

## Term Information

Effective Term Spring 2017

## General Information

Course Bulletin Listing/Subject Area Speech and Hearing Science  
Fiscal Unit/Academic Org Speech & Hearing - D0799  
College/Academic Group Arts and Sciences  
Level/Career Graduate  
Course Number/Catalog 7825  
Course Title Speech Perception in the Normal and Impaired Ear  
Transcript Abbreviation Speech Perception  
Course Description SHS 7825 is a graduate seminar-format course in speech & hearing science. We will discuss the auditory processing of speech sounds and examine the ramifications of hearing loss and cochlear implantation on this processing.  
Semester Credit Hours/Units Fixed: 3

## Offering Information

Length Of Course 14 Week  
Flexibly Scheduled Course Never  
Does any section of this course have a distance education component? No  
Grading Basis Letter Grade  
Repeatable No  
Course Components Lecture  
Grade Roster Component Lecture  
Credit Available by Exam No  
Admission Condition Course No  
Off Campus Never  
Campus of Offering Columbus

## Prerequisites and Exclusions

Prerequisites/Corequisites Grad standing in Speech and Hearing Science, or permission of instructor.  
Exclusions Not open to students with credit for 820.

## Cross-Listings

Cross-Listings

## Subject/CIP Code

Subject/CIP Code 51.0202  
Subsidy Level Doctoral Course  
Intended Rank Masters, Doctoral

## Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors

## Course Details

### Course goals or learning objectives/outcomes

- Increased knowledge of the processing of spectral and temporal aspects of speech sounds. Increased knowledge of the delivery of speech cues by cochlear implants.

### Content Topic List

- Introduction
  - Spectral Cues in Speech Recognition
  - Temporal Cues in Speech Recognition
  - Spectro-Temporal Cues in Speech Recognition
  - Cochlear Implants

## Attachments

- 7825Syllabus (1).doc: Syllabus  
*(Syllabus. Owner: Ellawadi,Allison Bean)*

## Comments

- 1. I am changing this to a doctoral-level course.
- 2. Reminder: ASC curriculum committees do not meet over the summer. The ASC review of this course will be during AU16 for the first time. *(by Haddad,Deborah Moore on 07/11/2016 07:31 PM)*

## Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Ellawadi,Allison Bean	07/11/2016 06:04 PM	Submitted for Approval
Approved	Fox,Robert Allen	07/11/2016 06:11 PM	Unit Approval
Approved	Haddad,Deborah Moore	07/11/2016 07:31 PM	College Approval
Pending Approval	Nolen,Dawn Vankeerbergen,Bernadette Chantal Hanlin,Deborah Kay Jenkins,Mary Ellen Bigler Hogle,Danielle Nicole	07/11/2016 07:31 PM	ASCCAO Approval

## Course Syllabus

# SHS 7825: Speech Perception in the Normal and Impaired Ear

Dr. Eric W. Healy

Fri 9:30 AM – 12:15 PM  
Pressey Hall Rm 024  
3 credits, 2.75 contact minutes/week

Office: Pressey Hall Rm 134b  
office hours by appointment  
(614) 292-8973  
healy.66@osu.edu

### **Course Description**

SHS 7825 is a graduate seminar-format course in speech & hearing science. We will discuss the auditory processing of speech sounds and examine the ramifications of hearing loss and cochlear implantation on this processing.

**Readings:** Source literature as provided.

**Course Objectives:** Increased knowledge of the processing of spectral and temporal aspects of speech sounds. Increased knowledge of the delivery of speech cues by cochlear implants.

### **Evaluation**

**Exams:** There will be one mid-term and one final, each worth 30% of your grade. They will be take-home exams in essay format. Dates will be determined during the first week of classes, as attempts will be made to coordinate with and accommodate the demands of other coursework.

**Paper:** There will be a paper due at the end of the semester, during finals week. It will be a review of a particular aspect of auditory research and will account for 20% of your grade. The instructor is willing to work with you to choose an appropriate topic and to guide the selection of appropriate background material.

(~8-10 pps, ~15 refs)

**Presentations:** In-class presentation of literature will constitute the remaining 20% of your grade. Although one student will lead the discussion. All are expected to participate in some way. Attendance is accordingly mandatory.

The OSU Standard Grade Scheme will be employed

93 - 100 (A)  
90 - 92.9 (A-)  
87 - 89.9 (B+)  
83 - 86.9 (B)  
80 - 82.9 (B-)  
77 - 79.9 (C+)  
73 - 76.9 (C)  
70 - 72.9 (C-)  
67 - 69.9 (D+)  
60 - 66.9 (D)  
Below 60 (E)

### **Calendar:**

Week 1	Introduction and syllabus review, Overview of acoustics and filtering	
Week 2	Spectral Cues in Speech Recognition I	ANSI, 1997; Warren et al., 1995
Week 3	Spectral Cues in Speech Recognition II	Warren et al., 1999; Warren et al., 2004
Week 4	Spectral Cues in Speech Recognition III	Stickney & Assman, 2001; Healy et al., 2013
Week 4	Spectral Cues in Speech Recognition IV	ter Keurs et al., 1992; ter Keurs et al., 1993
Week 5	Temporal Cues in Speech Recognition I	Moore, 2007; Rosen, 1992
Week 6	Temporal Cues in Speech Recognition II	VanTassell, 1987; Turner et al., 1995
Week 7	Spectro-Temporal Cues in Speech Recognition I	Shannon et al., 1995; Shannon et al., 1998
Week 8	Spectro-Temporal Cues in Speech Recognition II	Dorman et al., 1997b, Friesen et al., 2001
Week 9	Spectro-Temporal Cues in Speech Recognition III	Dorman et al., 2002; Zeng et al., 2015
Week 10	Cochlear Implants I	Wilson et al., 1991; Loizou, 2006
Week 11	Cochlear Implants II	Brown and Bacon, 2009a; Brown and Bacon, 2009b
Week 12	Cochlear Implants III	Baskent & Shannon, 2004; Fitzgerald et al., 2013

**Academic Misconduct:** No deviations from complete academic honesty will be tolerated.

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct at <http://studentlife.osu.edu/csc/>.

**Diversity:** Our department and our university have a long legacy of embracing inclusion, diversity, community, and openness. Our challenge is to ensure that we continue to be proactive in our efforts to nurture and realize these values. Therefore, we will continue to make every effort to welcome students of different backgrounds, cultures, and opinions and work to maintain an environment that is respectful of this diversity. University policies and other resources may be found here: <http://www.studentaffairs.osu.edu/bias/>

### **Students with Disabilities:**

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible about their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292 3307, TDD 292 0901; on the web at <http://www.ods.ohio-state.edu>