

- a. Evolution and Diversity of Life (BIOL 1010 Section A)
- b. Dr. Timothy Henkel (tphenkel@valdosta.edu)
- c. Bailey Science Center 2212, Valdosta State University
- d. 229-249-4941

Corequisite: BIOL 1010 Online. This course cannot be taken for credit toward the major in biology. A laboratory course to accompany Biology 1010 emphasizing the diversity of life.

This course fulfills one portion of Area D of the Learning Outcomes for Valdosta State University's Core Curriculum: Students will demonstrate understanding of the physical universe and the nature of science, and they will use scientific methods and/or mathematical reasoning and concepts to solve problems. (<http://www.valdosta.edu/academics/general-education-council/ge-outcomes.php>)

Students will participate in the process of scientific inquiry by asking scientific questions, developing hypotheses, predicting outcomes of experiments, collecting and interpreting data and drawing conclusions from the results. Specifically, students will:

- a. Learn about the nature of science and how to build scientific knowledge;
- b. Demonstrate a fundamental knowledge of evolution and how it relates to biodiversity;
- c. Effectively organize, communicate and apply their knowledge of biology to their everyday lives.

SimuText – The course will use simulation software and resources from SimuText. Instructions for registering for your section will be provided by your instructor. You are required to be registered in the software during your first two days of the semester. Visit <https://simutext.zendesk.com/hc/en-us/categories/200170134-Check-Your-Tech-> to confirm that the SimUText application will work on your computer, and/or to explore your options if there is a problem.

The simulations and activities assigned in this course are designed to help you understand the processes of evolution and ecology and how they relate to the diversity of life on our planet. The activities allow you to develop and test hypotheses and build your scientific understanding. The labs are also designed to assist with your understanding of concepts covered in BIOL 1010 Online. As you work through the activities, focus on the learning objectives for each unit and relate them to the content covered in BIOL 1010.

Email is the simplest and primary way to contact me outside of class and is the quickest way for me to contact you as well. You are required to check and maintain your Valdosta State University email account. I will only communicate with you through this official email account.

, all email should be sent directly to tphenkel@valdosta.edu using your VSU issued email account.

_____ do the following in your email communication:

1. Understanding Experimental Design
2. Darwinian Snails Lab
3. Evolution for Ecology (Starts Day 1; Must be Completed by end of Week 3)

4. Genetic Drift and Bottlenecked Ferrets Lab
5. Sickle Cell Alleles Lab

6. Flowers and Trees Lab

7. Understanding Population Growth Models Lab

8. Isle Royale Lab

9. Keystone Predator Lab

10. Nutrient Pollution Lab