

415 Phonetics
SOS B52 – Tu/Th 9:30-10:50 a.m.

Syllabus for Linguistics 415
Phonetics
Fall 2013

Time: Tuesdays and Thursdays 9:30 - 10:50 am

Place: SOS B52

Instructor: Prof. Sandra Ferrari Disner
GFS 301n
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Office hours: Mondays 1-2 pm; Tuesdays 2-3 pm, and by appointment

Course description: The main goals of this course are:

- to be able to recognize, produce, and transcribe the sounds that occur in the world's languages;
- to understand how these sounds are articulated and what their acoustic characteristics are; and
- to begin to think about spoken language in context.

To these ends, you will first acquire a set of analytical tools and then apply them to selected words and phrases from the world's 7000+ languages. The framework for this study will be the International Phonetic Alphabet.

At the end of the semester, your ability to *produce* and *transcribe* the sounds of the world's languages will be tested. You will also be asked to write a detailed phonetic description of a language of your choice. This will be original research, based on recordings and analysis of a native speaker; there is no need to resort to printed texts beyond the initial structuring.

As you begin to master the sounds of the world's languages -- which are, in essence, a set of noises made with the eating and breathing apparatus -- we will attempt to discern commonalities between them, to link those commonalities to gestural or acoustic imperatives, and to consider the "design requirements" of a phonetic system.

We will also consider some of the confounding influences within the system -- variations that may be individual, social, geographical, attitudinal, and emotional in nature -- and extract them, to the extent possible.

Textbook: *A Course in Phonetics*, sixth edition, 2011, by Peter Ladefoged and Keith Johnson. [L&J]

Course Requirements:

1. Attendance and participation. Class meetings will involve lecture, discussion, ear training and production practice. Class attendance and participation are *very* important, particularly for the latter two, which cannot be gleaned from books.

2. Readings. The reading assignments are mainly from the textbook [L&J], but occasionally you will be asked to read articles from other sources. These will be available on Blackboard..

3. Problem sets. The largest single component of your course grade will be your cumulative score on the problem sets. These will help you to prepare for the midterm, and will serve to test your knowledge thereafter. The assignments listed on this syllabus are not definitive; there may be additional problem sets assigned during the semester. To be certain, consult Blackboard regularly for upcoming assignments and due dates. *It is your responsibility to find out whether a problem set has been assigned.* But do not worry if you happen to miss one of these assignments; your lowest score of the semester will not be calculated into the grade.

A note on collaboration: General discussion of the assignments with other students is acceptable and encouraged, but you must arrive at the actual solutions to problems on your own and write them up on your own. Certain indicia make it quite apparent to an instructor when two students have collaborated. (Note that the instructor is a forensic linguist.)

Lateness policy: Points will be deducted from problem sets which are submitted late. But points will not be taken off when there is a valid and documented reason for the lateness, such as illness.

4. Practical exams. At the end of the semester, you will be tested (very briefly) on your ability to pronounce words written in the Int'l Phonetic Alphabet, and then, in turn, on your ability to transcribe into IPA the words of a foreign-language speaker. A few notoriously difficult sounds will be excluded from the production test, so, for example, do not panic if you simply cannot trill.

Grading Plan:

Homework assignments: **45%**, with lowest grade omitted

Midterm exam: **20%**

Practical exams:

 Production test: **8%**

 Transcription test: **7%**

Final project (phonetic survey of a language): **20%**

Academic integrity:

Students are expected to uphold the USC Student Conduct Code (<http://web-app.usc.edu/scampus/university-student-conduct-code/>). Violations of the code (see <http://web-app.usc.edu/scampus/1100-behavior-violating-university-standards-and-appropriate-sanctions/>) harm every student in the class. Any student who is found cheating on an exam or homework, or who facilitates cheating by another student, will receive no credit for that work. Further action will also be taken if necessary.

Students with disabilities:

Students needing special accommodations (e.g., longer exam time) due to a physical or learning disability should contact the instructor as early in the semester as possible, and should also contact Disability Services and Programs (DSP) (see their webpage at http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html)

Tentative schedule of topics and reading assignments:

August 27 -- **Introduction.** Read Ladefoged & Johnson (L&J), chapter 1

August 29 -- Overview of **articulation.**

Assignment due Sept. 3: The following exercises from chapter 1 of L&J:
A, B, D (11-18 only), & F. (Printable versions of all the exercises are available on the CD that accompanies the textbook.)

September 3 -- Articulation, continued.

Transcription. Read L&J chapter 2
Citation form vs. standard speech vs. fast speech
Broad vs. narrow transcription
Use of Doulos font for IPA transcription.

September 5 -- Transcription, continued.

Assignment due September 10: Exercises A - D from chapter 2 of L&J (but only the first five of each exercise).
Non-graded assignment: L&J ch. 2, performance exercises A-D.

September 10 -- Finish up transcription.

Consonants of English. Read L&J chapter 3
Introduction to aspiration, voicing, and other states of the glottis (to be taken up in more detail in ch 6); gestures and their overlap; features of English consonants.

September 12 -- Allophonic rules applying to English consonants. Secondary articulation.

Assignment due Sept. 17: L&J ch. 3, Exercises A; D (*two* examples each for rules 12a, 13a, 14, 15, 16); and G (*only* the first sentence of "Arthur the Rat")

September 17 -- Finish up consonants.

Vowels of English. Read L&J chapter 4

Cardinal vowels. Auditory labels. "Physiological fantasy".

September 19 -- Vowels, continued. Accents of English.

Vowels of other languages, and their representation within the IPA framework.

Secondary articulation of vowels

Assignment due Sept. 24: Exercises A and B; also H (1) - (4) only.

September 24 -- **Stress and Intonation in English.** Read L&J chapter 5 (pp. 107-127 only)

Primary & secondary stress; unstressed syllables. Tonic accent. Rhythm, intonation.

September 26 -- **The Larynx.** Actions of the laryngeal musculature and cartilages

Watch "Larynx film festival"; links on Blackboard. (No other assignment this week)

October 1 -- **Suprasegmentals.** Read L&J, chapter 10, pp. 243-251 and 255-258 only.

Syllables and the sonority hierarchy. Stress (continued), length, timing and tone.

October 3 -- **States of the Glottis.** Read L&J chapter 6, pp. 148-157 only.

Phonation types: Breathy, creaky & modal voice. Degrees of aspiration & voicing. Voice onset time in the world's languages.

Assignment to be handed in on October 8: Exercises C & D, pp. 158-9.

Do the following for practice, but no need to hand them in:

Thai listening assignment (on Blackboard)

Performance Exercises A, D, E, F, G, M, pp. 160-161.

October 8 -- States of the glottis (phonation types) continued.

Airstream mechanisms. Read L&J chapter 6, pp. 136-147

Listen to CD examples 6.1, 6.2, 6.3, 6.4

October 10 -- Airstream mechanisms, continued.

Listen to CD examples 6.8, 6.9, 6.10.

Do the following for practice, but no need to hand it in:

Xhosa listening assignment (on Blackboard); refer to Table 6.3; CD 6.4.

October 15 -- **Consonantal gestures.** Read L&J chapter 7.

Consonant articulation in the languages of the world.

October 17 -- Consonantal gestures, continued.

Assignment, to be handed in October 15: A classification exercise (on Blackboard), drawing from the categories on p. 182

Do the following for practice, but no need to hand it in:

Quechua listening assignment (on Blackboard); refer to Table 7.3; CD 7.7.

October 24 -- Midterm exam

October 29 **Acoustics.** Read Johnson, Chapter 1.1-1.3.3 Waves and aperiodic noise.

October 31 Acoustic analysis: Introduction to Praat.
Measurement of pitch and duration.
Physical traces of waves and of aperiodic noise.

November 5 -- **Acoustic Phonetics.** Part 1: Vowels
Read L&J chapter 8, pp. 187-198.
Source/filter theory. Vowel resonances. Formants.

November 7 -- The acoustics of vowels (continued).
Plot vowel formants on an acoustic chart.
Distinguish the formants that convey linguistic information from those that convey speaker identity.
Assignment, due November 12: "Measuring the formant frequencies of your own vowels" (Part I only, posted on Blackboard)

November 12 Acoustic phonetics, part 2: Consonants
Read L&J chapter 8, pp. 198-215.
Formant transitions. Fricative noise. Mystery spectrograms.
Non-graded exercise, due Nov. 14: Figure out the sentence in question C, p. 216.

November 14 **Vowel features.** Read L&J chapter 9.

November 19 -- Vowels, continued.
Accents of American English. (Supplementary reading from Wm. Labov to be posted on Blackboard.)
Additional vowel features: lip rounding, advanced tongue root, nasalization, rhotacization.

November 21 -- **Linguistic Phonetics.** Read L&J chapter 11.

November 26 -- Linguistic phonetics, continued: Balance between factors favoring the speaker and the listener.

November 28 -- [Thanksgiving holiday. No class meeting.]

December 3 -- Production test, at 10-minute intervals during class meeting time.

December 5 -- Transcription Test, in-class. Brief summary of the course.

December 12, 11 am - 1 pm -- Term papers to be submitted (in the classroom).