

San José State University
Department of Linguistics and Language Development
LING123, Sound and Communication, Section 7, Fall 2018

Course and Contact Information

Instructor:	Dennis Moradkhan
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Email:	dennis.moradkhan@sjsu.edu (Preferably email me in Canvas)
Office Hours:	MW 10:30AM - 11:30AM, and by appointment
Class Days/Time:	Tu/Th 9:00AM - 10:15AM
Classroom:	Clark Hall 242
Prerequisites:	<ul style="list-style-type: none">• Passage of the Writing Skills Test (WST) or ENG/LLD 100A with a C or better (C- not accepted)• Completion of core GE• Completion of/co-registration in 100W is strongly recommended.
GE/SJSU Studies Category:	Area R: Earth and Environment

Canvas and MYSJSU Messaging

Course materials such as syllabus, assignment instructions, readings, etc. can be found on [Canvas](http://sjsu.instructure.com) at <http://sjsu.instructure.com>. You are responsible for regularly checking with the messaging system through [MySJSU](http://my.sjsu.edu) at <http://my.sjsu.edu> to learn of any updates.

Course Description

In this class we will explore the basic acoustics and nature of sound as applied to the study of vocal communication by humans and animals as well as voice communication as transmission of a speech code via sound.

Course Goals

In this class, we will explore questions like the following:

- What is communication? What is language?
- What are the physical properties of communicative sounds? How can these properties be quantified and measured?
- How do humans and animals produce their vocalizations? What organs of the body are involved in vocalization, and what do they do?
- How does human language differ from animal 'language'? Is human language a learned skill (like chess), or an instinct (like laughing), or something in between?

LING 123 is a strongly multidisciplinary course. Our lectures and readings will jump eclectically among multiple scientific fields, most notably the following three:

1. Acoustics, the science of sound;
2. Linguistics, the science of human language; and
3. Ethology, the science of animal behavior

Within these fields we will encounter many different (and sometimes conflicting) scientific perspectives on communication. In order to appreciate this theoretical diversity, you will need to be able to think critically and skeptically.

GE Learning Outcomes (GELO)

Upon successful completion of this course, students will be able to:

1. demonstrate an understanding of the methods and limits of scientific investigation.
2. distinguish science from pseudo-science.
3. apply a scientific approach to answer questions about the earth and environment.

Course Learning Outcomes (CLO)

Upon successful completion of this course, students will be able to:

1. Understand sound as a physical phenomenon, and be able to solve simple problems in acoustics, such as calculating a sound's wavelength, frequency spectrum, and distance from source.
2. Analyze recorded human speech and other acoustic data on a computer, and to draw conclusions from that data.
3. Understand the biological mechanisms that allow humans and certain other animals to produce and process vocalized signals.
4. Understand how to analyze animal communication systems in terms of the four explanatory principles of ethology: adaptation, mechanism, ontogeny, and phylogeny.
5. List the essential design features of human language, and to explain how our language differs from the communication systems of other animal species.

Required Texts/Readings:

There is no required textbook for the course. Relevant materials will be posted on Canvas.

Course Requirements and Assignments

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related activities. Other course structures will have equivalent workload expectations as described in the syllabus.

For all assignments and examinations, see **Course Schedule** at the end of this syllabus for due dates. The required activities and assignments are described below.

1. Computer Lab Assignment (10 points)

There will be one computer laboratory session to analyze different sounds. The instructions for the assignment will be made available on Canvas. The assignment can be completed on your home computer or in Clark Hall #402B by appointment. This assignment addresses **GELOs 1 and 2** as well as

CLOs 1 and 2. You will use the free program called Praat. Download it from [Praat: doing phonetics by computer](http://www.fon.hum.uva.nl/praat/) at: <http://www.fon.hum.uva.nl/praat/>

2. Paper Assignments (30 points)

There will be 2 paper assignments with a total of 3000 words which you will submit through Canvas. The full instructions for the assignment will be posted on Canvas and the due dates for each paper is listed in your schedule below.

- Paper 1: Animal vs Human Communication (15 points) (GELO 1,3; CLO 4,5)
- Paper 2: Origin of speech (15 points) (GELO 1, 2, 3; CLO 5)

Your paper will be graded according to the following rubrics:

- Ideas and Content: whether your paper contained insightful theses supported by relevant, accurate, and specific evidence from appropriate sources
- Organization: whether your paper followed a clear and logical train of thought
- Originality: whether the ideas are expressed in your own words
- Conventions: whether you used correct grammar, spelling, punctuation, citation (if any)

As for formatting, I recommend 12 point font, double spaced, 1 inch margin all around. As for citation, if you incorporate materials from class (e.g. PowerPoint slides, lecture notes), you do not have to cite your source. But direct quotes from class materials are prohibited. You should explain or describe them in your own words. If you incorporate materials from elsewhere, you must cite your sources properly. You can choose any citation style (e.g. APA, MLA, IEEE) as long as you are consistent throughout the paper.

3. Student Presentations (10 points)

During the last six sessions or so, you will give a 10-15 minute in-class presentation on topics such as (1) difference between a language you know and English in terms of sound patterns (2) communicative systems of non-human animals that we have not already covered in class. You are welcome to explore and discuss any other topics that you find interesting and relevant to the course, but talk to me in advance to ensure that your topic is indeed relevant.

You are also expected to participate in evaluating your classmates' presentations. For each presentation, you will (1) rate its overall quality on a 5-point scale and (2) describe what you liked about it or make suggestions for improvement.

Your score will be determined by (1) average ratings from your peers (25%), (2) your extent of participation in peer evaluation (25%), and (3) my own assessment of the overall quality of your presentation (50%).

This exercise pertains to learning objective CLO5 as it allows you to appreciate the diversity and complexity of the human language in comparison with the animal communication systems discussed in class.

4. Mid-Term & Final Examinations (20 points each = 40 points)

The in-class midterm exam will be on the topics covered during the first half of the course, and the in-class final exam will be on the topics covered during the second half of the course. The exam is closed-book and closed-note. Most questions will draw on material from the lecture slides, and some questions will be based on videos and required readings.

Grading Information

Your final grade will be based on your performance on the required activities, as summarized below.

Grading Percentage Breakdown:

1. Computer Lab	10 %
2. Papers 1, 2	30 %
3. Student Presentation	10 %
4. Homework & Participation	10 %
5. Mid-term and Final Exam	40 %
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Total	100%

Letter Grades:

98% and above A+ (without percentage point from Extra Credit works)

94% - 97% A

93% - 90% A-

89% - 87% B+

86% - 84% B

83% - 80% B-

79% - 77% C+

76% - 74% C

73% - 70% C-

69% - 67% D+

66% - 64% D

63% - 60% D

Below 60% F

Grading transparency

The total number of earnable points for this course is 100. For example, if you receive 9 points on an assignment worth 10 points, those 9 points will be added to your total point accumulation. I will post grades of your exams and assignments on Canvas as soon as they are graded. This will give you a sense of how you are doing in the class.

Late work policy

Assignments are due at the beginning of class, on the date shown in the **Course Schedule** at the end of this syllabus. Please be aware that assignments turned in after the class-period of their due dates are considered as late works. Penalty for late work is as follows:

- Late 1 calendar day: Minus 10% of max point (e.g., 1 point for an essay).
- Late 2-3 calendar days: Minus 30% of max point.
- Late more than 3 calendar days: Minus 50% of max point.
- All late works are **due within 7 calendar days** after the original due dates.

In case of extenuating circumstances (an accident, family bereavement, serious illness or other serious circumstances) you may request an extension of the due date. To do so, you need to submit (1) a written request for the extension together with (2) a supporting documentation with a wet signature. The request must be submitted **at least 48 hours in advance of the due date**, but the supporting documentation may be submitted afterward.

Classroom Protocol

Do not disrupt the class. Limit your activities to those pertinent to class. Be courteous to everyone in class.

University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/>

LING 123 Sound and Communication, Fall 2018 Course Schedule

The schedule is subject to change with fair notice via announcements in class and Canvas.

Week	Date	Topics	Assignments, Deadlines	Readings (required bold)
1	08/21	Introduction to the Course		
	08/23	The Origin of Language		Fromkin 2011 Chap 1 Yule 2016 Chap 1 Crystal 2010 Chap 49
2	08/28	The Origin of Language		" " " " "
	08/30	What is Communication?		Crystal 2010 Chap 64 Yule 2016 Chap 2 Hudson 2000 Chap 1
3	09/04	Animal Communication		Fromkin 2011 Chap 1
	09/06	Animal Communication		" " " " "
4	09/11	Animal vs Human Communication		Yule 2016 Chap 2 Trask 1999 Chap1
	09/13	Animals & Human Language		Yule 2016 Chap 2 Dessalles 2007 Chap3
5	09/18	Video: Project Nim		-
	09/20	Sounds of Language	Paper 1 Due Date	Ipsen 1999 Chap 7 Yule 2016 Chap 3
6	09/25	Production of sounds		Yule 2016 Chap 3 Fromkin 2011 Chap6
	09/27	Production of Sounds		" " " " "
7	10/02	Sound Patterns of Language		Ipsen 1999 Chap 8 Yule 2016 Chap 4
	10/04	Sound Patterns of Language		Yule 2016 Chap 4 Fromkin 2011 Chap 7
8	10/09	Review for Mid-Term Exam		-
	10/11	Mid-Term Exam		
9	10/16	Speech perception		Crystal 2010 Chap 25
	10/18	Speech perception		" " " " "
10	10/23	Physical Properties of Sounds		Kreidler 2004 Chap 2 Ogden 2009 Chap 3 Odden 2005 Chap 1

	10/25	Physical Properties of Sounds		" " " " "
11	10/30	Analyzing Sounds		PRAAT warm-up
	11/01	Analyzing Sounds	Sound Analysis Task Due	" " " " "
12	11/06	Language and the Brain		Yule 2014 Chap 12 Fromkin 2011 Chap 2
	11/08	Language and the Brain		" " " " "
13	11/13	First Language Acquisition		Yule Chap 13
	11/15	First Language Acquisition		" " " " "
14	11/20	Second Language Acquisition/Learning	Paper 2 Due Date	Yule Chap 14
	11/22	<i>No Class Thanksgiving</i>		-
15	11/27	Student Presentations		-
	11/29	Student Presentations		-
16	12/04	Student Presentations		-
	12/06	Review for final exam		-
Final Exam	Thursday, December 13, 07:15 AM – 09:30 AM			