

LING 113: Spring 2017

Experimental Phonetics

Instructor: Susan Lin
Email: susanlin@berkeley.edu
Office Hours: 1215 Dwinelle
M 2-3p, W 11a-12p, or by appointment

Technical Support: Ronald Sprouse
Email: ronald@berkeley.edu
Office Hours: MW 1-2p in 1303 Dwinelle

Class meetings. TuTh 11:00a-12:30p; 254 Sutardja Dai Hall

Course Description. Practical training in experimental phonetics, including the acoustic and perceptual analysis of speech.

Prerequisites. Ling 110 or instructor approval

Learning goals. By the end of this course, you should be able to

- critically read and understand contemporary experimental research in phonetics.
- design and run an experiment.
- perform acoustic analysis of speech.
- construct and carry out speech perception studies.
- perform basic data visualization and create research reports.

Technology. This course makes regular use of digital technology and assumes that you have regular access to a personal computer on which you have administrator permissions.

To handle inter-OS differences, we will occasionally use virtualization software for some tasks. The virtual machine we will run is a variant of the Berkeley Common Environment (<http://bce.berkeley.edu/>) tailored for the PhonLab. Your computer should therefore support virtualization, be able to run VirtualBox (<https://www.virtualbox.org/>) and have approximately 14GB free space on your hard drive.

If you do not have access to a personal computer which meets these requirements, please contact Prof. Lin or Ronald Sprouse ASAP.

Course Requirements.

Every student seated in this classroom is expected to

- Be prompt.
- Be present.
- Be civil.

Every student taking this course for credit is further expected to

- Participate in the data collection and analysis of an in-class experiment.
- Read an experimental phonetics paper and explain its contents to the class.
- Attend a phonetics or experimental talk and write a reflection. (1-2 pages)
- Complete a term project, which will be a short experiment or an analysis of pre-existing data.
 - Present your work in front of your colleagues. (10 minutes)
 - Write up your work. (10-15 pages)

Point Distribution.

In-class Experiment participation	20
Reading discussion	15
Project: proposal	10
Project: update	5
Project: literature review	5
Project: figures and tables	5
Project: writeup	20
Project: presentation	15
Talk attendance and reflection	5
<hr/> TOTAL	<hr/> 100

Letter Grade Distribution.

≥ 93.00	A	73.00 - 76.99	C
90.00 - 92.99	A-	70.00 - 72.99	C-
87.00 - 89.99	B+	67.00 - 69.99	D+
83.00 - 86.99	B	63.00 - 66.99	D
80.00 - 82.99	B-	60.00 - 62.99	D-
77.00 - 79.99	C+	≤ 59.99	F

Course Policies.

All assignments should be submitted online through bCourses, by the due date. Grades and feedback will be distributed, where applicable, within one week of the assignment's due date.

University Policies.

Academic misconduct. All forms of academic misconduct, including plagiarism, failing to cite a source of information, alteration of university documents, or cheating during exams are serious offenses with serious consequences. In accordance with University policy, incidents of academic misconduct will be reported to the UC Berkeley Center for Student Conduct and Community Standards.

Accommodation of religious creed. In compliance with Education code, Section 92640(a), it is the official policy of the University of California at Berkeley to permit any student to undergo a test or examination, without penalty, at a time when that activity would not violate the student's religious creed, unless administering the examination at an alternative time would impose an undue hardship that could not reasonably have been avoided. Requests to accommodate a student's religious creed by scheduling tests or examinations at alternative times should be submitted directly to the faculty member responsible for administering the examination **by the second week of the semester.**

Principles of community. These principles of community for the University of California, Berkeley, are rooted in our mission of teaching, research and public service. They reflect our passion for

critical inquiry, debate, discovery and innovation, and our deep commitment to contributing to a better world. Every member of the UC Berkeley community has a role in sustaining a safe, caring and humane environment in which these values can thrive.

- We place honesty and integrity in our teaching, learning, research and administration at the highest level.
- We recognize the intrinsic relationship between diversity and excellence in all our endeavors.
- We affirm the dignity of all individuals and strive to uphold a just community in which discrimination and hate are not tolerated.
- We are committed to ensuring freedom of expression and dialogue that elicits the full spectrum of views held by our varied communities.
- We respect the differences as well as the commonalities that bring us together and call for civility and respect in our personal interactions.
- We believe that active participation and leadership in addressing the most pressing issues facing our local and global communities are central to our educational mission.
- We embrace open and equitable access to opportunities for learning and development as our obligation and goal.

Class schedule.

This schedule is preliminary! Your flexibility is greatly appreciated as unanticipated difficulties historically always occur. All assignments listed are due by 6am Saturday of the week listed¹.

Week	Topic	Assignments
1: 1/17, 1/19	Introduction & Technology	
2: 1/24, 1/26	In-class experiment: observe	Observation
3: 1/31, 2/2	In-class experiment: hypothesize	
4: 2/7, 2/9	In-class experiment: design & execution	Raw data
5: 2/14, 2/16	In-class experiment: interpret	Analysis
6: 2/21, 2/23	Reading & discuss other people's research	
7: 2/28, 3/2		Project proposal
8: 3/7, 3/9	Methodology: production	
9: 3/14, 3/16	Methodology: perception	
10: 3/21, 3/23	Project check-ins & troubleshooting	Project update
11:	Spring Break (no class)	
12: 4/4, 4/6	Methodology: articulation	
13: 4/11, 4/13	Free work time & troubleshooting	Lit review
14: 4/18, 4/20	Data analysis & visualization	Talk reflection ²
15: 4/25	Presenting experimental research	Data visualizations
16: TBD	Presentations (RRR week)	Slides or handout
17:	Finals week	Project writeup

¹Specific due dates may be altered as needed to accommodate issues that arise during the progression of the course. I will make every attempt to make sure the bCourses due dates are current.

²You may submit this anytime before this date. You will probably want to submit soon after the talk you attend.

Events of potential interest.³

- **Most Mondays**, 12-1p 1303 Dwinelle Hall. Phorum – the Berkeley Phonetics and Phonology Forum. Check the webpage (<http://linguistics.berkeley.edu/~phorum/>) regularly for updates on talks, or contact the organizers Meg Cychosz (mcychosz@berkeley.edu) or Andrew Cheng (andrewcheng@berkeley.edu) to be put on the mailing list.
- **2/3-2/5**. BLS 43 (<http://linguistics.berkeley.edu/bls/>) – a conference hosted by Berkeley Linguistics grad students. *Interested in free registration? Ask about volunteering!*
- **04/17** Linguistics Department Colloquium – sociophonetician Rob Podesva (Stanford; <http://web.stanford.edu/~podesva/>)

³Any talk occurring before the talk reflection deadline that is either phonetic or experimental in nature is acceptable for talk reflection credit. These are just events that I happen to know about.