

PSY 2364 – Animal Communication
Fall 2016
University of Texas at Dallas

Instructor: Dr. Jessica Lockhart
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Classroom: GR 4.301
Class Meetings: MW 11:30 – 12:45 PM

Text: L.A. Dugatkin (2013). Principles of Animal Behavior. 3rd edition. W. W. Norton & Co.

Pre-requisites: None

Course Description: The scientific study of animal communication draws from a range of disciplines, including physics, psychology, neuroscience, behavioral ecology, cognitive science and linguistics. Animals use a variety of methods to communicate with each other and between species. The primary methods include visual gestures and displays, vocal calls and songs, and chemical signals and odor trails. This course takes a comparative look at the diverse forms of communication used throughout the animal kingdom. This course will investigate the design features that characterize communication systems and the unique adaptations that are required in different environmental settings. Sensory and neural mechanisms that underlie the production and perception of communication signals will be considered, as well as the evolutionary and ecological forces that have shaped these systems in their natural environments. *This course serves as a General Education requirement for the Life and Physical Sciences Texas Common Core. Courses in this category focus on describing, explaining, and predicting natural phenomena using the scientific method. Courses involve the understanding of interactions among natural phenomena and the implications of scientific principles on the physical world and on human experiences.*

Student Learning Objectives that address the General Education Core Objectives:

Critical Thinking skills: Explain and analyze, with examples, four key questions that are addressed in the study of animal communication (mechanism, function, ontogeny, and phylogeny)

Communication skills: Describe and illustrate major theoretical perspectives that address animal behavior and animal communication (psychology, neuroscience, behavioral ecology, cognitive science, and linguistics).

Empirical and Quantitative: Apply basic physical principles (such as the inverse square law in acoustics) to the study of communication signals.

Teamwork: Show teamwork skill in discussing and analyzing the relationship between human language and animal communication.

Course requirements:

Examinations: Four multiple-choice tests will be given at regular intervals during the semester (see Course Calendar for dates). Each test will consist of 50 questions. These tests will cover relevant content from the assigned chapters listed in the Course Calendar and material presented in lecture. **Make-Up tests for these four multiple choice tests will NOT be granted.** However, students will be able to drop

their lowest test score. If a student misses an examination, this score will be dropped (not made-up) and the remaining examinations will be used to calculate the final average. If a student misses two examinations, one will be dropped; however, the student will be assigned a zero (0) for the second missed exam.

A comprehensive final examination will be given during finals week and is required for all students regardless of grade average. This test will cover information presented during the course of the entire semester in addition to material from the last three chapters. If a student is unable to attend class on the day of the final examination, a make-up exam will be permitted but only with notification within 24 hours of class time AND with a written excuse provided by a doctor, policeman, or coroner's office. Make-up examinations for the comprehensive final exam will consist of three to five essay questions that integrate course content from a broad perspective. **The final examination grade cannot be dropped (even if it is the student's lowest exam grade.)**

Academic Grades: Each examination in this course is assigned points distributed as follows:

Examination	# of Assignments	Points Each	Total
Multiple Choice Tests	4 (Lowest grade dropped)	50	150
Comprehensive Final Exam	1 (Mandatory for all students)	100	100
			250

Grading Policy: Grades will be determined based on the sum of all points earned.

Letter Grade	Points Needed	Letter Grade	Points Needed	Letter Grade	Points Needed	Letter Grade	Points Needed
A+	237.5	B+	212.5	C+	187.5	D+	162.5
A	232.5	B	207.5	C	182.5	D	150
A-	222.5	B-	197.5	C-	172.5	F	<150

Extra Credit Assignment: No extra credit will be offered during this course. However, there will be opportunities to earn 'bonus' points during in-class quizzes and participation events. There will not be any make-ups offered for missed quizzes or participation opportunities. Students must be present on day of quiz to earn points. Students can earn a maximum of 12 points no matter how many quizzes they complete.

Academic Resources: Strategies and resources are available to help students succeed in this course. My recommended strategies for approaching this course include:

1. Come to class – Our goal is to teach you. In doing so, we will break down concepts in lecture, helping you understand them and make the text easier to read.
2. Read the chapters – Reading the text before class will help you become familiar with content and help you formulate questions to ask during lecture.
3. Take Notes – Writing down examples from class and illustrations from concepts will make the text easier to understand and remember.
4. Keep me informed – At the first sign of confusion or difficulty, come see me during office hours or make an appointment so that we can talk formulate a plan. If you have study difficulties, I can provide additional suggestions. If you have attendance problems, I can explore options. Unless I hear from you I won't know how to help you.

General Class Policies:

1. Please, do not do your homework, read external material or do other work during class. It is very rude and disruptive to the instructor and the rest of the class. Please, remember to silence your phones during class.
2. Remember that you are not invisible. I can see you just as well as you can see me. Behaviors such as excessive whispering, phone checking, snoring, etc....are disruptive to the learning environment.
3. Once class has started please try to remain in the classroom. If you must leave during lecture, please sit near the door and leave quietly. Please, do not get into the habit of coming to class late or leaving early. It is disruptive, discourteous, and annoying to everyone.
4. Exams will not be given outside of their scheduled time (no early or make-up exams).

UT Dallas Syllabus Policies and Procedures: The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.

Comet Creed: *This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same: "As a comet, I pledge honesty, integrity, and service in all that I do."*

Date	Topics	Readings
Mon Aug 22	Definitions of communication	
Wed Aug 24	Evolution and Natural Selection	Dugatkin, Ch. 2
Mon Aug 29	Ethology/ Science of Behavior	Dugatkin, Ch. 1
Wed Aug 31	Definitions of Communication	
Mon Sept 5	Labor Day	
Wed Sept 7	Signals	External reading
Mon Sept 12	Signals	Dugatkin, Ch. 4
Wed Sept 14	Exam 1	
Mon Sept 19	Sensory Specialization	
Wed Sept 21	Acoustic Communication	Dugatkin, Ch. 3
Mon Sept 26	Visual Communication	
Wed Sept 28	Chemical Communication	
Mon Oct 3	Tactile and Electrical Communication	
Wed Oct 5	Exam 2	
Mon Oct 10	Territory and social organization	Dugatkin, Ch. 14
Wed Oct 12	Territorial Signals	
Mon Oct 17	Assessment Signals	Dugatkin, Ch. 15
Wed Oct 19	Warning and mimicry	Dugatkin, Ch. 13
Mon Oct 24	Alarm signals	
Wed Oct 26	Learning and cultural transmission	Dugatkin, Ch. 5 & 6
Mon Oct 31	Development of communication	Dugatkin, Ch. 9
Wed Nov 2	Exam 3	
Mon Nov 7	Courtship and mating systems	Dugatkin, Ch. 7 & 8
Wed Nov 9	Mate selection	
Mon Nov 14	Interspecies communication	
Wed Nov 16	Interspecies communication	
Mon Nov 21	Fall Break	
Wed Nov 23	Fall Break	
Mon Nov 28	Bonus!	
Wed Nov 30	Exam 4	
Mon Dec 5	Bonus!	
Wed Dec 7	Final Exam Review	
	Final Exam as scheduled by UTD	

- This schedule is tentative. The chapters and readings covered may change based on time constraints. Be sure to verify the material that will be covered on each exam.