

# CAS LX301 / GRS LX 601

## Phonetics and Phonology: Introduction to Sound Systems

Fall 2017  
TTh, 11:00-12:15  
Room: CAS 204A

### Instructor:

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Office Hours: Monday 3:00-4:30, Tuesday 3:30-5:00, or by appointment

### Course Description and Objectives:

This course is an introduction to the description and analysis of the sound systems of the languages of the world. We will investigate the nature of human speech sounds from the perspectives of both speech production and speech perception. Articulation, aerodynamics, acoustics, audition, and higher-level perceptual and cognitive characteristics of speech are considered. Throughout, however, our focus will be on what is called *linguistic phonetics*, or the application of so-called pure phonetic inquiry to the explanation of cross-linguistic patterns and universals in the composition of sound inventories, and the combination of sounds within the lexicon. Basic principles of phonological analysis, including the treatment of contrast, phonotactic patterning, and alternations, will also be introduced.

In this class, students will learn:

1. To describe and distinguish the speech sounds of the languages of the world in terms of their articulatory and acoustic profiles.
2. To recognize and produce this same range of speech sounds.
3. To use the International Phonetic Alphabet to produce detailed phonetic transcriptions of both familiar and unfamiliar dialects of English, as well as other languages.
4. To use basic techniques in digital speech analysis, and to interpret visual depictions of speech acoustics (e.g., spectrograms).

5. To understand basic principles that govern the selection of sounds to form segment inventories, and to apply concepts such as ease of articulation and perceptual robustness to the interpretation of sound patterns.
6. To apply all of the above to a novel field situation in which the goal is to create “from scratch” a basic phonetic and phonological description of an unfamiliar language.

Prerequisites: LX250, Introduction to Linguistics, or equivalent.

## Course Requirements and Grading

### Texts

**Required:** Peter Ladefoged (& Keith Johnson) *A Course in Phonetics*, 7th ed. (Cengage Learning. ISBN-13: 978-1-285-46340-7)

Note: Make sure you get the correct edition of Ladefoged! Previous editions, enticingly affordable though they be, are quite different in many respects.

**Recommended:** J.C. Catford, *A Practical Introduction to Phonetics* (Oxford).  
 Peter Ladefoged and Ian Maddieson, *Sounds of the World's Languages* (Blackwell).  
 Peter Ladefoged, *Elements of Acoustic Phonetics* (U of Chicago Press).

- The Ladefoged & Johnson textbook is available at the Barnes and Noble bookstore at Boston University.

### Some online resources

IPA fonts: [http://scripts.sil.org/cms/scripts/page.php?site\\_id=nrsi&id=ipahome](http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&id=ipahome)

Typing IPA online: <http://ipa.typeit.org>

Praat: <http://www.fon.hum.uva.nl/praat/>

Clickable IPA chart: <http://web.uvic.ca/ling/resources/ipa/charts/IPAlab/IPAlab.htm>

IPA Phonetics APP:

<http://www.uvic.ca/humanities/linguistics/resources/software/ipaphonetics/index.php>

Fun phonetics stuff from UCLA: <http://www.phonetics.ucla.edu>

### Grading Breakdown

	CAS LX 301	GRS LX 601
Classroom participation	5%	5%
Weekly Homework	32.5%	27.5%
Midterm examination (October 19)	12.5%	12.5%
Final examination (December 19, 12:30-2:30)	25%	20%
Phonetic fieldwork project	25%	25%
Critical reading summaries	NA	10%

## Academic Integrity

All students are responsible for understanding and complying with the BU Academic Conduct Codes, available at <http://www.bu.edu/academics/policies/academic-conduct-code> and <http://www.bu.edu/cas/students/graduate/grs-forms-policies-procedures/academic-discipline-procedures/>

## Homework

- Weekly homework assignments are due at the *beginning* of class on the day they are due. Late homework (without prior excuse) will not be accepted. Your lowest homework grade will be dropped.
- You may, if you wish, collaborate with your fellow students on homework assignments. You must, however, state CLEARLY on each assignment the identities of your collaborators, and you must each write up your homeworks individually.

## Graduate Students

- Students enrolled in this class as GRS LX601 will be required to complete certain additional assignments for this course. Weekly homework assignments, for example, will often have an additional component required for graduate students. Throughout the semester there will also be a series of additional readings, taken either from more advanced text- or handbook presentations of the material, or from the primary literature itself. In addition to being responsible for the content of these readings, graduate students will also be required to submit, for each such reading, a critical summary and evaluation of the reading in question, between one and two pages double-spaced in length. Each summary, in addition to an overview and commentary on the reading, must present at least one “question for further study”, with a blueprint for follow up, that emerges from this reading.

## Final Project

- For our final project, you will take on the role of linguistic field worker. Working with a native speaker of a language with which you have no previous experience, and without consulting existing sources, you will create an original description of the sound pattern of the language you have chosen. Initial proposals for projects due in class **on October 12**. An early start is highly recommended.
- Your consultant must be a living, intact, fluent speaker of the language in question. And must use the language in question on a regular basis.
- Please do not consult ANY reference materials (published grammars, dictionaries, articles, online descriptions, or what have you) regarding your language. Doing so defeats the purpose of the assignment, and will most likely be detected and frowned upon *severely* by your instructor.
- A note on using linguists as consultants: you should always seek out your consultant's intuitions concerning the structure of his or her language ("are these two sounds the same or different?"), but if your consultant should happen to be a linguist (or otherwise in-the-know about grammar), please explain to him or her the nature of this assignment and ask that he or she refrain from simply telling you "the way it really is".

- This project will be discussed *in detail* as the semester progresses. An archive of successful projects from previous years is available for your perusal upon request.

## Syllabus:

WEEK	DATE	TOPIC	ASSIGNMENTS
1	Sep 5, 7	Basic terminology and anatomy; What is linguistic phonetics? Airstream mechanisms	Read: Ladefoged, 1-2, 6: 144-159
2	Sep 12, 14	Phonation; Aspiration and VOT Obstruents: Place and manner of articulation	Read: <b>L</b> , Ch. 3-4, 6: 159-171
3	Sep 19, 21	More obstruents, Complex segments	Read <b>L</b> , Ch. 7
4	Sep 26, 28	Sonorants; Secondary articulations	
5	Oct 3, 5	Vowels and diphthongs	Read: <b>L</b> , Ch. 9
6	Oct 12	Phonemic analysis Note: NO CLASS OCTOBER 10 ☹	Read: <b>L</b> , Ch. 11 <b>Proposals due in class on October 12! You should be starting work by now.</b>
7	Oct 17, 19	More phonemic analysis October 19: <b>Midterm exam</b>	
8	Oct 24, 26	Suprasegmentals 1: syllables, stress	Read: <b>L</b> , Ch. 5, 10
9	Oct 31, Nov 2	Suprasegmentals 2: Tone and intonation	
10	Nov 7, 9	Coarticulation, Contextually-determined variation; Acoustic phonetics	Read: <b>L</b> , Ch. 8
11	Nov 14, 16	Still more acoustic phonetics	
12	Nov 21	Even more acoustic phonetics Note: NO CLASS November 23 ☹☹	
13	Nov 28, 30	Last acoustic phonetics	
14	Dec 5, 7	Speech perception	Read: Diehl, Lotto, Holt (To be distributed)
15	Dec 12	Review and wrap-up	December 12: Projects due in class!

- A number of supplemental readings will be assigned and made available to you over the course of the semester.