University of Florida at Gainesville Department of Linguistics 4131 Turlington Hall

LIN 6226 Advanced Phonetics

T 8-10th period (3:00-6:00) UST0105

Professor: Ratree Wayland Turlington 4131E

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Office Hours: T (11:45-12: 35), R (12:50-1:40), and by appointment

Overview:

The goal of this course is to introduce students to acoustic analysis techniques, theoretical issues in phonetics, and experimental phonetic research design. Experimental phonetic studies particularly those pertaining to an investigation into second language acquisition (production and perception) in general and on linguistic prosody in particular will read and discussed.

Prerequisite: LIN 4205 (Fundamental Phonetics) LIN 6208 (Phonetics for Linguists)

Objectives: On completion of this course, students should be able to:

- perform acoustic analysis on various acoustic characteristics of speech signals
- design experimental phonetic research to answer specific research questions
- be familiar with general theoretical issues in phonetics
- be informed of current trend in experimental phonetics research

Assessment	% of course grade
Class participation and exhibition	15%
of having read reading assignments	
Home work (5)	25%
Midterm exam (1)	25%
Presentation of selected papers	10%
Final project	25%

Grading Scale

93.7-100% = A	90-93.6% = A-	86.7-89.9% = B+
83.7-86.6% = B	80.0-83.6% = B-	76.7-79.9% = C+
73.7-76.6% = C	70.0-73.6% = C-	66.7-69.9% = D+
63.7-66.6% = D	60.0-63.6% = D-	Below 60% = E

Information on current UF grading policies for assigning grade points can be found here. http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html.

Late Policy: No late transcriptions, homework, or quizzes unless you receive permission before the due date. Let us know as soon as you realize you will be unable to meet a deadline. Assignments are collected at the beginning of class on the date they are due.

Textbooks

Required

Reetz, Henning and Jongman, Allard. Phonetics: Transcription, Production, Acoustics, and Perception. Wiley-Blackwell Publisher, 2009

Recommended

- 1. Rosen, S. and Howell, P. (1991). Signals and systems for speech hearing. Academic Press
- 2. Kent, R. and Read, C. (1992). The Acoustic analysis of speech. Singular Publishing Group, Inc.
- 3. Borden, G., Harris, K., and Raphael, L. (1994). Speech Science Primer. Latest Edition.
- 4. Johnson, Keith. (2012). Acoustic and Auditory Phonetics. Blackwell Publishers, Inc. 3rd Edition.
- 5. Stevens, K. (1999). Acoustics Phonetics. The MIT Press.

Course Outline

Lectures will follow the outline below. This outline is tentative and may be updated as we go.

Week	Date	Topic	Reading Assignments	HWs & Exams
1	1/9/18	Intro & Review		
2	1/16/18	-Basic Acoustics: Wave Loudness, pitch, Quality, resonance -auditory scales		
3	1/23/18	Speech analysis I: -Recording -Interpreting spectrograms -Temporal measurement -Amplitude measurement - Pitch measurement	Wayland Chapter 7 Sawusch 2005	
4	1/30/18	Speech analysis II: - LPC - FFT	Wayland Chapter 8 Practice doing LPC & FFT analysis	

5	2/6/18	Acoustic characteristics of segments and suprasegments	Chapter 9 Sussman 1991 Locus equation	
6	2/13/18	Speech perception -acoustic invariance -consonant perception -vowel perception -effects of contexts & rate - etc	Raphael 2005 Johnson 2005 Steven & Blumestein 1978	
7.	2/20/18	Neural coding of speech -duplex perception -McGurk effects -non-speech analog	McGurk 1976 Whalen & Liberman 1987	
8.	2/27/18	Speech perception theories/models -Motor theory -Direct realist -Psychoacoustic	Liberman et al 1985	
9.	3/6/18	SPRING BREAK!	NO CLASS!	
10.	3/13/18	Speech perception development	Kuhl et al 2000 Houston 2005 Maye et al 2002	
11.	3/20/18	Speech production and perception	Wayland Chapter 11 Fowler et al 2005	Mid-term
12.	3/27/18	L1-L2 perception theories and models -NLM -SLM -PAM etc	Iverson & Kuhl 1995 Best,1995	
13.	4/3/18	L2 Prosody acquisition -stress	Rasier et al. 2007 Guion et al. 2003	
14.	4/10/18	L2 Prosody acquisition -intonation	Jun & Oh.	

15.	4/17/18	L2 Prosody acquisition -tone	TBA	
16	4/24/18	L2 Prosody acquisition -rhythm		

Accommodations for students with disabilities Students requesting classroom accommodation must first register with the Dean of Students Office http://www.dso.ufl.edu/drp/. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation.

Academic honesty It is expected that all students will adhere to the University of Florida Honor Code and the academic honesty guidelines available at http://www.dso.ufl.edu/judicial/procedures/honestybrochure.php.