



7th Grade Science

7th Grade Life Science - Year at a Glance

Course #2000010, 2000020, 2000030, 2002086

A Note to Parents: The Florida state standards require that the science teacher plan lessons that build knowledge of various scientific concepts, develop the ability to apply these concepts, and engage students in critical thinking. To achieve these goals, students will take part in a range of activities including reading, discussions, writing, lab activities and projects. Safety is paramount in science labs and your child's teacher will ensure a safe learning environment.

Please note the units of study listed below indicate the course sequence. Instructional pacing may vary.

Course Description

Effective science learning enables our students to connect and apply science concepts and processes to everyday events. Students learn science by being actively engaged in the following ways: making observations; designing and conducting experiments and other types of investigations; collecting and organizing data; making predictions and possible conclusions; and communicating their understanding. The *Life Sciences* course is an interactive course that uses up-to-date technology to investigate the following topics: Nature of Science; Cells; Human Body Systems and Development; Heredity, and Ecology.

Honors and Advanced Level Course Note: Advanced courses require a greater demand on students through increased academic rigor. Academic rigor is obtained through the application, analysis, evaluation, and creation of complex ideas that are often abstract and multi-faceted. Students are challenged to think and collaborate critically on the content they are learning. Honors level rigor will be achieved by increasing text complexity through text selection, focus on high-level qualitative measures, and complexity of task. Instruction will be structured to give students a deeper understanding of conceptual themes and organization within and across disciplines.

International Baccalaureate Middle Years Program Note: The International Baccalaureate® aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. The MYP curriculum framework comprises eight subject groups, providing a broad and balanced education for early adolescents. The MYP requires at least 50 hours of teaching time for each subject group, in each year of the program. The MYP is inclusive by design; students of all interests and academic abilities can benefit from their participation.

Cambridge Pre-AICE Program Note: The Cambridge Pre-AICE is a prestigious college preparatory program. It is designed for advanced students with a commitment to excellence, and provides a more rigorous, faster-paced instruction in the core subjects of math, science, and language arts. Advanced students can obtain high school credits toward acceleration in the subjects of Geometry, Algebra, Physical Science, Spanish and Emerging Technology.

CPALM Link

Please follow the links below to learn more about the course expectations, the course standards, and to access student resources. The student resources include Florida Department of Education recommendations that students can use to learn the concepts and skills in this course.

M/J Life Science: <https://www.cpalms.org/PreviewCourse/Preview/4238>

M/J Life Science Advanced :<https://www.cpalms.org/PreviewCourse/Preview/4241>

M/J International Baccalaureate MYP Life Science : <https://www.cpalms.org/PreviewCourse/Preview/4250>

M/J Science 2 Cambridge Lower Secondary: <https://www.cpalms.org/PreviewCourse/Preview/4320>

| Unit of Study | |
|--|--|
| <p>Quarter 1 Aug 10 – Oct 12</p> | <p><i>Nature of Science</i> <i>Unit 1 – Investigating Cells</i></p> <ul style="list-style-type: none"> • The cell theory • Cell types • Cell processes <p><i>Unit 2 – Organizing Life</i></p> <ul style="list-style-type: none"> • Characteristics of Living Things • Classification of Living Things |
| <p>Quarter 2 Oct 13 – Dec 22</p> | <p><i>Unit 3 – Human Body Systems</i></p> <ul style="list-style-type: none"> • The Human Body Systems • Relationships Between the Systems • Homeostasis <p><i>Unit 4 – Heredity and Reproduction</i></p> <ul style="list-style-type: none"> • Heredity • Cell Division: Mitosis and Meiosis • Human Growth and Development |
| <p>Quarter 3 Jan 10 – Mar 10</p> | <p><i>Unit 5 – Infectious Agents</i></p> <ul style="list-style-type: none"> • Infectious Agents • Infectious Diseases <p><i>Unit 6 – Interdependence of Organisms</i></p> <ul style="list-style-type: none"> • Ecosystems • Trophic relationships • Populations and Communities • Human Impact on Environment |
| <p>Quarter 4 Mar 26 – May 27</p> | <p><i>Unit 7 – Evolutionary Theory</i></p> <ul style="list-style-type: none"> • Fossil Record • Adaptations of Organisms • Natural Selection <p><i>Unit 8 – Energy and Life</i></p> <ul style="list-style-type: none"> • Energy in Ecosystems • Photosynthesis • Cellular Respiration • Cycles of Matter |
| Course Resources | |
| <p>Core Techbook: Discovery Education Science Online Techbook For more information on this resource: https://www.discoveryeducation.com/programs/science/middle-school/</p> <p>Supplemental Resources: <i>Middle School eSources</i> which are accessed through MySCS. https://launchpad.classlink.com/sarasota For additional supplemental resources, please see your child’s course syllabus.</p> | |