

Class time and place:

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Office hours:

COURSE DESCRIPTION:

Linguistics 250 is an introduction to the sound structure of language. We will learn to describe speech sounds in the three domains of speech: the articulatory domain (how speech sounds are produced in the human vocal tract), the acoustic domain (their form in the acoustic medium), and the perceptual domain (how listeners process the incoming speech signal). We will learn to recognize the ways in which speech sounds pattern in language to convey meaning, and the ways in which these patterns are similar and different across the languages of the world. Finally, we will learn about current speech technology as it applies to computerized speech synthesis and speech recognition.

Together Linguistics 250, 270 (“Meaning”), and 260 (“Formal Analysis of Words and Sentences”) form a three-course introduction to linguistics, for majors and non-majors alike. Each course may be taken independently of the others and in any sequence. All three courses are prerequisites for the major and minor in Linguistics. Linguistics 250 also satisfies the WCAS Area I Distribution Requirement in Natural Sciences.

PREREQUISITES: None.

COURSE REQUIREMENTS AND GRADING:

Projects	40%
Long Quiz 1	25%
Long Quiz 2	35%
Experiment Requirement	Not graded, but required for full course credit

All written work is to be done by you as an individual. Collaboration is not allowed on written work. Homework assignments are due at the beginning of class on the due date. No make-up quizzes or late assignments will be accepted.

TEXTS: (Available from the Norris Bookstore)

- *English Phonetics and Phonology*, Robert Carr.
- *Vowels and Consonants: An Introduction to the Sounds of Language*, Peter Ladefoged.
- Supplemental readings to be made available electronically:

Tentative schedule of work:

Week	Block	Topic	Reading	Work Due
1	Introduction		Ladefoged: Ch. 1	
2	Describing Speech Sounds	Vowels 1: Traditional Descriptions	Ladefoged: Ch. 3 Carr: Ch. 3, 4	
		Vowels 2: Production	Ladefoged: Ch. 12	
3		Vowels 3: Basic Acoustics	Ladefoged: Ch. 4, 5	
		Vowels 4: Vowel Acoustics		
4		Vowels 5: Vowels around the World	Ladefoged: Ch. 15	Project 1: Vowel Transcription, Classification and Acoustic Measurement
		Consonants 1: Traditional Descriptions	Carr: Ch. 1, 2 Ladefoged: Ch. 13	
5		Consonants 2: Consonant Acoustics I: Waveforms	Consonants Ladefoged: Ch. 6	
		Consonants 3: Consonant Acoustics II: Spectrograms		
6	Consonants 4: Consonants around the World	Ladefoged: Ch. 13, 14	Project 2: Consonant Transcription, Classification and Perception	
Quiz 1				
7	Speech and Language	The Phonemic Principle	Carr: Ch. 5	
		English Phonemes	Carr: Ch. 6	
8		Phonological Processes		
		Syllables and beyond	Carr: Ch. 7	
9	Applications	Speech Technology	Ladefoged: Ch. 8, 9	Project 3: Speech Perception, Phonemes and Allophones
Quiz 2				
10	WCAS Reading Period			
11	Project 4: Speech Synthesis			

Linguistics Department Experimental Requirement

This course has an experimental requirement. Students may fulfill this requirement by either participating in two experiments of one hour each, by attending two presentations (a video screening or two screenings of linguistics videos) of one hour each or by participating in one experiment of one hour and one video of one hour. The experiment will be part of ongoing research in the department and will illustrate features of language structure and use that are relevant to topics covered in the core linguistics curriculum. Similarly, the videos will be on topics covered in the core linguistics curriculum.

Failure to complete this requirement will result in a lowered course grade.

NOTE WELL: Don't leave this requirement to the end of the quarter! The last experiments and the last video showing will be scheduled during reading week at the latest. Don't count on sufficient experiment slots being available for everyone to fulfill this requirement at that late date. We highly recommend that you fulfill at least one experimental unit by week 5, and both by week 9.

Option 1: Experiments

The experiments will be run either in the Linguistics House (2016 Sheridan Road) or in linguistics laboratories in Swift Hall and Cresap Hall. A list of available experiments with available times and instructions on where to go will be posted on the *Experimetrix* web site (see instructions below). Please note:

- You can do each experiment only once. You may not sign up for more than 1 slot in any individual experiment.
- Be sure to arrive on time for the experiments you sign up for. If you are more than 5 minutes late or fail to show up at all, you will receive **a negative credit** (i.e. you'll have to do 3 instead of just 2 credits)
- If the experimenter is more than 5 minutes late or fails to show up at all, notify your instructor immediately (via email is best). In the email include your name, the date, time and place of the appointment, and the experiment name. After the appointment has been verified with the appropriate experimenter, you will receive the credit.

Option 2: Videos

Attendance at one video showing will count as fulfillment of one of the two hours of experiment participation required for this course. Information about the video showings will be available on the *Experimetrix* web site. In order to receive full credit for your attendance at a video showing, you need to:

- Sign-up on the *Experimetrix* web site ahead of time.
- Fill out the sign-in sheet upon entering the classroom. If you're late don't enter the room.
- Stay at the video showing for the entire duration of the video.

Instructions for using *Experimetrix*

Experimetrix is a web site that handles the scheduling of the Linguistics experiments and video showings for all 200-level Linguistics courses. It keeps track of which experiments you have participated in and/or videos you have attended and how many credits you have earned. Below are the basic instructions for using the site (more detailed instructions are available on the site itself).

Step 1. Register

Go to <http://experimetrix.com/nuling> and click on “New User.” Follow the instructions for registration. Make sure to follow the instructions that will be emailed to you shortly after you have completed your registration. **NOTE! Be sure to go to the link given above. There are other departments using Experimetrix, and you want to be sure you are at the Linguistics site.**

Step 2. Sign-up for experiments and manage your profile

Once you have completed the registration process, you can sign up for experiments, edit your profile, keep track of past participation and future appointments, **and assign earned experiment credits to your courses.** **Note well!:** Make sure to indicate which course(s) you are taking this quarter under profile options. All procedures are explained on the page which is displayed after you log-in.

Step 3. Apply credits towards classes

Once you have participated in an experiment, check the web site to make sure that you have been given credit for your participation. Then, assign your credit towards the fulfillment of your requirement in your selected class(es) under the “Assign credit towards your classes” feature. This is a crucial step in making sure that your courses are credited properly.

IMPORTANT

Be sure to assign your credits after your participation. If they are not credited by you, the instructor for your course does not receive a report indicating your participation. If you do not apply the credits to the appropriate class, no credit is assigned, and your grade will be lowered accordingly. *This is your responsibility, please be sure to follow through in order to receive your credit!* If this procedure is unclear to you after registering at the web site, please ask your instructor for assistance.