year)

### **Orchestra 6** (Prerequisite: 5th grade orchestra or Director approval after audition)

Orchestra 5-6 is a two-year course in which students receive beginning instruction. Students are developing knowledge and skills to become well-rounded musicians who appreciate the art, science and social aspects of music, since it reflects the culture and time period in which it was created.

Through playing, listening, reading, improvising and composing, the child will gain knowledge and performance/evaluative skills related to the musical elements of rhythm, melody, texture/harmony, expressive qualities, form, and tone color, which leads to high-quality student performance. Beginning technique and performance is the focus of this course. Public and/or in-class performance is an important experience of the art of music and is a natural extension of the essential elements acquired through music instruction, however it is not the primary focus. Student progress is formally reported as a part of the building's report card schedule. Outside practice is required as well as attendance and participation at all scheduled performances.

### **Band 6**

Sixth grade band is the first year of band in the Pattonville School District. No experience is required to participate in a 6th grade band class. Students will learn the fundamentals of music and performing in a group. All rehearsals and performances contribute to each member's grade in the class because they are a demonstration / application of all students' learned skills. Students who successfully complete their sixth grade year in band are highly encouraged to continue their musical education in 7th grade, 8th grade, and High School.

### **Choir A: 6**

Beginning Choir is an introductory level ensemble in middle school. Students will establish healthy vocal techniques, broaden their foundation of music literacy, work together in a choral setting, and present a product that demonstrates artistry and refinement. The rigor of this course will increase throughout the year and unit content will be explored concurrently within other units. All performances are mandatory and will be a significant portion of the student's final grade as they are a demonstration and application of their learned skills.

## **ACADEMIC INTERVENTIONS**

(By teacher recommendation only)

### **Reading Essentials 6** (Full Year)

Qualified students will learn a variety of reading strategies that foster independence in reading. By using a wide range of material, i.e., novels, plays, textbooks, magazines, charts, etc., students will have an opportunity to become lifelong readers.

### **Mathematics Essentials 6** (Full Year)

Mathematics Essentials 6 is designed to support students as they take their grade level math by reinforcing skills needed for day to day learning and to help students strengthen other areas of weakness by personalizing learning to their needs. There will be a focus on the mathematical processes of problem solving, reasoning, communicating, and connecting mathematical concepts to real life. The goal for students in this course is to fill gaps in their math understanding which remain from lower grade levels, with a view to raising the overall level of their mathematical skills.

### **Academic Lab 6** (Semester)

Academic Lab is a structured time for students to complete work at school which may have been assigned for homework. This time allows for busy students who have activities or other responsibilities outside of school an opportunity to complete class work at school. Students enrolled in this class must bring class work every day, which is not limited to written work. Work also includes studying and reading course work. Teachers will actively monitor students' daily work and provide a variety of structures which may help students organize to reduce the number of assignments that are incomplete. Students will be placed in an academic lab based on administrator approval, discretion, and teacher recommendation. The students will receive a pass or fail grade.

## **SIGMA – MIDDLE SCHOOL GIFTED PROGRAM**

(Specialized Program for students who meet entrance criteria)

SIGMA sixth grade curriculum encourages independent and self-directed learning and is designed to meet the academic and affective needs of students. Using an interdisciplinary and multicultural perspective, learning activities emphasize the higher-level cognitive skills of analysis, synthesis, and evaluation. Incorporating a variety of approaches from experts in the field of gifted education, the program curriculum draws from the following major areas: Communication, Critical Thinking, Creative Thinking, Life Skills and Information Processing. **This course will alternate days with P.E.**