

## Introduction to Phonetics/Elements of Phonetics SLHS 30600/LING 31500 – Fall 2013

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Lecture Time/room: MW 11:30-12:20, BRNG 2290 Labs: Wednesday, 2:30-4:20, CL50 125

Thursday, 2:30-4:20, CL50 125 Friday, 7:30-9:20, GRIS 276

Teaching Assistants: Amber Torelli (atorelli@purdue.edu); Janet Vuolo (jvuolo@purdue.edu);

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Instructor Office Hours: Tuesday 2:30-3:20, or by appt.

TA Office Hours/Location: TBD/TBD

#### SOURCES OF COURSE INFORMATION

## Required textbook

Reetz, H. & Jongman, A. (2009). Phonetics. Wiley-Blackwell.

You will also need a pair of headphones (i.e. for an iPod or computer) and an iClicker (see below).

It may be helpful to have a microphone as well (not required).

#### **Supplementary references**

PDFs as assigned and posted to Blackboard.

#### **Blackboard Learn**

We will be using Blackboard learn (<a href="http://www.itap.purdue.edu/learning/tools/blackboard/index.cfm">http://www.itap.purdue.edu/learning/tools/blackboard/index.cfm</a>) as the primary means for distributing grades. You will also be able to download class notes and other supplementary materials from this system. Important course announcements will be made via Blackboard Learn Announcements, and also via Mixable (see below). Please do not rely on the Blackboard email system to contact your instructors. Use your own email to contact them directly at the address given above/in lab.

### **In-Class Response System**

We will be using the "iClicker" to obtain feedback during lectures. If you do not already have one, you will need to purchase one for use in this class. **Note:** We are unable to provide assistance with getting your iClicker to work. If you have difficulties obtaining, maintaining, or using your iClicker in class, you must contact ITaP for assistance.

#### Mixable

We will be using Mixable (<a href="http://www.purdue.edu/mixable/">http://www.purdue.edu/mixable/</a>) as a means to facilitate discussion in this class. Your TAs and I commit time each day to read and respond to comments and questions posted via Mixable, and we encourage you to post and respond to your classmates as well. The login page for Mixable is accessible from the main mixable page by clicking the login button at the upper right.

#### **COURSE OBJECTIVES**

This course is an introduction to the study of phonetics, the study of the production and perception of speech, with emphasis on using the International Phonetic Alphabet (IPA) as a tool for manually recording aspects of speech as it is produced, and the use of acoustic analysis to further explore speech production and perception. The study of phonetics is relevant to a variety of disciplines, from linguistics, audiology and speech/language pathology to sociology, law, music, and human-computer interface design. The course is intended primarily for undergraduate majors in linguistics and speech/language pathology and audiology, but other disciplines will be referenced when possible.

By the end of the semester you should be able to:

- Explain the mechanisms of speech sound production
- Understand the rationale, benefits and shortcomings of phonetic transcription
- Relate the production of speech to its perception
- Describe speech sounds in terms of linguistic phonetic features
- Recognize and transcribe common speech sounds from English and other languages
- Understand and be able to conduct simple computerized acoustic analyses of speech sounds using the freely available Praat software.

#### **COURSE POLICIES**

**Students with Disabilities**: If you believe you have a disability, medical condition or other special circumstances that may affect your participation in this course please contact the Dean of Students Office (Schleman 207, 4-1747, <a href="www.purdue.edu/odos/drc/welcome.php">www.purdue.edu/odos/drc/welcome.php</a>) so that suitable arrangements can be made. No accommodations can be provided without express written instructions from the Office of the Dean of Students.

If you plan to take any exams through the Disability Resource Center, please schedule them on the day of the in-class exam or on the preceding day. I will not approve exams scheduled for any day after the in-class exam is given except under exceptional circumstances (see below). All exams taken in the DRC must be confirmed at least two weeks before they in-class exam is set to be given. It is your responsibility to make arrangements before that time. If this is not done, you may not be permitted to take the exam outside of the regularly scheduled exam period. Exam times are already scheduled for the semester (see course plan) so you should be able to schedule all your exams well in advance.

**Time commitment**: Learning phonetics is time-consuming. It requires considerable memorization and repetitive practice. In addition to the hours you spend in class, you should plan on spending *at least 6-8 hours per week* on reading, reviewing your notes, and other assigned activities (homework, using CD-ROMs, downloading and applying software packages, and visiting suggested websites). The teaching assistants and I also commit time to working with you. If there is any material that you do not understand, please contact the TA for help or come to my office hours. Do this sooner rather than later. Like a foreign language, learning phonetics, and especially becoming proficient at transcription,

requires a great deal of highly repetitive practice. Do not wait until the week before the exam to start studying!

Attendance: Students are expected to attend all lectures and all assigned labs. In my experience, students who attend class regularly understand the material better and consequently earn better grades. If you must be absent from lecture or lab you are still responsible for all of the material covered during that class period. I recommend you make arrangements with your colleagues to borrow their notes if you miss class. Your TAs and I are not responsible for keeping you up-to-date on classes that you miss (except under exceptional circumstances, see below). Note that lectures and labs may not cover all material presented in the textbook, and will cover material that is not in the textbook. You are expected to know and understand all material covered in the course, whether presented in lecture, lab, the textbook, or any other assigned readings. No attendance will be taken in lecture or lab, and there is no necessity for you to ask to be excused from lectures that you may miss. However, homework and quizzes are due every week in lab, and quick quizzes may be given without warning in any lecture period (see assignments, below).

**Reading assignments:** All reading assignments for a given day should be completed before you come to class on that day. Readings will follow the attached schedule unless stated otherwise in lecture.

Homework: Written homework is a valuable form of active learning that helps students understand the materials covered in lecture and labs. Homework will be assigned regularly. Some assignments may require you to download and run various free computer programs. These may be done on your computer or in one of the ITaP labs on campus. Most programs we will use should be available for both Windows and MacOS (and Linux), but it is your responsibility to make sure they work on your computer. You are encouraged to work with colleagues on homework assignments. However, you should not turn in work that you did not do. Do not simply copy work done by others. Homework assignments exhibiting evidence of plagiarism will receive an automatic 0 for the entire assignment. Your homework is due in lab one week after it is assigned unless otherwise noted. Assignments not turned in on the due date will receive a grade of 0. There are 11 graded homework assignments. At the end of the semester, only your top 10 homework grades will be counted. No make-up assignments will be given for any reason.

Quizzes: Short quizzes will be given during labs to ensure that you are keeping up with and understanding course material. Reviewing the course material <u>regularly</u> (e.g. after every lecture) and making sure you can do your homework *on your own* will help you be prepared for these quizzes and will make it easier to prepare for the exams. Any quiz that shows evidence of plagiarism will receive an automatic 0 for the entire quiz. There are 11 graded quizzes. At the end of the semester only your top 10 quiz grades will be counted. Quizzes may include transcription of live or recorded speech. No make-up quizzes will be given for any reason.

Quick Quizzes: Quick quizzes may be given at any time during any lecture. These will be conducted via the iClicker system. Only responses provided via iClicker will be accepted. There will be no option to make up these questions or to substitute other methods for submitting answers. If your iClicker is not functioning correctly, it is your responsibility to make sure it works properly. If you must be absent from a lecture in which a quick quiz is given, you will receive a 0 for that quiz. No make-up or alternate quick quizzes will be given to replace those that are missed for any reason.

**Examinations**: There will be two written exams scheduled during regular class time (see the course schedule), a Lab Practicum (transcription exam) given during the final lab of the semester, and a final exam scheduled according to the campus-wide final exam schedule. Each in-class exam will comprise 12% of your final grade. In-class exams may include transcription of live or recorded speech.

**Lab Practicum** (**Transcription Exam**): This exam will consist of transcription of live or recorded speech. Samples may be typical or disordered English speech including children's speech, and may also include typical adult speech produced by native speakers of languages other than English (i.e. potentially including accented English speech as well as speech from foreign languages containing non-English speech sounds). It will constitute 12% of your final grade. This exam may be given in a computer lab.

**Final Exam**: The final exam will be cumulative, will comprise 20% of your final grade, and will address information from the entire course.

You are expected to take exams and quizzes on the days and times scheduled. Make-up exams are only allowed under exceptional circumstances (see below).

Conflict Exam Policy: Because this is a large class, there are usually a few students entitled to a conflict exam (see ODoS policies on conflict exam eligibility). This conflict exam will be scheduled according to the needs of eligible students, and location will be determined by space available at that time. If there is additional space in the scheduled conflict exam room, other students may be given the option of taking the conflict exam at the same time as the eligible students. Priority for this option will be determined by cumulative grade on the two in-class exams. If none of the eligible students elect to take the conflict exam, none will be offered. **Note**: The conflict exam time may be earlier or later than the official exam time and, at the discretion of the instructor and with the agreement of all students eligible to take it according to university regulations, may be provided outside of the regular examining period.

Please do not schedule travel for the end of the semester until after you have verified the date and time of the final exam. No conflict exams will be given for students wishing to leave campus before the official end of the semester except under exceptional circumstances (see below).

**Exceptional circumstances**: Exceptional circumstances include religious obligations, active military duty, serious personal illness or injury, sudden hospitalization or death of an immediate family member, and illness requiring home-stay of a dependent. If the absence can be anticipated (e.g. religious obligation, military service, family wedding, family graduation), you must notify me at least two weeks prior to the date of absence. Unanticipated absences may be excused only within 1 week following the date of returning from the absence and upon receipt of a letter verifying the legitimacy of the absence from the Office of the Dean of Students. **Unanticipated absences must be verified by the Office of the Dean of Students.** If you have questions about this policy, please ask. You may also refer to the website <a href="https://www.purdue.edu/odos/services/classabsence.php">www.purdue.edu/odos/services/classabsence.php</a>

Grading: C	Course grade	will be base	d on performance	e on the items	described in	the following table:
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Item	Points	Percentage
Exam 1	60 points	12 %
Exam 2	60 points	12 %
Final Exam	100 points	20 %
Transcription Exam	60 points	12 %
Lab Quizzes	10 quizzes * 10 points each = 100 points	20 %
Homework	10 assignments @ 10 pts each = 100 points	20 %
Quick Quizzes	20 points	4 %
TOTAL	500 points	100%

The final grade will be scored: A+ (100-97%, 485 pts and above), A (96-93%, 465-484 pts), A- (92-90%, 450-464 pts); B+ (89-87%, 435-449 pts), B (86-83%, 415-434), B- (82-80%, 400-414 pts); C+ (79-77% 385-399), C (76-73%, 365-384 pts), C- (72-70%, 350-364 pts); D+ (69-63%, 315-349 pts), D (62-56%, 280-314 pts), D- (55-50%, 250-279 pts); F ( $\leq$  49%, < 250 pts). Grades will be posted via Blackboard Learn as soon as the assignment has been graded for the entire class.

Classroom atmosphere: Please feel free to raise your hand to ask questions during lectures. I will do my best to answer your question in a timely manner. Please come to class prepared to participate. I often ask impromptu questions during lecture, and I expect you to be able to work with me when called upon to do so. Please be respectful of your instructors and your colleagues. If you must discuss something while someone else is talking, please do so quietly. If your discussion appears to be disruptive to the instructor or to other students you will be asked to quiet down. If you must be asked to quiet down more than once, you will be asked to leave class for the day. If you must leave early or arrive late, please make sure you enter or leave as quietly and unobtrusively as possible. I appreciate being notified of such occasions in advance, but understand that this is not always possible.

**Wireless Devices**: Please remember to turn off the sound on all electronic devices (phones, tablets, computers) before class begins. If your device is disruptive you may be asked to leave class. Use of any communication device during exams will result in a 0 and may be referred to the Office of the Dean of Students.

Student Academic Misconduct (a.k.a. cheating): If you work together with colleagues, make sure you can also do the work on your own when your colleagues are not there to help you. If you work together with someone else on a homework assignment, you are expected to include all authors' names on the assignment (whether or not they are currently enrolled in the class). Copying answers from anyone without attribution is plagiarism, and will be treated as such. You may not collaborate with anyone on quizzes or exams. Copying answers from classmates or allowing others to copy your answers on quizzes or exams, using others' work without attribution, and all other forms of plagiarism and cheating as given in the university guidelines will result in a failing grade for the assignment, and the incident may be reported to the Dean of Students for disciplinary action. Do not present the work of others as your own. Please review carefully the brochure "Academic Integrity: A Guide for Students" available at the Dean of Students Office (Schleman 207) or online at: http://www.purdue.edu/odos/aboutodos/academicintegrity.php

**Student Rights and Complaints**: The official policies of the University concerning student rights and complaints, honesty and academic misconduct can be found in the *Academic Procedure Manual*, and in *University Regulations*, available from the Office of the Dean of Students or at: <a href="http://www.purdue.edu/univregs/">http://www.purdue.edu/univregs/</a>

Any concerns about grades given on a particular assignment must be put in writing (hardcopy) and given to your TA, attached to the assignment to which they refer. Your written statement should include a description of why you believe the grade to be incorrect, and what you believe the grade should be. The course instructor is the final arbiter on all such decisions. The only exception to this rule is obvious errors in arithmetic, which may be brought to your TA's attention directly. In order to be considered, any appeal must be submitted within 1 week of the lab in which the assignment is handed back.

In general, any problems should be brought first to your TA. If you feel you cannot discuss the problem with your TA, please talk to the course instructor. You may also contact one of the department Ombudspersons before going to the department Head or the Dean of Students. The SLHS Ombudspersons are Dr. Anne Smith (email: <a href="mailto:asmith@purdue.edu">asmith@purdue.edu</a>) and Hope Gulker (email: <a href="mailto:hgulker@purdue.edu">hgulker@purdue.edu</a>). The Head of SLHS is Professor Keith Kluender (email: <a href="hkluender@purdue.edu">kkluender@purdue.edu</a>). You can also talk with the SLHS undergraduate advisor, Michelle Mullen (<a href="mailto:mmull@purdue.edu">mmull@purdue.edu</a>).

**Campus Emergency:** In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances. Here are ways to get information about changes in this course: Blackboard Learn web page (https://blackboard.purdue.edu/), the course Mixable feed (http://www.purdue.edu/mixable/), my email address: francisa@purdue.edu, and my office phone: 494-3815.

**Honors option:** There is no honors option for this class.

**Policy on letters of recommendation for graduate school**: I am usually unable to write letters of recommendation for students who have not worked in my lab for at least a semester and/or who have not taken a seminar-style course with me (e.g. SLHS 444 *Research Methods in Communication Sciences and Disorders*).

# SLHS 30600 / LING 31500 Phonetics Fall 2013 Course Plan (subject to change)

Week		Date	Lecture Number/topic	Reading Assignment
1	M	August 19	1. Introduction	Ch. 1
	W	August 21	2. Speech Articulation	Ch. 2
2	M	August 26	3. Phonetic Transcription I	Ch. 3, pp. 23-36
	W	August 28	4. Phonetic Transcription II	Ch. 3, pp. 37-48
3	M	September 2	Labor Day: NO CLASS	
	W	September 4	5. Place and Manner of Articulation	Ch. 4
4	M	September 9	6. Physiology of Sound Production	Ch. 5 (selected)
	W	September 11	7. Airstream Mechanisms & Phonation Types	Ch. 6 (selected)
5	M	September 16	8. Basic Acoustics	Ch. 7
	W	September 18	9. continued	
6	M	September 23	10. Speech Analysis	Ch. 8
	W	September 25	11. continued	
7	M	September 30	12. Source-Filter Theory	Ch. 9
	W	October 2	13. Continued (review for Exam 1)	
8	M	October 7	October Break: NO CLASS	
	W	October 9	14. Exam 1	
9	M	October 14	15. Acoustic Characteristics of Vowels	Ch. 10
	W	October 16	16. Continued (Diphthongs & Glides)	
10	M	October 21	17. Acoustic Characteristics of Consonants (Fricatives)	Ch. 10
	W	October 23	18. Continued (Plosives)	
11	M	October 28	Crossroads Conference: NO CLASS	Ch. 10
	W	October 30	19. Continued (Nasals & Laterals)	
12	M	November 4	20. Syllables & Suprasegmentals	Ch. 11
	W	November 6	21. continued	
13	M	November 11	22. Speech Perception	Ch. 12
	W	November 13	23. continued	
14	M	November 18	24. Review for Exam 2	
	W	November 20	Exam 2	
15	M	November 25	25. Sociophonetics and Dialect Variation	Hay & Drager (2007)
	W	November 27	Thanksgiving: NO CLASS	
16	M	December 2	26. Clinical Phonetics I: Guest Lecture	
	W	December 4	27. Clinical Phonetics II: Dr. Huber (Dysarthria)	
Finals		December 9-14	FINAL EXAM	

# SLHS 306 Phonetics Fall 2013 Lab Plan (subject to change)

Week	Date	Topic	Homework Due	Quiz	Notes
1	August 21-23	Introduction/ Articulation			
2	August 28-30	Transcription	HW1 (Ch. 1-2)	Q1	
3	September 4-6	Non-English Sounds	HW2 (Ch. 3)	Q2	
4	September 11- 13	Physiology	HW3 (Ch. 4)	Q3	
5	September 18- 20	Acoustics	HW4 (Ch. 5-6)	Q4	
6	September 25- 27	Signal Analysis	HW5 (Ch. 7)	Q5	
7	October 2-4	Source-Filter Theory	HW6 (Ch. 8)	Q6	
8	October 9-11			Exam 1	
9	October 16-18	Vowels	HW7 (Ch. 9)	Q7	
10	October 23-25	Consonants (obstruents)	HW8 (Ch. 10a)	Q8	
11	October 30- November 1	Consonants (sonorants)	HW 9 (Ch. 10b)	Q9	
12	November 6-8	Syllables & Suprasegmentals	HW10 (Ch. 10c)	Q10	
13	November 13- 15	Speech Perception	HW11 (Ch. 11)	Q11	
14	November 20- 22			Exam 2	
15	November 27- 29			Thanksgiving	
16	December 4-6	Review for Final		Transcription Exam	