Linguistics 441

Advanced Phonetics

Course information and syllabus – Winter 2013

General Information

Instructor: Steve Winters

Social Sciences 814 2500 University Drive NW

Phone: 220-7230

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Office Hours: Tue. & Thu. 1:00-2:00, and by appointment.

Teaching Assistant: Jacqueline Jones

Social Sciences 808 Phone: 210-6534

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Office Hours: TBD

Lectures: MWF 2:00-2:50 Education (EDC) 384

This course continues the introduction to phonetic study that began in linguistics 341. In this course, students will hone their transcription skills through a small, phonetic field study on an unfamiliar language, develop laboratory skills for the acquisition of experimental phonetic data, acquire in-depth knowledge of the mechanisms involved in the production, perception and acoustics of speech, and become familiar with the primary theories in the field of phonetics. Upon conclusion of the course, students should be prepared to conduct an honors-level research project in phonetics.

Practical training in phonetics is particularly valuable for professions in language education – whether foreign language education, English education, or ESL. Phonetic training also benefits students who are interested in human/computer interface technology, and students are in training for certification as speech pathologists or audiologists. Of course, students who major in linguistics should take phonetics.

Note on departmental grade requirement: a student may not register in any linguistics course unless a grade of at least C- has been achieved in each prerequisite for that course. The prerequisite for this course is linguistics 341.

Course Web Page:

https://webdisk.ucalgary.ca/~swinters/public_html/ling441/index.html

All lecture notes, handouts and homework exercises—along with updated versions of this syllabus—will be posted to the course website. Please check it on a regular basis if you are interested in having access to these materials.

Textbooks

Keith Johnson (2011) *Acoustic & Auditory Phonetics*, 3rd ed. Malden, MA: Wiley-Blackwell.

Lawrence J. Raphael, Gloria J. Borden, Katherine S. Harris (2007) *Speech Science Primer*, 6th ed., Baltimore, MD: Lippincott, Williams & Wilkins.

These textbooks are <u>recommended</u> for this course. Further readings will be announced and made available during the course of the semester.

Grading

The course grade will be based on your performance on homework exercises, a semester-long course project, a midterm exam and a final exam.

Homework will consist primarily of laboratory exercises that are designed to improve your skills in collecting and working with phonetic data. We will go over, in detail, the requisite tools and skills necessary to complete these exercises during the course of the semester. Late homework will only be accepted in cases of documented medical or family emergencies.

Course Project. Your primary responsibility in this course will be the execution of a small, phonetic field study involving a native speaker of an unfamiliar language. Your goal in this project is to learn how to identify and transcribe the sounds of the unfamiliar language, primarily through data that you have elicited from the native consultant. At the end of the semester, you will either (1) produce a final term paper, or (2) present the results of your work to the class, detailing the phonetic characteristics of the language you have chosen to study. More detail on this project is provided in an additional handout.

I am happy to entertain alternative ideas for course projects. Please come talk to me as soon as possible if you have an idea for another project that you would like to work on over the course of the semester.

Exams. The final exam will be cumulative. Make-up exams will not be given except in the case of dire, documented medical emergencies.

Your final grade will be based on:

Homework exercises: 20%
Course Project: 30%
Midterm exam: 25%
Final exam: 25%

The grading scale for the course will be as follows:

| 97% <u><</u> A+ | 71 <u><</u> C+ < 75 |
|------------------------|------------------------|
| 92 <u><</u> A < 97 | 66 <u><</u> C < 71 |
| 88 <u><</u> A- < 92 | 62 <u><</u> C- < 66 |
| 84 <u><</u> B+ < 88 | 58 <u><</u> D+ < 62 |
| 79 <u><</u> B < 84 | 50 ≤ D < 58 |
| 75 < B- < 79 | F < 50 |

Please note that I do not round up in calculating final grades.

Resources

- 1. The Department of Linguistics Phonetics Lab is located in Education 259 (phone: 220-3598). Please contact me or the TA if you would like to use the lab.
- 2. There are a variety of places on the web where you can acquire an IPA font for your computer. Here are a few links that you may find helpful:

http://scripts.sil.org/cms/scripts/page.php?site_id=nrsi&id=DoulosSILfont http://ipa.typeit.org/full/ http://www.blugs.com/IPA/

Although it is not necessary to do so, you are encouraged to use your computer—and an IPA font—in writing up homework assignments for this class.

3. Praat is a great, freely available software package for phonetic analysis. Among (many) other things, you may use Praat to record, edit and play sound files on your computer. Praat is available for download at:

http://www.fon.hum.uva.nl/praat/

4. A great website for looking up background information on the languages of the world is SIL's Ethnologue site:

http://www.ethnologue.com

- 5. The following books, available for loan in the main library, may provide useful reading for some of the topics we will cover in this class:
- Ladefoged, Peter (1964) Elements of Acoustic Phonetics, 2nd ed. [QP306.L33]
- Ladefoged, P. & Maddieson, I. (1995) Sounds of the World's Languages [P221.L315 1995]

Course Schedule

Please note that this schedule is meant to provide an *ideal* course of future action and is therefore likely to change before the end of the semester. Revised course schedules will be announced at the beginning of class if and when those changes occur.

| Wk | Date | Day | Lecture Topic | Reading | Course Project |
|----|-------|-----|------------------------------|--------------|--------------------|
| 1 | 1/9 | W | Introduction + Overview | | |
| | 1/ 11 | F | Basic Acoustics | AAP 7-24 | |
| 2 | 1/ 14 | M | Digital Signal Processing | AAP 49-58 | |
| | 1/ 16 | W | Pitch Tracking | AAP 64-68 | |
| | 1/ 18 | F | Prosody | SSP 144-153 | |
| 3 | 1/ 21 | M | ToBI: Basics | | |
| | 1/ 23 | W | ToBI: practice | | |
| | 1/ 25 | F | ToBI: Boundary Tone combos | | |
| 4 | 1/ 28 | M | ToBI: more practice | | 1. Intro |
| | 1/ 30 | W | ToBI: Bi-Tonal Pitch Accents | | |
| | 2/ 1 | F | ToBI: even more practice | | |
| 5 | 2/ 4 | M | Respiration | SSP 55-66 | |
| | 2/6 | W | The Larynx | SSP 69-74 | |
| | 2/8 | F | Phonation | | |
| 6 | 2/ 11 | M | Voice Quality | AAP 170-172 | 2. Stops + |
| | | | | | Phonation |
| | 2/ 13 | W | Spectral Analysis | AAP 60-64 | |
| | 2/ 15 | F | MID-TERM EXAM | | |
| 7 | 2/ 18 | M | Reading Week: No Classes | | |
| | 2/ 20 | W | Reading Week: No Classes | | |
| | 2/ 22 | F | Reading Week: No Classes | | |
| 8 | 2/ 25 | M | Lab: Korean Stops | | 3. Suprasegmentals |
| | 2/ 27 | W | Fourier Analysis | | |
| | 3/ 1 | F | Resonance | AAP 30-45 | |
| 9 | 3/ 4 | M | Formants | SSP 96-112 | |
| | 3/6 | W | Vowels: Perturbation Theory | AAP 137-142; | |
| | | | | SSP 93-96 | |
| | 3/8 | F | Vowels II | | |
| 10 | 3/ 11 | M | Vowels III: Tube Models | AAP 132-137 | |
| | 3/ 13 | W | Sonorant Acoustics | AAP Ch. 9 | |
| | 3/ 15 | F | Sonorants II | | |
| 11 | 3/ 18 | M | Transitions | AAP 176-179; | 4. Vowels |
| | | | | SSP 129-135 | |
| | 3/ 20 | W | Perception | AAP 100-111; | |
| | | | _ | SSP 205-212 | |
| | 3/ 22 | F | Perception II | SSP 223-234; | |
| | | | 1 | 244-249 | |

| 12 | 3/ 25 | M | Obstruent Acoustics | AAP Ch. 7; | |
|----|-------|---|------------------------------|--------------|-----------------|
| | | | | SSP 123-128 | |
| | 3/ 27 | W | Static Palatography | | |
| | 3/ 29 | F | Good Friday: No Class | | |
| 13 | 4/ 1 | M | Vocal Tract Physiology | SSP: 88-93; | 5. Fricatives + |
| | | | | 120-123 | Sonorants |
| | 4/ 3 | W | Audition | AAP Ch. 4; | |
| | | | | SSP Ch. 9 | |
| | 4/ 5 | F | Audition II | | |
| 14 | 4/8 | M | Exemplar Theory | | |
| | 4/ 10 | W | Exemplar Theory II | | |
| | 4/ 12 | F | Speech Synthesis | SSP 264-268; | |
| | | | | 273-275 | |
| 15 | 4/ 15 | M | Time for catch-up and review | | |
| 15 | | | FINAL EXAM | | |
| | | | Time and Place TBA | | |

GENERAL COURSE/UNIVERSITY INFORMATION FOR ALL STUDENTS

LINGUISTICS STUDENT ADVISING

For any questions regarding the undergraduate or graduate program in linguistics, the organization of your program, or the selection of courses, contact the appropriate advisor as follows:

Undergraduate Advisor Dr Robert Murray SS 824 lingadv@ucalgary.ca Graduate Program Director Dr Susanne Carroll SS 830 linggrad@ucalgary.ca

FACULTY of ARTS PROGRAM ADVISING and STUDENT INFORMATION

The Faculty of Arts Program Information Centre (PIC) is the overall headquarters for undergraduate programs in the Faculty of Arts. The key objective of this office is to connect students with whatever academic assistance that they require. The PIC is located in the Social Sciences Building (SS 102), please contact them by phone at 403-220-3580, or email artsads@ucalgary.ca, or visit the website http://arts.ucalgary.ca/undergraduate.

For program planning and advice, contact the Student Success Centre (SSC). Degree advisors assist undergraduate students in planning their overall degree programs along with providing broad educational planning, learning support, assistance with academic difficulties, academic program guidance, writing support, success seminars and peer support. The SSC is on the 3rd Floor of the Taylor Family Digital Library, or you can contact them at 403-220-5881, by email success@ucalgary.ca, or visit their website http://www.ucalgary.ca/ssc/.

For registration issues, contact Enrolment Services who will also be able to help you with questions about fee payments, awards, financial aid, admissions questions, visiting and exchange students, open studies, transcripts, deferred exams. Enrolment Services are in the MacKimmie Library Block, Room 117, or you can contact them at 403-210-ROCK [7625] or visit their website http://www.ucalgary.ca/registrar/.

ACADEMIC ACCOMMODATION

It is the student's responsibility to request academic accommodation. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 403-220-8237. Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the start of this course.

FREEDOM OF INFORMATION AND PRIVACY ACT (FOIP)

The Freedom of Information and Protection of Privacy Act was enacted by the Alberta Legislature on June 1, 1994. The Act is intended first of all to allow any person the right of access to the records in the custody and under the control of a public body although this right is subject to limited and specific exceptions. The Act also includes a strong right to privacy component, allowing individuals to control the manner in which a public body collects personal information, to control the use that a public body may make of the information, and to control the disclosure of that information by a public body. It also allows individuals the right of access to personal information about themselves held by a public body and the right to request corrections to that information.

For more information on FOIP, visit the website http://www.ucalgary.ca/legalservices/foip/, or contact Jo-Anne Munn Gafuik at 403-220-3602 or by email munngafu@ucalgary.ca

PLAGIARISM AND ACADEMIC MISCONDUCT

Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course, when, in fact, it is not. Most commonly plagiarism exists when:

- the work submitted or presented was done, in whole or in part, by an individual other than the one submitting or presenting the work (this includes having another impersonate the student or otherwise substituting the work of another for one's own in an examination or test);
- 2. parts of the work are taken from another source without reference to the original author,;
- 3. the whole work (e.g. an essay) is copied from another source; and/or
- 4. a student submits or presents work in one course which has also been submitted in another course (although it may be completely original with that student) without the knowledge of or prior agreement of the instructor involved.

While it is recognized that scholarly work often involves reference to the ideas, data and conclusions of other scholars, intellectual honesty requires that such references be explicitly and clearly noted. Students are often encouraged to work together in preparing homework assignments, but check with your instructor beforehand. However, unless noted otherwise in writing, students must write up their own answers for submission of the assignment. Failure to do so constitutes plagiarism.

Plagiarism is an extremely serious academic offence. Possible penalties for plagiarism include: failing the assignment, failing the course, disciplinary probation, suspension, or expulsion. Any student who voluntarily and consciously aids another student in the commission of plagiarism is also guilty of academic misconduct.

For more information on academic misconduct and related UofC regulations please consult the Student Misconduct web pages in the on-line University Calendar: http://www.ucalgary.ca/pubs/calendar/current/k.html.

EMERGENCY EVACUATION AND ASSEMBLY POINTS

The University of Calgary is committed to creating a safe and healthy living and learning environment. The health and safety of our employees, students and the general public are the highest priority of the University of Calgary's Emergency Management Program.

During times of emergency, Assembly Points have been identified across campus. These areas have been selected as they are large enough to hold a significant number of people and will provide an evacuated population access to washroom facilities and protection from the elements. Assembly points are also designed to establish a location for information updates:

- from the emergency responders to the evacuees; and
- from the evacuated population to the emergency responders.

Please familiarize yourself with the following:

Emergency Assembly Points: http://www.ucalgary.ca/emergencyplan/assemblypoints
Emergency Instructions: http://www.ucalgary.ca/emergencyplan/node/28

SAFEWALK INFORMATION

Twenty four hours a day and seven days a week, Safewalk volunteers walk people safely to their destination on campus. This service is free and available to students, staff and campus visitors. Requesting Safewalk volunteers to walk with you is easy:

- Call 403-220-5333 (24 hours a day/seven days a week, 365 days a year)
- Use the Help Phones (they are not just for emergencies)
- Approach an on-duty Safewalker and request a walk

For more information, contact the Safewalk main office at 403-220-4750, by email safewalk@ucalgary.ca or visit their website http://www.ucalgary.ca/security/safewalk.

STUDENT REPRESENTATIVE INFORMATION

The Students' Union and the Graduate Students' Association (GSA) in partnership with the University of Calgary offers students a key advocacy resource to assist in addressing concerns and issues they encounter at the University with the Student Ombuds Office.

Students in undergraduate programs, please contact the Student's Union in the MacEwan Student Centre, Room MSC 251, at 403-220-6551, by email arts1@su.ucalgary.ca, or visit their website http://www.su.ucalgary.ca/.

Students in a graduate program, please contact the GSA at 403-220-5997, by email ask@gsa.ucalgary.ca, or visit their website at: http://gsa.ucalgary.ca/. The GSA will be moving offices in 2013, please contact them for their current location.

The Student Ombuds Office offers a safe place for undergraduate and graduate students of the University of Calgary to discuss student related issues, interpersonal conflict, academic and non-academic concerns, and many other problems. Their office is in the Administration Building, Room A166, or you can contact them at 403-220-6420, by email ombuds@ucalgary.ca or visit their website http://www.ucalgary.ca/provost/students/ombuds.

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