

Instructor: Dr. Todd Blackledge

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Office hours: Wednesday 10-11:00am, Thurs 10:30-11:30am, or by appointment

Teaching Assistant: Jacki Zevenbergen

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Office hours: 3-4pm, Thurs in 386c (go to back of the room), or by appointment

Time & Location (2 credit hours) Tues 2:15-5:15pm in ASEC 186

Course Objectives: This laboratory will provide you with hands on experience in the study of animal behavior. You will gain experience with the process of scientific research – from the development of hypotheses to the implementation of experiments to the synthesis and presentation of your results. Throughout the semester our projects will demonstrate basic principals of animal behavior and give you experience in how to observe and quantify different types of behavior.

Course Layout: You will attend one three hour laboratory session each week. A substantial amount of out of class time will be required for many of the exercises. In addition, you will work in teams to design and implement your own independent research projects. These projects will culminate in a mini-research symposium on the last day of class. Your grade will be based upon a combination of attendance, laboratory write-ups, and your independent project.

Text

There is no required text for the class. Laboratory exercises will handed out prior to each class

Approximate grading scale

<u>Assignment</u>	<u>Points</u>
Attendance	20
Lab writeups (8 at 20 pts each)	160
Guppy project	40
Zoo observation project	20
Field research proposal	20
Field research presentation	40

Tentative Lecture Schedule (*May change to accommodate guest lecturers & student needs*)

Week	Topic
T Jan 17	No lab
T Jan 24	Operational definitions of behavior
T Jan 31	Isopod moisture preference: testing multiple hypotheses
T Feb 7	Neurotransmitters and crayfish behavior
T Feb 14	Crayfish aggression - learning to lose Zoo observations due
T Feb 21	NO CLASS
T Feb 28	Class presentation of field research proposals
T Mar 7	FAPs and aggressive behaviors: Betta fish
T Mar 14	Foraging studies at Bath Nature Preserve
T Mar 21	Game theory
T Mar 28	SPRING BREAK
T Apr 4	Guppy behavior observation and hypothesis development
T Apr 11	Guppy behavior - experiments
T Apr 18	Guppy project presentations
T Apr 25	Mate selection in humans; Guppy scientific paper due
T May 2	Independent research poster symposium

Independent Research project

You will spend much of the semester developing and conducting your own independent research project. These projects will be conducted in teams of three students. You will gain experience with all aspects of research from how to develop a project and propose the research to your colleagues to the research itself and the analysis of data. You will also present your project to the class as part of a mini behavioral research symposium. This project will involve a significant commitment of time outside of class and will constitute 20% of your final grade.

Attendance

Your success is directly related to class attendance and participation. You are expected to attend all classes on time and your attendance will contribute ~ 6% of your final grade. All graded exercises are due at the beginning of the class on which they are assigned.

Academic integrity

You are expected to abide by University of Akron's code for academic conduct. All assignments are to be completed on your own, unless they state otherwise. Also, you should be aware that plagiarism includes copying not just someone else's words but also their *ideas*. Giving credit where credit is due and properly citing the literature are fundamental to communication in the sciences. So don't just change a few words from someone else's work in the belief that it is now your "own".