Organismal Biol Project Lab

Last Updated: Wed, 12/17/2025

Course prefix: BIOS

Course number: 1208

Section: A1,A2,A3,A4,A5

CRN
28898 29627 28902 28901 28903

Instructor first name: Colin

Instructor last name: Harrison

Semester: Spring

Academic year: 2026

Course description:

The scientific method, as a way of acquiring knowledge has been one of the most significant factors in the improvement of the humans' quality of life. Biological research has given us major advancements in health and understanding of our environment. In this course you will learn and practice the scientific method by doing original biological research. This course is designed as a research service-learning lab, which means you will be immersed in a research experience from day one. Service-learning is a way of integrating relevant community service with academic coursework in order to enhance learning, teach civic responsibility, and strengthen communities. The lab class is partnering with the Georgia Tech researchers to conduct research that will benefit our learning in biology and the greater Atlanta and scientific community. You will work in teams with the support of the entire class to brainstorm and critique ideas to design a semester-long research project to explore the effects of leaf litter and other variables on the soil microbiome of the Eco Commons here on campus. GT and the research team involved in studying ecosystem health on campus will use our data to help promote healthy sustainability practices. You will participate in all steps of the scientific process performing research on microbiomes and their effects with our research partners here at GT. You will do background research, learning to read and evaluate primary literature to identify areas of potential research. You will design an original hypothesis and a series of experiments to test the hypothesis. You will learn scientific techniques as well as basic statistical analysis of data. You will communicate your findings in both written and spoken presentations.

Academic honesty/integrity statement:

Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of

academic dishonesty will result in immediate consequences as outlined in the university's academic integrity policy.

Core IMPACTS statement(s) (if applicable):

This is a Core IMPACTS course that is part of the STEM area.
Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help students master course content, and support students' broad academic and career goals.
This course should direct students toward a broad Orienting Question
• How do I ask scientific questions or use data, mathematics, or technology to understand the universe?
Completion of this course should enable students to meet the following Learning Outcome
• Students will use the scientific method and laboratory procedures or mathematical and computational methods to analyze data, solve problems, and explain natural phenomena.
Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:
• Inquiry and Analysis
• Problem-Solving
• Teamwork