ANIMAL COMMUNICATION
ESPM 156

COURSE GUIDELINES

Instructor: TBD

Lectures:
MWF, 3-4pm, 110 Barker Hall

Course website:

The course website is available through **bcourses.berkeley.edu.**

Course text:
Principles of Animal Communication, 2nd Edition, Sinauer Publishing

Course Prerequisites and recommendations:
Coursework in Animal Behavior, Physiology and Evolution is highly recommended although not required.

Course Overview:
The goal of this course is to explore animal communication from a variety of perspectives from physics to evolutionary biology. Due to the interdisciplinary nature of the study of animal communication, over the course of the semester, we will draw on a variety of disciplines (including cell biology, ecology, evolution, genetics, neurophysiology, and physics) to understand the mechanisms, function, and evolution of animal communication. The course will be divided into three general parts: (1) mechanism of animal communication and sensory systems, (2) functional studies of animal communication, and (3) evolution of animal communication. The lectures/discussions will draw on examples from diverse taxa (insects, spiders, fish, birds, and mammals) and examples from the primary literature will be emphasized.

Exams and grading:
The final course grade will be based on a total of 400 points. Grades will be "curved" to reflect the distribution of point totals for members of the class. There will be two midterms worth 100 pts, a final exam worth 100 pts (date, time, and place assigned by the University), and a series of discussion assignments that will total 100 points.

Note: Cell phones are very disruptive to lectures and exams. Anyone whose cell phone rings during an exam will automatically lose 5 points on that exam. Please turn them off before class begins.

Policy on cheating:

Cheating will not be tolerated. Cheating includes both copying of answers during written exams and plagiarism of written assignments. Students caught cheating will be receive a score of zero for that exam or assignment and will be reported to the Office of Student Conduct.

Missed exams and assignments:

If you know that you will miss an exam or assignment for a legitimate reason, you must notify the instructors of the course **in advance**. The official campus policy concerning acceptable conflicts with exams is available at:

http://academic-senate.berkeley.edu/pdf/Guidelines_AcadSchedConflicts_July2006.pdf.

Students with learning or physical disabilities or who require special arrangements for taking exams must contact the appropriate instructor at least **one week prior to the exam** to assure that appropriate arrangements can be made.

Students who miss an exam or assignment unexpectedly (i.e., no prior warning) will be allowed to complete a make-up exam or assignment only with written verification of illness or family emergency.

DATE	TOPIC	Reading
January 20	Class Overview	
January 22	Introduction to Communication	Chapter 1
January 25	Introduction to Bioacoustics	Chapter 2
January 27	Physical Acoustics	Chapter 3
January 29	Propagation of acoustic signals	Chapter 2
February 1	Acoustic signal production	Chapter 2
February 3	Perception of acoustic signals	Chapter 3
February 5	Perception of acoustic signals	TBA
February 8	Acoustic signals finale	
	Discussion session 1	
February 10	Primary literature	TBA
February 12	Primary Literature/Review	
February 15	Holiday (Presidents Day)	
February 17	Review	
February 19	Midterm 1	
February 22	Properties of light	Chapter 5
February 24	Properties of Light	Chapter 5
February 26	Visual signal production	
February 29	Visual signal transmission	Chapter 4
March 2	Visual signal transmission	
March 4	Optics	
March 7	Visual signal reception	
March 9	Visual signal reception	Chapter 6
March 11	Visual signal reception	
Chapter 6		
March 14	Primary lit primer	Chapter 7
March 16	Discussion session 3	
March 18	Intro to chemical senses	
March 21	Spring Break!	
March 25		
March 25		
March 28	Chemical signal production	
March 30	chemical Reception	
April 1	No Class	Chapter 8

April 4	Other Modalities	Chapter 9
April 6	Midterm 2	
April 8	Primary literature	
April 11	Discussion 4	TBA
April 13	Signal Information	
April 15	Signal Information 2	
April 18	Signal Honesty	
April 20	Signal Honesty 2	Chapter 12
April 22	No Class	
April 25	Discussion session 5	
April 27	Review	Chapter 13
April 29	Final	
Final	WEDNESDAY, MAY 11, 2016 7-10P	