

# ANIMAL BEHAVIOR (BI335)

Fall 2018

Dr. Lori LaPlante

## Course Description & Objectives

This course is an introduction to the basic principles underlying the behavior of animals. In this course you will gain an understanding of the mechanisms and evolutionary causes that drive behaviors observed in all types of animals (insects, fish, birds, and mammals). Upon completing this course, you will have acquired experiences in observing and recording animal behaviors through laboratory- and field-based studies.

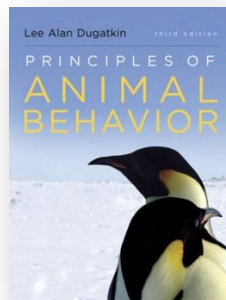
## Office Hours:

Office hours: Mondays 1:00 – 4:00 or by appointment

## Course Meeting Times And Locations:

Lecture (Goulet 3103): T/TH 8:30 – 9:45 AM

Lab (Goulet 1328 / Stone Zoo, MA): T 1:30 – 4:20 PM



## Required Texts & Supplies:

- 1) *Principles of Animal Behavior*. Lee A. Dugatkin. 3<sup>rd</sup> Edition. W.W. Norton and Company, Inc.  
Textbook website: <http://www.norton.com/college/biology/animalbehavior/welcome.aspx>
- 2) Bound field notebook – a waterproof one is recommended (e.g. composition or Rite in the Rain notebook)
- 3) *Writing in the Biological Sciences*. Angelika Hofmann. 2<sup>nd</sup> Edition. Oxford University Press.

**Evaluation:** Your final grade in BI335 will be based on a total of 500 points (see explanations of each category below):

2 Lecture Exams <sup>a</sup>	200
Writing Exercises <sup>b</sup>	30
Draft(s) for Methods/Results <sup>c</sup>	10
Draft(s) for Introduction/Discussion <sup>c</sup>	15
Final Paper <sup>d</sup>	45
Oral Presentation <sup>e</sup>	30
Participation <sup>f</sup>	20
Final Exam	150

Grade	%	Grade	%
A	>93	C	74-76
A-	90-93	C-	70-73
B+	87-89	D+	67-69
B	84-86	D	64-66
B-	80-83	D-	60-63
C+	77-79	F	<60

<sup>a</sup>**Lecture exams (2 x 100 pts each = 200)** cover material presented in lecture, discussions, and lab. The format of the exams may include any of the following: multiple choice, matching, true/false, fill-in-the-blank, short answer and/or short essay questions. **A make-up exam will only be scheduled if you provide a note from the Dean.**

<sup>b</sup>**Writing Exercises (30 pts):** There will be several required readings and exercise sets covering organization strategies for each section of a scientific paper (Literature cited, Introduction, Methods, Results, Discussion). All assignments are due at the beginning of the period on the scheduled due date. There will be a one-point deduction on assignments turned in late on the due date, and an additional point will be deducted for every day following.

**Research Project:** You will complete an independent research project focusing on the behavior of an animal (or group of animals) at the [Stone Zoo](#) in Stoneham, MA. You will develop a research question, design a research methodology, collect and analyze data, interpret and write up your results, and present your study to your peers.

- **Written Drafts (25 pts):** Using guidelines and strategies presented in the reading and writing exercises, you will compose a draft for each section of your own research paper. You are required to submit at least two drafts, one

for an *informative* section of your paper (Methods, Results) and one for a *persuasive* section of your paper (Introduction, Discussion). Although only two drafts are required, it is highly recommended you submit drafts for each section according to the due dates outlined in the Schedule (**Note: you cannot receive full “Participation” points if all drafts are not submitted, see below**). Several lab sessions are devoted to improving writing skills. Student-instructor conferences during the period, provide an opportunity for you to engage in a dialog to help improve writing skills. Without a draft to discuss, your participation in this dialog becomes very limited. Due to the amount of time required in providing editing comments on drafts, **late submissions will not be accepted**.

- **<sup>d</sup>Final Research Paper (45 pts):** You will be working on your research paper throughout the semester (see Lab Schedule for due dates of particular sections). Papers submitted after class on the due date will receive a 5% deduction and then an additional 5% will be deducted for each day following.
- **<sup>e</sup>Oral Presentation (30 pts):** You will give a 10-minute presentation (+ 2 min for questions and answers) of your research project. A rubric will be provided in advance listing areas for which you will be evaluated. Presentations are held in front of an audience, therefore there is no option to make-up the assignment.

**<sup>f</sup>Participation (20 pts)** is earned by your efforts and attitude during lecture and lab. Below are criteria for participation grades. You may ask me at any time for your current participation grade.

<b>Participation Grade →</b>	<b>A</b>	<b>B</b>	<b>C</b>
<b>Attendance</b>	Misses no lectures or labs	Misses no more than 1 lecture	Misses no more than 2 lectures or 1 lab
<b>Assignments</b>	Same as “B” criteria + submits all optional assignments by due date/time	Submits all required assignments by the due date/time	Submits most or all required assignments, generally by the due date
<b>Class Preparation</b>	Same as “B” criteria + and is familiar with assigned reading material.	Same as “C” criteria + knows definitions for vocab terms.	Comes prepared with notes.
<b>Involvement in Class Discussions</b>	Consistent and very actively involved	Sporadic	Infrequent
<b>Contribution to Class Discussions</b>	Contributes in a very significant way to ongoing discussion: keeps analysis focused, responds very thoughtfully to other students’ comments, contributes to the cooperative argument-building, suggests alternative ways of approaching material and helps class analyze which approaches are appropriate, etc.	Contributes well to discussion in an ongoing way: responds to other students’ points, thinks through own points, questions others in a constructive way, offers and supports suggestions that may be counter to the majority opinion.	Doesn’t offer to contribute, but contributes to a moderate degree when called on
<b>Attitude</b>	Enthusiastic and supportive of others	Consistently positive	Makes no negative comments

**Final Exam (150 pts):** The final exam is cumulative and will include material presented in all lectures and student research presentations. The format may include any of the following: multiple choice, matching, true/false, fill-in-the-blank, short answer and/or short essay questions. See schedule below for date and time of final exam. *A make-up exam will only be administered if you provide a note from the Dean.*

### Attendance:

You are expected to attend every class meeting and laboratory session in which you are enrolled. You may accumulate class absences amounting to the number of class meetings per week, which for this course is **3** lecture absences and **1** lab absence. These “allowed absences” should be used for reasons necessitated by circumstances such as a brief illness, a personal obligation that conflicts with a class, or participation in College-sponsored events. Absences beyond these

“allowed absences” will have a negative impact on your grade. If you exceed this number, then your final course grade will be reduced by 5% for each additional absence beyond the allowed outlined above. For example, if you have an 84%, or ‘B’, at the end of the course but have 4 lecture absences, then your final course grade will be adjusted down to 79%, a ‘C+’. Keep in mind that **work missed resulting from any unexcused absence may not be made up!**

- Make-up quizzes and exams in lecture and lab will be permitted only with an “excused” absence.
- Please refer to the Student Handbook for additional policies regarding attendance.
- **Student athletes** will occasionally have conflicts between games and lectures in this course. It is your responsibility to meet with Dr. LaPlante **before** the scheduling conflict so that appropriate arrangements can be made.

### Credit Hours – Workload Expectation

According to the College Catalogue, the expectations for this 4-credit lecture/laboratory course is **3 hours in class, 3 hours in the laboratory and approximately 5 hours of out of class work per week**. The “out-of-class” work includes reading, writing, reviewing, research, and any group work assigned for this course. Reading and writing assignments are given with this expectation in mind. Furthermore, when grading assignments, exams and quizzes I will be assuming you have invested the required time for this course.

### Academic Honesty:

It is imperative that you review the section on Academic Honesty in your Student Handbook, and review your copy of *Doing Honest Work in College* (from Freshman year), where there are clear explanations of what is considered cheating and plagiarism. Remember, it is **your responsibility** to understand these policies. Incidents of cheating or plagiarism will be handled according to the Procedures outlined in your Student Handbook. Cases of cheating or plagiarism may result in a failing grade for the assignment or exam in question, a failing grade in the course, or expulsion.

Your work should originate from your own ideas. Plagiarism includes “wholly or partially copying, translating, or paraphrasing without acknowledgement of the source.” It is in your best interest to read the section on Plagiarism in your Student Handbook, especially since you will be using source material for your research paper.

### Electronic Devices:

In order to avoid disruption to the class, the use of cell phones, pagers, PDAs, or similar communication devices are prohibited during scheduled classes (including laboratory sessions). Text messaging or accessing information on these devices is likewise forbidden. All such devices must be put in a silent (vibrate) mode and ordinarily should not be taken out during class. Given the fact that these same communication devices are an integral part of the College’s emergency notification system, an exception to this policy would occur when numerous devices activate simultaneously. When this occurs, students may consult their devices to determine if a college emergency exists. If that is not the case, the devices should be immediately put away.

### ADA/504 Compliance statement

Saint Anselm College is committed to meeting the needs of students with documented physical, sensory, psychiatric, and learning disabilities. To disclose a disability and request accommodations, please see **Kenneth Walker in the Academic Resource Center (ARC)**, who will assist you in making contact with faculty members and arranging support services and accommodations available within the ARC and elsewhere. To ensure that accommodations are arranged in a timely manner, you are encouraged to make your request at the beginning of each semester. For questions concerning support services, documentation guidelines, or disability email [KWalker@anselm.edu](mailto:KWalker@anselm.edu), or go to: <http://www.anselm.edu/Current-Students/Academic-Resources/Disability-Services.htm>

### Writing Intensive Learning Outcome

Mastering scientific writing is crucial to promoting one’s research and career. Throughout the semester you will learn writing mechanics and composition specific to the scientific writing style. There will be several required readings and exercises that will help you learn organization strategies for each section of a scientific paper (Introduction, Methods, Results, Discussion, Literature cited). The written assignments are designed to meet the college’s student learning outcomes: i) Demonstrate a command of standard grammar, spelling, and punctuation; develop an effective writing process of planning, writing, reflecting, and revising; write well-organized papers that make effective and discipline-specific use of credible evidence in support of clear [hypotheses] that acknowledge complexity and alternative views; cite document sources effectively and meet readers’ expectations.

## LECTURE &amp; DISCUSSION SCHEDULES (subject to change)

Week	Date	Lecture Topic / Assignment	Ch	Laboratory Topic/Assignment
1	T Aug 28	Course Introduction Lecture: Principles of Behavior	1	Zoo Field Trip: Intro to Research Animals
	Th Aug 30	Lecture: Evolution of Behavior Assigned: Composition/Style homework (Hofman)	2	
2	T Sep 4	Lecture: Evolution of Behavior (cont.)	2	1) Observing /Collecting Behavior data 2) <b>Due: Exercise 1 from "Behavior" Lab</b>
	Th Sep 6	Lecture: Evolution of Behavior (cont.) Project Conferences: Zoo data protocols	2	
3	T Sep 11	<b>Due+Discussion: Composition and Style (Hofmann)</b> Project Conferences: Zoo data protocols Assigned: Literature Sources reading (Hofmann) Computer Exercise: Annotated Bibliographies		Zoo: Ethogram data collection
	Th Sep 13	<b>Location: Library, room 204</b>		
4	T Sep 18	Project Conferences (Fri 9/13 & Tue 9/19)		1) Zoo: Data collection 2) <b>Due: Ethogram Lab</b>
	Th Sep 20	Lecture: Hormones and Neurobiology Assigned: Introduction exercise (Hofmann)	3	
5	T Sep 25	Lecture: Hormones and Neurobiology/Molecular Genetics and Development <b>Due: Hypothesis; Annotated Bibliography</b>	3,4	Zoo: Data collection
	Th Sep 27	Lecture: Molecular Genetics and Development <b>Due: Introduction homework (Hofmann)</b>	4	
6	T Oct 2	Lecture: Learning <b>Exam #1</b>	5	Zoo: Data collection
	Th Oct 4	<b>Due by midnight: Academic Integrity Quiz</b>		
7	T Oct 9	<i>No Classes – Fall Break</i>		
	Th Oct 11	Lecture: Learning <b>Due: Zoo Introduction drafts</b>	5	
8	T Oct 16	Lecture: Sexual Selection Assigned: Methods homework (Hofmann)	7	Zoo: Data collection
	Th Oct 18	Lecture: Sexual Selection Project Conferences (?): Zoo Introduction Review <b>Due: Methods homework (Hofmann)</b>	7	
9	T Oct 23	Lecture: Sexual Selection <b>Due: Zoo Methods Draft</b> Assigned: Results; Figures/Tables homework (Hofmann)	7	Zoo: Data collection
	Th Oct 25	Lecture: Sexual Selection <b>Due: Results; Figures/Tables homework</b>	7	
10	T Oct 30	Lecture: Mating Systems <b>Modified Schedule</b>	8	Zoo: Data collection
	Th Nov 1	Lecture: Mating Systems <b>Due: Zoo Results drafts</b> Assigned: Discussion homework (Hofmann)	8	

(continued)

Week	Date	Lecture Topic / Assignment	Ch	Laboratory Topic/Assignment
11	T Nov 6	Lecture: Foraging <b>Due: Quiz on writing a Discussion (Sakai)</b>	11	Zoo: Data collection (if needed) / or Optional Project Conferences
	Th Nov 8	Lecture: Foraging	11	
12	T Nov 13	Lecture: Foraging	11	Optional Project Conferences / Work on Discussion Drafts
		Lecture: Antipredator Behavior <b>Due: Zoo Discussion Draft</b>		
	Th Nov 15	Distribute Homework: <i>How to Give a Talk</i>	12	
13	T Nov 20	<b>Exam #2</b>		Optional Project Conferences (Review Discussion drafts)
	Th Nov 22	<i>No Class – Happy Turkey Day!</i>		
14	T Nov 27	Lecture: Antipredator Behavior	12	Due: How to Give a Talk Assignment
		Lecture: Antipredator Behavior		
	Th Nov 29	<b>Due: Final Research Papers</b>	12	
15	T Dec 4	TBD	16	<b>Due: Oral Presentation of Zoo Study</b>
	Th Dec 6	TBD		

**\*\*Final Exam: Friday, December 14<sup>th</sup> at 9:00 AM \*\***