Introduction to Phonetics & Phonology  
(Ling 20101)  
Fall 2017

Class: MWF 11:30–12:20  
Instructor: Jacob B. Phillips  
Email: jbphillips@uchicago.edu  
Section: F 1:30–2:20  
TA: Marina Ermolaeva  
Email: mermolaeva@uchicago.edu  
Location: Walker 302

Office: SS 010C (Landahl)  
Office hours: W 1:00–2:00 pm and by appointment

Location: Pick 222  
Office: SS 008A (Landahl)  
Office hours: T 10:00–11:00 am

Course Description:

This course provides an in-depth introduction to the phonetics and phonology of human languages. Phonetics is the study of how the sounds of the world’s languages are produced and perceived. Phonology is the study of how these sounds are categorized, contrasted, and organized into larger structures in each language.

In this course, we will begin with an introduction of how to describe and identify different speech sounds by their acoustic and articulatory properties. We will move onto an examination of those different sounds are categorized, classed, and structured in different languages from a variety of different theoretical perspectives. Throughout the quarter, we will work with real data from a diverse sample of the world’s languages. You will also be introduced to a variety of experimental and data collection methodologies, including experience in lab practica and participation in current research. The course will culminate with a final project where you collect your own data and provide your own phonetic and phonological analysis of a language you have not previously studied.

Course Objectives:

By the end of the quarter, you will be able to:

• confidently identify and describe the acoustic and articulatory properties of the various sounds of the world’s languages.
• transcribe speech from any language using the International Phonetic Alphabet (IPA).
• identify alternations and patterns between sounds and sound classes in a diverse set of languages.
• model those patterns and alternations using both rule and constraint based approaches.
• collect and analyze your own data.

Prerequisites: Introduction to Linguistics (20001)

Course Materials:

Weekly readings and are meant to provide background and reinforcement to the material we cover in class. Both required texts are available on reserve in the library or for purchase from the bookstore. Additional readings are available on Canvas.


If you seek more in-depth content to supplement what we cover in class, I recommend the following texts:
For this class you will need to use Praat, a speech analysis software. You can download Praat for free at http://www.fon.hum.uva.nl/praat/

For help with IPA (International Phonetic Alphabet), I suggest:

- https://web.uvic.ca/ling/resources/ipa/charts/IPAlab/IPAlab.htm
- https://teaching.ncl.ac.uk/ipa/practical-exercises.html

Grading Policy:

Grade distribution:

<table>
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<tr>
<th>Component</th>
<th>Percentage</th>
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<tr>
<td>Research Awareness Requirement</td>
<td>5%</td>
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<tr>
<td>Lab reports &amp; problem sets</td>
<td>35%</td>
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<tr>
<td>Quizzes</td>
<td>20%</td>
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<tr>
<td>Midterm Exam</td>
<td>20%</td>
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<tr>
<td>Final Project</td>
<td>20%</td>
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Attendance: Although attendance is not factored into the course grade, you will be responsible for attending class to receive handouts, turn in assignments, and take quizzes. Absence from class does not excuse you from assignments, quizzes, or the material covered in class.

Research Awareness Requirement: Linguists conduct research using a variety of methodologies. Some research involves interviews in field situations, and other research involves experimental techniques in a laboratory setting. To gain exposure to the different methodologies, you must complete two credits demonstrating knowledge of current linguistic research. Credits may be fulfilled by participating in ongoing studies in the Linguistics Department and/or attending a talk in the Linguistics Department. You may register for participation in a study at https://uchicagoling.sona-systems.com/. If you choose to attend a lecture, you must write a 500 word summary of the talk including an explanation and discussion of the methodologies used. An up-to-date list of studies and lectures will be available on Canvas. The Research Awareness Requirement must be completed by the last day of class (11/29).

Homework: Assignments will be due on Mondays at the beginning of class. Late assignments will not be accepted. You are encouraged to work in groups to discuss the assignments, but you must write up your own solutions and name all students you with whom worked. Typed assignments are required, but you may attach hand-drawn figures as necessary. Assignments submitted via email must be in PDF format.

Quizzes: Quizzes will be short assessments at the beginning of class noted in the course outline and are designed to test your mastery of skills, terms, conventions, and fundamental concepts to the field. You may not consult any resources during the quizzes, though you are encouraged to prepare in groups. Quizzes may not be made up except in the case of a medical or family emergency or the observation of a religious holiday. The lowest score will be dropped.

Midterm Exam: The midterm project will take place on Friday, November 3 and will test the topics covered during the first five weeks of the course, including the vocal tract, transcription, spectrogram reading, and descriptions of the acoustic and articulatory properties of speech.

Final Project: The final project is due Monday, December 4 and may submitted as a PDF via email or in person to my office. In groups of 2 to 4, you will select a language that you have not previously studied.
and write a phonetic and phonological sketch of that language, including acoustic measurements and a phonological process modeled using rule-based or constraint-based approaches. For this project, you will need to consult with a native speaker and obtain and submit your original audio recordings. A prospectus and outline of the project will be due on Details to Monday, November 13. Details to follow.

*Academic Integrity:* Plagiarism, whether intentional or unintentional, will not be tolerated in this course. While collaboration and consultation is encouraged, you must cite and acknowledge any materials you consult or aid you receive on assignments or projects, including the names of peers with whom you collaborate on the assignments. Violations of academic integrity are taken very seriously and will result in disciplinary action.
Course Outline:

This outline is subject to change. Please check Canvas to see an up-to-date syllabus.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic &amp; Assignment</th>
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<tr>
<td><strong>Week 1</strong>&lt;br&gt;9/25–9/29</td>
<td><strong>Articulatory phonetics</strong>&lt;br&gt;Reading: Ladefoged &amp; Johnson (2014), Ch. 1: ‘Articulation &amp; Acoustics’; Odden (2005), Ch. 2: ‘Phonetic transcriptions’&lt;br&gt;Quiz 1 (Fri): Vocal tract</td>
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<td><strong>Week 2</strong>&lt;br&gt;10/2–10/6</td>
<td><strong>Articulatory phonetics cont’d</strong>&lt;br&gt;Reading: Ladefoged &amp; Johnson (2014), Ch. 4: ‘English vowels’, Ch. 6: ‘Airstream mechanisms and phonation types’ &amp; Ch. 7: ‘Consonantal gestures’&lt;br&gt;Quiz 2 (Mon): Articulatory properties and IPA for consonants of English&lt;br&gt;Quiz 3 (Fri): Articulatory properties and IPA for vowels of English</td>
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<td><strong>Week 3</strong>&lt;br&gt;10/9–10/13</td>
<td><strong>Acoustic phonetics</strong>&lt;br&gt;Reading: Ladefoged &amp; Johnson (2014), Ch. 8: ‘Acoustic Phonetics’; Johnson (2011), Ch. 2: ‘The acoustic theory of speech production’&lt;br&gt;Quiz 4 (Wed): Articulatory properties and IPA for non-English sounds&lt;br&gt;Assignment 1 (Fri)</td>
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<td><strong>Week 4</strong>&lt;br&gt;10/16–10/20</td>
<td><strong>Acoustic phonetics cont’d &amp; allophonic alternations</strong>&lt;br&gt;Reading: Odden (2005), Ch. 3: ‘Allophonic relations’ &amp; Ch. 4 ‘Underlying representations’&lt;br&gt;Assignment 2 (Mon)&lt;br&gt;Quiz 5 (Fri): Transcription of nonce words</td>
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<td><strong>Week 6</strong>&lt;br&gt;10/30–11/3</td>
<td><strong>Phonological features &amp; rules</strong>&lt;br&gt;Reading: Odden (2005), Ch. 5: ‘Interacting processes’ &amp; Ch. 6: ‘Feature Theory’&lt;br&gt;Assignment 4 (Mon)&lt;br&gt;Midterm exam (Fri)</td>
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<td><strong>Week 7</strong>&lt;br&gt;11/6–11/10</td>
<td><strong>Features and rules cont’d</strong>&lt;br&gt;Reading: Odden (2005), Ch. 7: ‘Doing an analysis’ &amp; Ch. 8: ‘Phonological typology and naturalness’ (parts 8.1 &amp; 8.2)&lt;br&gt;Quiz 8 (Wed): Features</td>
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<td><strong>Week 8</strong>&lt;br&gt;11/13–11/17</td>
<td><strong>Rules &amp; constraints</strong>&lt;br&gt;Reading: Ladefoged &amp; Johnson (2014), Ch. 10: ‘Syllables and Suprasegmental Features’; Odden (2005), Ch. 8: ‘Phonological typology and naturalness’ (parts 8.3 &amp; 8.4)&lt;br&gt;Prospectus/Assignment 5 (Wed)</td>
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<td><strong>Week 9</strong>&lt;br&gt;11/20–11/24</td>
<td><strong>Optimality theory</strong>&lt;br&gt;Assignment 6 (Mon)&lt;br&gt;No Class Friday (Thanksgiving Break)</td>
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<td><strong>Week 10</strong>&lt;br&gt;11/27–12/1</td>
<td><strong>Optimality theory cont’d</strong>&lt;br&gt;Assignment 7 (Wed)&lt;br&gt;Reading Period (Fri)</td>
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<td><strong>Week 11</strong>&lt;br&gt;12/4–12/8</td>
<td><strong>Final Project</strong> (Mon)</td>
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