7th Grade Life Science Syllabus

Course Objectives

- 1. Students gain an increased awareness of the natural world through reading, writing, observation, development of questions, and the conduct of investigations.
- 2. Students develop skills to conduct research, measure accurately, analyze critically, and communicate their thoughts both verbally and in writing.
- **3.** Students develop a working vocabulary of science related terms in order to understand and think deeply about science related matters.

Content Outcomes

1. Science, Technology & Engineering

- Use and develop models to understand science.
- Use appropriate tools, measurement, graphs and data in a life science context.
- Understand the importance of and use of microscopes.

2. Scientific Method

- Learn scientific method terms and processes
- Conduct a quality science project using the skills and knowledge acquired.

3. Ecology

• Understand how living organisms and non-living factors interact with each other to form stable ecosystems.

4. Cell and Human Body

- Understand the structure of cells and how they function, including cell parts, processes, and division.
- Know the difference between plant and animal cells.
- Understand the structure and function of complex organisms, including key organ systems.

5. Genetics & Changes Over Time

- Understand hereditary information is contained in genes, which are inherited through reproduction.
- Understand how organisms change and adapt to their environment and the evidence supporting this.

6. Plants & Animals

• Study through discussion, readings, direct observation, and dissections.

7. Human Interaction with Living Systems

- Explore and understand how human beings interact with microbes (virus, bacteria, fungi).
- Investigate, discuss and communicate the effects of human activities on the environment.

8. Reading & Writing in Science

- Read, analyze and discuss current science related matters.
- Write clearly and concisely in order to accurately convey ideas, opinions, and research findings.

Course Projects and Labs

- Science Project
- Animal and Plant Dissections
- Microscope Labs
- Cells

Grading Policy

- Tests & Quizzes
- Projects & Labs
- Homework
- Daily Work & Assignments