About the Production and Perception of Language

First, think of something poetic to say. Then, find the words and syntax to convey the message with clarity and wit. To give voice to the words, speak them as a series of consonants and vowels, but use your own dialect and idiolect. Don’t worry about acoustic propagation—the compliance of the atmosphere will accomplish that, conveying the effects of vocalization to the listener. A conversational partner who shares your language will find acoustic attributes within the signal that distinguish consonants and vowels, will reprise the segmental series cognitively, and, from this, will apprehend the words, syntax and meaning of your utterance. (“Tell me, O Muse...”)

These phenomena of language have framed and fueled a century of neuroscience. Researchers have sought to understand how, by hearing sounds that a talker makes, a listener perceives a message, and not simply the articulatory causes of the hisses, clicks, whistles, buzzes and hums which compose speech. Spoken communication is dependent on a linguistic as well as a physical medium, and in Psychology G4232y we will expose the classic and contemporary research conducted in this vein on the perception of speech. We will start with several comprehensive reports and reviews; we will sample a variety of accounts, some based on the models of psychophysics and others on less rarefied circumstances (speech perception on the corner); and, we will spotlight several recent and promising manifestations of the classic themes. In every case, we will read the work of the scientists themselves, as they reported the evidence and proposed interpretations.

About Psychology G4232y

Each week, a pair of students will be designated as leader and rapporteur of a discussion of assigned reading. The leader will present a summary and a critique of the reading, and propose questions to guide the discussion by the seminar. The discussion will be chronicled by the rapporteur, and posted on the website of the seminar as a record of our intellectual work. Each member will take turns leading the group and reporting the discussion over the course of the semester; your instructor will take a few turns, too. One or more readings will be assigned each week from a collection of monographs, journal articles and conference reports.

Learning Objectives

By completing this course, you will learn:
• to describe the cognitive functions by which communicative goals take linguistic form expressed in an utterance;
• to explain the specific productive and perceptual challenges posed by the resolution of linguistic form and personal attributes conveyed in an utterance;
• to evaluate the quality of evidence offered in studies of linguistic communication;
• to explain language phenomena according to several rival contemporary accounts;
• to link explanations of perception and language to general scientific principles.

Chronicles

Within a week of leading a session, the rapporteur will post a brief, written chronicle of the discussion on the seminar website. A chronicle will summarize the research that launched the discussion, the key questions identified by the leader, and the contributions made in discussion with members of the seminar.

Grades

Each student will prepare an original paper appraising an empirical project in the light of the scientific themes of the seminar. The topic of the paper may be freely chosen from the technical literature on the perception and production of language. A student’s grade in the course will be based on participation as leader, as rapporteur, as discussant within the seminar, and on the
final paper project. The course grade will indicate the student’s achievement as discussion leader (30%), as rapporteur (20%), as a participant in weekly discussions (20%) and as the author of the paper project (30%).

*How to get into this course*

The number of places in the seminar is limited. Permission of the instructor is required to enroll. Class standing (graduate, post-baccalaureate, undergraduate senior, junior, major concentration, etc.) will be considered in determining eligibility. Additionally, a prerequisite of a course in Psychology above the 1000 level pertinent to the perceptual or linguistic topics of G4232y will also be considered. In some circumstances, relevant courses in Biology, Computer Science, Engineering, or Philosophy may be acceptable preparation.
READINGS

Week 1: January 22, 2018: General Overview and Organizational Meeting.


Week 5: February 19, 2018: Perception in the Psychophysics Laboratory.

Week 6: February 26, 2018: Perception and Production as Information Processing.
Week 7: March 5, 2018: Production, Perception and Neural Oscillators.


Week 10: April 2: Perceptual Organization of Speech.


**Week 13: April 23, 2018: Concurrent Identification of Words and Talkers.**


**Week 14: April 30, 2018: The Problem of Veterinary Models.**


