San José State University  
Linguistics & Language Development  
LING123, Sound and Communication, Section 11, Fall 2018

Course and Contact Information

Instructor: Reiko Kataoka
Office Location: Clark Hall 404E
Telephone: (408) 924-4712
Email: reiko.kataoka@sjsu.edu
Office Hours: T/Th 1:30-2:30 PM, and by appointment
Class Days/Time: T/Th 3:00 – 4:15 PM
Classroom: Clark Hall 242

Prerequisites:
• 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, optional readings, etc. can be found on Canvas at http://sjsu.instructure.com. You are responsible for regularly checking with the messaging system through MySJSU at http://my.sjsu.edu to learn of any updates.

Course Description

In this class we will explore the intertwining ethological and linguistic issues related to evolution of auditory communication systems in human and other animals. This course has a strongly multidisciplinary nature. 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 and cognition, encompassing both proximate and evolutionary explanations).

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:

GELO 1: demonstrate an understanding of the methods and limits of scientific investigation;
GELO 2: distinguish science from pseudo-science; and
GELO 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:

CLO 1: Understand sound as a physical phenomenon, and be able to solve simple problems in acoustics, such as calculating a sound’s frequency and distance from source (Sound Labs and Presentations);
CLO 2: Analyze recorded human speech and animal vocalization on a computer, and draw conclusions on those data (Sound Labs and Presentations);
CLO 3: Understand the biological mechanisms that allow humans and certain other animals to produce and process vocalized signals (Essays, Reading Responses and Presentations);
CLO 4: Understand how to study animal communication systems in terms of the four explanatory principles of ethology: adaptation, mechanism, ontogeny, and phylogeny (Essays, Reading Responses and Presentations); and
CLO 5: Discuss the essential design features of human language, and to explain how our language differs from the communication systems of other animal species (Essays, Reading Responses and Presentations).

Required Texts/Readings

Required Readings:

A compiled course packer (reader, lecture notes, video notes, and other necessary materials) is available at Maple Press, 330 S. 10th St. #200 (408-297-1001).

Optional Textbook


Library Liaison

Toby Matoush, Toby.Matoush@sjsu.edu

Course Requirements and Assignments

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details
about student workload can be found in University Policy S12-3 at http://www.sjsu.edu/senate/docs/S12-3.pdf.

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

1. Sound Labs (Lab 1 & 2)
There will be two Sound Labs. The instructions for each assignment can be found in the course packet. These assignments 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 at: http://www.fon.hum.uva.nl/praat/

2. Essays (Essay 1 & 2)
You will write two essays, each of which is at least 1000 words long. Essay that is less than 1000 words does not receive any credit (0 % credit). The essay prompts will be distributed and fully discussed in class. This assignment addresses GELOs 2 and 3 as well as CLOs 3, 4, and 5.

3. Reading Response Papers (RRP 1 & 2):
You will write two Reading Response Papers. Each Response should be at least 500 words long. This assignment addresses GELOs 2 and 3 as well as CLOs 3, 4, and 5.

4. Student Presentation
In this assignment, you will form a group and develop a short presentation on a topic of your choice that is relevant to the course contents. This assignment addresses GELOs 1, 2 and 3 as well as any one or more of CLOs depending on the topic.

5. Examinations
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. You will need to bring a T&E-200 scantron and a pencil for the exams.

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

Grading Percentage Breakdown:

1. Sound Lab 1 & 2 (5 % each) 10 %
2. Essay 1 & 2 (10 % each) 20 %
3. Reading Response 1 & 2 (5 % each) 10 %
4. Student Presentation (10 %) 10 %
5. Mid-term and Final Exam (25 % each) 50 %

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**

*Note: Passage of the Writing Skills Test (WST) or ENGL/LLD 100A with a C or better (C- not accepted), and completion of Core General Education are prerequisite to all SJSU Studies courses. Completion of, or co-registration in, 100W is strongly recommended. A minimum aggregate GPA of 2.0 in GE Areas R, S, & V shall be required of all students.*

**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.

**Extra credit options**

An Extra Credit work (worth 4 %) is available for everyone, and will be discussed in 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 3 or fewer calendar days: Minus 15% of max point (e.g., 1.5 point for an essay).
- Late 4-7 calendar days: Minus 30% of max point.
- Late more than 7 calendar days: Minus 50% of max point.
- All late works are **due within two weeks** 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

- Please arrive to class on time. It distracts the instructor and other students when you arrive late. If you must arrive late, please enter the classroom quietly and with respect to your classmates and your instructor.
- Please also do not leave the classroom while class is in session except in the case of extreme personal emergency.
- **I do not allow any cell phone use in class** except when we use certain educational applications as a part of in-class activities. Please turn off your phone when you arrive to class and store it in your purse, backpack, or pocket. I will forgive any two transgressions of this policy (they may occur in the same class), after which **you will be asked to leave class for the day for any subsequent transgression**. Repeat offenders will be sent academic discipline for disrupting class.
- Should you wish to use a laptop or tablet in class, other than when we do acoustic analyses, it will be allowed **on a trial basis and only with my prior approval**. I reserve the right to revoke this privilege at any time if I find it distracting to you or to other students. Should you wish to consult research on the impact of using technology for taking notes, please see [http://pss.sagepub.com/content/25/6/1159](http://pss.sagepub.com/content/25/6/1159).

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
*(Subject to change with fair notice)*

<table>
<thead>
<tr>
<th>Course Schedule</th>
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<tbody>
<tr>
<td><strong>Week</strong></td>
<td><strong>Date</strong></td>
<td><strong>Topics, Readings, Assignments, Deadlines</strong></td>
<td><strong>Readings (required bold)</strong></td>
</tr>
<tr>
<td>1</td>
<td>8/21 (T)</td>
<td>Introduction to Linguistics 123</td>
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<tr>
<td>1</td>
<td>8/23 (Th)</td>
<td><em>Great Transformations</em> (video)</td>
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<tr>
<td>2</td>
<td>8/28 (T)</td>
<td>Introduction to animal communication</td>
<td><strong>Gillam, 2011</strong></td>
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| 2 | 8/30 (Th) | Evolution of mating calls  
**Reading Response #1 assigned**  
**(Activity #1)** | **Ayala, 2016; Pianka, 2002**  
**Solensky, 2002** |
| 3 | 9/4 (T) | Sound waves | **The Physics Classroom (online)**  
**Lesson 1 (a, b, c);**  
**Lesson 2 (a & c only)** |
| 3 | 9/6 (Th) | Complex waves  
**Acoustic analyses with Praat**  
**Reading Response #1 due** |  |
| 4 | 9/11 (T) | Sound Lab 1 practice | **bring Instruction to class** |
| 4 | 9/13 (Th) | Frog advertisement calls | **Page & Bernal, 2006**  
**Zelick et al., 1999**  
**Ryan & Rand, 1990** |
| 5 | 9/18 (T) | Bird song: introduction  
**Sound Lab 1 due** | **Catchpole & Slater, 1995**  
**Catchpole, 1980** |
| 5 | 9/20 (Th) | Bird song: ontogeny  
**Essay #1 assigned**  
**(Activity #2)** | **Wada, 2010** |
| 6 | 9/25 (T) | *Signals and Songs* (video) |  |
| 6 | 9/27 (Th) | Bird calls | **Templeton et al., 2005** |
| 7 | 10/2 (T) | Articulatory phonetics  
**Essay #1 due** | **Ghazanfar & Rendall, 2008** |
| 7 | 10/4 (Th) | Midterm Review |  |
| 8 | 10/9 (T) | Midterm Exam  
**BRING SCANTRON T&E 200** |  |
<p>| 8 | 10/11 (Th) | Acoustics of speech |  |</p>
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics, Readings, Assignments, Deadlines</th>
<th>Readings (required bold)</th>
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<tbody>
<tr>
<td>9</td>
<td>10/16 (T)</td>
<td>Sound Lab 2 practice</td>
<td>bring Instruction to class</td>
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<tr>
<td>9</td>
<td>10/18 (Th)</td>
<td>Theory of mind</td>
<td>Pearce, 2008</td>
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<td>Reading Response #2 assigned</td>
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<td></td>
<td></td>
<td>Essay #2 assigned</td>
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<td></td>
<td></td>
<td>(Activity #3)</td>
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<tr>
<td>10</td>
<td>10/23 (T)</td>
<td><em>Monkey in the Mirror</em> (video)</td>
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<td></td>
<td>Sound Lab #2 due</td>
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<tr>
<td>10</td>
<td>10/25 (Th)</td>
<td>Food calls</td>
<td>Hauser &amp; Marler, 1993</td>
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<td>Predator alarm calls</td>
<td>Seyfarth et al., 1980</td>
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<td>Reading Response #2 due</td>
<td>Cheney &amp; Seyfarth, 1985</td>
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<td>(Activity #4)</td>
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<td>11</td>
<td>10/30 (T)</td>
<td><em>Families in the Wild</em> (video)</td>
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<td>11</td>
<td>11/1 (Th)</td>
<td>Evolution of language</td>
<td>Pinker, Ch 11</td>
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<td>12</td>
<td>11/6 (T)</td>
<td>Bees</td>
<td>NCSU honeybee; Gadagkar, 1996</td>
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<td>Presentation Group assigned</td>
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<tr>
<td>12</td>
<td>11/8 (Th)</td>
<td>Speech perception</td>
<td>Human ear (web)</td>
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<td>Essay #2 due</td>
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<tr>
<td>13</td>
<td>11/13 (T)</td>
<td>Child language acquisition</td>
<td>Pinker, Ch 2 &amp; Ch 9; Saffran et al., 2001</td>
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<tr>
<td>13</td>
<td>11/15 (Th)</td>
<td>Language and the brain</td>
<td>Pinker, Ch 10</td>
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<tr>
<td>14</td>
<td>11/20 (T)</td>
<td>Conference</td>
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<tr>
<td>14</td>
<td>11/22 (Th)</td>
<td><em>Thanksgiving Day</em> (no class)</td>
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<td>15</td>
<td>11/27 (T)</td>
<td>Student Presentation #1</td>
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<tr>
<td>15</td>
<td>11/29 (Th)</td>
<td>Student Presentation #2</td>
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<td>16</td>
<td>12/4 (T)</td>
<td>Student Presentation #3</td>
<td></td>
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<tr>
<td>16</td>
<td>12/6 (Th)</td>
<td>Final Exam Review</td>
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**Final Exam**

Monday, December 17, 2:45 PM – 5:00 PM

*BRING SCANTRON T&E 200*