

Phonetics

LING 320, Spring 2016

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Office Hours
Tuesday: 3–5:00pm;
Friday: 10:00–11:00am,
and by appointment

1 Overview

This course introduces the foundations of phonetics—the study of the physical aspects of speech production and perception. We will study how sounds are *articulated* in the human vocal tract, looking at the anatomy of the vocal tract and classifying sounds by their corresponding articulatory gestures. We will learn about the acoustics of speech sounds and to perform acoustic analysis using software. We will also survey some of the non-acoustic methods of measuring speech as an introduction to laboratory methods used by phoneticians.

By the end of the course, you will be able to:

- Transcribe speech using the International Phonetic Alphabet (IPA)
- Describe production and perception in precise terms
- Identify the properties of production and perception that are linguistically relevant
- Produce pharyngeal fricatives with confidence! (or insert phonetic segment of your choice)
- Make quality recordings and interpret digital displays of speech on your computer
- Conduct your own acoustic phonetic analysis
- Present your research in a clear and well-reasoned manner to others

2 Course Requirements

2.1 Prerequisites

LING 211 INTRODUCTION TO LINGUISTIC ANALYSIS (or equivalent)

2.2 Textbooks, Required Readings

There are two required textbooks that we will use extensively.

- Ladefoged, Peter. *A Course in Phonetics*.
- Johnson, Keith. *Acoustic and Auditory Phonetics*.

Additional readings will be available as .PDF files via Moodle.

2.3 Participation and Discussion

Will be unavoidable.

2.4 Transcription Exercises

Transcription is one of the most fundamental skills of phonetics. Over the course of the semester we will practice transcription of both English and unfamiliar languages. We will do a regular transcription review on Tuesdays, collectively looking at an utterance posted on Moodle the prior Thursday. These exercises are not corrected and are not to be turned in, but you will be expected to transcribe each utterance and bring your transcription to class, ready to discuss.

2.5 Assignments & Quizzes

Regular homework assignments are essential for you both to put into practice what you are reading and as an opportunity for feedback. Assignments will roughly occur weekly and will generally be shorter than what you have encountered in LING 211 or 321. Some “assignments” will be completed in class and will resemble what you might consider a “quiz.” As far as content and value toward your grade, these quizzes are effectively regular homework assignments.

For the most part, work can be handwritten. However, we will endeavor over the course of the semester to produce fully typed and printed IPA transcriptions. Furthermore, specific assignments may require typing, and will clearly be noted as such.

I am aware that circumstances may arise suddenly which prevent you from turning in an assignment or doing the work you are capable of. For this reason your lowest score on an assignment will not be considered in your final grade. See also §3 below regarding late work.

2.6 Exams

There will be two exams. They will be closed-note, in short-answer format. We will go over a practice exam to familiarize you with their format and approximate content.

There will not be a final exam, but Quiz #3, a production quiz, will be conducted individually during the final exam period.

2.7 Project

Details to come.

2.8 Grade Composition

<u>Requirement</u>	<u>% of Grade</u>
Participation, In-class exercises	10%
Assignments & Quizzes	30%
Exams	35%
Project	25%

3 Honor Principle and other policies/notes

All Reed students must abide by the Honor Principle. Plagiarism, cheating, or any form of academic dishonesty will not be tolerated and will be reported immediately.

Collaborating Other than the final project, your submitted work *must* be your own. You are however encouraged to work together on your transcription skills and discuss any part of any assignment with me or your classmates.

Late and missed work If you foresee a problem turning in an assignment on time, contact me *at least* 24 hours in advance and we can work out a reasonable solution. Otherwise, late work will receive a considerably diminished grade if received before the next class session. If later than that, I will happily provide feedback but no grade will be assigned.

Moodle will be used extensively for distribution of readings and other course materials.

4 Schedule

Tuesdays		Thursdays	
1/26	Agenda, Review	1/28	The vocal tract; Consonants & Vowels <i>Read: Ladefoged ch. 1 & 3</i>
2/2	Transcription <i>Read: Ladefoged ch. 2 & 4</i>	2/4	Phonation <i>Read: Borden & Harris (1984)</i> Problem Set #1 due
2/9	States of the glottis · VOT, voicing, voice quality <i>Read: Ladefoged ch. 6</i>	2/11	Consonants · Place, manner <i>Read: Ladefoged ch. 7</i> Problem Set #2 due
2/16	More on consonants	2/18	Vowels, nasalization <i>Read: Ladefoged ch. 9</i> Quiz #1
2/23	Non-segmental Phonetics in context · sentences, stress, intonation <i>Read: Ladefoged ch. 5, 10</i>	2/25	More on vocalic segments · Glides, laterals, rhotics Problem Set #3 due
3/1	Transcription practice <i>Read: TBA</i>	3/3	Exam One
3/8	Introduction to Acoustics · Nature of sound and sound propagation <i>Read: Johnson ch. 1</i>	3/10	Waveform analysis · F0, intensity, voicing <i>Read: Zsiga (2012)</i> Project Progress Report #1
3/15	Source-filter theory · Complex sounds and spectra <i>Read: Johnson ch. 2</i>	3/17	Vowel acoustics <i>Read: Johnson ch. 6, Ladefoged ch. 8</i> Problem Set #4 due
SPRING BREAK			
3/29	Making recordings, Introduction to Praat <i>Read: Johnson ch. 3, Peterson & Barney (1952)</i>	3/31	Acoustics of prosody · Stress, Pitch, Duration <i>Read: TBA</i>
4/5	Fricative acoustics <i>Read: Johnson ch. 7</i> Quiz #2 - Acoustics	4/7	Stop acoustics <i>Read: Johnson ch. 8</i> Project Progress Report #2
4/12	Nasalization, wrapping up acoustics <i>Read: Johnson ch. 9</i>	4/14	Exam Two
4/19	Audition & Perception <i>Read: Johnson ch. 4, 5</i>	4/21	Perception Experiments Problem Set #5 due
4/26	Article discussion <i>Read: TBA</i>	4/28	Presentations <i>Read: -</i>
Exam Week: Quiz #3			