

BEHAVIORAL ECOLOGY (PCB5415)

Fall 2024

MW, periods 6 and 7

521 Carr Hall

Instructor: Rebecca Kimball

Office Hours: By appointment

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Objectives: To provide a strong background across the field of behavioral ecology for graduate students and advanced undergraduates. A focus will be on both key hypotheses and theories, but also thinking critically about these ideas. Students will be encouraged to think about how to approach behavioral questions in different ways.

Textbook (Recommended): Evolutionary Behavioral Ecology (Westneat and Fox 2010). **An eBook of this is available through the UF Libraries so it is not necessary to purchase.**

Grading and expectations:

- 1) Participation in discussions, lectures, etc. (this requires reading assigned material IN ADVANCE so you are prepared to participate). (25% of class grade)
- 2) Leading discussions. Discussion leaders will find papers for the class to read (the discussion leaders may want to read material in addition to this as well), organize questions, and run a discussion. Discussion days will typically include two papers, and may be led by more than one person. The discussion should consider all angles, and may be set up as a debate between two alternative view points. Plan to lead discussion of three papers each. (10% of class grade)
- 3) For five discussions (your choice, and you can do more than; five is the expectation for full credit), students will be expected to submit two questions or comments on each paper in advance of the discussion. These should address things such things as whether the authors adequately considered alternative hypotheses, was the study design appropriate, were the interpretations reasonable, was there anything puzzling about their results, etc. (5% of class grade)

These need to be **emailed to me and the designated discussion leader(s) by 10pm the night before discussion.**

- 4) Proposals. You will submit two small "grant proposals" about behavior (5-10 pages, double spaced, excluding figures or literature cited). These should include some background to set up the importance of the hypothesis, careful consideration of alternative hypotheses, methods to test among hypotheses, predictions (and what result would support which hypothesis). **You must use a different approach to address questions in each proposal** (e.g., one might incorporate physiology while the other might utilize experimental manipulations). (Each is 15% of class grade)

5) Final assignment. Write a review-style paper that provides a summary of an area of behavioral ecology you are interested in. This should focus on a question in behavioral ecology, not just a taxonomic group. The article should provide a balanced discussion of the ideas, including unanswered questions, conflicting data, and/or areas of future research. This assignment will be longer than the proposals (10-20 pages, double spaced, excluding figures, tables and literature cited). You will submit an initial version, and then you will revise this based on comments received through peer review and submit a final version. (25% of class grade)

6) Peer review of the final assignment. Each student will critically read and write an approximately two page review of another student's final assignment (I will assign these largely randomly). This will be turned in by the paper's author with the final paper. (5% of class grade)

The specific topics and schedule will depend upon interest of the class (see a list below for a list of topics likely to be covered). You will receive an email with questions to solicit your interest in various topics, provide information on your background, etc. Once I have received this, I will come up with a final class schedule, and you can sign up for discussions to lead. The course schedule will be posted on the home page in Canvas, along with links to any supplementary reading that will be required.

- Evolution of animal signals (including deception)
- Information Theory
- Sensory ecology and behavior
- Optimality and decision making (foraging, habitat selection)
- Risk and Life History
- Learning, social learning
- Evolutionary arms races
- Sexual selection and mating systems
- Parental care
- Alternative breeding strategies
- Conflict and cooperation in social groups
- Selfishness, altruism, kin selection
- Conservation and behavior
- Behavioral syndromes (or "personality")

Other information:

Recording of class: For some classes, if someone cannot attend due to illness or another conflict, our class sessions may be audio or audio-visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. As in all courses, unauthorized recording and unauthorized sharing of recorded materials by students or any other party is prohibited.

Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the [Disability Resource Center](#). It is important for students

to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. [Click here for guidance on how to give feedback in a professional and respectful manner](#). Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. [Summaries of course evaluation results are available to students here](#).

University Honesty Policy

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” [The Honor Code](#) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the [Notification to Students of FERPA Rights](#).

Campus Resources:

Health and Wellness

U Matter, We Care:

If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: counseling.ufl.edu/cwc, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or police.ufl.edu.

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling.

Library Support, Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints Campus

On-Line Students Complaints