

BIOL 1110L- GENERAL BIOLOGY LAB 1 CREDITS

SYLLABUS

CATALOG DESCRIPTION

This laboratory course for non-science majors compliments the concepts covered in the associated general biology lecture course. Students will learn quantitative skills involved in scientific measurement and data analysis. Students will also perform experiments related to topics such as biochemistry, cell structure and function, molecular biology, evolution, taxonomic classification and phylogeny, biodiversity, and ecology.

Prerequisites:

Semester Offered: Fall, Spring

Common Student Learning Outcomes Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in... **BROAD AND SPECIALIZED LEARNING** Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts. **CRITICAL THINKING** Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems. CULTURAL AND CIVIC ENGAGEMENT Students will act purposefully, reflectively, and ethically in diverse and complex environments. **EFFECTIVE COMMUNICATION** Students will exchange ideas and information with clarity in multiple contexts. INFORMATION LITERACY Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively. **INTEGRATING TECHNOLOGIES** Students will demonstrate fluency in the application and use of technologies in multiple contexts. Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

Course Learning Outcomes

Upon successful completion of the course, the student will be able to...

- 1. Employ critical thinking skills to judge the validity of information from a scientific perspective.
- 2. Apply the scientific method to formulate questions and develop testable hypotheses.
- 3. Analyze information/data and draw conclusions.
- 4. Operate laboratory equipment correctly and safely to collect relevant and quality data.
- 5. Utilize mathematical techniques to evaluate and solve scientific problems.
- 6. Recognize biodiversity in different ecological habitats and communities of organisms.
- 7. Communicate effectively about scientific ideas and topics.