Biology 278 – Animal Behavior
Syllabus for Fall 2019

Time and Place: Tuesday and Thursday, 2:00-3:15, Rm. 201 Coker Hall
Professor: Dr. Catherine M.F. Lohmann
Phone: 919-962-3216
Office: Rm 402 Coker Hall (at the top of the stairs near 201 Coker)
Email: clohmann@email.unc.edu
Office Hours: Tuesdays and Thursdays 3:30-4:30 PM and by appointment

Class Website: A website for Biol 278 –section 001 is available through
http://sakai.unc.edu This syllabus itself, old exams, and various other items
will be posted throughout the semester for your reading pleasure.

Course Goals: The course teaches the <u>science</u> of animal behavior. We will
focus on what animals do, how they do it, why they do it, and perhaps most
importantly, how WE as scientists can be sure of our information. That
means we will spend a great deal of time discussing experimental
procedures and results. You will be challenged to understand the
<u>experiments and conclusions</u> and to think about them analytically.

Grading:
❖ We will have <u>two homework assignments</u> worth 10 points each. Each
   student will be assigned one lecture and one textbook chapter to write 5
   study questions for. The questions will be sent to me via Sakai, I will edit
   them, and then post them anonymously for the class to use.

❖ We will have a brief quiz each Thursday that covers material from the
   previous week. Each quiz will be worth 6 pts. You will be allowed to
   drop your lowest two quiz grades. The quizzes are designed as practices
   for the exams.

❖ We will have <u>two midterm exams.</u> Each will be worth 100 pts. On each,
   approximately 75% of the points will be multiple choice, and about 25%
   of the points will require written answers. The multiple choice questions
   usually require a thoughtful analysis and only rarely rely on pure
   memorization. The written answers need to be clear, well-organized, and
   complete.

❖ <u>The final exam</u> will be cumulative, worth 150 pts, and will be <u>all multiple choice</u>. Approximately 100 pts will cover new material since the second midterm, and 50 pts will cover old material.

❖ <u>The final grade </u>will be calculated based on total points. Grades will be assigned using a 10-point scale. The scale will be adjusted each semester for fairness (always in the students' favor), although an 'A' typically requires at least 90%. Scores below 50% will always be failing grades. Scores below 60% will likely be failing.

❖ <u>Additional notes:</u> There will be no extra credit. However, weight is given to improvement over the course of the semester, so that any initial difficulties can be overcome with effort.

Honor Code: As in any course at UNC, you are expected to adhere to the student honor code and you will be asked to sign your exam as an indication that you will do so.

Text: Nordell SE and Valone, TJ. 2017. *Animal Behavior: Concepts, Methods, and Application*. Second edition. Oxford University Press: New York.
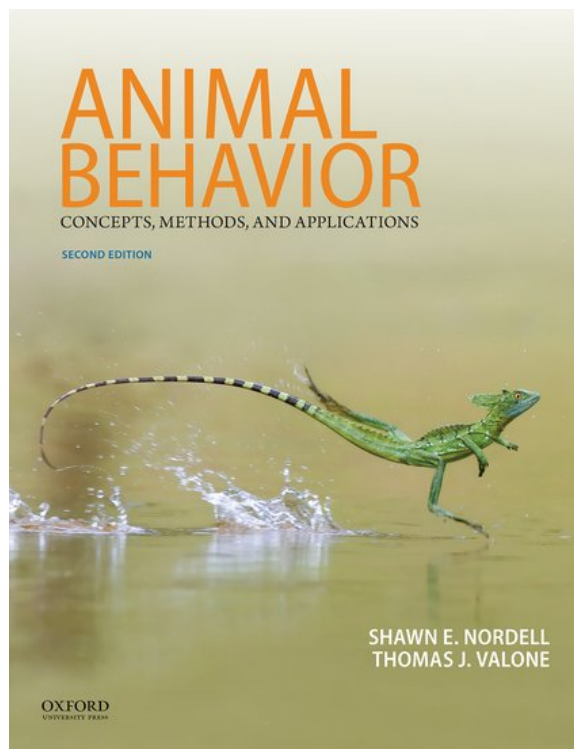
Lecture, Reading, and Exam Schedule Fall 2019
(this is approximate - details are subject to change)

Date	Lecture	Topic	Readings
August 20, Tuesday	Lecture 1	Introduction	Chapter 1 and 2
August 22, Thursday	Lecture 2	Science of Behavior: History and Principles	Chapter 1 and 2; also Chapter 7 pp 157-162
August 27, Tuesday	Lecture 3	Genetics of Behavior CHECK HOMEWORK	Ch 3 and 4
August 29, Thursday	Lecture 4 Quiz 1	Evolution & Behavior	Ch 3 and 4
September 3, Tuesday	Lecture 5	Neural Basis of Behavior HOMEWORK ACKNOWLEDGEMENT	Ch 5 pp 87-89; Ch. 7 pp 151-156
September 5, Thursday	Lecture 6 Quiz 2	Neural Basis of Behavior	Ch 5 pp 87-89; Ch. 7 pp 151-156
September 10, Tuesday	Lecture 7	Hormones & Behavior	Ch. 11 pp. 286-291 Ch 14 pp. 385-388
September 12, Thursday	Lecture 8 Quiz 3	Development of Behavior	Ch. 4, pp 71-73 (Birdsong Learning); Ch.7.163-177
September 17, Tuesday	Lecture 9	Development of Behavior/ Biological Rhythms	Parts of Ch 5 not covered elsewhere
September 19, Thursday	Exam 1		
September 24, Tuesday	Lecture 10	Biological Rhythms	None
September 26, Thursday	Lecture 11 Quiz 4	Foraging Behavior	Ch. 5, pp. 89-103; Ch. 7 and 8
October 1, Tuesday	Lecture 12	Foraging/Antipredator Defenses	Ch. 8, Ch 9
October 3, Thursday	Lecture 13 Quiz 5	Antipredator Defenses	Ch. 9
October 8, Tuesday	Lecture 14	Animal Travels & Sea Turtles	Ch. 10
October 10, Thursday	Lecture 15 Quiz 6	Animal Travels & Sea Turtles	Ch. 10

Date	Lecture	Topic	Readings
October 15, Tuesday	Lecture 16	Dispersal & Migration	Ch. 10
October 17, Thursday		Fall Break	
October 22, Tuesday	Lecture 17	Habitat Selection	Ch. 11
October 24, Thursday	Lecture 18 Quiz 7	Territoriality and Conflict	Ch. 11
October 29, Tuesday	Lecture 19	Communication I	Ch. 6
October 31, Thursday		Exam 2	
November 5, Tuesday	Lecture 20	Communication II	Ch. 6
November 7, Thursday	Lecture 21 Quiz 8	Sexual Selection: Mate Competition	Ch. 12
November 12, Tuesday	Lecture 22	Mate Competition/Choice	Ch. 12
November 14, Thursday	Lecture 23 Quiz 9	Mate Choice	Ch. 12
November 19, Tuesday	Lecture 24	Mating Systems	Ch. 13
November 21, Thursday	Lecture 25 Quiz 10	Parental Care	Ch. 13
November 26, Tuesday	Lecture 26	Costs and Benefits of Social Behavior	Ch. 14
November 28, Thursday		Thanksgiving Break	
December 3, Tuesday	Lecture 27	Cooperation & Altruism	Ch. 15
December 7, Saturday	12 Noon	Final Exam	