

# Animal Behavior

Spring 2018

TR 9:30-10:20 in  
R 10:30-12:20

ANSC 303

3 credits



Instructor:  
Dr. Gaskill  
[bgaskill@purdue.edu](mailto:bgaskill@purdue.edu)  
CRTN

Lab TA:  
Megan LaFollette  
[lafollet@purdue.edu](mailto:lafollet@purdue.edu)  
CRTN 3108

Lecture TA:  
Lindsey Robbins  
[lrobbin@purdue.edu](mailto:lrobbin@purdue.edu)  
CRTN 3108

Office hours by appointment Monday thru Friday 8am-5pm

**In this course, we will provide a broad overview of animal behavior.**

The educational objectives of the course are to instill excitement in the subject, and to equip students with the conceptual foundation and intellectual tools to think creatively and critically about animal behavior and science in general, and to apply these skills to future challenges. The design of the course, including the nature in which material is presented, the course assignments, and the nature of testing and grading, reflects these educational objectives. ***As a result, it is critical for students to appreciate that this is a conceptual, not merely factual course.***

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## COURSE DESCRIPTION

### LEARNING OUTCOMES

By the end of the course, students should be able to:

1. **Distinguish** between the four types of questions that may be asked about animal behavior, **formulate** hypotheses of each type, and **answer** these questions.
2. **Identify and understand** primary literature pertinent to topics in animal behavior, **examine and interpret** data presented in figures and tables, and **evaluate conclusions** based on the data presented.
3. **Pursue scientific inquiry** into animal behavior through formulating hypotheses, designing controlled experiments or studies, gathering or generating data, analyzing and evaluating results, and presenting these results in a report and presentation.
4. **Distinguish** between the processes through which the evolution of behavior occurs, **understand** that selection acts on multiple stages in the life cycle, and understand how domestication is related to evolution.
5. **Understand** the dynamic nature of animal behavioral development from inception through growth and differentiation, aging and death.
6. **Understand** the major concepts and theories in animal behavior, including evolution, learning, causation, signals, and social behavior.
7. **Apply** the knowledge of animal behavior to everyday problems.

### HOW TO SUCCEED IN THIS COURSE

The best way to succeed in this course is by **attending every class, paying attention to rubrics, and actively participating** by taking notes, asking questions, and joining group activities. This will ensure that you:

- a) Acquire, review, and clarify new knowledge through in-class participation & assignments
- b) Become familiar with questions and format used for mid-term and assignments
- c) Stay up-to-date with course changes and assignment requirements
- d) Get to know Dr. Gaskill, Megan LaFollette, Lindsey Robbins, and your peers

In addition to class participation, to succeed in this course you can:

- a) Read and follow the syllabus assignment instructions, examples, and rubrics carefully
- b) Start the group research project early & get feedback frequently
- c) Work closely with your group throughout the semester & be a good team member
- d) Take responsibility for your course experience. If you do poorly on a test or assignment, come see us to figure out what you could have done better. If your team is having difficulties, come see us as soon as possible.
- e) Plan your time wisely, study and work on assignments steadily rather than cramming.
- f) Ask Dr. Gaskill or Megan LaFollette any questions as soon as you have them.
- g) Be respectful – be respectful in class, both of your fellow students and the instructor and TA. Be respectful of your team members. Be respectful of the instructor and TA's time

## LECTURE SCHEDULE

This is a tentative schedule subject to change at the instructor's discretion and/or with student input.

Week	Date	Lecture Topics
<b>BACKGROUND</b>		
1	9-Jan	Introduction: Overview, Goals, History
1	11-Jan	Background: Tinbergen's 4 questions
2	16-Jan	Background: The Scientific Method and Defining What is True
<b>DEVELOPMENT</b>		
2	18-Jan	Development
3	23-Jan	Behavioral Genetics
3	25-Jan	Learning 1 – General Concepts
4	30-Jan	Learning 2 – Associative Learning
4	1-Feb	Learning 3 – Instrumental Learning
<b>PHYLOGENY</b>		
5	6-Feb	Introduction to Evolution & Behavioral Evolution
5	8-Feb	Exam prep
6	13-Feb	<b>Exam 1</b>
6	15-Feb	Domestication: Dog Evolution
7	20-Feb	Belyaev's Foxes
7	22-Feb	Leave Early for Zoo
<b>CAUSATION</b>		
8	27-Feb	Causation 1 – Neuronal Diversity
8	1-Mar	Causation 2 – Systems & Motivations
<b>FUNCTION</b>		
9	6-Mar	Animal Emotions
9	8-Mar	Signals 1
10	13-Mar	<b>SPRING BREAK</b>
11	20-Mar	Signals 2
11	22-Mar	Animal Play
12	27-Mar	<b>Exam 2</b>
12	29-Mar	Social behavior - advantages
13	3-Apr	Social behavior- disadvantages
<b>APPLIED</b>		
13	5-Apr	Environmental Enrichment
14	10-Apr	Abnormal Behavior
14	12-Apr	Behavior and Conservation - Thogerson
15	17-Apr	Laboratory Animal Behavior - Carol & Rat Tickling
15	19-Apr	Companion Animal Behavior - Ogata
16	24-Apr	Livestock Management & Behavior
16	26-Apr	<i>Overrun &amp; Final Review &amp; Presentations</i>
17	30-Apr	<b>FINAL</b>

## LAB SCHEDULE

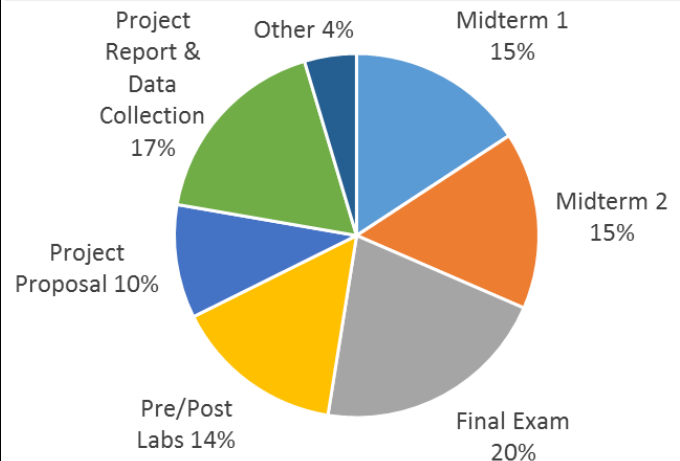
This is a tentative schedule subject to change at the instructor's discretion and/or with student input.

Week	Date	Topic	What's Due	Prelab?
<b>Part One: Introduction to Animal Behavior Methods</b>				
1	11-Jan	Methods 1		Yes
2	18-Jan	Methods 2		Yes
3	25-Jan	Poultry Field Trip	Lab Report 1	Yes
4	1-Feb	Team Project Discussion	Poultry Report	Yes
5	8-Feb	Learning Lab & Peer Review	Team Rough Draft of Proposal	Yes
6	15-Feb	Zoo Field Trip	Team Final Draft of Proposal	Yes
7	22-Feb	Shelter Field Trip	Zoo Lab	Yes
<b>Part Two: Team Projects</b>				
8	1-Mar	Data Collection 1	Shelter Lab	
9	8-Mar	Data Collection 2		
10	15-Mar	<i>Spring Break</i>		
11	22-Mar	Data Collection 3	Intro of Final Report (Rough Draft)	
12	29-Mar	Data Collection 4	Methods of Final Report (Rough Draft)	
13	5-Apr	Data Analysis & Interpretation Meetings with Each Team		
14	12-Apr	Presenting & Discussing Data Peer Review	Rough Draft of Final Report	
15	19-Apr	Service Dog Behavior	Final Lab Report	
16	26-Apr	Presentations	Group Presentation	

## GRADING & ASSESSMENT

### COURSE GRADE COMPONENTS

Component	Times	Points per Time	Total Points
Pre-Lab	6	8	48
Post-Lab	4	24	96
Peer Review	2	12	24
Project Proposal	1	96	96
Project Report & Data Collection	1	168	168
Presentation	1	48	48
Midterm	2	150	300
Final Exam	1	200	200
Class Evaluation	2	10	20



Total possible points = 1000

### LATE ASSIGNMENTS OR EXAMS

Students missing an exam must have previous permission or a documented medical emergency. Only under extenuating circumstances will students be permitted to make-up an exam. Students failing to hand in assignments on time without previous permission or a documented medical emergency will not be allowed to make up, and will score a zero.

### GRADING SYSTEM

Grade	Percentages
A+	96.00-100+
A	90.00-96.99
B+	86.00-89.99
B	80.00-86.99
C+	76.00-79.99
C	70.00-76.99
D+	66.00-69.99
D	60.00-66.99
F	Less than 60

Grading scale based on 910 possible points. I do not like +/- therefore only whole grades and + grades will be given. For example 90-95% will be an A and 96-100 will receive an A+. Final course grades will be rounded up only if students have very good attendance, good participation & behavior in class (no distracting technology use), and good homework grades. For example, if you earn a final grade of 89.98%, but were in class every day, had good participation & behavior, and good homework grades, then you will receive an A-. However this is at the Instructor's discretion.

## EXAMS

Exams will consist of four different kinds of questions: Definitions, Compare and Contrast, Multiple Choice, and Short Answers. Only the Definitions questions can be answered factually; the other questions are designed to test conceptual understanding. In the Compare and Contrast and Short Answer sections students will have a choice of which questions they answer. Examples of questions, and answers in italics, from previous exams include:

**A. Give a definition with an example (perhaps an experiment, behavior, or person) for each of the following terms.**

1. Habituation.

*The waning of a response as a stimulus is repeated even though the full response could still be made. For example, Aplysia's gill withdrawal reflex gets weaker with repeated stimulation.*

**B. Compare (say what is similar) and contrast (say what is different), using examples when appropriate. For full credit make sure that you list at least five points for each answer including at least one point of similarity and at least one point of contrast. Underline each point, or provide a bullet list, or a table.**

5. Compare and contrast Classical and Instrumental conditioning.

*Both are forms of ASSOCIATIVE learning. Classical conditioning involves the pairing of two stimuli so that a new stimulus elicits an existing response. In contrast, instrumental conditioning involves pairing a stimulus, a response and a reinforcer so that an entirely new response is elicited by the stimulus. For example dogs learning to salivate when they hear a bell is an example of classical conditioning; dogs learning to sit on command is an example of instrumental conditioning.*

**C. Multiple Choice. Select the best answer.**

1. Which of these is NOT a TYPE of play

- a) Social play
- b) Exercise
- c) Pleasure
- d) Exploration
- e) None of the above

*c – pleasure is an EXPLANATION*

**D. Short answer.**

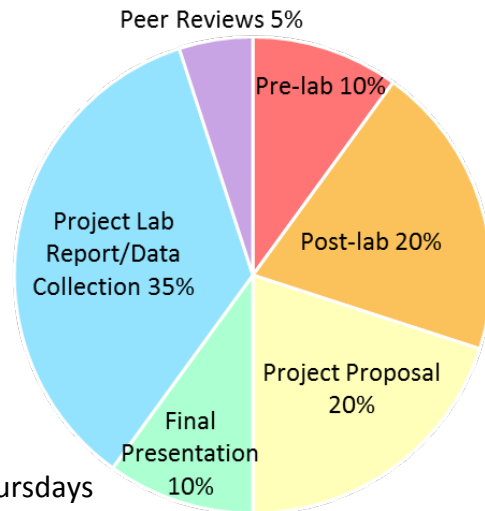
1. What are Tinbergen's 4 questions about animal behavior? Explain each one with an example.

Students will be allowed to "correct" questions from one of the two midterm exams for partial credit. One third of the missed points can be made up by 1) explaining WHY the answer originally given was not correct and 2) What the correct answer is and WHY. For example, if a question was worth 9 points, 3 points will be received if corrected explanation is satisfactory. It is expected that a student will answer these 2 questions sufficiently and points awarded back to the student is at the teacher's discretion. This must be turned in 1 week after tests are returned.

## LAB GRADES

### LAB GRADE COMPONENTS

Component	Times	Points per Time	Total Points
Pre-lab	6*	8	48
Post-lab	4	24	96
Project Proposal	1	96	96
Final Presentation	1	48	48
Project Lab Report & Data Collection	1	168	168
Peer Reviews	2	12	24



There will be 7 pre-lab quizzes offered.

Pre-lab quizzes & post-labs are due before 9:30am on Thursdays

## GROUP PROJECT

The main project during the laboratory will be for you to answer a question about animal behavior using scientific inquiry. During this project you will be assigned to a team based on your answers to your initial course survey. Your group project will be divided into 3 major components: project proposal, data collection and final report, and a final presentation. During this project, you will need to think critically and communicate effectively in both the written and oral forms.

You will have an opportunity to evaluate yourself and your team members after each component. Your team evaluations will be worth 15% of each grade. Team evaluations grades will be made comparing self and team evaluations, individual vs team work, and comments.

You will also have the opportunity to peer review the writing of other groups and individuals in the class. These two peer review writing opportunities will be worth 12 points each.

Project Proposal	Points
Rough draft	10
Final Proposal	72
Group Member Review	14
<b>TOTAL</b>	<b>96</b>

Data Collection & Project Lab Report	Points
Rough Draft Intro	17
Rough Draft Methods	17
Final Report	109
Group Member Review	25
<b>Total</b>	<b>168</b>

Final Presentation	Points
Final Presentation	41
Group Member Review	7
<b>Total</b>	<b>48</b>

\*Failure to return any borrowed equipment will earn the team an incomplete in the course.



## COURSE POLICIES

### GENERAL POLICIES

#### ATTENDANCE

**In order to succeed, students are expected to be present for every meeting of the class. For unanticipated or emergency absences when advanced notification to an instructor is not possible, the student should contact the instructor immediately.** Only the instructor can excuse a student from a course requirement or responsibility. When conflicts or absences can be anticipated, such as for many University sponsored activities and religious observations, the student should inform the instructor of the situation as far in advance as possible. For unanticipated or emergency absences when advance notification to an instructor is not possible, the student should contact the instructor as soon as possible by email. When the student is unable to make direct contact with the instructor and is unable to leave word with the instructor's department because of circumstances beyond the student's control, and in cases of bereavement, the student or the student's representative should contact the Office of the Dean of Students.

#### COMMUNICATION WITH THE INSTRUCTORS AND TA

**In-person communication during class and email are the preferred forms of communication.** If you do talk to us before/during/after class asking us to do a task, please send a follow-up in email. We will respond to emails as soon as possible. Please allow at least one business day for a response from the TA and up to two business days for the instructor to reply. If you have questions about the course material or assignments then please try to ask during class so that other students may benefit from our response. Do not expect a response by email after normal business hours under any circumstances.

#### ARRIVING LATE/LEAVING EARLY

**To succeed in this class, as well as respect the time and effort of your instructors and guest lecturers, arrive to class early/on time** and do not leave early unless you have a pre-approved reason.

#### USE OF CELL PHONES & COMPUTERS DURING CLASS

Although cell phones and computers are allowed in class to facilitate note-taking, you will be asked to put them away if they become a distraction to other students, the instructor, or the TA. In general, we ask for cell phones to remain out of sight during class to prevent distraction. Please consider putting your cell phone in a separate bag during class and using an application to prevent web browsing during class.

#### CLASS PARTICIPATION AND PREPAREDNESS:

I expect you to care about being here and participate in classroom activities and discussion. Participation will help you succeed in this class.



## COURSE EVALUATIONS

During the last three weeks of the semester, you will be provided an opportunity to evaluate this course and your instructor(s). On Monday of the fifteenth week of classes, you will receive an official email from campus evaluation administrators with a link to the online evaluation site. You will have three weeks to complete this evaluation (the last two weeks of classes and finals week). **Your participation in this evaluation is an integral part of this course and your feedback will be used to improve education in ANSC. I strongly urge you to participate in the evaluation process.**

## NONDISCRIMINATION & DIVERSITY

**In this course, each voice in the classroom has something of value to contribute. Please take care to respect the different experiences, beliefs and values expressed by students, staff, and guest lecturers involved in this course.** We, along with Purdue University, are committed to maintaining a community which recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding, and mutual respect among its members; and encourages each individual to strive to reach his or her own potential. In pursuit of its goal of academic excellence, the University seeks to develop and nurture diversity. The University believes that diversity among its many members strengthens the institution, stimulates creativity, promotes the exchange of ideas, and enriches campus life.

Purdue University prohibits discrimination against any member of the University community on the basis of race, religion, color, sex, age, national origin or ancestry, genetic information, marital status, parental status, sexual orientation, gender identity and expression, disability, or status as a veteran. Purdue University promulgates policies and programs to ensure that all persons have equal access to its employment opportunities and educational programs, services and activities. The principal objective of this policy is to provide fair and consistent treatment for all students and employees of the University. The University will conduct its programs, services and activities consistent with applicable federal, state and local laws, regulations and orders and in conformance with the procedures and limitations as set forth in Executive Memorandum No. D-1, which provides specific contractual rights and remedies. Any student who believes they have been discriminated against may visit [www.purdue.edu/report-hate](http://www.purdue.edu/report-hate) to submit a complaint to the Office of Institutional Equity. Information may be reported anonymously.

## STUDENTS WITH DISABILITIES

Purdue University is committed to maintaining an inclusive community that recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding and mutual respect among its members; and encourages each individual to strive to reach his or her own potential. In pursuit of its goal of academic excellence, Purdue University seeks to develop and nurture its diversity. The University believes that diversity among its many members strengthens the institution, stimulates creativity, promotes the exchange of ideas and enriches campus life. Purdue University views, evaluates and treats all persons in any university-related activity or circumstance in which they may be involved solely as individuals on the basis of their own personal abilities, qualifications and other relevant characteristics.

*If you have a disability that requires special academic accommodation, please make an appointment with Dr. Gaskill within the first three (3) weeks of the semester in order to discuss any adjustments. It is important that you talk about this at the beginning of the semester.*

**Students with disabilities must be registered with Disability Resource Center in the Office of the Dean of Students before classroom accommodations can be provided.** If you are eligible for academic accommodations because you have a documented disability that will impact your work in this class, please schedule an appointment with me as soon as possible to discuss your needs. The Disability Resource Center (DRC) is a resource for students and instructors. Students may present a "Letter of Accommodation" to us at any point in the semester. Should you have questions about accommodations, please contact the DRC at: 494-1247. You may also visit the DRC at [drc@purdue.edu](mailto:drc@purdue.edu).

## ACADEMIC INTEGRITY & DISHONESTY

**Purdue Honor Pledge, "As a boilermaker pursuing academic excellence, I pledge to be honest and true in all that I do. Accountable together - we are Purdue."**

Incidents of academic misconduct in this course will be addressed by the course instructor and referred to the Office of Student Rights and Responsibilities (OSRR) for review at the university level. Any violation of course policies as it relates to academic integrity will result minimally in a failing or zero grade for that particular assignment, and at the instructor's discretion may result in a failing grade for the course. In addition, all incidents of academic misconduct will be forwarded to OSRR, where university penalties, including removal from the university, may be considered.

Academic integrity is one of the highest values that Purdue University holds. Individuals are encouraged to alert college officials, such as Dr. Salisbury ([salisbus@purdue.edu](mailto:salisbus@purdue.edu)), to potential breaches of this value. While information may be submitted anonymously, the more information that is submitted provides the greatest opportunity for officials to investigate the concern.

Purdue prohibits "dishonesty in connection with any University activity. Cheating, plagiarism, or knowingly furnishing false information to the University are examples of dishonesty." [Part 5, Section III-B-2-a, Student Regulations] Furthermore, the University Senate has stipulated that "the commitment of acts of cheating, lying, and deceit in any of their diverse forms (such as the use of substitutes for taking examinations, the use of illegal cribs, plagiarism, and copying during examinations) is dishonest and must not be tolerated. Moreover, knowingly to aid and abet, directly or indirectly, other parties in committing dishonest acts is in itself dishonest." [University Senate Document 72-18, December 15, 1972]

## USE OF COPYRIGHTED MATERIALS

**Students should not make course notes or materials available for others to purchase via commercial note taking service.**

Among the materials that may be protected by copyright law are the lectures, notes, and other material presented in class or as part of the course. Students enrolled in, and authorized visitors to, Purdue University courses are permitted to take notes, which they may use for individual/ group study or for other non-commercial purposes reasonably arising from enrollment in the course or the University generally.

Notes taken in class are, however, generally considered to be “derivative works” of the instructor’s presentations and materials, and they are thus subject to the instructor’s copyright in such presentations and materials. No individual is permitted to sell or otherwise barter notes, either to other students or to any commercial concern, for a course without the express written permission of the course instructor. To obtain permission to sell or barter notes, the individual wishing to sell or barter the notes must be registered in the course or must be an approved visitor to the class. Course instructors may choose to grant or not grant such permission at their own discretion, and may require a review of the notes prior to their being sold or bartered. If they do grant such permission, they may revoke it at any time, if they so choose.

## STUDENT MENTAL HEALTH & WELL-BEING

### **COUNSELING AND PSYCHOLOGICAL SERVICES (CAPS) INFORMATION**

Purdue University is committed to advancing the mental health and well-being of its students. **If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available.** For help, such individuals should contact Counseling and Psychological Services (CAPS) at (765) 494-6995 and [Link to Counseling and Psychological Services Website](#) during and after hours, on weekends and holidays, or through its counselors physically located in the Purdue University Student Health Center (PUSH) during business hours.

### **GRIEF ABSENCE POLICY FOR STUDENTS**

Purdue University recognizes that a time of bereavement is very difficult for a student. The University therefore provides the following rights to students facing the loss of a family member through the Grief Absence Policy for Students (GAPS). GAPS Policy: Students will be excused for funeral leave and given the opportunity to earn equivalent credit and to demonstrate evidence of meeting the learning outcomes for missed assignments or assessments in the event of the death of a member of the student’s family.

See the University’s website for additional information:

[http://www.purdue.edu/studentregulations/regulations\\_procedures/classes.html](http://www.purdue.edu/studentregulations/regulations_procedures/classes.html)

## VIOLENT BEHAVIOR POLICY

Purdue University is committed to providing a safe and secure campus environment for members of the university community. Purdue strives to create an educational environment for students and a work

environment for employees that promote educational and career goals. Violent behavior impedes such goals. Therefore, Violent Behavior is prohibited in or on any University Facility or while participating in any university activity.

See the University's website for additional information:

<http://www.purdue.edu/policies/facilities-safety/iva3.html>

## EMERGENCIES

In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor's control. Relevant changes to this course will be posted onto the course website or can be obtained by contacting the instructor or TAs via email. You are expected to read your @purdue.edu email on a frequent basis.

"Shots Fired on Campus: When Lightning Strikes," is a 20-minute active shooter awareness video that illustrates what to look for and how to prepare and react to this type of incident.

See: [Link to Video Website](#) (Link is also located on the EP website). See the University's website for additional information: [https://www.purdue.edu/epps/emergency\\_preparedness/](https://www.purdue.edu/epps/emergency_preparedness/)

## DISCLAIMER

This syllabus is subject to change.

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