

Linguistics 414: Introduction to Phonetics for Linguists  
Syllabus: Fall 2009

15<sup>th</sup> September, 2009

**Lecture 34681**

**Location** Bartlett 301

**Time** 9:30-10:45 TR

**Lab 39183**

**Location** Dickinson 212

**Time** 11:15-12:05 W

**Instructor** John Kingston

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**Lab** Bartlett 6

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**1 Introduction**

This course is about how speakers produce or articulate speech sounds and about the acoustic results of their articulations. We study the full variety of articulations and acoustics found in the speech sounds of the world's languages. Our focus throughout is on how sounds contrast with one another in particular languages, that is, on the differences that can distinguish one message from another. This focus leads to an exploration of the relationship between phonetics and phonology, the latter being the patterns into which sounds enter in languages. Finally, we study the basic theory of the transformation of articulations into acoustic signals and their perception by listeners.

## 2 Structure of the course

Linguistics 414 meets three times a week, lectures on Tuesdays and Thursdays and the lab on Wednesdays. The lab has two purposes:

1. Training in transcription, so you can complete the final project for the course, and
2. Demonstrating the various analytical techniques that we use to investigate the articulation, acoustics, and perception of speech sounds, to illustrate the nuts and bolts of analyses, and to answer your questions about the course content, assignments, and exams.

## 3 Your responsibilities

**Exercises: Total 25%** 3 exercises worth 5% each and 1 worth 10%. You have a week to do each of the three smaller exercises and two weeks for the larger one. The exercises are carried out by groups rather than individuals. We will assign you to groups for each exercise.

**Transcription: Total 15%.** On many Wednesdays (“transcription” labs in the day-to-day schedule below), a native speaker of a language other than English comes in to help with demonstrating transcription. Together, you and the instructor elicit and transcribe words from this speaker. The goal of this activity is to train you in transcription, so that you can carry out your final project. You turn in a sample of your transcriptions, each worth 2%. Your grade for this activity is based both on your transcription and your participation in that lab meeting.

**Exams: Total 30%.** Twice during the course, you write a take-home exam; each is worth 15%. For each exam, you have a week.

**Final Project: 30%.** You recruit a native speaker of a language other than your native one or any that you have studied formally, and by eliciting and transcribing words and phrases discover what its contrasting sounds are and how they vary in pronunciation between contexts. The transcription exercises are designed to teach you the skills you’ll need to carry out this project.

1. By 1 September 2009, all students must meet with either the instructor or one of the TAs to tell us which language you’re doing your final project on. 3% is deducted from the grade for the project if you do not meet with us by this date to tell us your language. We will provide help with recruiting speakers for those who can’t find one themselves.
2. By 29 October 2009, you meet with one of us again to show us your transcriptions of at least 200 words of the language. 5% is deducted from the grade for the project if you don’t meet to show us your transcriptions by this date.
3. By 19 November 2009, you turn in a first draft of the description of your language’s sounds. This draft is returned to you with comments on 1 December 2008. 5% is deducted from the grade for the project if you don’t turn your first draft in on time.
4. In the last week of classes, each of you presents the highlights of your study orally to the class. The presentation contributes 5% to your grade, the written report 25%.

## 4 Text

There are two texts for this course:

1. Ladefoged and Maddieson's *Sounds of the World's Languages* (1996). This text presents a nearly complete description of the distinctive speech sounds of the world's languages, organized by the type of sound.
2. Reetz and Jongman's *Phonetics* (2009). This text provides a more general description of the phonetics of speech sounds, along with more detailed discussions of the acoustics and perception of speech sounds.

Both are available at the Textbook Annex.

## 5 Policies

- I expect both the exercises and the exams to be done on time. The homework assignments are designed to take each member of a group 1-3 hours/week to complete, and the exams 3-4 hours, so there is little reason not to finish them on time. Of course, if some unforeseeable problem arises, I'll grant appropriate extensions. Otherwise, one-third the credit is deducted for each business day that an exercise or exam is late; after three business days have passed, a grade of 0 is assigned for that piece of work.
- I encourage you to collaborate with your classmates in brainstorming about exams, but you must write them up by yourselves.
- We will set up a Facebook group for this course, which will be used for asking and answering questions, keeping up with deadlines, and discussing the course content.
- Otherwise, use email to reach us. We recommend that you send your email to all three of us, as that way you'll likely to get a faster response.

## 6 Software and hardware

- Much of the work you do for this course, as well as many of the demonstrations in class and lab use a software package called "Praat". This software is free and runs on all operating systems. To obtain it, you should go to:

[www.praat.org](http://www.praat.org)

and download the most current version for your operating system. You can find instructions there for how to install it on your machine. PRAAT is primarily a tool for acoustic analysis, but with care, acoustic measurements can be used to infer a great deal about articulations.

- Two of the exercises require you to use equipment in the Phonetics Laboratory in Bartlett 6, so we provide some practical guidelines for using this equipment, which are designed to ensure that everyone can get their work done on time.
  - You must sign up for the equipment you want to use. The signup sheet is in the white end table next to the mailboxes in the Linguistics Department Office, South College 226. The keys to Bartlett and the lab may also be found there. Include your phone number on your signup, so the people needing the keys next know how to reach you.
  - Because this class is large and many people are competing to use the equipment:
    - ★ If you sign up for an interval of time, make sure you use it, so it isn't wasted. If you can't use it, unsignup as soon as possible.

- ★ Don't sign up for more time than you really plan to use, and in any case, don't sign up for more than two prime-time hours any day nor more than three two-hour prime-time slots in any week. Prime time is defined as 9-5 M-F. Expect that sometimes you will have to work in the evening or on the weekend.
- ★ As soon as you're done using the lab, return the keys or give them directly to the next person using the lab, if they're using the lab right after you. It is definitely not OK to wait to return the keys until after your next class, after lunch, or the next morning. Return the keys immediately, and you'll keep the love and affection of your classmates. Fail to do so, and well, you really don't want to know.

## 7 In-class activity

A great deal of class time is spent analyzing phonetic data, so you need to bring your laptop with you to every class.

## 8 Outline of course topics

1. Place of articulation
2. Stops
3. Fricatives
4. Nasals
5. Multiple articulations
6. Laterals
7. Rhotics
8. Clicks
9. Vowels
10. Speech acoustics
11. Speech perception
12. Presentations

**9 Academic calendar Fall 2009**


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First Day of classes	Tuesday	September 8
Last day to Add or Drop with no record	Monday	September 21
Holiday - Columbus Day	Monday	October 12
Monday class schedule will be followed	Tuesday	October 13
Last day to Drop with "DR" - Graduate	Monday	October 19
Mid-Semester Date (Last day to drop with "W")	Thursday	October 22
Holiday - Veterans Day	Wednesday	November 11
Registration begins for Spring 2009	Thursday	November 12
Tuesday class schedule will be followed	Wednesday	November 12
Thanksgiving recess begins after last class	Wednesday	November 25
Classes resume	Monday	November 30
Last day of classes	Friday	December 11
Reading Period begins	Saturday	December 12
Reading Period ends	Sunday	December 13
Final examinations begin	Monday	December 14
Last day of final examinations	Saturday	December 19
Snow day for Dec. 19 exams, semester ends	Monday	December 21
Final grades due 12:00 noon	Monday	December 28

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## 10 Day-to-day schedule

Below is the day-to-day schedule of the course. In the right two columns are listed the days when the exercises and exams are passed out and when they they are due. In the 'Reading' column, 'LM #' and 'RJ #' indicate that chapter # in Ladefoged and Maddieson and/or chapter # in Reetz and Jongman is to be read for that class meeting. The final project is due by the end of business (4 PM) on 19 December 2009. Unless otherwise noted, labs will meet where the class does, in Machmer W-21.

Week	Day	Topic	Reading	Homework	Exam
1	8 Sep	Introduction; First transcription demo	LM 2		
	9 Sep	Lab: Transcription	RJ 2		
	10 Sep	Introduction to Praat			
2	15 Sep	1. Place of articulation	LM 2, RJ 3.1, 4.1		
	16 Sep	Demonstration		Paint it black (5%)	
	17 Sep	Place cont.			
3	22 Sep	2. Stops	LM 3, RJ 6		
	23 Sep	Transcription		Paint it black due Damp skunk (5%)	
	24 Sep	Stops cont.			
<b>You must tell us the language of your final project by the end of this week.</b>					
4	29 Sep	3. Fricatives	LM 5		
	30 Sep	Demonstration		Damp skunk due Nasal air flow out (10%)	
	1 Oct	Fricatives cont.			
5	6 Oct	4. Nasals	LM 4		
	7 Oct	Transcription			
	8 Oct	Nasals cont			
6	13 Oct	Monday class schedule			
	14 Oct	Demo Bartlett 6		Nasal air flow due	
	15 Oct	5. Multiple articulations	LM 10, RJ 4.4		E1 out 1-4
7	20 Oct	Multiple arts cont			
	21 Oct	Transcription			
	22 Oct	6. Laterals	LM 6		E1 due
<b>Meeting to present transcriptions of first 200 words must be held by this week.</b>					
8	27 Oct	Laterals cont			
	28 Oct	Transcription			
	29 Oct	7. Rhotics	LM 7		

Week	Day	Topic	Reading	Homework	Exam
9	3 Nov	Rhotics cont			
	4 Nov	Transcription			
	5 Nov	8. Clicks	LM 8		
10	10 Nov	Clicks cont.			E2 out 5-8
	11 Nov	Veteran's Day			
	12 Nov	Vowels	LM 9, RJ 2.4,3.2,10.1		
<b>First draft of final project must be turned in by the end of this week.</b>					
11	17 Nov	Vowels			E2 due
	18 Nov	Demonstration			
	19 Nov	Speech acoustics	RJ 7		
12	24 Nov	Speech acoustics cont.	RJ 9-10		
	25 Nov	????			
	26 Nov	Thanksgiving			
<b>First draft of final project returned with comments.</b>					
13	1 Dec	Speech perception	RJ 13		
	2 Dec	Demonstration		Lexical bias out (5%)	
	3 Dec	Speech perception cont.			
14	8 Dec	Final project presentations			
	9 Dec	Final project presentations			
	10 Dec	Final project presentations		Lexical bias due	
	19 Dec	Final projects due			