

BIOL 340 – SYLLABUS

Dr. Justin Touchon, Biology Department
Fall 2022

IMPORTANT DETAILS

Where: OH A62

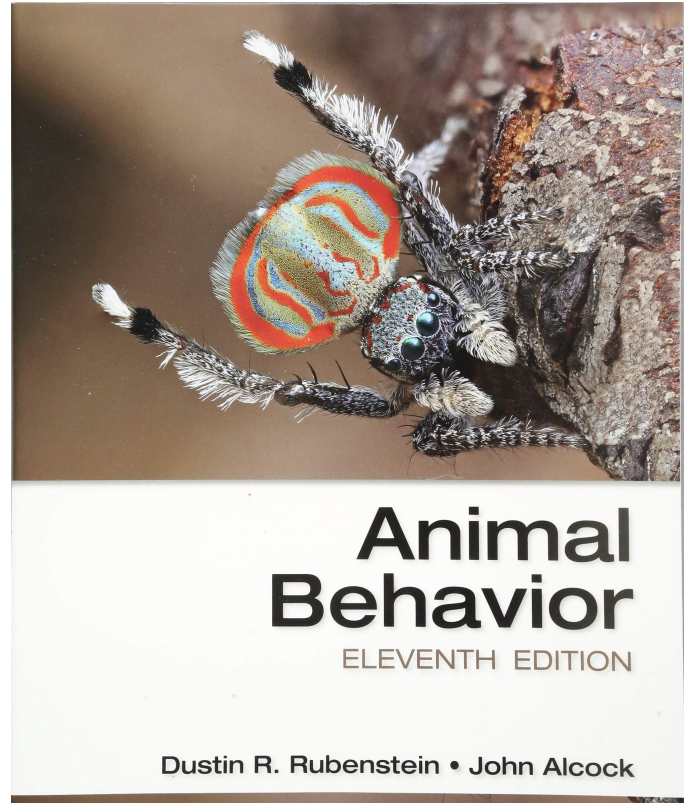
When: MW 12:00-1:15

**Office hours:
R 10:00-11:00 (or appt)**

**Contact:
jutouchon@vassar.edu**

**Note: I respond to email
primarily between 9am and
5pm, Monday–Friday**

WHAT YOU NEED



...and access to a printer

**...and a laptop
(most likely)**

A note about reading *actual* paper

Although the articles we will read this semester will be distributed electronically, you *should* print them out and read hard copies, and then bring those hard copies with you to class for discussion. If you would like me to provide you with hard copies, I am happy to do so.

What is this course about?

The behaviors of animals have long fascinated biologists and thus the field of Animal Behavior has a long and storied history. The ways we study animal behaviors are constantly changing and evolving, particularly as new technologies allow us to ask questions that were not previously feasible. This semester we cover a great breadth of topics that fall under the umbrella of Animal Behavior, and we will attempt to understand where the field has come from and where it is going. In particular, we will focus on the ways that experiments are used to isolate and understand animal behavior (hence the 'Experimental' in the course title).

We will read both classic (i.e. old) and recent papers in order to understand how the way that scientists study animals has changed. Class participation is a large part of your grade and will depend heavily on your attendance and level of involvement in the discussions. You should read articles critically and try to discuss any shortcomings of the experiments described in the papers as well as how this experiment adds to our understanding of animal behavior.

WHAT WILL YOU DO THIS SEMESTER?

- Improve knowledge of animal behavior and relevant research techniques
- Understand the history of behavioral research and how it differs from contemporary approaches
- Improve science literacy and ability to critique/assess primary literature
- Be able to envision a cohesive research project and how to "sell it"
- Improve writing through giving and receiving constructive criticism

Dr. Touchon's Semester Synopsis

The easiest way to think about this semester is that there will be **two halves: my half and your half.**

The first half of the semester is **my half** and will focus primarily on learning 1) the historical context of animal behavior research and 2) a basic framework for asking any question in animal behavior. I will lead each discussion and orchestrate what we do each day. We will focus on one well-studied system for the first several weeks and then examine two of my favorite topics.

The second half of the semester is **your half** and we will explore different topics in animal behavior of **your choosing**. Our textbook is an amazing resource, but it is too long for us to read all of. We will explore chapters 3–14 in our textbook. **You and two partners** will pick a chapter (or part of a chapter) to lead the class through (with my assistance of course). For Monday's class we will read and discuss the chapter you have picked. For Wednesday's class we will read a recent peer-reviewed journal article that relates to the topic **you have picked**. For the article you have picked, you will be responsible for creating a **reading guide** to help the class understand the article to the fullest extent.

The final project is a mock grant proposal. We will brainstorm ideas the week of 9/26 and a draft of your Intro is due before October Break (10/14). You will review one of your peers grant proposals (double-blind) and a final draft is due 12/11. You will also present your project to the class at the end of the semester.

Schedule

Date	Unit	Reading	Assignments
8/29/2022	Animal Behavior: Origins and Current Ideas		In class project
8/31/2022		Tinbergen 1963	
9/7/2022	Experimental design workshop		
9/12/2022	Ultimate causes of Túngara frog behavior	Rand and Ryan 1981; Tuttle and Ryan 1981;	Various prompts on moodle to stimulate discussion
9/14/2022		Ryan and Rand 1995; Ryan 1986	
9/19/2022	Proximate causes of Túngara frog behavior	Ryan et al 1990; Baugh et al 2017	
9/21/2022		Lynch et al 2006; Hoke et al 2008	
9/26/2022	Grant Proposal Workshop		Take home exam due: 9/26 Grant proposal topic description due: 9/30
9/28/2022			
10/3/2022	Altruism and Kin Selection	Ch. 12 (p. 444–469)	Proposal v0.5 due: 10/28
10/5/2022		TBD	
10/10/2022	Animal Communication	Ch. 8 (p. 256–262, 278–300)	
10/12/2022		TBD	
10/17/2022	<i>October break - no class</i>		
10/19/2022			
10/24/2022	Student Led Explorations of Animal Behavior Group 1: Natasha, Anjali, Julia Group 2: Lucy, Liza, Max Group 3: Olivia, Avery, Gill, Kasey Group 4: Marina, Kali, Joey Group 5: Tom, Jackson, Joey Group 6: Avani, Trina, Ninamma	Student group 1 - chapter	The week you are leading discussion you will pick a paper to discuss in addition to the chapter you have chosen. You will create a reading guide for the article to help ensure the class fully understands and appreciates the article you chose. Grant proposal peer review due: 11/18
10/26/2022		Student group 1 - paper	
10/31/2022		Student group 2 - chapter	
11/2/2022		Student group 2 - paper	
11/7/2022		Student group 3 - chapter	
11/9/2022		Student group 3 - paper	
11/14/2022		Student group 4 - chapter	
11/16/2022		Student group 4 - paper	
11/21/2022		Student group 5 - chapter	
11/23/2022		Student group 5 - paper	
11/28/2022	Student group 6 - chapter		
11/30/2022	Student group 6 - paper		
12/5/2022	Grant Proposal Pitch Presentations		Format of presentations TBD
12/7/2022			Final grant proposal: 12/11

How are you graded?

Contribution to class (aka participation)	30%
Take home essay exam	10%
Reading guide	10%
Leading chapter & paper discussion	10%
Grant proposal: topic description	5%
v0.5 (Intro)	10%
presentation	5%
v1.0 (final draft)	10%
Quality of peer review feedback	10%

Grading scale

Percentage Points	Letter Grade
100–94	A
93.99–90	A-
89.99–87	B+
86.99–83	B
82.99–80	B-
79.99–77	C+
76.99–72	C
71.99–70	C-
69.99–67	D+
66.99–60	D
59.99 and below	F

Late assignments

It always beneficial to turn in assignment or quiz, even very late.

There is a 5% penalty per day for late assignments, with a maximum penalty of 50% off.

Attendance

Come to class, **it is important**.

That said, do not come to class if you feel sick. If you feel that you have symptoms of COVID-19, make sure to get tested and to stay safe. Let's all stay healthy this semester!

Accommodations

Academic accommodations are available for students with disabilities who are registered with the Office of Accessibility and Educational Opportunity.

Integrity

Discussion of assignments with your classmates is encouraged.

However, your assignments should be in **your own** and should elaborate on **your own ideas**.

Plagiarism is a very serious offense and I take it very seriously.