Behavioral Biology

Course Information

Instructor: Michael Goodisman (michael.goodisman@biology.gatech.edu)
Course Prefix and Number: BIOS 4471
Term: Spring 2027

Course Description

An introduction to the study of the principles of behavior of all kinds of organisms, from microbes to mammals.

Course Learning Outcomes

By the end of this class, students will be able to:

1. Demonstrate how evolutionary and ecological processes shape behavior
2. Explain how genetic, developmental, and physiological systems affect behavior
3. Design and implement experiments to test behavioral hypotheses
4. Distinguish between proximate and ultimate causes of behavior
5. Understand concepts that explain behavioral differences within and between species.
6. Read, interpret, and explain primary literature that concerns behavior
7. Effectively communicate scientific findings concerning behavior in both oral and written modes

Required Course Materials

No textbooks or materials are required. Resources for research are determined in consultation with the instructor.

Grading Policy

This course is graded on a letter grade basis. The grading process will be clearly articulated to the student to allow reasonable prediction progress towards the final grade throughout the semester.

Attendance Policy

Student attendance is expected.

Academic and Research Honesty/Integrity Statement

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review the Student

Code of Conduct and the Academic Honor Code, especially Appendix A: Graduate Addendum to the Academic Honor Code.

Core IMPACTS

Not applicable

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. The Student-Faculty Expectations articulates some basic expectations that you can have of me and that I have of you. Additional information for research-related work is given in The Expectations of Advisors and Advisees. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

Campus Resources

The Undergraduate Research Opportunities Program (UROP) provides resources and support for undergraduate research students and their mentors. Visit https://undergradresearch.gatech.edu/ or contact UROP at urop@gatech.edu for more information.