

Life Science:

Class and Labs

Grades 7-8

Course Syllabus

2026-2027

Course Objectives:

- Apply the **scientific method** and **design thinking process** to investigate living systems
- Explain how **cellular, tissue, organ, and system structures** are purposefully suited to their functions.
- Describe levels of biological organization from **cells to ecosystems**.
- Describe how **genetic information** guides growth, development, and reproduction.
- Communicate scientific ideas clearly using written, oral, and visual formats.
- Learn the scientific method and how to use scientific inquiry.
- Gain knowledge on the subject through ten main topics: cells, taxonomy, viruses, bacteria, plants, animals, human body, genetics, heredity, and ecology.
- Reflect on how the **order, complexity, and functionality** observed in living systems demonstrate purposeful design by a divine creator and inspire responsible stewardship of life.

Course Components:

- Instruction on keywords, ideas, and concepts in class
- Reading 10-20 pages of text each week (4 days per week)
- Student Notebook Completion daily (4 days per week)
- Completion of labs
 - We will NOT do every single lab, as some are more time consuming for little knowledge gained. (We will likely skip 15 out of the 60)
 - Some simple labs WILL be completed at home
- Study guide completions at the end of each module
- Module Tests - these will be taken at home (we do not have the time to complete in class) but I would ask that parents supervise.
 - I will be making the tests so they will be straightforward and directly related to student learning.

This course is a survey course in the field of Science. The text contains 7 chapters. Each module will take about 4-4 ½ weeks to complete working on a 4 days per school week for about 45 minutes per day. This provides us with flex time over breaks and holidays for students to get a time to recharge. If however, students

fall behind in the work when it is assigned, it is going to get hard to keep up. So therefore, when the work is assigned, it would need done in the weekly timeline that it is given. Class time is a great time to ask questions they are struggling with.

Course Materials:

- One Inch Three Ring Binder (must be easy to add or take things out) - used for storing labs, group activity pages, and tests.
- Purposeful Design: Life Science Textbook or E-book (companion texts- using both- is often the best for students)
- Purposeful Design: Lab Manual - this also has all the worksheets we will be needing!
- Safety Goggles
- Lab Shirt