

Science

Life Science 7

Year-long course required of 7th graders

In this course, students examine living systems, their interactions, and interdependence. Areas of study include the nature of science, ecology, cell biology, genetics, and the human body. Students will also work to develop science practices such as data analysis, model construction, and argumentation that they will apply to future courses.

Physical Science 8

Year-long course required of 8th graders

This project-based course gives students an introduction to physics and engineering. Students will learn fundamental science skills through which teamwork and cooperative learning will be emphasized. Topics covered will include measurement, the metric system, motion, Newton's laws, forces, and energy. Also, physical and chemical properties, using properties to classify matter, the periodic table, chemical formulas, and nomenclature will be covered. Activities will include projects, laboratory work, formal assignments, inquiry-based activities, lectures, and demonstrations.

**As an alternative to these required science classes, incoming seventh grade students have the option to opt into our thematic science classes described on the next page.*

Thematic Course Offerings

This two-year sequence of courses, beginning in 7th grade and continuing in 8th grade, provides a thematic approach to learning science. Each course will integrate earth science, life science, and physical science concepts. Students will participate in multiple field trip opportunities to dig deeper into the content. These courses are designed for students who are interested in science and would like accelerated, hands-on programming. The 8th grade course will be offered during the 25/26 school year. Students enrolled in the 7th grade course during the 24/25 school year must enroll in the 8th grade course the following year. Field trip fees for each class are estimated to be around \$175 and will be billed through tuition.

If interest exceeds capacity in the class, students will be randomly selected for this class.

Our Place in the Universe 7

Year-long course taken in place of Life Science 7

This place-based course will provide the opportunity to learn more about the geological and ecological processes that have shaped the state of Minnesota. We will explore Earth's place in the universe and physics concepts that support our knowledge of astronomical systems. Beyond content area knowledge, emphasis will also be placed on science practices and literacy. Students will develop skills in data analysis, scientific modeling, and experimental design.

The Chemistry of Us 8 (Offered 2025/2026)

Prerequisite: Our Place in the Universe

Year-long course taken in place of Physical Science 8

This course is the second in the thematic science course sequence. This course will investigate the human body from the atomic level to body systems. The chemistry that supports biological processes within our bodies will also be covered. Emphasis will be placed on interactive labs that allow students to grow a deeper understanding of the content while building upon science skills introduced in the 7th grade thematic course.