

## Evolution of Animal Behavior 11:216:269 (3 credits)

### Instructors:

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### Description:

This course broadly exposes students to evolutionary theory and natural selection using examples from animal behavior to illustrate basic concepts. This course is not meant to be comprehensive in either evolutionary theory or in animal behavior. Our guiding objective is to engender understanding of the principles of evolution, and animal behavior provides some of the most charismatic examples.

### Course Learning Goals:

- 1) To understand the basic concepts of natural selection and evolutionary mechanisms.
- 2) To recognize and understand basic terms and concepts in animal behavior.
- 3) To understand the evolutionary and ecological processes that shape animal behavior.
- 4) Be able to think critically, interpret graphical data and solve problems based on evidence-based reasoning.

### Instructors:

The 1st half of the course will be given by Dr. Suzanne Sukhdeo and the 2nd half of the course will be given by Dr. Michael Sukhdeo.

### Optional Textbook:

A textbook is **NOT** a requirement for this course. All tests will be based on lecture material only. However, for those students interested in animal behavior:

### Grading Scheme:

Pop quiz (4)	40*
Midterm 1	150
Midterm 2	150
Final (not cumulative)	150
Total	490**

\* The total value of the quizzes is up to the discretion of the instructors!!

\*\* There is **NO** extra credit in this course and grading points are subject to change.

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**11:216:269**  
**Lecture Schedule Fall**  
**2016\***

<b>DATE</b>	<b>LECT</b>	<b>LECTURER</b>	<b>TOPICS</b>
9/6	1	SS	Evolution & Natural Selection
9/13	2	SS	Behavior: Ultimate & Proximate Causation
9/20	3	SS	Behavior: General Definitions
9/27	4	SS	Sexual Selection
10/4	<b>MIDTERM 1 (Lectures 1-4)</b>		
10/11	5	SS	Mating Systems
10/18	6	SS	Evolution of cheating
10/25	7	MS	Adaptation, Behavior & Perception
11/1	8	MS	Clocks, Rhythms & Orientation
11/8	<b>MIDTERM 2 (Lectures 5-8)</b>		
11/15	9	MS	Dispersal & Habitat Selection
11/29	10	MS	Territoriality & Aggression
12/6	11	MS	Foraging Behavior & Cooperation
12/13	12	MS	Communication & Human Uniqueness
<b>12/19</b>	<b>FINAL EXAM (Lectures 9-12) 9:00-10:30 AM</b>		

\* Lecture topics are subject to change.

SS – Dr. Suzanne Sukhdeo  
MS – Dr. Michael Sukhdeo