

LIGN110 - PHONETICS

Fall Quarter 2008

Prerequisite: LIGN 101 or consent of instructor

Credit units: 4:0

Section ID#: 633266

Time and place: Tue-Thu 12:30-1:50, Centr 214

Instructor: Amalia Arvaniti

TA: Tristie Ross

Information: <http://webct.ucsd.edu>

ABOUT THE COURSE

This course is an introduction to phonetics, the study of speech.

- You will learn how speech sounds are produced and what their acoustic characteristics are.
- You will also learn how to use the International Phonetic Alphabet to transcribe speech sounds, and how to interpret visual representations of speech using specialized software.
- You will learn about differences among varieties of English (especially American English).
- We will also review the sounds that are known to be used across the globe (but not necessarily in English).
- We will briefly discuss the changes that take place and other phenomena that apply to running speech (as opposed to isolated speech sounds).
- Finally, we will discuss briefly the main techniques for speech synthesis and speech recognition, and the experimental techniques that allow us to investigate all the above topics.

Main objectives

- To provide you with an overview of the mechanisms of speech production and the complexity and variability involved in producing speech; for Linguistics majors, this is knowledge that will be necessary for other classes, such as Phonology, Morphology, and Sociolinguistics.
- To acquaint you with the basics of speech analysis and speech technology

This course is required for Linguistics majors, and is a prerequisite for LIGN 111 Phonology. It is also a useful course for those interested in a variety of topics that deal with speech, such as speech technology, speech therapy, sociolinguistics, communication, psychology, cognitive science, social anthropology and human development.

SECTION

Time and place: Monday 12-1, Phonetics Lab, AP&M 4432

Tristie will hold section once a week. Section will start in week 2. It is not mandatory, but recommended if you want to ensure good grades (though alternatives are possible). The purpose of section is to go over exercises, practice transcribing speech sounds, ask clarification questions, do reviews and practice using acoustic analysis software.

CONTACT

Instructor: Amalia Arvaniti

Office: 4151 AP&M; office hours: Tues-Thu 9:45-10:45; or by appointment

E-mail: amalia@ling.ucsd.edu

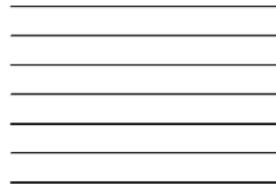
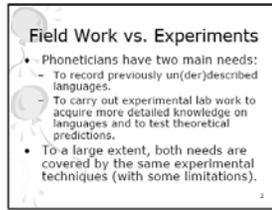
Teaching assistant: Tristie Ross

Office: Phonetics Lab, AP&M 4432; office hours: Mon 1:00-2:00, Thu 4:00-5:00, or by appointment

E-mail: tross@ling.ucsd.edu

REQUIRED READING AND RECOMMENDED BOOKS

The required reading for this course is the set of lecture notes that will be available to you on webCT before each class. We recommend that you download the lecture notes *before* coming to class, and use them as a skeleton on which to build your own notes.



← This is what the downloadable notes will look like

There is no required textbook: the lecture notes provide sufficient information for reviewing and completing all tests and exams. However, if you want to get more in depth information about a particular topic, the following three books are recommended. They are on reserve at the Geisel library and in the Language Lab (AP&M 3432).

Recommended textbooks:

- Henning Reetz and Allard Jongman (2008) *Phonetics*. Wiley Blackwell.
- Peter Ladefoged (2001) *Vowels and Consonants*. Blackwell Publishers.
- Peter Ladefoged (2005) *A Course in Phonetics* (5th Edition). Thomson, Wadsworth.

ACOUSTIC ANALYSIS SOFTWARE

Wavesurfer. This program can be downloaded from <http://www.speech.kth.se/wavesurfer/>

PRAAT: This program can be downloaded from <http://www.fon.hum.uva.nl/praat/>

We will be using these two programs in class and for various tests throughout the course. Documents with instructions on how to use them are downloadable from webCT.

REQUIREMENTS AND GRADING

Grades will be curved and will be assigned as follows:

- | | | |
|---------------------------------|---|--------------------------------|
| 1. 3 tests (20 questions each): | 30% (10% each) | Grades will be posted on WebCT |
| 2. Midterm (50 questions): | 25% | |
| 3. Final exam (100 questions): | 45% | |
| 4. (<i>Extra credit</i>) | <i>3 points for participating in one 1-credit experiment</i>
Check https://experimetrix2.com/ucsd/ | |
| TOTAL | 100% (+) | |

- Tests will become available on Thursdays after class and will have to be completed by Tuesday of the following week before class starts.
- You have one week to complete the Mid-Term and Test 3.
- All tests and the Mid-Term are webct-based and will be take-home open-book exams. You have several days to answer the questions, but you can only register an answer once.

Percentage-to-letter conversion

A+ = 100+	B+ = 85-77.5	C+ = 62.5-55
A = 100-92.5	B = 77.5-70	C = 55-47.5
A- = 92.5-85	B- = 70-62.5	C- = 47.5-40

HOW TO GET THE BEST GRADE YOU CAN IN THIS CLASS

- This course involves a fair amount of memorizing (terminology, the International Phonetic Alphabet).
- Attend class regularly and take notes; occasionally, test/exam questions may be covered in more detail in class than in the notes.
- If you cannot come to class, download the notes and consult with a fellow student.
- If you are unclear about a point, come to section, or our office hours, or make an appointment to meet with one of us to go over your questions.
- The purpose of tests and exams is to test your knowledge; they are not meant to replace studying and reviewing. This means that you should
 - regularly study and review the material, as you cannot cram for this class;
 - give yourself ample time to finish each test and exam, whether at home or in class;
 - expect that you will need to (a) study for this course and (b) think while taking tests/exams.
- Submit the tests and mid-term on time, or have a valid reason (as per University regulations) for being late (proof will be needed); unjustified delays will result to penalties (2 points off your grade per day).

PRINCIPLES AND POLICIES – PLEASE READ CAREFULLY

MAIN PRINCIPLES

(A) The efforts of the instructor and TA should benefit all students to the max.

(B) The work of the instructor and the TA should be fair to all students.

Following these basic principles will allow us to do the best job we can for this class.

How can you help?

(A) Please help us make good use of our time by respecting our office hours and our time:

- ✓ If you have a question, first consult this syllabus (or the copy available on webct); it is likely to have the answer.
- ✓ If this is not the case, please use the webct discussion forum and webct announcements.
- ✓ Email us for simple inquiries about exams, reading, handouts and the like, *if you cannot find this information in the prospectus or webCT.*
- ✓ Come to section or office hours if you have questions regarding class content.
- ✓ If you cannot come to section or office hours, make an appointment.
- ✓ However, do not come to our office hours expecting a run-down of what we did in a class you missed, and do not e-mail us to ask if there had been any announcements.
- ✓ If you email us during the weekend, your inquiry will be answered during working hours the following Monday at the earliest.
- ✓ If you send us e-mail, make sure you mention the class you are taking in the subject line and your full name in the message especially if you are e-mailing from a non-UCSD account; e-mails that do not include either your name or the class you are taking will not be answered.

(B) Please be fair to others:

- ✓ Before you contact us for any special arrangement, please consider the following: is what you are asking covered by the University's regulations? If not, how will it impact the instructor and TA and your fellow students? Is it fair use of our time (which we could spend on activities that will benefit all students)? Is it fair on the other students?

In the classroom

- ✚ Come to class on time!
- ✚ Feel free to (a) ask questions in class; (b) request clarification; (c) request that a point be repeated.
- ✚ Please, no cell phones, pagers, or disruptions of any kind during class.
- ✚ Although attendance is required at UCSD, you are free not to come to class if you so wish.
- ✚ However, if you miss class for whatever reason, it is your responsibility to be informed about what was covered; download the class notes from webCT, ask a classmate for their notes, consult webCT for any announcements.
- ✚ Note that class attendance is required because it helps you understand and assimilate the material. If you choose not to attend class, this may have an impact on your grades.

EXAMS (test, mid-term, final)

- ✚ You may work with classmates on your tests, mid-term and final if you wish, but if you do, this should involve only *discussion* of the material. All submitted work must be your own. If you submit a test, mid-term or final that closely resembles work submitted by anyone else in this class or in previous courses like this one, it will be considered cheating. This will automatically result in at least no credit for the assignment in question, possibly also failure of the course, and you will be referred to your dean for disciplinary action. This is University policy and there will be no exceptions.
- ✚ Please mark the deadlines for all tests so you can complete them in time.
- ✚ Please mark in your calendar the deadline for the mid-term and date and time of the final (12/12, 11:30-2:30) also shown in the schedule overleaf; following University regulations, exams will only be rescheduled in case of a health or family emergency, or if they coincide with a religious holiday you wish to observe. If you cannot make the final for reasons not covered by the regulations you should consider taking a different class.
- ✚ Late assignments will not be accepted (unless you have very good reasons for being late) and can provide proof.

LIGN110 - Phonetics
Class Schedule
 Fall Quarter 2008

This schedule is subject to small changes, depending on class progress. Make sure you check webCT regularly for updated information.

	Tuesday	Thursday
Wk 0 9/25		9/25: Review of practical details What is phonetics and why it is interesting to study it.
Wk 1	9/30: Speech production I: respiration and phonation	10/2: Speech production II: phonation and articulation Test 1 opens
Wk 2	10/7: Phonetic transcription; vowels and consonants; English consonants I: stops & fricatives Test 1 closes	10/9: English consonants II: the articulation of affricates, nasals, liquids and glides
Wk 3	10/14: Rudiments of acoustic analysis; the acoustics of English consonants: reading waveforms	10/16: Vowel systems: what constitutes a vowel system and why; cardinal vowels
Wk 4	10/21: Video showing of <i>American Tongues</i>	10/23: English vowels; vowel related variation in English Test 2 opens
Wk 5	10/28: More on speech variation in English Test 2 closes	10/30: The source-filter theory of speech production; the acoustics of English vowels
Wk 6	11/4: English consonants in spectrograms; waveform and spectrogram reading practice	11/6: Connected speech phenomena I: what happens when we string words together? MID-TERM opens
Wk 7	11/11: <i>No class; Veterans Day</i>	11/13: Connected speech phenomena II: Prosody MID-TERM closes
Wk 8	11/18: Speech synthesis and speech recognition: how do we make computers talk and recognize speech?	11/20: Further functions of the larynx: voice quality; the glottis as airstream provider
Wk 9	11/25: Consonants in languages other than English Test 3 becomes available	11/27: <i>No class: Thanksgiving</i>
Wk 10	12/02: Vowels in languages other than English Test 3 is due	12/04: Experimental methods in Phonetics
FINAL	FRIDAY, DECEMBER 12TH, 11:30 a.m. -2:30 p.m.	