

ZOO 4050 – Introduction to Animal Behavior

Section 0972 / Class Number 17563

Syllabus for Spring 2025

I. Course Description and Prerequisites

The scientific study of the mechanistic and evolutionary causes of animal behavior, including communication, foraging and anti-predator behavior, spatial behavior, mating behavior, parental care, and social behaviors. 3 credits.

Prerequisites: BSC 2010/2011 and labs, or the equivalent, with a minimum grade of “C”. PCB 4674 suggested (previously or concurrently) but not required.

II. Course Meetings

Lectures: MWF period 8, 3:00 PM - 3:50 PM, Turlington 2318

First / Last day of classes: Monday 13 January 2025 / Wednesday 23 April 2025

Final exam period: Wednesday 30 April 2025, 3:00 – 5:00 PM

III. Instructors

Course Instructor:

Dr. Nicole Gerlach (she/her)

Department of Biology

E-mail: ngerlach@ufl.edu (preferred)

Office: 520 Carr Hall

Office Hours: in-person: Mondays and Wednesdays 4-5 p.m. (immediately following class) or Tuesdays/Thursdays by appointment.

IV. Course Communications

- A. **Course Website:** <https://ufl.instructure.com/courses/526412>
- B. **Contacting Your Instructor:** If you have a question about course mechanics or course material that cannot be answered from the syllabus, course announcements, or the course FAQ, please post it to the Discussion Boards on Canvas (see section IX “Getting Help”, below). If you have a question involving a personal/grade-related issue, e-mail is by far the best way of contacting me (rather than the phone). **All e-mail correspondence should originate from your @ufl.edu account, have your full name in the body of the e-mail, and contain “ZOO 4050” in the subject line.** E-mails not meeting these requirements may not be recognized by my e-mail filters, and thus may not be answered. I do my best to reply within 24 hours during the week, and 48 hours over the weekend. E-mails and Discussion Board posts are typically checked at least once per day, but sometimes not more than that.
- C. **Communications From Your Instructor:** Each student is individually responsible for reading and following the instructions, guidelines, and schedules that are in this syllabus, posted on the course webpage, and announced in class. Not having read the information in this syllabus, on the webpage, or in course announcements will not constitute an excuse for missing deadlines, assignments, or other assessments. Please set your preferences in Canvas so that you receive timely notifications of course announcements and other information.

V. Course Resources

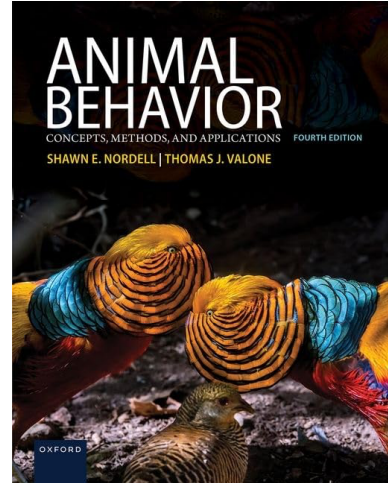
A. Textbook

Animal Behavior: Concepts, Methods, and Applications, 4e by Shawn E. Nordell & Thomas J. Valone. Oxford University Press (publisher), 2024.

A copy of this textbook is on reserve at the Marston Science Library.

B. Learning Catalytics

We will use the Learning Catalytics Classroom Response System (<https://learningcatalytics.com/>) for clicker/quiz questions during class, as well as for out-of-class response questions. Learning Catalytics allows students to use a laptop, tablet, smartphone, etc. to participate in a variety of types of questions. Information on correctly registering for Learning Catalytics will be available in Canvas. When setting up your account, **you must use your Gatorlink (ufl.edu) e-mail address.** Using an e-mail address other than your UFL e-mail address will result in you receiving NO credit for Learning Catalytics questions.



C. Course Website (Canvas)

Class material - including the syllabus, handouts, assignments, and gradebook – will be posted on the course Canvas website (<https://ufl.instructure.com>). For help with Canvas, call the UF Computing Help Desk at 352-392-4357, or visit the e-Learning support website: <http://help.instructure.com/>.

D. Course Fee

There is an additional course fee of \$1.25 this semester.

VI. Course Philosophy

My hope is that this course will serve as an outlet for some of the stress and uncertainty of the rest of our lives, rather than an additional source of it, and that it will give you a chance to connect with your peers, learn more about animals and their behavior, spend some time outside watching animals, and pursue topics that interest you within the scope of the class.

To this end, I propose that all of us (myself included) adopt an approach to this course that is based on the following principles:

- **Flexibility:** I have attempted to plan the course to work as well as possible given the current circumstances, but we have all learned over the past several years that circumstances can change rapidly. We should all expect that some aspects of the course delivery, policy, etc., may need to be changed as the semester goes on, so that we can achieve a learning experience that is as beneficial as possible for as many people as possible.
- **Communication:** Along with the flexibility to make changes as we go comes the need to communicate about those changes. I pledge to do my best to keep the lines of communication open, and to let you know what's happening in the course as frequently and as clearly as I can. I ask that you do the same – if there is something that is hampering your performance in the course, or that would make things easier for you to do well, please let me know so we can see if it's something we can change.
- **Compassion:** We're all humans, and many aspects of the current situation can be quite challenging – even taking care of our basic physical needs requires more time, energy, and mental effort than usual. The more empathy, kindness, and grace we can extend – both to others and, equally importantly, to ourselves – the better able we will be to meet those challenges.

- **Diversity:** In this classroom, all students will be included, heard, and treated with respect. We will promote a safe, healthy, and fair learning environment where all individuals are provided with equitable opportunity to participate, contribute, and succeed. Student success is enhanced by innovation and creativity of thought that inclusive classrooms facilitate. The success of an inclusive classroom relies on the support and understanding of you and your peers. Students are encouraged to speak up and share their views while also engaging respectfully with others.
- **Community:** The success of this course is going to depend on us coming together as a community, not only to learn together, but also to learn from each other, to support one another, and to help keep each other safe and well. The more that everyone participates, the better off we will all be, and the more we all get to learn (your instructor included!)
- **Safety:** My goal this semester is to provide everyone the best learning experience possible while also keeping everyone as safe as possible. Out of respect for your classmates and instructor, we ask that you **PLEASE DO NOT COME TO CLASS IF YOU ARE EXPERIENCING SYMPTOMS OF COVID-19 OR OTHER TRANSMISSIBLE ILLNESS.** If you are feeling ill, please contact me prior to class and I will work with you to arrange alternate ways for you to cover the material without being penalized or missing points (see below under “VIII.B Attendance”).)

VII. Course Objectives

Behavior is one of the most important and interesting aspects of animal biology. Behaviors permit flexibility that allows animals to respond rapidly to environmental changes. This course exposes students to the broad field of animal behavior. Students will come to understand the historical foundations of the field, as well as current theories and evidence for a broad range of behavioral topics. We will also focus on how the science underlying our theoretical understanding of behavior is conducted, and how behavioral hypotheses at all levels of analysis can be tested experimentally. Students also participate in practical exercises to learn some fundamental techniques used to study behavior, and will practice reading and analyzing current scientific literature. Behavioral ecology and the evolution of behaviors as adaptations will be recurring themes interwoven through all topics discussed.

By the end of this course, students should be able to:

- Distinguish between the four types of questions that may be asked about animal behavior, and formulate hypotheses of each type to explain a given behavior.
- Explain how behavioral hypotheses are formulated, the procedures used to test them, and the types of data that can be collected.
- Design experiments that could test various behavioral hypotheses.
- Understand some of the mechanisms involved in the production of a behavior by an animal.
- Understand the role of natural and sexual selection in the evolution of behavior.
- Be able to use these principles to make predictions about a behavior in an unfamiliar animal.

VIII. Course Policies

A. Time Commitment

The UF College of Liberal Arts and Sciences assumes that each student will devote 3-4 hours per week per credit-hour to each course during the regular semester. Because ZOO 4050 is 3 credits, each student should therefore expect to devote an average of 9-12 hours per week to this course in a 15-week semester.

B. Attendance

While the lecture videos will be posted asynchronously, there are also synchronous components of the course at which student attendance and participation is expected. However, PLEASE DO NOT COME TO

LECTURE IF YOU ARE EXPERIENCING ANY SYMPTOMS OF TRANSMISSIBLE ILLNESS Unavoidable emergency circumstances (e.g. illness, hospitalization, family emergencies, etc.) that cause you to miss a deadline or exam require documentation (e.g. a doctor's note, dated COVID test results, or a letter from the Dean of Students office: <https://care.dso.ufl.edu/instructor-notifications/>) in order for it to count as an excused absence.

C. Exams

Any material covered during the lecture period or assigned in the reading may be included in the lecture exams. This can include textbook reading and illustrations, the recorded lectures, any supplemental videos, and any material covered during class. Take notes!

After the exam, I will post exam keys that highlight the salient points for which credit is awarded. I will consider re-grade requests on a case-by-case basis, however, I will not argue about point assignments (i.e. how much a particular element of a question was worth). To request a re-grade, write a brief paragraph explaining why you believe your answer to a question was incorrectly scored, making specific reference to the posted key, and bring it along with your original exam paper to class. Re-grade requests must be submitted within one week of the exam scores being posted.

Make-up exams will **only** be available in cases of medical and/or family emergencies when documented by an accompanying letter from the Dean of Students (<https://care.dso.ufl.edu/instructor-notifications/>), or for official academic activities (in which case student must contact the instructor a minimum of two weeks in advance). The student must notify the instructor either ahead of time or within 24 hours of the missed exam, and the student is responsible for scheduling a timely make-up exam with the instructor. Make-up exams due to pre-arranged official activities may be scheduled *prior* to the in-class exam, at the instructor's discretion. Make-up exams may be given in an alternate format as the situation requires.

D. Late Work

Assignments should be submitted by the assigned deadline. Late work will be subject to a 20% penalty for every day it is late, up to four days. For example, an assignment initially worth 10 points will be subject to a 2 point penalty if it is submitted up to 24 hours after the deadline, a 4 point penalty up to 48 hours, etc. Assignments may not be submitted more than four days after the assigned deadline without a notification from the Dean of Students documenting a medical/family emergency, as described above.

LearningCatalytics questions close at the posted deadline, and may not be submitted late.

E. Class Preparation

Readings should be done and recorded lectures should be watched in advance of class; you are expected to come to class ready to discuss the topics.

F. Classroom Behavior

Please be respectful of your fellow students, both during the in-class activities, and in your interactions on Canvas. This is particularly important in discussion boards and peer reviews where you are commenting on the work of other students. Students who persist in being rude or disrespectful will be blocked from future participation (with corresponding loss of points). Recording, photographing or screencapping, downloading, or otherwise distributing any student presentations or other student-created material from this course without permission from the creator(s) is strictly prohibited.

Students are encouraged to employ critical thinking and to rely on data and verifiable sources to interrogate all assigned readings and subject matter in this course as a way of determining whether they agree with their classmates and/or their instructor. No lesson is intended to espouse, promote, advance, inculcate, or compel a particular feeling, perception, viewpoint, or belief.

G. Office Hours

If you need to talk to me outside of class time, please make an effort to attend posted office hours whenever possible. If you have a conflict with those hours, I am happy to make an appointment to meet you and address questions at a mutually agreeable time. However, I cannot meet with students on a drop in basis outside of office hours – please send me an e-mail to set up an appointment!

H. Grammar

Correct grammar, punctuation, spelling, capitalization and paragraphing should be used in any college level submission, including exams, discussion boards, clicker questions, and typed assignments. I will take note of spelling and grammar and I will grade accordingly.

I. Recordings

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

IX. UF Policies

A. Academic Honesty

All students registered at the University of Florida have agreed to comply with the following statement:

“I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University.”

In addition, on all work submitted for credit the following pledge is either required or implied:

“On my honor I have neither given nor received unauthorized aid in doing this assignment.”

Cases of plagiarism, falsification of information; unauthorized collaboration with others on exams, quizzes, and other assignments; use of unapproved materials on exams or quizzes; use of advanced automated tools (artificial intelligence or machine learning tools such as ChatGPT) on assignments; or other academic dishonesty will not be tolerated, and may result in assignment penalties, course grade penalties (up to and including a failing grade in the class), and/or other sanctions. If you have knowledge of any instances of academic dishonesty in this class, please notify the instructor (with screenshots, if

applicable) or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional information on Academic Honesty, please refer to the University of Florida Academic Honesty Guidelines at: <https://catalog.ufl.edu/UGRD/student-responsibilities/>.

B. Accommodations for Students with Disabilities

Students who will require a classroom accommodation for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida Disability Resources website for more information at <https://disability.ufl.edu/>. Students should provide their DRC accommodation letter to Dr. Gerlach as soon as possible, ideally by the second week of classes. No accommodations are available to students who lack this documentation, and accommodations are not retroactive. It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student.

C. Drop/Add/Withdrawal

A student can drop/add during the drop add period with no penalty. After drop/add, a student who drops will receive a W until the date listed in the academic calendar. After that date, the student may be assigned an “E” (fail). Note: it is the responsibility of the STUDENT to withdraw from a course, not the instructor. Failure to participate/complete the class is NOT a drop.

D. Teacher Evaluations

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the e-mail they receive for GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

X. Getting Help

Asking for help is not a sign of weakness or failure! No one understands everything, and no one can do it all on their own. One of the least appreciated, but most useful things you can learn in college is what to do when you're facing a challenge that you may not be able to overcome on your own. I want you all to succeed, and there are tons of resources out there for the asking, so please: ASK!

A. Computing Problems

For issues with technical difficulties with Canvas, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

It is each student's responsibility to check their LearningCatalytics gradebook in a timely fashion to be sure their submissions are being properly recorded. **For problems with Learning Catalytics, call the following support number:** 1- 800-677-6337 or visit <https://learningcatalytics.com/pages/support> .

B. University Support Services

College can be a very stressful time in a person's life. Resources are available on campus to help students meet academic goals and solve personal problems, which may interfere with their academic performance. If you find that you are having difficulty emotionally or academically, there is substantial support available. See "[A Self Help Guide for Students](#)" or contact on of the following services:

1. [UF Counseling and Wellness Center](#), Radio Rd Facility, 392-1575

2. [Dean of Students Office](#), 202 Peabody Hall, 392-1261
3. [Career Resource Center](#), Reitz Union, 392-1601
4. [CLAS Academic Advising Center](#), Farrior Hall, 100 Fletcher Drive, 392-1521
5. [UF Field and Fork Pantry](#), 564 Newell Dr., 294-3601

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Dean of Students (202 Peabody Hall, 392-1261) for support. Furthermore, please notify your instructor(s) if you are comfortable in doing so. This will enable us to provide any resources that we may possess.

C. Other Questions

If you have non-tech-support questions about other aspects of the course, check the following sources first to see if it is already answered, **before** e-mailing your instructor:

- Course Syllabus
- Weekly Schedules, List of Graded Work, and other Canvas pages
- Course Announcements (this is the primary means that your instructor has to communicate with you in a timely manner)
- Course FAQ Discussion Boards

If you still cannot find the answer to your questions:

- If it is a question that others might find useful to know the answer to as well (regarding the course material, specifics of an assignment, etc.), post it to the discussion board.
- If it is a question specific to you (e.g. account or grade specific), contact Dr. Gerlach via e-mail.

XI. Assessments and Grading

A. Course Structure

Final grades will be based on 4 exams (12.5% each), homework assignments/projects throughout the semester (20%), weekly discussion posts (5%), and participation in lecture activities including Learning Catalytics questions (25%). A more detailed breakdown of assignments and grading proportions can be found in the Canvas gradebook.

B. Assignments

Assignments for this course focus around having students practice with the course material, and gain experience with observing and quantifying animal behavior in the field, and with identifying hypotheses to explain animal behavior and designing experiments to test these hypotheses.

- **Questioning Behavior** – Students will make casual observations about animal behavior, formalize these into scientific questions about behavior, formulate testable hypotheses about this behavior, and generate predictions about the results of testing these hypotheses.
- **Data Collection Preparation** – Students will work to devise a methodology for observing the behavior of wild animals, including creating an ethogram, formulating a sampling methodology, and creating an appropriate data sheet for recording their observations.
- **Field Notes and Ethogram Analysis** – Students will spend time observing their specified wild animal, and will complete a preliminary analysis to compare the behaviors of two groups of animals (e.g. female vs. male, adult vs. juvenile, etc.)
- **Experiment** – Students will design a set of two linked experiments that address a question regarding animal behavior from multiple levels of analysis, and discuss potential results to these experiments and their implications.
- **Peer Reviews** – On several of these assignments, students will be asked to peer-review and

expand upon the work of their classmates. These peer reviews will be submitted via Canvas, typically due one week after the due date for the original assignment.

- **Weekly Discussions** – Each week we will have a short weekly discussion assignment in Canvas. These discussions are meant to be fast (should take no more than 10-15 minutes), fun, and to help foster a sense of community among students. Each week, students are expected to answer the discussion prompt, and then reply to at least two of their classmates. The two lowest scores for these discussions will be dropped.

All assignment files must be submitted to Canvas by 11:59 p.m. on the scheduled due date unless otherwise specified. Links to Google docs (or similar services), or assignments submitted via e-mail will not be accepted. TurnItIn software will be used to check all assignments for originality.

C. Learning Catalytics

Learning Catalytics will be used for both in-class and out-of-class clicker/quiz questions. Out-of-class LC sessions will be due by 3:00 p.m. just before the next class period. In-class sessions will be available only to students participating in the synchronous session.

Most Learning Catalytics questions will be scored as 1 point for a correct answer and 0.5 points for an incorrect answer. Learning Catalytics has an answer/discuss/answer feature in which a question is presented for a second time after students have discussed the question with their classmates. In these cases, both the initial question and the second presentation are each worth 1 point. No participation credit will be given without a submitted answer, so please make sure that your device is charged and has a stable connection to the internet. Your final Learning Catalytics score will be determined as the proportion of possible points that you earned, scaled to 80%. Thus, if you earn 80% or more of the possible Learning Catalytics points, you will receive 100% of the course points for this assignment.

D. Extra Credit

There will be four short extra-credit opportunities in this course in which students are asked to read and evaluate the primary literature related to course material, corresponding to each of the four lecture exams. Each opportunity will be worth a maximum of 0.5% of the final course grade. More information regarding these assignments and their due dates will be available on the Canvas course site. No individualized extra credit opportunities will be available.

E. Grading

Minimum grade cutoffs are listed below. These cutoffs will not be raised; in other words, if you receive 93% of the possible points, you are guaranteed to earn an A grade. A curve may be applied to individual exams or assignments, or to the final overall scores, depending on the class average, and will be communicated clearly. However, I will *not* adjust cut-offs or round-up grades on an individual basis for any reason.

Note that the current UF policy for assigning grade points is available at the following undergraduate catalog web page:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.

Point Range (%)	Letter Grade
≥ 93	A
≥ 90	A–
≥ 87	B+
≥ 83	B
≥ 80	B–
≥ 77	C+
≥ 73	C
≥ 70	C–
≥ 67	D+
≥ 63	D
≥ 60	D–
< 60	E

F. **Incomplete("I"):** If a student has completed the majority of the course work with a passing grade and particular DOCUMENTED circumstances prevent completion of the course in the time allotted, the student may, with the agreement of the instructor, be assigned an "I*" pending resolution of the grade. All incompletes MUST be resolved by the end of the following term or the student will receive a grade of "E" (failing).

G. **Special Treatment**

Please do not request individual special treatment regarding grading at the end of the semester; **I do not adjust grades for individuals for any reason.** Plan to do well on all exams and other assignments from the beginning; if you are having difficulty in the class, please let me know sooner rather than later.

XII. Disclaimer

This syllabus represents the current plans and objectives; however, schedules, requirements, and assignments may change throughout the semester as the need arises. Such changes, communicated clearly, are not unusual and should be expected.

XIII. Weekly Schedule

NOTE: The following schedule is tentative; lecture topics, coverage, and reading assignments may change. Updated schedule and supplemental reading assignments will be posted on the course website throughout the semester.

Week #	Lecture #	Date	Lecture Topic	Chapter	Assignments Due
1	1	M 13 Jan	Syllabus Day and Introduction		
	2	W 15 Jan	What is Behavior?	1.1, 1.3, 1.5-1.6	
	3	F 17 Jan	Testing Behavioral Hypotheses	1.2, 1.4	
2		M 20 Jan	MLK JR DAY – NO CLASS		
	4	W 22 Jan	Tinbergen's 4 Questions	1.3, suppl.	Intro Survey, Discussion
	5	F 24 Jan	Ultimate Causes – Selection I	2.1-2.2, 3.1	
3	6	M 27 Jan	Ultimate Causes – Selection II	2.3-2.4, 9.3	
	7	W 29 Jan	Ultimate Causes – Phylogenies	1.4, suppl.	Questioning Behavior, Discussion
	8	F 31 Jan	Proximate Causes – Genetics	3.2-3.4	
4	9	M 03 Feb	Proximate Causes – Hormones	Suppl.	Peer Review
	10	W 05 Feb	Proximate Causes – Neuro/Sensory I	4	EC1, Discussion
		F 07 Feb	EXAM I (Lectures 1-9)		
5	11	M 10 Feb	Proximate Causes – Neuro/Sensory II	4, 6.1-6.2	
	12	W 12 Feb	Proximate Causes – Learning I	6.3	Discussion
	13	F 14 Feb	Proximate Causes – Learning II	6.4-6.5, 7.1-7.3	
6	14	M 17 Feb	Communication I	5.1-5.2, 5.5	Data Collection Prep

	15	W 19 Feb	Communication II	5.3	Discussion
	16	F 21 Feb	Communication III	5.4, 5.6	
7	17	M 24 Feb	Foraging	8	Peer Review
	18	W 26 Feb	Introduction to Sexual Selection	12.1	EC2, Discussion
		F 28 Feb	EXAM II (Lectures 10-17)		
8	19	M 03 Mar	Intrasexual Selection	12.4, 12.5	
	20	W 05 Mar	Intersexual Selection I	12.2, 12.3	Discussion
	21	F 07 Mar	Intersexual Selection II	12.3, 12.6	
9	22	M 10 Mar	Mating systems I - Polygyny	13.1, 13.3	
	23	W 12 Mar	Mating systems II - Polyandry / Leks	13.3, 13.4	Discussion
	24	F 14 Mar	Mating systems III - Monogamy and EPCs	13.2, 13.5	
		M 17 Mar	SPRING BREAK – NO CLASS		
		W 19 Mar	SPRING BREAK – NO CLASS		
		F 21 Mar	SPRING BREAK – NO CLASS		
10	25	M 24 Mar	Parental care I	14.1, 14.5	
	26	W 26 Mar	Parental care II	14.2	Field Notes, Discussion
	27	F 28 Mar	Parental care III	14.3, 14.4	
11	28	M 31 Mar	Animal Navigation	10.4-10.5	EC3, Discussion*
		W 02 Apr	EXAM III (Lectures 18-27)		
	29	F 04 Apr	Migration	10.3	
12	30	M 07 Apr	Dispersal	10.1-10.2	
	31	W 09 Apr	Habitat Selection	11.1	Discussion
	32	F 11 Apr	Territoriality	11.2	
13	33	M 14 Apr	Intro to Game Theory	11.4	
	34	W 16 Apr	Aggression	11.3	Experiment, Discussion
	35	F 18 Apr	Sociality and Cooperation	15	
14	36	M 21 Apr	Kin Selection and Eusociality	16.1-16.2	
	37	W 23 Apr	Cooperation and Altruism in Non-Relatives	16.3-16.4	Peer Review, Discussion
		F 25 Apr	READING DAYS – NO CLASS		
15		M 28 Apr	FINALS WEEK – NO CLASS		EC4, Discussion*
		W 30 Apr 3-5 p.m.	EXAM IV (Lectures 28-37)		