

# 7<sup>th</sup> 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

