Linguistics 415/515  
Phonological Phonetics  
Fall 2017

**Professor:** Natasha Warner  

**Class meets:**  
Tuesday 3:30-6:00  
Saguaro Hall 223

**Office hours:** Wednesday 10-12 (tentatively), Douglass 320  
**Phone:** 626-5591  
**Email:** nwarner@email.arizona.edu (best way to reach me outside office hours)  
**Course website:** http://d2l.arizona.edu  
My website: www.u.arizona.edu/~nwarner/  
Douglass Phonetics Lab website: http://linguistics.arizona.edu/dpl

**Books/materials:**  
Ladefoged, Peter, and Johnson, Keith. 2015. A Course in Phonetics. 7th ed. Wadsworth. (If you own a previous edition from another class, you do not need to buy the new one.)  
Johnson, Keith. 2011. Acoustic and Auditory Phonetics. 3rd ed. Blackwell. (2nd ed. OK, but notice difference in order of chapters.) **This one is available as a free e-book linked through d2l.**  
Various articles to be chosen (see below).

**General organization of the course:**  
The course topics cover three areas: articulatory phonetics, acoustic phonetics, and speech perception. There will be one homework assignment for each of the first two of these, often requiring lab work. We will spend approximately the first 1/2 to 2/3 of the course on basic material using lectures, class discussion, hands-on activities, the textbooks, and lab work. Then we will spend the remaining part of the semester reading current phonetics research literature and discussing it. I think we will do the articles as general group discussion rather than having one person responsible for each article. We'll try to have a lab activity pretty much every week, so we'll see how many people can conveniently bring their laptops in order to just have lab in class. For the article discussions, we will also have individual students summarize what the current trends of publication in a given journal are.

We will choose the articles to read as a class. You will most likely be assigned to go out and find one article you would like the class to read from an appropriate journal. We could, alternatively, decide to just take a recent issue of a relevant journal and read everything in it. We will decide this several weeks into the semester.

Good journals to use to start looking for term paper topics, interesting articles, etc. include but are not limited to *Journal of Phonetics, Phonetica, Journal of the Acoustical Society of America* (the speech sections), and *Journal of the International Phonetic Association.*

**Course objectives and learning outcomes:**  
My purpose in teaching you in this course is to give you enough background in phonetics that you can decide whether to pursue original research in phonetics in the future, and that you will be able to begin to do so if you wish. Reaching that level means that there are several other things you will be able to do with phonetics by the end of the semester, too: you could teach English or other languages more effectively by understanding L1-L2 phonetic influence and the phonetic inventories of other languages, you could learn a foreign language more easily (for the same reasons), you could detect the difference between foreign accented and disordered speech in a child you teach more effectively, you could use phonetics comfortably in doing language revitalization, you could go into speech technology work in industry with a better
understanding of speech acoustics and perception. But to accomplish all those goals, I'll plan to get you to a level where you could start to become a phonetician.

Specific learning outcomes include:
- ability to analyze speech acoustics and to manipulate and resynthesize speech in Praat
- ability to make most or all of the sounds on the IPA chart, and understanding of how they are made
- ability to explain to someone else how to get from a sine wave to a vowel sound, including some math
- familiarity with some of the topics of current research in phonetics
- understanding of several current important theories of phonetics
- familiarity with major journals that publish phonetic research, ability to find relevant research literature
- competence in writing the genre of phonetics journal articles

Readings:
All students should read the assigned material from the textbooks. If you've read Course in Phonetics before for some other course, just skim through chapters. All students should read all the articles, in order to be able to contribute to the discussion. For each article we read, there will be a worksheet to fill out about how the article is written and structured.

Term papers:
Each student will do some project involving collection of original phonetic data, and will write a term paper on this project and give a presentation on it in class. Term papers can be completely original research, or can be a replication of a study in the literature, but they must involve collection of at least some new phonetic data. In order to make sure there's enough time to accomplish this, a topic proposal, a partial annotated bibliography and methodology proposal, and a progress report on the paper will also be required. Also keep in mind that term papers make great pilot studies for future prelims or publications! In writing term papers, please use well-written papers in the phonetics literature, published in major journals, as models for how to present and explain your work.

Requirements/grading:
Homework assignments: 30% (15% each)
Article discussion, article worksheets: 10%
Presentation on current publication directions in a given journal: 10%
Paper topic proposal: 5%
Bibliography/methods: 5%
Progress report: 3%
Term paper presentation: 7%
Term paper: 30%

Grades on all items will be assigned as letter grades (A, A-, B+, etc.) These are on a 4-point scale, e.g. A=4.0, A-=3.7, B+=3.3, etc. These grades are then weighted by the percentages above.

Note that contributing to discussion counts for a lot (10%). This is because I want you all to discuss the articles, instead of having one person present each article for a grade.

Work turned in late will lose 10% of the possible grade per day late, except in drastic cases involving doctors or police or such. Work turned in in bits and pieces (e.g. "I'll give you what I've got now, and give you the rest on Friday") will be counted as turned in on the day the last part of it is received.

Students enrolled in Ling. 515 will have additional problems on homework assignments and additional questions on the article worksheet, relative to the Ling. 415 versions. The grading scale is the same for
students in 415 and 515, but the grade for students in 515 will be determined over all problems assigned for the 515 level.

Requests for incompletes (I) and withdrawal (W) must be made in accordance with university policies which are available at [http://catalog.arizona.edu/2014-15/policies/grade.htm#I](http://catalog.arizona.edu/2014-15/policies/grade.htm#I) and [http://catalog.arizona.edu/2014-15/policies/grade.htm#W](http://catalog.arizona.edu/2014-15/policies/grade.htm#W) respectively.

**Prerequisites:**
For Ling. 415, the prerequisite is Ling. 315 (or 314 would be fine too). For Ling. 515, the prerequisite is graduate standing in Linguistics or a related field (Linguistic Anthropology, Speech and Hearing Science, etc.). This is basically a graduate course, with a co-convened section for advanced undergraduates who plan to continue in linguistics or a related field. The work is largely graduate level.

**How to turn things in:**
Homework is due by the beginning of class, in hard copy, to be turned in during class. Handwriting is OK for parts where it makes more sense (e.g. IPA, hand-drawn figures), but please make sure both handwritten and typed parts are neat and easy to find all the parts of. The term papers will be turned in as pdf on d2l, and you should double check that your IPA symbols come through correctly.

**Group work:**
Group study is fine, and often helpful, including discussing what members of your group think about various homework topics. However, do not decide on exact answers together as a group, and do not write up answers together as a group. Each person should learn from whatever group session they might attend, then split up and write up homework individually. If you work with others on an assignment, include a note on the assignment saying who you worked with. On lab homework activities, if you work with a group, each member of the group must do the recordings and lab activities, even if you are all present while you're doing them.

**Useful free software:**
- IPA fonts are available for download from the Summer Institute of Linguistics (SIL) at [http://www.sil.org/computing/catalog/show_software.asp?id=91](http://www.sil.org/computing/catalog/show_software.asp?id=91) for Mac and PC. Unicode-compliant (SIL Doulos). However, recent Mac operating systems make it easier to use IPA Palette ([https://www.blugs.com/IPA/](https://www.blugs.com/IPA/)) instead. There are also web-based methods for inserting IPA symbols.
- Praat ("speech" in Dutch) is a very good speech analysis program which runs on both Mac and Windows and is free. You can download it from [http://www.praat.org/](http://www.praat.org/). The course d2l site includes a Praat cheat-sheet to get you started using it, but exact menu options change very frequently.

**Tentative schedule (subject to change):**

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<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings/requirements</th>
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<tbody>
<tr>
<td>Week 1 (Aug. 22)</td>
<td>Intro., Place and manner of articulation</td>
<td>Ladefoged and Johnson <em>Course</em> Ch. 1, 3</td>
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<tr>
<td>Week 2 (Aug. 29)</td>
<td>Nasalization, more consonants, vowels, variability in transcription</td>
<td>Ladefoged and Johnson <em>Course</em> Ch. 2, 4, 7</td>
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<tr>
<td>Week 3 (Sep. 5)</td>
<td>Non-pulmonic airstream mechanisms, trying out transcribing an unfamiliar language</td>
<td>Ladefoged and Johnson <em>Course</em> Ch. 6, Johnson Ch. 1</td>
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<tr>
<td>Week 4 (Sep. 12)</td>
<td>Basic acoustic phonetics, Vowel formants</td>
<td>Johnson Ch. 2, 6 (ed. 2: 5, 6), Ladefoged and Johnson <em>Course</em> Ch. 8, <em>HW 1 due Tues. Sep. 12</em></td>
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<tr>
<td>Week 5 (Sep. 19)</td>
<td>Deriving vowels, acoustic phonetics of consonants</td>
<td>Johnson Ch. 7, 8, Ladefoged and Johnson <em>Course</em> Ch. 9</td>
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### Schedule

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<tr>
<th>Week 6 (Sep. 26)</th>
<th>Voicing and VOT, intonation, wrap-up</th>
<th>Johnson Ch. 9, Catch-up on textbook readings. <strong>paper topic proposal due Tues. Sep. 26</strong></th>
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<tr>
<td>Week 7 (Oct. 3)</td>
<td>Discussion of Ladefoged <em>Phon. Data</em> book, lab work, wrap-up basics</td>
<td>Ladefoged <em>Phon. Data</em> Ch. 1, 4, (also skim 2, 3 a little)</td>
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<tr>
<td>Week 8 (Oct. 10)</td>
<td>Discussion of Ladefoged <em>Phon. Data</em> book, choose articles</td>
<td>Ladefoged <em>Phon. Data</em> Ch. 5, 6, 8 (skim 7), <strong>HW2 due Tues. 10/10</strong></td>
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<td>Week 9 (Oct. 17)</td>
<td>Discussion of articles, check-in on term paper projects, lab work</td>
<td>read articles, discussion questions due weekly, also complete worksheets about each article), <strong>paper bibliography and methods statement due Tues. 10/17</strong></td>
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<td>Week 10 (Oct. 24)</td>
<td>Continued</td>
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<td>No class Oct. 31 (Halloween)</td>
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<td>Week 11 (Nov. 7)</td>
<td>Continued</td>
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<td>Week 12 (Nov. 14)</td>
<td>Continued</td>
<td><strong>Paper progress report due Tues. 11/14</strong></td>
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<td>Week 13 (Nov. 21)</td>
<td>Continued</td>
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<td>Week 14 (Nov. 28)</td>
<td>Continued</td>
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<td>Week 15 (Dec. 5)</td>
<td>Student presentations</td>
<td><strong>Presentations due</strong></td>
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<td>Fri. Dec. 8, by <strong>11:59 PM</strong></td>
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<td><strong>Paper due as pdf to the dropbox on the d2l site</strong></td>
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### Various statements:

#### Attendance:
The UA’s policy concerning Class Attendance and Administrative Drops is available at: [http://catalog.arizona.edu/2014-15/policies/classatten.htm](http://catalog.arizona.edu/2014-15/policies/classatten.htm) The UA policy regarding absences on and accommodation of religious holidays is available at [http://deanofstudents.arizona.edu/policies-and-codes/accommodation-religious-observance-and-practice](http://deanofstudents.arizona.edu/policies-and-codes/accommodation-religious-observance-and-practice). Absences pre-approved by the UA Dean of Students (or Dean designee) will be honored. See: [http://uhap.web.arizona.edu/chapter_7#7.04.02](http://uhap.web.arizona.edu/chapter_7#7.04.02)

#### Students with Disabilities:
It is the University’s goal that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please let me know immediately so that we can discuss options. You are also welcome to contact Disability Resources (520-621-3268) to establish reasonable accommodations. For additional information on Disability Resources and reasonable accommodations, please visit [http://drc.arizona.edu/](http://drc.arizona.edu/).

If you have reasonable accommodations, please plan to meet with me by appointment or during office hours to discuss accommodations and how my course requirements and activities may impact your ability to fully participate.

Please be aware that the accessible table and chairs in this room should remain available for students who find that standard classroom seating is not usable.

#### Academic misconduct:
Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed (see specific guidelines about studying together above). Students are expected to
adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See:
http://deanofstudents.arizona.edu/codeofacademicintegrity http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity. The library’s website also provides extensive help with learning what constitutes plagiarism and how to avoid it, at

Content warning:
The material in this course is primarily not political, but there may be some discussion of endangered languages, intellectual property rights, use of human subjects in research, dialects associated with various social groups, attitudes toward dialects, etc. If you are worried about any of this, please let me know.

Conduct in class and electronics:
Students are required to treat others in class with respect. Disruptive behavior is prohibited. Do not text or use social media during class. Do not use electronics for non-class related purposes during class. You're welcome during class to look up things on the web relevant to what we're discussing, but please do not distract from class with any electronic devices, including phones. Exceptions (phone still silent) are OK if you're waiting for an emergency phone call or have to be reachable as someone's caregiver.

The Arizona Board of Regents’ Student Code of Conduct, ABOR Policy 5-308, prohibits threats of physical harm to any member of the University community, including to one’s self. See:
http://policy.arizona.edu/threatening-behavior-students.

Inclusiveness and diversity:
Inclusive Excellence is a fundamental part of the University of Arizona’s strategic plan and culture. As part of this initiative, the institution embraces and practices diversity and inclusiveness. These values are expected, respected and welcomed in this course.

This course supports elective gender pronoun use and self-identification; rosters indicating such choices will be updated throughout the semester, upon student request. As the course includes group work and in-class discussion, it is vitally important for us to create an educational environment of inclusion and mutual respect. Students may share their preferred name and pronoun with the instructor and fellow students, as desired, and these gender identities and gender expressions will be honored in this course.

Additional resources for students:
UA Non-discrimination and Anti-harassment policy:
http://policy.arizona.edu/sites/default/files/Nondiscrimination.pdf
UA Academic policies and procedures are available at:
http://catalog.arizona.edu/2014-15/policies/aaindex.html
Student Assistance and Advocacy information is available at:
http://deanofstudents.arizona.edu/student-assistance/students/student-assistance
Office of Diversity (http://diversity.arizona.edu/)
http://www.health.arizona.edu/counseling-and-psychotherapy-services
http://oasis.health.arizona.edu/hpps_oasis_program.htm

Confidentiality of student records:
http://www.registrar.arizona.edu/ferpa/default.htm
http://registrar.arizona.edu/personal-information/student-information?audience=faculty&cat1=17&cat2=211

Changes:
The information in the syllabus, other than grade and absence policies, is subject to change by the instructor with reasonable advance notice.