Biology 278 – Animal Behavior Syllabus for Spring 2020

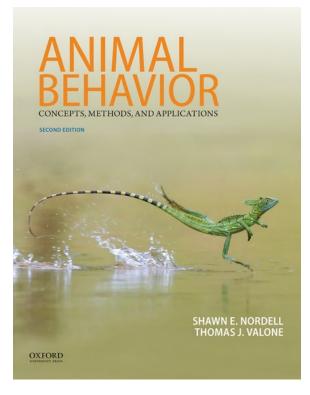
Time and Place: Tuesday and Thursday, 11:00-12:15, Rm. 201 Coker Hall Professor: Dr. Catherine M.F. Lohmann Phone: 919-962-3216 Office: Rm 402 Coker Hall (at the top of the stairs near 201 Coker) Email: clohmann@email.unc.edu Office Hours: Tuesdays and Thursdays 3:30-4:30 PM and by appointment

- **Class Website**: A website for Biol 278 –section 001 is available through <u>http://sakai.unc.edu</u> 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 rarely rely on pure memorization. The written answers need to be clear, well-organized, and complete.
- The final exam will be cumulative, worth 150 pts, and will be <u>all multiple</u> <u>choice</u>. Approximately 100 pts will cover new material since the second midterm, and 50 pts will cover old material.

- The final grade 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.
- Additional notes: 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. In addition, participation as seen via UNC Check-in and Poll Everywhere will be considered as well.
- **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 Spring 2020 (this is approximate - details are subject to change)

| Date | Lecture | Торіс | Readings |
|--------------|---------------------|--------------------------|--------------------------|
| January 9, | Lecture 1 | Introduction | Chapter 1 and 2 |
| Thursday | | | |
| January 14, | Lecture 2 | Science of Behavior: | Chapter 1 and 2; also |
| Tuesday | | History and Principles | Chapter 7 pp 157-162 |
| January 16, | Lecture 3 | Genetics of Behavior | Ch 3 and 4 |
| Thursday | Quiz 1 | HOMEWORK | |
| | | ACKNOWLEDGEMENT | |
| January 21, | Lecture 4 | Evolution & Behavior | Ch 3 and 4 |
| Tuesday | | | |
| January 23, | Lecture 5 | Neural Basis of Behavior | Ch 5 pp 87-89; Ch. 7 pp |
| Thursday | Quiz 2 | | 151-156 |
| January 28, | Lecture 6 | Neural Basis of Behavior | Ch 5 pp 87-89; Ch. 7 pp |
| Tuesday | | | 151-156 |
| January 30, | Lecture 7 | Hormones & Behavior | Ch. 11 pp. 286-291 |
| Thursday | Quiz 3 | | Ch 14 pp. 385-388 |
| February 4, | Lecture 8 | Development of Behavior | Ch. 4, pp 71-73 |
| Tuesday | | | (Birdsong Learning); |
| | | | Ch.7.163-177 |
| February 6, | Lecture 9 | Development of Behavior/ | Parts of Ch 5 not |
| Thursday | Quiz 4 | Biological Rhythms | covered elsewhere |
| February 11, | Lecture 10 | Biological Rhythms | None |
| Tuesday | | | |
| February 13, | <mark>Exam 1</mark> | | None |
| Thursday | | | |
| February 18, | Lecture 11 | Foraging Behavior | Ch. 5, pp. 89-103; Ch. 7 |
| Tuesday | | | and 8 |
| February 20, | Lecture 12 | Foraging/Antipredator | Ch. 8, Ch 9 |
| Thursday | Quiz 5 | Defenses | |
| February 25, | Lecture 13 | Antipredator Defenses | Ch. 9 |
| Tuesday | | | |
| February 27, | Lecture 14 | Animal Travels & Sea | Ch. 10 |
| Thursday | Quiz 6 | Turtles | |
| March 3, | Lecture 15 | Animal Travels & Sea | Ch. 10 |
| Tuesday | | Turtles | |

| Date | Lecture | Торіс | Readings |
|------------------------------|----------------------|------------------------------|----------|
| March 5 | Lecture 16 | Dispersal & Migration | Ch. 10 |
| Thursday | Quiz 7 | | |
| March 10 and 12, | | Spring Break | |
| March 17, | Lecture 17 | Habitat Selection | Ch. 11 |
| Tuesday | | | |
| March 19, | Lecture 18 | Territoriality and Conflict | Ch. 11 |
| Thursday | Quiz 8 | | |
| March 24, | Lecture 19 | Communication I | Ch. 6 |
| Tuesday | | | |
| March 26, | | Exam 2 | |
| Thursday | | | |
| March 31, | Lecture 20 | Communication II | Ch. 6 |
| Tuesday | | | |
| April 2, | Lecture 21 | Sexual Selection: Mate | Ch. 12 |
| Thursday | Quiz 9 | Competition | |
| April 7, | Lecture 22 | Mate Competition/Choice | Ch. 12 |
| Tuesday | | | |
| April 9, | Lecture 23 | Mate Choice | Ch. 12 |
| Thursday | Quiz 10 | | |
| April 14, | Lecture 24 | Mating Systems | Ch. 13 |
| Tuesday | | | |
| April 16, | Lecture 25 | Parental Care | Ch. 13 |
| Thursday | Quiz 11 | | |
| April 21, | Lecture 26 | Costs and Benefits of Social | Ch. 14 |
| Tuesday | | Behavior | |
| April 23, | Lecture 27 | Cooperation & Altruism | |
| Thursday | Quiz 12 | | |
| <mark>April 27 Monday</mark> | <mark>12 Noon</mark> | Final Exam | |