

# ZOO 4926 – Introduction to Animal Behavior

## Section 1E11

### Syllabus for Spring 2015

#### 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 recommended.

#### II. Course Meetings

**Lectures:** MWF period 6, 12:50-1:40, 113 Little Hall

**First day of classes:** 07 January 2014

**Last day of classes:** 22 April 2014

**Final Exam:** Group 29C, Wednesday 29 April 2014, 12:30 – 2:30 p.m.

#### III. Instructors

**Course Instructor:**

**Dr. Nicole Gerlach**

Department of Biology

Office: 520 Carr Hall

Office Hours: Tuesday 2-3 p.m. or by appointment

E-mail: [ngerlach@ufl.edu](mailto:ngerlach@ufl.edu)

#### IV. Course Communications

- A. **Course Website:** <http://lss.at.ufl.edu> (select Canvas); or <https://ufl.instructure.com/courses/314381>
- 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, please e-mail Dr. Gerlach. All e-mail correspondence must originate from your @ufl.edu account, have your full name in the body of the e-mail, and contain “ZOO 4926” in the subject line. E-mails not meeting these requirements may not be recognized by our e-mail filters, and thus may not be answered. Barring unusual circumstances, expect a reply within 24 hours during the week, and 48 hours over the weekend. E-mails and Discussion Board posts are checked at least once per day, but sometimes not more than that.
- C. **Communications From Your Instructor:** Each student is solely responsible for reading and following the instructions, guidelines and schedules in this syllabus and on the course webpage, or 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, 1e* by Shawn E. Nordell & Thomas J. Valone. Oxford University Press (publisher), 2013.

Textbook publisher web site:

<http://global.oup.com/us/companion.websites/9780199737598/>

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

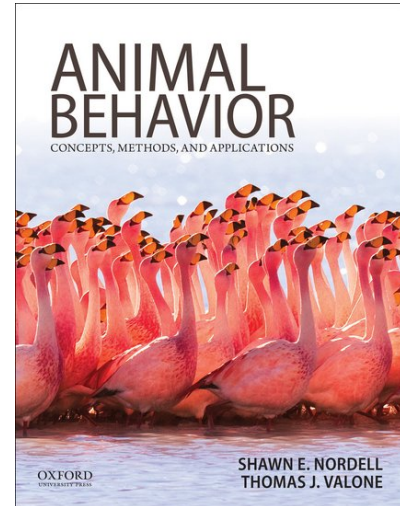
### B. TopHat

We will use the Top Hat Classroom Response System for quiz questions during class. THM allows students to use text messaging, laptop, tablet, smartphone, etc. to participate in class. Information on correctly registering for TopHat 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 Top Hat 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/>.



## VI. 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.
- Understand some of the mechanisms involved in the production of a behavioral sequence by an animal.
- Understand the role of natural and sexual selection in the evolution of behavior.
- Explain how these principles can be used to understand human behavior.

## VII. 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 4926 is 3 credits, each student should therefore expect to devote 9-12 hours per week to this course in a 15-week semester.

**B. Attendance**

Students are expected to attend all scheduled classes, and are responsible for all material presented in lecture, online, and in the assigned readings. Students who miss class are welcome to ask to borrow the notes of their classmates; the instructors will not be responsible for providing notes. Please note that no in-class quizzes, or participation points can be made up, regardless of the reason for missing class.

**C. Quizzes**

Quizzes may be given at any time in lecture, without notice. There will be no make-up quizzes during class or afterwards. Arriving after the quiz has been given will result in a 0 for that quiz.

**D. Exams**

Students are expected to arrive on time; no extra time will be given for students who arrive late. Any material covered during the lecture period or assigned in the reading may be included in the lecture exams. This can include textbook illustrations, films, Powerpoint slides, and actual lectures. Take notes!

We will either hold post-exam review sessions or post exam keys that highlight the salient points for which credit is awarded. Please see us immediately if 1) your score is incorrectly summed, or 2) your posted score on Canvas does not agree with the score on your exam. We will consider other re-grade requests on a case by case basis, however, we will not argue about point assignments. To request a regrade, write a brief paragraph explaining why you believe your answer to a question was incorrectly scored, make specific reference to the posted key and submit to us in office hours (so that an instructor can look over your request and be sure it is clear). Regrade 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, or for official academic activities (in which case the instructor should be contacted 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 exams with the instructor.

**E. 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. 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.

**F. Classroom Behavior**

Readings should be done in advance of class; you are expected to come ready to discuss the topics. Please be courteous to others during lecture, particularly during in-class discussions. Students exhibiting disruptive behavior in class will be asked to leave, with the subsequent loss of participation points for that day. Use of electronic devices in class to take notes or otherwise participate in classroom activities is approved. Approved electronic devices are laptop computers, cell phones, smart phones, tablets, iPod touch, and voice recording devices. Other uses of these devices or the use of unapproved devices will be considered disruptive. Unapproved electronic devices include video recorders, digital cameras and MP3 players.

**G. Office Hours**

Please see instructors in posted office hours when possible. If you have a conflict with those hours we will make an appt. to meet you and address questions. We cannot meet with students on a drop in basis.

**H. Grammar**

Correct grammar, punctuation, spelling, capitalization and paragraphing should be used in any college level submission, including exams and typed reports. We will take note of spelling and grammar and we will grade accordingly.

## VIII. 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 or other academic dishonesty will not be tolerated, and may result in grade penalties or other sanctions. If you have knowledge of any instances of academic dishonesty in this class, please notify the instructor 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/ugrad/current/advising/info/student-honor-code.aspx#honesty>.

### 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: <http://www.dso.ufl.edu/drc/>. Note that the student should provide documentation of a requirement for accommodation to Dr. Gerlach **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

Anonymous course evaluations will be open via UF's online evaluations system (<https://evaluations.ufl.edu>) near the end of the semester; you will receive e-mail notifications of when the evaluations open.

## IX. Getting Help

### 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 TopHat gradebook in a timely fashion to be sure their submissions are being properly recorded. **For problems with Top Hat, call the following support number:** 1-888-663-5491 or e-mail [support@tophatmonocle.com](mailto:support@tophatmonocle.com)

**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

**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 instructors:

- Course Syllabus
- 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, 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.

**X. Assessments and Grading****A. Course Structure**

Final grades will be based on 4 exams (15% each) and short homework assignments and participation in lecture activities including quizzes and TopHat questions (40%). No mechanisms for extra credit are available.

**B. Assignments**

Homework assignments will include 1) a semester-long project that asks students (in stages) to observe animal behavior, formulate a research question and hypothesis, and develop an experiment to test that hypothesis; and 2) short weekly (or bi-weekly) assignments in which you will be asked to read and evaluate the primary literature, consider case studies, and/or answer questions related to the course material that week. The lowest score on the weekly assignments (category 2) will be dropped; however, all assignments related to category 1 are required and will count towards the final grade.

**C. 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 to the final scores, depending on the class average, and will be communicated clearly. However, we will *not* adjust grades on an individual basis.

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

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>.

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

## XI. 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.

## XII. Weekly Schedule

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

Week #	Lecture #	Date	Lecture Topic	Chapter
1		M 05 Jan	DROP/ADD – NO CLASS	
	1	W 07 Jan	Introduction to Animal Behavior	1
	2	F 17 Jan	Scientific Ways of Studying Behavior	1
2	3	M 12 Jan	Methods for Studying Behavior	3
	4	W 14 Jan	History of Animal Behavior and Tinbergen's Four Questions	2
	5	F 16 Jan	Ultimate – Selection I	2
3		M 19 Jan	MLK JR. DAY – NO CLASS	
	6	W 21 Jan	Ultimate – Selection II	2
	7	F 23 Jan	Ultimate - Phylogenies	2
4	8	M 26 Jan	Proximate - Genetics	4
	9	W 28 Jan	Proximate - Neuro I	5
	10	F 30 Jan	Proximate - Neuro II	5
5		<b>M 02 Feb</b>	<b>EXAM I</b>	
	11	W 04 Feb	Proximate - Hormones	3
	12	F 06 Feb	Proximate - Learning I	5
6	13	M 09 Feb	Proximate - Learning II	5
	14	W 11 Feb	Communication I	6
	15	F 13 Feb	Communication II	6
7	16	M 16 Feb	Communication III	6
	17	W 18 Feb	Foraging I	7
	18	F 20 Feb	Foraging II	7
8	19	M 23 Feb	Antipredator Behavior	8
		<b>W 25 Feb</b>	<b>EXAM II</b>	
	20	F 27 Feb	Male-male competition	11
		M 02 Mar	SPRING BREAK – NO CLASS	
		W 04 Mar	SPRING BREAK – NO CLASS	
		F 06 Mar	SPRING BREAK – NO CLASS	
9	21	M 09 Mar	Alternative mating tactics	11
	22	W 11 Mar	Female choice I	11
	23	F 13 Mar	Female choice II	11
10	24	M 16 Mar	Mating systems I - Polygyny	12
	25	W 18 Mar	Mating systems II - Polyandry / Leks	12
	26	F 20 Mar	Mating systems III - Monogamy and EPCs	12
11	27	M 23 Mar	Parental care I	13
	28	W 25 Mar	Parental care II	13

	29	F 27 Mar	Parental care III	13
12		<b>M 30 Mar</b>	<b>EXAM III</b>	
	30	W 01 Apr	Animal Orientation	9
	31	F 03 Apr	Dispersal	9
13	32	M 06 Apr	Migration	9
	33	W 08 Apr	Habitat Selection	10
	34	F 10 Apr	Territoriality	10
14	35	M 13 Apr	Aggression	10
	36	W 15 Apr	Sociality and Dominance	14
	37	F 17 Apr	Game Theory	14
15	38	M 20 Apr	Altruism	14
	39	W 22 Apr	Eusociality	14
		F 24 Apr	READING DAYS – NO CLASS	
<b>FINALS</b>		<b>W 29 Apr</b>	<b>EXAM IV</b>	