LING 320 (Articulatory and Acoustic) Phonetics

Tu/Thu 9:00 am – 10:20 am Vollum 118

Course Syllabus
Spring 2010

Svitlana Antonyuk-Yudina
email: *svanton@reed.edu*
phone: 7852 (from off-campus: 503-517-7852)
office hours: Mon 1:00 – 2:30 pm, Thu 3:00 – 4:30 pm
                or by appointment / Vollum 307

PREREQUISITES

Successful completion of Linguistics 211 (or equivalent), or instructor consent.

CONTENT OF THE COURSE

This course will introduce the students to the nature of human speech production and perception and the nature of the acoustic signal that is transmitted from speaker to listener. Our goals will be: (1) To understand fundamental principles of phonetic theory and phonetic representation. We will study current theories of the complex tasks accomplished by speakers and listeners and will arrive at a representation of speech sounds in terms of their articulatory (speaker-based), acoustic, and perceptual characteristics. (2) To obtain practical skills of carrying out phonetic experimentation and modeling. Small-scale experiments will provide training in measurement, acoustic analysis, and perceptual testing, and reinforce theoretical principles by serving as empirical tests of selected claims. (3) To consider the relation between human articulatory and perceptual capacities and patterns in linguistic sound systems (i.e., phonology). Our exploration of issues related to this third goal will necessarily be preliminary, serving as a bridge between phonetics and future coursework that many students will take in phonology. (4) To provide practical experience in producing and transcribing sounds of the world's languages[!].

Required text: Peter Ladefoged, **A Course in Phonetics**, 5th edition (2006).[*]

[!] Due to the nature of this course, which requires obtaining significant amount of practical training (transcription skills, learning to do acoustic analysis, writing up experimental results) parts of the course will, by necessity, deviate from the conferences format.

[*] Since the 6th edition has just come out, it is no longer possible to order the 5th edition of the textbook through the bookstore, thus I ordered the new one for those of you who decide to purchase a copy; however, to the extent that I was able to verify this, there is no significant difference between the 5th and the 6th edition. The library has a number of copies of 5th ed. which you are welcome to use instead.

Additional texts (selected chapters, made available through Moodle):
Keith Johnson, Acoustic and Auditory Phonetics, 2nd edition (2003)
Ladefoged, Peter and Ian Maddieson, The Sounds of the World's Languages (1996)

GRADING AND ASSIGNMENTS

4 in-class dictations (approximately 10 min each), 10% of the final grade
5 problem sets, 50% of the final grade
Participation (includes participation in both in-class discussion, discussions on Moodle as well as occasionally collected homework practice exercises), 5% of the final grade
A final individual *practical exam*, worth 5% of the final grade, given by appointment in my office
A *term project* worth 30% of the final grade

Problem set due dates

	Given out	Due in Class
Problem set 1	Feb. 2	Feb. 9
Problem set 2	Feb. 16	Feb.23
Problem set 3	March 2	March 9
Problem set 4	Apr. 6	April 13
Problem set 5	Apr. 20	Apr. 27

Your term project is due Tuesday, May 11th, at 5pm.
Your practical exam will be during the week of oral exams, May 3 – May 9, individual times TBD

COURSE OUTLINE

The schedule outlined below is subject to modification. Note that I will be relying heavily on Moodle for all communication, posting updated syllabus (should I decide that changes to the current syllabus are necessary) as well as posting additional readings. You are responsible for checking the Moodle page for this class on a regular basis to keep up with the most current assignment. All readings that come from sources other than Ladefoged's textbook will be posted on Moodle for your convenience.

TOPICS (Sections I-III follow Peter Ladefoged's text (PL), though not in the same order)

Week1 Jan.26 – Jan.28   Section I INTRODUCTORY CONCEPTS
                               Articulation and Acoustics (PL)
                               Phonology and phonetic transcription (PL)

Week 2 Feb.2 – Feb. 4   Section II ENGLISH PHONETICS
                               The Consonants of English (PL)

Week 3 Feb. 9 – Feb.11   English Vowels (PL)

Week 4 Feb. 16 – Feb.18   English Words and Sentences (PL)

Week 5 Feb. 23 – Feb.25   Section III GENERAL PHONETICS
                             Acoustic Phonetics (PL)

Week 6 Mar. 2 – Mar. 4   Acoustic Phonetics Cont'd (Johnson)

Week 7 Mar. 9 – Mar. 11   Speech Perception (Johnson)

Week 8 Mar. 22 – Mar. 24   Speech Perception Cont'd (selected readings, to be posted
                             on Moodle)

Week 9 Mar. 30 – Apr.1   Airstream Mechanisms and Phonation Types (PL)

Week 10 Apr. 6 – Apr.8   Consonantal Gestures (PL)
                             More on Voice Onset Time (selected readings, to be posted
                             on Moodle)

Week 11 Apr. 13 – Apr.15   Section 4 TOPICS IN PHONETICS
                             Rhotics (Maddieson)
                             Russian Palatalization (Kochetov, available on Moodle)

Week 12 Apr. 20 – Apr. 22   Vowels and Vowel-like Articulations (PL)

Week 13 Apr. 27 – Apr. 29   Syllables and Suprasegmental Features (PL)
                             Linguistic Phonetics (PL)

ADDITIONAL USEFUL TEXTS

Comrie, Bernard (ed.) 1990. *The World's Major Languages*. Nice basic descriptive
chapters on quite a few languages, often a good start for your term project. (You can also
learn if Bernard Comrie thinks your language is major!)

International Phonetic Association. 1999. *Handbook of the International Phonetic
Association : a guide to the use of the International Phonetic Alphabet*. The authoritative
source.

Pullum, Geoffrey and William Ladusaw. 1996. *Phonetic Symbol Guide, 2nd ed.* Great
for study, and also you can use it to translate almost any non-IPA symbol in IPA, which
will help for your term paper. Note: don't use the first edition; it's for an obsolete
version of the IPA.

USEFUL ONLINE RESOURCES

http://www.fon.hum.uva.nl/praat/
You can download praat software, which we will be using in class and which you will eventually need to use on its own I carrying out your course project at this website for free.

http://www.uiowa.edu/~acadtech/phonetics/#
This is the website for the University of Iowa's Phonetics Flash Animation project. Here you can look at animated diagrams illustrating different places and manners of articulation in English, Spanish, and German.

http://www.phonetics.ucla.edu/
The homepage for the UCLA Phonetics Lab. To listen to sound files of the different types of sounds discussed in the reading, along with cool sounds from other languages, click on "Index of Languages" (to search alphabetically by language), "Index of Sounds" (to search by natural class), or "Map Index" (to search for language by location). For a handy 'self-pronouncing' version of the IPA chart, click on "A Course in Phonetics", and then click on "The IPA Chart".

http://www.sil.org/computing/fonts/encore-ipa.html
If you have not already done so, you should equip your computer with an IPA font. IPA fonts for Windows and Macintosh are available for free download from the Summer Institute for Linguistics website at the address above. Free phonetic fonts are also available from other sites, but the SIL fonts are the most widely used.