

## SHS 649: Speech Perception and Production

**Catalog Description:** Speech perception and production for children who are deaf or hard of hearing; acoustic and articulatory phonetics; phonetic transcription of spoken language.

**Course Credit:** 1 semester hour

### **Prerequisites:**

Normal Language Development

Infant Development or Child Development

Anatomy & Physiology of the Speech Mechanism

Anatomy & Physiology of the Vocal Mechanism

Introduction to Audiology

Phonetics

Or permission of instructor

### **I. Course Objectives**

Students will achieve growth toward becoming informed, dynamic professionals by demonstrating proficiencies in knowledge comprehension, skill application and dispositions to speech perception and production underlying oral communication for children who are deaf or hard of hearing. The student will:

- A. locate the major anatomical structures involved in speech production and label a diagram of the speech mechanism. (K)
- B. identify speech frequencies for Ling Six Sound Test and describe reasons for administration. (K,S)
- C. interpret aided and unaided audiograms and determine speech sounds expected within the range of aided hearing, including whether auditory devices are optimal for speech development. (K,S,D)
- D. list and define suprasegmental patterns of speech perception and production (duration, intensity and frequency). (K,S)
- E. group and classify segmental aspects of speech production (vowels & consonants). (K,S)
- F. recognize errors of “deaf speech” commonly associated with late intervention and/or ineffective auditory management. (K,S)
- G. describe the visual perceptual confusions inherent in the speechreading process and the implications for teaching and oral communication. (K,S,D)
- H. transcribe words, phrases and sentences orthographically. (K,S)
- I. transcribe sounds, syllables, words, phrases and sentences using the International Phonetic Alphabet (IPA) and/or Northampton symbols. (K,S)

## II. Course Content

- A. Anatomy and physiology of the speech mechanism
  - 1. Lungs, vocal folds, articulators
  - 2. Respiration, phonation, resonance, articulation
  - 3.
- B. Ling Six Sound Test
  - 1. Phonemes and correspondent speech frequencies
  - 2. Procedures and reasons for administration
  - 3. Applications
- C. Interpretation of aided and unaided audiograms
  - 1. Speech “banana” and “count-the-dot” audiogram
  - 2. Aided thresholds and speech reception across the range of speech sounds
  - 3. Determining suitability of amplification based on speech acoustics
- D. Suprasegmental patterns of speech
  - 1. Duration (length)
  - 2. Intensity (loudness)
  - 3. Frequency (pitch)
- E. Segmental aspects of speech production
  - 1. Vowels
  - 2. Diphthongs and semi-vowels
  - 3. Consonants by manner, place and voicing
  - 4. Consonant blends
- F. Characteristics of “deaf speech”
  - 1. Suprasegmental errors
  - 2. Segmental errors
  - 3. Relationship of errors to respiration, phonation, resonance and articulation
  - 4. Relationship of errors to late intervention and/or poor auditory management
- G. Speechreading
  - 1. Place of articulation, visual cognates, visemes
  - 2. Visual perceptual confusions
  - 4. Implications for teaching and oral communication
- H. Orthography
  - 1. Transcription of words
  - 2. Transcription of phrases and sentences
- I. International Phonetic Alphabet and Northampton Symbols
  - 1. Transcription of vowels
  - 2. Transcription of consonants
  - 3. Transcription of co-articulated syllables
  - 4. Transcription of words, phrases and sentences
  - 5. Diacritics

6. Ear training for phonetic transcription
7. Ear training for voice errors

### **III. Methods of Instruction**

- A. Lecture
- B. Demonstrations
- C. Audio/CD and video/DVD presentations
- D. Reading assignments and handouts
- E. Self study (audio/CD & video/DVD)
- F. On-line resources

### **IV. Methods of Evaluation**

- A. Attendance 5%
- B. Quality and quantity of class participation (K,S,D) 10%
- C. Written examinations and quizzes (K,S) 45%
- D. On-line web search and summary (including research articles) (K,S) 15%
- E. Transcriptions (K,S) 15%
- F. Self-study tapes (K,S) 10%
- G. Anonymous course evaluations (D)

### **V. Suggested Texts**

Klein, D. & Parker, E. (2002). *Spoken communication for students who are deaf and hard of hearing: A multidisciplinary approach*. Hillsboro, OR: Butte Publications.

Ling, D. (2002). *Speech and the hearing-impaired child: Theory and practice*. (2<sup>nd</sup> ed.) Washington, DC: Alexander Graham Bell Association for the Deaf.

### **VII. Course Format**

This course will be taught as a seminar with class discussion, research, student presentations, invited presentations and demonstrations.

#### **Academic Honesty**

When cheating is discovered, the faculty member may give the student an F on the work involved or in the course. If further disciplinary action is deemed appropriate, the student should be reported to the dean of students. In addition to being in violation of academic honesty, cheating violates the Code of Student Conduct and may be grounds for probation, suspension, and/or expulsion. (Taken from *Student Handbook*)

#### **Plagiarism**

Plagiarism is scholarly theft, and it is defined as the unacknowledged use of secondary sources. More specifically, any written or oral presentation in which the writer or speaker does not distinguish clearly between original and borrowed material constitutes plagiarism. Because students, as scholars, must make frequent use of the concepts and facts developed by other scholars, plagiarism is not the mere use of another's facts and ideas. However, it is plagiarism when students present the work of other scholars as if it were their own work. Plagiarism is committed in a number ways:

1. Reproducing another author's writing as if it were one's own.
2. Paraphrasing another author's work without citing the original.
3. Borrowing from another author's ideas, even though those ideas are reworded, without giving credit.
4. Copying another author's organization without giving credit.

(Taken from *Student Handbook*)

### **Administrative Requirements**

1. Students are expected to attend and be prepared to participate in each class session.
2. Students are expected to participate in all related field experiences.
3. Students are expected to take examinations and quizzes when they are scheduled and to submit assignments on the date these assignments are due during the class period.
4. Late submission of assignments should be rare. Late assignments will be accepted only on or before the next regularly scheduled class period and penalized by 50%. Late assignments will not be accepted beyond the next class period and will earn "0" credit.
5. If one quiz is missed, the next quiz will count twice. If additional quizzes are missed a grade of "0" will be given.
6. Make-up examinations will be given only in the most merited circumstances. Make-up examinations may be oral, written, or oral and written.
7. Requests for Incomplete (I) grades are discouraged, and will not be approved except in the most merited circumstances.

### **ADA STATEMENT**

If a student has a disability that qualifies under the American with Disabilities Act (ADA) and requires accommodations, he/she should contact the Office for Disability Accommodations (ODA) for information on appropriate policies and procedures. Disabilities covered by ADA may include learning, psychiatric, physical disabilities, or chronic health disorders. Students can contact ODA if they are not certain whether a medical condition/disability qualifies.

Address: The University of Southern Mississippi  
Office for Disability Accommodations  
118 College Drive # 8586  
Hattiesburg, MS 39406-0001

Voice Telephone: (601) 266-5024 or (228) 214-3232

Fax: (601) 266-6035

Individuals with hearing impairments can contact ODA using the *Mississippi Relay Service* at 1-800-582-2233 (TTY) or email Suzy Hebert at [Suzanne.Hebert@usm.edu](mailto:Suzanne.Hebert@usm.edu)