

BIOL 1020 World of Biology Lab

Fall 2018

Instructor: Biological Studies Faculty Member

Contact: generic@csustan.edu

Office Hours: N XX Wednesday 2-3 or by appointment

Required Text: *World of Biology 1020 Laboratory Workbook, 6th ed. by Stevens and Fleming. (2014).* Bring this each week. Photocopies are not allowed.

Course Description: World of Biology is intended to provide students with laboratory experience in various biological contexts. We will explore topics covered in BIOL 1010 with the added luxury of actually performing some of the experiments discussed in lecture. Note that this class is graded separately from BIOL 1010.

Learning Goals:

1. To provide an overview of basic knowledge, principles, methodologies, theories, and perspectives in biology.
2. To offer opportunities to work in groups with other students to practice effective communication about concepts and issues in biology.
3. To provide a broad understanding and appreciation of biology and encourage continuous inquiry and lifelong learning.
4. To provide the framework to critically evaluate and use information from various scientific sources to answer questions relevant to biology.
5. To understand the relationship between the fields of biology, chemistry, physics, geology and other sciences.
6. To appreciate the interdependence of humans, natural ecosystems, and diversity of life on earth.
7. To develop more informed and responsible citizens with respect to issues concerning the living world.
8. Use math as it applies to biology. This mostly includes making and interpreting graphs, and may also include calculating averages and variation around an average. I will help you and there will be chances to practice.

This course meets GE learning outcomes in area B2: Develop broad knowledge of biological and physical sciences, humanities and creative arts, and social sciences.

Students attaining the second learning goal will be able to:

GE Learning Outcome	Assignments and Quizzes will be used to assess learning outcomes in the lab activities listed below
2.1 Explain and apply basic scientific methods.	Daphnia Transport Metabolism
2.2 Demonstrate an understanding of the living and non-living physical world.	Microscope and Cells Mitosis, Meiosis and Genetics Evolution Phylogenies Animal Adaptations Plant Biology Population Parameters Central Valley Ecology