BIO 328 – Section 01- 26080 Animal Behavior *Tentative* Syllabus, Spring 2025 (still in progress) College of Arts & Sciences Syllabus

COURSE INFORMATION

Lecture time and location: Online asynchronous. (No set meeting time.) First Day of Classes: We begin on Tuesday, January 21, 2025

Credit Hours: 3

Course Description: Comparative ethology with an emphasis on understanding the impact of adaptation, evolutionary history, anatomy, physiology, and developmental processes on the behaviors of animals. Topics include learning, intelligence and emotional impacts, social organization, and physiological integrating mechanisms.

Course Prerequisites: Prerequisites: Prerequisites: BIO-150 minimum grade of C and BIO-202 minimum grade of C and BIO-202 minimum grade of C.

Final Exam: Due by May 15

FACULTY INFORMATION

Instructor: Dr. M. Readey.

Office Location: https://neiu-edu.zoom.us/j/3038240479 Meeting ID: 303 824 0479

Inperson hours in BBH 352 or BBH 356

Office Hours: M: online Noon to 5 pm. T, R: 10-noon BBH 352B W: 10 a.m. to 4 p.m. (My schedule chart is given near the back of the syllabus)

Upon request, review sessions can be scheduled before exams. Other office times are also available by appointment.

Phone Extension: NA. I will be off campus most of the semester. Better to contact me via e-mail **E-mail:** <u>mareadey@neiu.edu</u>

Bathrooms on the third floor of BBH are on the west side of the ramp: Inclusive: North end of the hallway near the ramp entrance; Women's: South end of the same hallway; Men's near the center of the ramp

Fall 2022 Calendar

Important Dates:				
T Jan 21: NEIU Classes Begin	S Jan 25, C	S Jan 25, Open Registration Ends for Full Semester		
T Jan 28: Last day for P/F op	W Feb 12: Darwin's Birthday (no classes)			
W Feb 12: Second deferred	Payment due	Mar 17-23	: Spring Break	
M May 12: Last Day of Reg (Classes	May 13-15	: Finals	
Refund Calendar for full-te	rm classes			
Time Period	-Feb 3	Feb 4- 17	Feb 18-Mar 14	Mar 15-
Credit /Refund Amount	100%	50%	25%	No Refund
Grade Issued	None	W	W	W

If you stop attending without dropping, you will be issued a grade of F.

NB: Cited from the Schedule of classes, inside front cover: "POLICY ON FIRST CLASS SESSION

ATTENDANCE: Department instructors may reassign a student's seat in a class if the student does not attend the first class session and neglects to inform the instructor in advance of the intended absence. The student will be responsible for any financial consequence if the course is not dropped officially by the student before the appropriate refund deadline. Failure to officially withdraw from class will result in a grade of F."

Final Exam: Due by May 15

(Full Final Schedule at the end of the syllabus)

COURSE MATERIALS

Text Book

John Alcock & Sherman Animal 9th edition or 11th edition. (The 10th edition was flawed)

Reading and Presentation Groups

In addition, you will be responsible for participation in one group paper and presentation based upon a book choice. You will meet with your groupmates and communicate with them through our D2L Discussion tab. There will be several books available. The group size will be limited to no more than four or five people, and it will be first come, first serve for membership in each group.

Warning: If you do not pull your weight in a group, or if your presence is a hindrance to the others, your group mates may expel you from the group. Expulsions must be done within the first month. **I will be able to track how often people comment and participate, so I will be able to** Before it can proceed, the group must have a conference with the instructor who will try to mediate and correct the problems. If the problem persists or a conference cannot be arranged,, then the expulsion will proceed. If expelled, you will still be responsible for the presentation of materials and the review paper. You may try to join another group; if you are unable to join another group, then you can be assigned another text or you can proceed to complete the same text on your own. Removal from the group may be due to lack of participation, but other

reasons may lead to separation from a group. Separation will not be considered a negative sign.

Book Group Choices:

(Remember: Book group are on a first-come-first-serve schedule. Declare your choice early.

- 1. F. De Waal: Different: Gender and Our Primate Heritage. ISBN 9781324007104
- 2. F. DeWaal: Are We Smart Enough to Know How Smart Animals Are? ISBN 9780393353662
- 3. F. De Waal: *Mama's Last Hug: Animal Emotions and What They Tell Us About Ourselves*. ISBN 9780393357837
- 4. E. Young: An Immense World: How Animal Senses Reveal the Hidden Realms Around Us. ISBN 9780593133255
- 5. K. McAuliffe: *This is Your Brain on Parasites*. ISBN 9780544193222 (NB: This is a shorter book, and the group will be limited to three participants.
- 6. S. B. Hrdy: Father Time: A Natural History of Men and Babies. ISBN 9780691238784
- 7. J. Roughgarden: *Evolution's Rainbow: Diversity, Gender, and Sexuality in Nature and People.* ISBN 9780520280458

The above books have been placed on order with our bookstore. If none of the above books appeals to you, you may also choose from the following:

- 8. E. A. Caspar: Just Following Orders: Atrocities and the Brain Science of Obedience. ISBN 9781009385435
- 9. L. Cooke: Bitch: On the Female of the Species. ISBN 9781541674912
- 10. L. Trut & A. Dugatkin: *How to Tame a Fox (and Build a Dog): Visionary Scientists and a Siberian Tale of Jump-Started Evolution.* ISBN 9780226599717
- 11. J Haidt: The Righteous Mind: Why Good People Are Divided by Politics and Religion. ISBN 978-0307455772. (This book looks at the physiological underpinnings of morality, a critical aspect of social behavior.)

WARNINGS SPECIFIC TO THIS CLASS

During the semester, we will be discussing topics that some people may find uncomfortable. We will have explicit discussions about animal and human sexual behavior and anatomy. We will discuss spiteful behaviors across species, including genocides and war. We will talk about coerced sexual intercourse across species. And we will discuss gender-specific behaviours across species. Please see the weekly course topics and the book selections for the complete list.

COURSE OBJECTIVES / STUDENT LEARNING OUTCOMES

OBJECTIVES: Comparative ethology in the animal kingdom and its adaptive significance based upon the evolution of form and function of the nervous system, sense organs and effector

organs. Topics include instinct, learning, intelligence, social organization and their physiological integrating mechanisms. Through the class, you should develop an understanding of the following organizing concepts:

I. the philosophy of science and the study of animal behaviour
II. the proximate and ultimate causes of actions
III. the interactive theory of behaviour
IV. the physiological aspects of behaviours
V. the neurological and hormonal bases for behaviours
VI. the role of learning and social interaction in behaviour
VII. the role of operations and fixed patterns on behaviour

VII. the role of emotions and fixed patterns on behaviour
VIII. how the needs for food, territory, and sex drive behaviour
IX. how genetic investment impacts behaviors
X. how communication is used to enhance deception

XI. how spite can function to enhance reproductive success.
XII. how to assess behavioural similarities and differences across clades
XIII. the impact of niche and convergence on behaviour
XIV. how behaviour can be used to produce hypotheses across clades
XV. how social behaviour is phenotypic for a group of organisms

XVI. how social behaviour can enhance or detract from genetic survival XVII. how social hierarches evolved and took shape in different clades XVIII. how and when play behaviours impact genetic survival XIX. human behaviour is on the same spectrum as other animal behaviour

GRADING: STUDENT TASKS / ASSIGNMENTS / REQUIREMENTS

Grading: Your grade will be determined in the following manner

Examination Grade:

Exam 1 (Midterm)......100 pointsExam 2100 pointsCumulative Final Exam.....150 pointsExam Total350 points

Quizzes:.....100

Each of the ten quizzes is worth 11 points with the opportunity to earn bonus points. Only the top nine quizzes will be used to calculate your score. (I know it only adds up to 99 points, but this "missing" point will be more than accounted for through the bonus questions.)

Book Report and Presentation: 100 points (65 for paper and 35 for presentation) The paper will be graded upon both form and content. 50% of your grade is based upon the grammar and structure of the paper. The other 50% looks at the analysis and summary of the content. You will lose points for unnecessary fluff and repetitions. (*A good way to avoid losing points for writing skills or content is to share the paper with me via GoogleDocs, and do so early! That way, I can check your writing and make sure you are on the right track.*) You have three-four pages double spaced, 1" margins in Times New Roman or Calibre to make your points. Speak with a single voice, and DO NOT repeat the same materials! (*That often happens when people try to summarize each chapter individually rather than reviewing the entire book. It's a rookie mistake made in group projects.*) Pull what is unique from each section and then summarize the materials to tell your story. All papers should conform to APA style.

Here is an excellent resource to help you with APA style: https://owl.purdue.edu/owl/research and citation/apa style/apa style introduction.html

Estimated Total Point Score: 550 points.

Final Percentage Grade:

90% + = A 80% + = B 70% + = C 60% + = D < 60% = F

I keep all tests and assignments. You are, however, welcome to come and review exams with me. This offer is particularly important if you are not doing well in the class.

Exam and Quiz Formats:

Lecture exams: Lecture exams will consist of multiple-choice questions.

• I have done my best to avoid having exams fall on major religious holidays. If an examination does fall on a holiday of your faith, and you do not think you can get the exam completed ahead of that date, let me know within the first week or two of the semester so we can make arrangements.

•MAKE UP POLICY There will be NO make-ups for missed exams other than for extreme emergencies. Everyone gets to make up one quiz without an excuse. A second missed quiz must have a verifiable excuse.

OTHER STUFF

1. If you are in the honors section, additional criteria will apply.

2. There is no OFFICIAL policy of required attendance in online classes. However, it is unlikely that you will earn an acceptable grade if you do not keep up with the work. My lectures (in print on the PowerPoint and recorded on them, too, for audio learners) are key components of the exams. Scanning the materials alone does not guarantee a passing grade. For best results, also use the review sheets that accompany each lecture as a Word document.

It is important that you take complete and comprehensive notes of the materials.
 It is also *essential that you study regularly*. The material in this class does not lend itself to cramming. Learning animal behavior is like learning the violin. It takes repeated sessions of practice.

5. Expect to spend 3-5 hours per week studying the materials on your own.

6. After each lecture, you should reread and/or rewrite your notes and read the material on the websites again to make sure that you correctly took the notes and fully understand the material that was covered. Rewriting the material longhand is a far more effective memory tool than typing into a computer. Try using two columns, the first listing broad concepts and the second containing a list of facts and supportive evidence linked to that concept.

7. Look over the study guides prior to class whenever possible. Then, use the study guide to organize your notes after class. The sooner you reinforce material, the more likely it is to stick. Prior to the exam, use the study guide to re-assess whether you have learned the material, but do not depend on this guide as quick way to cram. Here are some study for Introductory Biology from other universities. Try some of the following links (available on line):

1. How to Study for Biology WikiHow https://www.wikihow.com/Study-for-Biology

2. How to use Office Hours Cornell University

https://lsc.cornell.edu/consult-with/how-to-use-office-hours/

4. Learning Strategies, Yale:

https://academiccontinuity.yale.edu/students/learning-strategies

5. Study Strategies, Miami University

<u>https://miamioh.edu/centers-institutes/rinella-learning-center/academic-support/online-resources/study-strategies.html</u>

6. Not-Taking Methods <u>https://e-student.org/note-taking-methods/</u>

8. Talking or other disruptive behaviour during lecture will not be tolerated, and you may be asked to leave.

9. Academic dishonesty includes giving, receiving, or using unauthorized aid on any academic work. This includes a person who has taken a test discussing what was on a test with a person who has not taken the test. Any student guilty of cheating—including--plagiarism will receive a grade of F and their conduct may be reported to the dean of students for potential further action up to and including expulsion from NEIU.

Our Meetings: All the dates for the materials are tentative. We may alter our schedule if we find that we need to spend more or less time on one subject or if the weather interferes with class time. We will review our standing and issue any updates to the schedule prior to the examination.

Practice!: JUST LISTENING TO THE LECTURES IS INSUFFICIENT TO PASS. You must dedicate home time to study. This material is not cramable!

Tentative Schedule

The following schedule is subject to revision to allow for more or less time on various topics as needed or because of potential school closures such as snow days.

We may be ahead or behind during any given week. You need to work with me and let me know when you are having trouble comprehending a section.

Study Tip:

As you learn about behaviors, look for the commonalities among clades of organisms. Impose the particulars (when you can find them) upon the background. Keep in mind that behavior is an adaption, just like anatomy and physiology.

And remember the key: successful reproduction to keep the genes that support a behavior in the gene pool. *Think of the chicken as the egg's way of making another egg, and then you've got it!*

Week of:	Monday	Wednesday	
Week 1 Jan 19	Introduction To Philosophy of Science and Behavior	Introduction To Science and Behavior (example: monogamy)	
Week 2 Jan 26	Q1 Jan 30 Intro through Philosophy Integrative Study of Behavior Proximate and Ultimate Causes: Bird Song	Integrative Study of Behavior Proximate and Ultimate Causes: Bird Song	
Week 3 Feb 2	Genes and Environment I	Genes and Environment I	
Week 4 Feb 9	Q2 Feb 6 Bird Songs & Communication Genes and Environment II	Genes and Environment III: Bees and Humans Exam 1a,b,c: Philosophy of Science, Monogamy, Mating Systems, Bird Song, Sexual Selection	
Week 5 Feb 16	Q3 Feb 20 Bees & Psychopaths parts A & B Neural Basis of Behavior I (handout on brain regions)	Neural Basis of Behavior II	
Week 6 Feb 23	Q4 Feb 21 Bees and Psychopaths Parts C & D Neural Basis of Behavior	Physiological Basis for Behavior I Exam 1D, E, F Feb 23 Bee Behavior, Genetics, Epigenetics, Mammalian Behavior, Mixed Questions	
Week 7 Mar 2	Physiological Basis for Behavior I & II	Physiological Basis for Behavior II	
Week 8 Mar 9	Q5 & Q6 Mar 11 Mammalian Brain Avoiding Predators and Finding Food I	Avoiding Predators and Finding Food II	
March 16	Spring Break	Spring Break	
Week 9 Mar 23	Territory and Migration I Quiz 7, 8 Mar 25 Neural Mechanisms and Feeding	Territory and Migration II Exam 2 Parts A B: Mar 27 Beginning through Neural Mechanisms and Feeding	

Week 10 Mar 30	<i>No Quiz</i> Communication II	Communication III
Week 11 Apr 6	Presentations due on April 5	Exam 2 C Optimality, FAPS, through Senses
Week 12 Apr 13	Q 9 Apr 17 Habitat and Communication Reproductive Behavior I	Reproductive Behavior II Final Drafts of Book Reviews Due
Week 13 Apr 20	Parental Care I	Parental Care II; Principles of Sociobiology
Week 14 Apr 27	Q 10 Apr 29 Parental Care Principles of Social Biology (revisited)	Principles of Social Biology (revisited)
Week 15 May 4	Q 11 May 6 Sociobiology and Evolution of Social Systems Behavior and the Microbiome	Behavior and the Microbiome Exam 3 A, B of Cumulative Final: May 9 Focus on Feeding, Habitat, Territoriality, Communication, Sociality
Week 16 May 11	<u>Final Exam Week:</u> (I have split the third exam into four sections. To ease the burden during exam week, the first two parts were due last week.	Remainder of Final Exam 3 C, D 5 of Cumulative Final May 14: Part C: Focus on Brain Regions, Bird Songs, and Communication onward; Part D: Idea Synthesis and Student Presentations

COURSE POLICIES AND STATEMENTS

Attendance and Absence Policies:

■ ATTENDANCE: Per university policy, department instructors may reassign a student's seat in a class if the student does not attend the first class session and neglects to inform the instructor in advance of the intended absence. The student will be responsible for any financial consequence if the course is not dropped officially by the student before the appropriate refund deadline. Failure to formally withdraw from class will result in a grade of F." (Cited from the Schedule of classes, inside front cover: "POLICY ON FIRST CLASS SESSION") This also applies to online courses. If you know you are not going to be able to sign in during the first week or submit the first quiz on time, you must communicate that to keep your space in the class. Attendance (regular participation and work) will be considered in the final grade, especially in borderline cases. In addition to the quizzes, I will take a pop-attendance several times during the semester. If present, you will receive a few points. Attendance alone does not guarantee a passing grade.

Academic Integrity Policy:

By enrolling in this course, you are bound by the NEIU Student Code of Conduct: <u>http://www.neiu.edu/university-life/student-rights-and-responsibilities/student-code-conduct</u>. You will be informed by your instructor of any additional policy specific to your course regarding plagiarism, class disruptions, etc.

ADA Statement:

Northeastern Illinois University (NEIU) complies with the Americans with Disabilities Act (ADA) in making reasonable accommodations for qualified students with disabilities. To request accommodations, students with special needs should make arrangements with the Student Disability Services (SDS) office, located on the main campus in room D104. Contact SDS via (773) 442-4595 or http://www.neiu.edu/university-life/student-disability-services.

If you need special accommodations because of a disability, you must let me know and present HELPcentre documentation ASAP. In most cases, we can provide accommodations, but I need to know about them to arrange for the accommodation.

Campus Safety:

It is recognized that a safe university environment is a shared responsibility of faculty, staff, and students, all of whom are expected to familiarize themselves with and cooperate with emergency procedures. Web links to Campus Safety: Emergency

Web links to Campus Safety: Emergency Procedures and Safety Information can be found on NEIU*port* on the MyNEIU tab or as follows: <u>http://homepages.neiu.edu/~neiutemp/Emergency_Procedures/MainCampus/</u>.

ADDITIONAL COURSE INFORMATION

Missed Examinations: I allow everyone up to one late assignment or examination with no excuse necessary.

The 2-day Lock-Out Period: To discourage cramming, I will not answer any questions about examination material starting the day before an examination.

Course Communication

All pertinent electronic communications between the instructor and students are conducted *exclusively through NEIU e-mail and our D2L site*. It is the responsibility of students to check their NEIU e-mail account and the D2L site for all significant information, including updates on course materials. Communication between the instructor and students via personal e-mail accounts (e.g., @gmail.com or @yahoo.com) will not occur.

Assignment Submissions: All Assignments will be submitted through the Assignments page on D2L. *They will not be accepted through e-mail or on the discussion pages.*

Incompletes

An "I" (incomplete) may be given if a student is absent from the final examination or fails to complete a special research or individual study project <u>because of some unavoidable</u> <u>circumstance, such as illness. Not showing up for the exam without a verifiable and</u> <u>acceptable reason will result in a grade of zero, not an I.</u> Students will have one semester after the incomplete grade has been assigned to remove the incomplete. Incompletes that have not been finished by that time will be changed to an "F" grade.

Late assignments: Late work will receive a grade of zero unless there is a verifiable excuse. Turning in work late can impair your chances of success in the course. This late work policy applies to all graded assessments (including the final examination) in the course, with the exception of the discussion threads. Because class discussions require us all to participate during the week when they are active, no make-up or late credit will be allowed for discussion participation. I understand that unexpected things can come up, so the late-work policy for our course is outlined below.

Serious Emergencies: For serious emergencies, your instructor will decide whether your late work may be accepted for full or reduced credit. Serious emergencies include things like serious illness, accidents, natural disasters, and university server outages. E-mail your instructor the information about your emergency and request approval to make up the assignment, lab, quiz, or exam. If you receive approval, make up the work according to the plan you and your instructor set.

Submission of Materials: Written assignments will be submitted electronically to the proper file on D2L. Any student file submitted electronically that does not meet the requirements listed will not be graded. Please ensure that files are

- appropriately named (last names-document title-date). (Do not simply label your paper "Animal Behavior Paper." I may get up to 24 papers with that same title!)
- submitted in Microsoft Office format (e.g., .doc, .xls., .ppt),* and
- submitted to the corresponding Dropbox folder.
- For group papers, elect someone to submit the paper and have only one copy submitted per group! (I don't need to have five (hopefully) identical copies. It's frustrating and upsetting for me, and it makes extra work for you.)

While you are not required to use Microsoft Office products, please ensure your productivity applications are able to import/export into compatible file formats. (Google Docs is NOT compatible with D2L) Also, check the final draft of your paper to make sure that it is still in APA style before submitting it. Remember, if you've shared the document with me in advance, this should not be a problem.

Hours	Monday (online)	Tuesday	Wednesday (online)	Thursday
8				
9			Independent Study	
10		Office Hours BBH-352B	Office Hours	Office Hours BBH-352B
11		Office Hours BBH-352B	Office Hours	Office Hours BBH-352B
12	Office Hours	Parasitology (12:15)	Office Hours	Parasitology (12:15)
1	Office Hours	Parasitology	Office Hours	Parasitology
2	Office Hours	Parasitology (2:55)	Office Hours	Parasitology (2:55)
3	Office Hours		Office Hours	
4	Office Hours			
	irs by appointme cheduled office h	nt only. Nours during exan	nination week.	,

My Scheduled Hours Spring 2025



Spring 2025 - Final Exam Schedule

Examination Periods	Tuesday, May 13, 2025	Wednesday, May 14, 2025	Thursday, May 15, 2025
	Class Time During the Term	Class Time During the Term	Class Time During the Term
8:00-9:50 a.m.	9:25-10:40 a.m. TR	8:30-9:20 a.m. MWF 8:30-9:45 a.m. MW	8:00-9:15 a.m. TR
10:00-11:50 a.m.	12:15-1:30 p.m. TR	9:30-10:20 a.m. MWF	10:50-12:05 p.m. TR
12:00-1:50 p.m.	12:55-2:10 p.m. MW	10:30-11:20 a.m. MWF 10:00-11:15 a.m. MW	8:00-9:15 a.m. MW
2:00-3:50 p.m.	1:40-2:55 p.m. TR	11:30-12:20 a.m. MWF 11:30-12:45 p.m. MW	2:20-3:35 p.m. MW
4:00-5:50 p.m.	4:15-5:30 p.m. TR 4:15-6:55 p.m. T	4:15-5:30 p.m. MW 4:15-6:55 p.m. M	4:15-6:55 p.m. R
6:00-7:50 p.m.	5:40-6:55 p.m. TR	5:40-6:55 p.m. MW 4:15-6:55 p.m. W	7:05-8:20 p.m. MW 7:05-9:45 p.m. W
8:00-9:50 p.m.	7:05-9:45 p.m. T 8:30-9:45 p.m. TR	8:30-9:45 p.m. MW 7:05-9:45 p.m. M	7:05-8:20 p.m. TR 7:05-9:45 p.m. R

Final examinations for Saturday classes: Saturday, May 17, 2025 at the same time and place as class meetings during the term.

Final examinations for Friday only classes: Friday, May 16, 2025 at the same time and place as class meetings during the term.

If the University is officially closed or not conducting business during the scheduled examination period, examinations will be at the same time and in the same location as follows:

Original date	Adjusted date
Tuesday, May 13, 2025 Exams	Monday, May 19, 2025
Wednesday, May 14, 2025 Exams	Tuesday, May 20, 2025
Thursday, May 15, 2025 Exams	Wednesday, May 21, 2025

If a student identifies a schedule conflict affecting a formal examination, (s)he should contact the professor within two weeks of the beginning of class to make alternative arrangements for taking the examination. Reasonable accommodations will be made if: a) the conflict arises because of a religious belief, or b) the conflict is created by the examination pattern.

Note: Other campuses maintain different final examination schedules. Please contact each campus' administrative office to determine when a final examination will be given.

Please note: The university does use these alternative dates. I can remember one time in the past 10 years or so when we had terrible weather during the semester, and NEIU had to use the alternative exam times to make up the lost days. However, since then, we have instituted Zoom classes, and we will meet online as a class should we need to miss a day due to weather.