PHI 80382/80682: Phonetics and Phonology II
Syllabus

Instructor	Christina Bjorndahl, Baker Hall 161A, cbjorn@andrew.cmu.edu
Time	Mondays & Wednesdays, 9:00 - 10:20
Location	Baker Hall, A54
Office hours	Mondays & Wednesdays, 10:30 -11:30, and by appointment
Course website	`http://www.cmu.edu/blackboard/`

1 Course description

This course is a continuation of *Phonetics and Phonology I* and is designed to expand upon the phonetic skills developed in that course, while delving more thoroughly into various issues central to phonology. We will focus primarily on consonants and the phonetic principles that govern their realization, with a special emphasis on voicing. We will learn about how articulatory and acoustic principles give rise to voicing assimilation, final devoicing and the interaction of consonant voicing and tone. The exploration will be hands on, and we will learn how to measure voice onset time, analyze stop bursts and fricative noise and see how the voicing of a consonant affects the pitch of the following vowel, using Praat. On the phonological side, we will consider various ways in which voicing contrasts and processes have been represented, including SPE-style binary features, feature geometry and Optimality Theory. One of the central themes will be how to reconcile phonological accounts of voicing phenomena with our understanding of their underlying phonetic principles. Both rule-based and constraint-based approaches to phonology rely on discrete symbols, whether they be phones or features, but the speech stream is not neatly divided into segment-sized units, and the features of phonological theory are typically spread over multiple segments. Additionally, many phonological explanations recapitulate phonetic principles, calling into question what we consider to be an explanation of sound patterns. The course will culminate in a survey of some recent approaches to understanding how phonetics and phonology interact.

2 Course objectives

Upon successful completion of this course you should be able to:

- model a speaker's knowledge of the sound system of their language using the tools of phonological theory (features, rules, constraints)
- acoustically analyse the speech of a speaker
- translate phonological phenomena into phonetic terms
- identify the advantages and limitations of either a purely phonological or phonetic account of a particular phenomenon
- present clearly and concisely, using appropriate terminology, phonological analyses and the results of phonetic investigations (both oral and written)

These learning objectives are brought together in the semester-long course project, in which you are to articulate a research question, collect data, maintain a fieldwork notebook, perform both a phonological and phonetic analysis on the data, and present the results (orally and in your written report). As a result, the various assignments and activities done throughout the course will work toward developing the skills required for the successful completion of the project.

3 Resources

Both textbooks are available at the CMU bookstore. If you have an older edition of the Johnson book, you do *not* need to get a newer one. Required resources are marked with an asterisk.

Textbook* Zsiga, Elizabeth C. *The Sounds of Language: An Introduction to Phonetics and Phonology*

Textbook Johnson, Keith. *Acoustic and Auditory Phonetics*

Praat software (free)* Please install the most recent version (5.3.82), which can be found here: `http://www.fon.hum.uva.nl/praat/`. You will need to have Praat installed and working by the second week of class; if you have any difficulties with installation, see me. Note that some classes will require that you bring a laptop with Praat installed to class; see me if this is a problem.

Additional readings from other sources will be made available on Blackboard, and all reading assignments will be posted on Blackboard at least 2 weeks in advance. You are expected to do the reading for that day's lecture *prior* to coming to class.

4 Academic integrity

All students are expected to adhere to the CMU code of academic integrity, which can be found here: `http://www.cmu.edu/academic-integrity/`. Violations of the code will be treated very seriously. If you are in doubt about what constitutes a violation, please don't hesitate to ask!

5 Evaluation

Problem sets (phonology)	25% (5 problem sets, 5% each)
Labs (phonetics)	25% (5 labs, 5% each)
Quizzes	15% (3 quizzes, 5% each)
Major project	25%
Good citizenship	10%

5.1 Phonology problem sets and phonetics labs

One of the primary goals of this course is to get you to engage with phonology and phonetics, and to help you build an intuition regarding the issues pertaining to sounds and sound systems. In this spirit, you should not assume that there is a particular answer I'm looking for on a problem set or lab. Rather, you should view them as opportunities to practice summarizing, analyzing and presenting the data and arguments, much as you will be doing for the course project. You do not need to be verbose (bullet points are fine and even encouraged!), but you need to write in such a way that a reader who is not intimately familiar with the data can follow your analysis and argumentation. I will be grading as much for clarity of presentation as I will for content.

5.1.1 Working with others

You are permitted, and in fact encouraged, to discuss the data and methodology with others, but you must write up the problem sets and labs by yourself. If you work with anyone else, you must indicate who you worked with on the first page of the assignment.

5.1.2 Formatting and naming conventions

Please type up your assignments, and use common sense formatting (i.e., no font size smaller than 10pt, appropriate margins, etc.). Please staple your assignments and make sure your name is on every page.

For diagrams and trees that are difficult to do in a word processor, you may leave blank space and draw them in by hand, but please be as neat as possible. For IPA transcription, I recommend `http://ipa.typeit.org/`, which is very easy to use. If you use LaTeX, come talk to me about packages you will need.

Any assignment submitted electronically must be submitted in pdf form, and be named as follows: `LastName_AssignmentName` (e.g., `Smith_ProblemSet1`; `Chen_MajorProject`; `Sidenberg_PhoneticsLab1`).

5.2 Late submissions

Assignments are due at the beginning of class on the posted due date, and in general late submissions will not be accepted (except in exceptional circumstances, which should be discussed with me *prior* to the due date). Assignments will typically be returned and discussed in the following class, and no assignments can be submitted after this, regardless of circumstance.

5.3 Quizzes

There will be three in-class quizzes, one at the end of each of the first three parts of the course. The quizzes will last approximately 20 minutes, and be administered at the beginning of class; note that if you arrive late you will not receive extra time. These are not midterms! You should view them as benchmarks to assess how well you've learned the recent material; they are important for me to ensure that everyone is on the same page before we move on to the next unit. You will be notified of quiz dates 2 weeks ahead of time.

I will make heavy use of shorter, *non-graded* quizzes, throughout the semester. I will not be collecting them, and we will take them up in class. These are for your benefit, as they make sure you know immediately if you're falling behind. These will be unannounced, and will typically cover material from the previous day's lecture.

5.4 Course project

The course project is a semester long project, meaning that it should be started right away! There will be numerous check-ins to ensure that progress is going smoothly, and I will of course be available to talk about your project throughout the semester.

The project must tackle both the phonetics and phonology of a particular phenomenon. It can be more heavily biased to one or the other, but any project that either fails to address phonological analyses or does not include a phonetic study will be deemed unacceptable (i.e., receive a grade of no more than 60%).

5.4.1 Timeline for project

Initial proposal (in-class discussion)	Week 2
Formal proposal and outline	Week 5
Progress report	Week 10
In-class presentation	Week 15
Final report	December 5, 2014 (with no late penalty until December 12)

5.4.2 Components and evaluation of course project

Initial proposal	not graded
Formal proposal and outline	15%
Progress report	15%
In-class presentation	10%
Data collection / annotation	20%
Write-up	40%

5.5 Good citizenship

The expectation is that you will engage with the material and the class. That means attending class, doing the readings, participating with questions or comments in discussions and attempting to answer questions I ask in class. I will not keep detailed records of attendance or tardiness. That being said, coming in late is a disruption to your fellow classmates, and disrupts me if I'm lecturing. Being absent means you cannot participate in that day's discussion. Both absence and tardiness are excusable if they happen only occasionally, but I will notice any errant behaviour that constitutes a pattern, and it will impact your grade, as will improper use of your computer/tablet/smart phone during class. "Improper use" means activities such as surfing, texting, working on assignments (whether for another class or this one) or any other activity that distracts you or your classmates from being fully engaged with the class.

5.6 Life happens

Please come see me as soon as you know of circumstances that will impact your performance in the course, including but not limited to religious holidays, class excursions, zombie attacks, interviews, sickness, bereavement, depression, extreme stress, etc. The degree to which I accommodate you is proportional to how much notice you give me (taking into consideration how much notice it was possible to give).