I praise you because I am fearfully and wonderfully made. 
Your works are wonderful, I know that full well. 
Psalm 139:14

Course Description
An outline of the vocal mechanism, the acoustics of voice and sound production, and the human ear and the psychoacoustics of audition will be presented. Practical application of this knowledge will be emphasized. Successful completion of CSD 290 and 325 are required for enrollment in this course. Successful completion of CSD 400 is highly recommended.

Required Materials

Other Resources
Journal articles, videos, and other resources will be posted on Canvas.
Computerized Speech Lab (CSL) in HUSC
Audacity – http://audacityteam.org/
PRAAT – http://www.fon.hum.uva.nl/praat/

Course Objectives
Students will demonstrate knowledge of the following objectives and the ability to integrate them into the frameworks of speech pathology and audiology:
- The basics of acoustics
- Body systems involved in respiration and phonation
- Resonance of speech
- Speech perception
- Research tools used in speech science

Relationship to ASHA Standards
ASHA upholds seven Standards related to academic and clinical training as well as continuing education. This course contributes to completion of Standards III-A and III-C.

Course Policies
- In order to sufficiently master the topics covered in this course, you should attend each class meeting and stay current on all assigned readings. Attendance will be recorded at each class meeting. Students are expected to read assigned material prior to class and be prepared to participate in class discussions. Students who miss class are responsible for content.
• Keep all electronic devices turned off or silenced and in your bag unless our classwork requires them. If you have an urgent situation that requires your attention, just let me know.
• Lectures, slides, and test questions are considered to be intellectual property and some course components are protected by an additional copyright. For these reasons, students may not record any portions of a class or photograph slides without the permission of the course instructor.
• Written work must be reasonably correct in mechanics (e.g. spelling, grammar, punctuation, etc.). Points may be deducted for mechanics. Students may not receive credit for illegible assignments.
• Students are expected to adhere to assignment due dates. Students may not receive credit for late submissions.
• Students who share assignments with students taking the course in a subsequent semester may be subject to having an academic integrity sanction added to their college record.
• Students are expected to follow all HU Testing Lab policies and procedures when taking any exams scheduled there.
• Students are expected to follow all HUSC policies and procedures when completing projects in the clinic area or with clinic materials or equipment. Clinical assignments take priority over class projects when instrumentation is concerned. Do not carry food or drink into the instrumentation lab, and be sure to leave the room and equipment clean when you leave.
• If you are unable to take an examination due to illness, an alternate form of the exam (essay or written paper) may be substituted for the missed exam. Students must contact the instructor prior to the scheduled exam for the make-up request to be considered.

Course Requirements
Exams – Students will have at least three unit exams during the semester. Tentative exam dates and topics are provided in the course schedule. Students will also have a comprehensive final exam, according to the University’s published exam schedule.

Learning activities – Students will complete several lab projects during the semester. These labs are designed to provide students with hands-on experience with many concepts discussed during class. Labs will also provide students with opportunities to use a variety technologies and applications commonly used in diagnosis, treatment, and research in speech and hearing sciences. Labs may include: oscillation, manometry, s/z ration, maximum phonation time, voice range profile, intensity, fundamental frequency, interactive vowel chart, and perceptual characteristics.

Research paper – Students will write an original 5-page research paper on a topic related to speech and hearing science. Topics must be approved by the instructor. Potential topics and guidelines will be discussed in class.

Book review – Each student will select a book to read and review. Books must be on a topic related to speech and hearing science and cannot have been used for another class project or assignment. Potential topics and guidelines will be discussed in class.

Grading
Chapter Exams – 25%  Final Exam – 25%  Book review – 15%
Research paper – 25%  Learning activities – 10%

A = 90 -100%  B = 80 - 89%  C = 70 - 79%  D = 60 - 69%  F = below 60%
Students with Disabilities
It is the policy for Harding University to accommodate students with disabilities, pursuant to federal and state law. Therefore, any student with a documented disability condition (e.g. physical, learning, or psychological) who needs to arrange reasonable accommodations must contact the instructor and the Disabilities Office at the beginning of each semester. (If the diagnosis of the disability occurs during the academic year, the student must self-identify with the Disabilities Office as soon as possible in order to get academic accommodations in place for the remainder of the semester.) The Disabilities Office is located in Room 205 in the Student Center, telephone (501) 279-4019.

Credit Hour Statement
For every course credit hour, the typical student should expect to spend at least three clock hours per week of concentrated attention on course-related work, including but not limited to time attending class, as well as out-of-class time spent reading, problem solving, reviewing, organizing notes, preparing for upcoming quizzes/exams, problem solving, developing and completing projects, and other activities that enhance learning. Thus, for a three-hour course, a typical student should expect to spend at least nine hours per week dedicated to the course.

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Academic Integrity
Cheating in all its forms is inconsistent with Christian faith and practice and will result in sanctions up to and including dismissal from the class with a failing grade.

Assessment
Harding University, since its charter in 1924, has been strongly committed to providing the best resources and environment for the teaching-learning process. The board, administration, faculty, and staff are wholeheartedly committed to full compliance with all criteria of the Higher Learning Commission of the North Central Association of Colleges and Schools. The university values continuous, rigorous assessment at every level for its potential to improve student learning and achievement and for its centrality in fulfilling the stated mission of Harding. Thus, a comprehensive assessment program has been developed that includes both the Academic units and the Administrative and Educational Support (AES) units. Specifically, all academic units will be assessed in reference to the following Expanded Statement of Institutional Purpose: The University provides programs that enable students to acquire essential knowledge, skills, and dispositions in their academic disciplines for successful careers, advanced studies, and servant leadership.

Dress Code
All students are expected to abide by the Student Handbook. A student may be asked to leave class or other activities if they are not in keeping with these expectations.
### Tentative Schedule of Topics

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic, Chapter</th>
<th>Assignment</th>
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<tbody>
<tr>
<td>Aug 24</td>
<td>Introductions, Syllabus review</td>
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</tbody>
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| Aug 26 - Sept 11 | Ch. 2, Sound Waves | Friday, Aug. 28, Last day to add/drop class  
                                                      Friday, Sept. 11, Exam #1 |
| Sept 14 - Sept 21 | Ch. 3, Breathing  | Monday, Sept. 14, HUSC clinic begins                 |
| Sept 23 - Oct 5 | Ch. 4, Phonation   | Friday, Oct. 2, Fall break day                       |
| Oct 7 - 16 | Ch. 5, Instrumentation | Oct. 12-16, Midterm week  
                                                      Wednesday, Oct. 14, Exam #2  
                                                      Friday, Oct. 16, ArkSHA |
| Oct 19 - Nov 2 | Ch. 6, Vowels       |                                                      |
| Nov 4 - 18 | Ch. 7, Consonants   | Monday, Nov. 9, IPE event  
                                                      Friday, Nov. 13, ASHA Convention |
| Nov 20 - Dec 4 | Ch. 8 & 9, Theories | Thanksgiving break  
                                                      Monday, Nov. 30, Exam #3 |
| Dec 7-11   | Review and apply    | Dead Week                                            |
| Dec 14     | Final exam, 1:00-3:00 pm |                                                  |

### Changes to this syllabus

Course schedule is tentative and subject to adjustment at discretion of instructor. In fact, I will try to adjust due dates for labs and projects to give you the most benefit from what has been discussed in class. Please be patient and tolerant of these adjustments, as they are for your benefit.

The instructor reserves the right to change course assignments and/or testing procedures; however, the instructor will announce any changes during class meetings or on Canvas so that the students have sufficient notice.