***Biology*** is a lecture, discussion, and laboratory course for the motivated science student. It can be taken as ***Regular Biology*** or ***Pre-AP Honors***. The primary objective of the course is to provide students with a fundamental understanding of modern biology and scientific processes, building a foundation for success in the AP Biology course, the Anatomy and Physiology course, and in a college/career major in a Life Science or Health Care field. Those taking Pre-AP Honors Biology will examine topics with more depth and includes more advanced resource material than the regular Biology course. There is also a greater emphasis on developing critical thinking skills for the content and by examining real world problems.

Topics include biochemistry, cellular biology, bioenergetics, heredity and molecular genetics,

creation/evolution, structure and diversity of organisms, and ecology. All topics, and especially the matter of origins, are presented so students understand mainstream thought in public school, but then is addressed from a biblical perspective. Laboratory work provides hands-on learning experience, and provides opportunity for more detailed analysis. Scientific writing is integrated into the lab work.

**Note**: All Learning CTR Online science courses include training and resources for writing technically correct lab reports, to prepare the student for upper-level science and college lab courses in various sciences. Students will be instructed in the process of writing, revising, and producing a formal lab report, in general and specifically for that field of science. For each course, this training process includes video instruction, written evaluation guidelines, sample lab reports, in-class training, and an evaluated draft, all before the first final lab report is submitted.

**Note**: The Honors Biology course is geared for students pursuing science or health care degrees / careers, or who might take the AP Biology exam. Students pursuing liberal arts or social science degrees / careers might prefer to take Regular Biology.

**CONTENT TOPICS**:

1) Introduction to Biology

2) Chemistry of Life

3) Cells

4) Metabolism

5) DNA and Biotechnology

6) Cell Division

7) Genetics

8) Creation/Evolution

9) Classification

10) Microorganisms and Fungi

11) Plants

12) Invertebrates

13) Chordates

14) The Human Body

15) Ecology

**TEXTBOOK**:

Hardin, Scott. **Science Shepherd Biology**, 2013 Edition. Ohana Life Press, LLC., (ISBN# 978-0- 9828568-4- 0)

Hardin, Scott. Science Shepherd Biology **Answer Key and Parent Companion**, 2013 Edition. Ohana Life Press, LLC., (ISBN# 978-0- 98285685-7)