PRECLINICAL SPEECH SCIENCE  
SLHS 567, Fall 2014

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Time/Place: TTh 11:00-12:15 / SLHS 409  
Office Hrs: Anytime by appointment

Learner Outcomes: Upon completion of this course, students will be able to:

(1) describe normal speech production physiology.  
(2) discuss the relation of speech production to speech.  
(3) describe the nature of the acoustic speech signal.  
(4) discuss current theories of speech perception.  
(5) discuss measurement principles and their applications to speech production, speech, and speech perception  
(6) demonstrate professional oral and written skills.


Grading: A standard grading scale will be used (90-100% = A; 80-89% = B; 70-79% = C; 60-69% = D; below 60% = E). There will be no re-grading.

Homework (5 points each; total = 40 points). There will be homework related to Chapters 2, 3, 4, and 5 of your book that will be due prior to the lectures on those chapters. This is to ensure that students have prepared for the lectures by reading the material. Homework assignments for acoustics and perception will require use of methods discussed in class.

In-Class Activities (2 points each; total = 20 points). There will be 11 in-class activities designed to facilitate learning of the material, 10 of which will count toward your course grade (that is, one activity grade will be dropped). A good performance on an activity will earn 2 points; a good try, but incomplete or a partly incorrect performance will earn 1 point; and an absence or failure to try the activity will result in a 0.

Exams (20 points each; total = 100 points). There will be 5 exams, 4 of which will count toward your course grade (that is, one exam grade will be dropped). Students must take all 5 exams.

Final Exam (40 points). The final exam will be approximately half comprehensive over the semester and half related to the final unit (Speech Perception and Measurement).

Course Outline: (Subject to modest revision)  

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading(s)</th>
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<tbody>
<tr>
<td>Aug 26</td>
<td>Introduction</td>
<td>Chapter 1</td>
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<td>Aug 28</td>
<td>Homework due for Chapter 2 (5 points)</td>
<td>Chapter 2</td>
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<td></td>
<td>Respiratory Function and Measurement</td>
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<td>Sept 2</td>
<td>Respiratory Function and Measurement</td>
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</table>
Sept 4  Respiratory Function and Measurement
Sept 9  Respiratory Function and Measurement
Sept 11  **Exam #1 (Respiratory Function and Measurement; 20 points)**
Sept 16  **Homework due for Chapter 3 (5 points)**  
         Laryngeal Function and Measurement
Sept 18  Laryngeal Function and Measurement
Sept 23  Laryngeal Function and Measurement
Sept 25  **Exam #2 (Laryngeal Function and Measurement; 20 points)**
Sept 30  **Homework due for Chapter 4 (5 points)**  
         Velopharyngeal-Nasal Function and Measurement
Oct  2  Velopharyngeal-Nasal Function and Measurement
Oct  7  Velopharyngeal-Nasal Function and Measurement
Oct  9  **Exam #3 (VP-N Function and Measurement; 20 points)**
Oct 14  **Homework due for Chapter 5 (5 points)**  
         Pharyngeal-Oral Function
Oct 16  Pharyngeal-Oral Function
         (P-O Measurement will be integrated into Speech Acoustics)
Oct 21  Speech Production Physiology: All Subsystems
Oct 23  Speech Acoustics and Measurement  
         Chapters 7-11
Oct 28  **Exam #4 due (Integrative Physiology Take-Home Exam; 20 points)**
Nov  4  Speech Acoustics and Measurement
Nov  6  Speech Acoustics and Measurement
Nov 11  Veterans Day (no class)
Nov 13  **Homework for Speech Acoustics due (5 points)**  
         Speech Acoustics and Measurement
Nov 18  **Exam #5 (Speech Acoustics and Measurement; 20 points)**
Nov 20  Speech Perception and Measurement  
         Chapter 12
Nov 25  Speech Perception and Measurement
Nov 27  Thanksgiving Day (no class)
Dec  2  Speech Perception and Measurement
Dec  4  **Homework for Speech Perception due (5 points)**  
         Speech Perception and Measurement
Dec  9  Speech Perception and Measurement
Dec 16  **Final Exam (40 points)**
         (10:30-12:30)

**Class Policies**

1. **Absences**: Students are expected to attend class unless there is an unavoidable
circumstance such as illness or emergency. Attendance may be taken periodically.
   Anyone who is chronically absent may have their grade lowered or be dropped from the
class. All holidays or special events observed by organized religions will be honored for
those students who show affiliation with that particular religion. Absences pre-approved
by the UA Dean of Students (or Dean designee) will be honored.

2. **Please turn off all cell phones and pagers during class**: If you must take a call for
   emergency purposes, please do so by placing your phone’s ringer on silent or vibrate and
   leave the room to answer your phone.
3. **Incomplete Grade Policy**: Incomplete grades will be given ONLY in special circumstances as outlined in the university’s policy. See: http://catalog.arizona.edu/2006-07/policies/grade.htm

4. **Threatening Behavior**: Threatening behavior is prohibited at the University of Arizona. “Threatening behavior” means any statement, communication, conduct or gesture, including those in written form, directed toward any member of the University community that causes a reasonable apprehension of physical harm to a person or property. See http://policy.web.arizona.edu/threatening-behavior-students for the University’s policy.

5. **Accessibility and Accommodations**: It is the University’s goal that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please let me know immediately so that we can discuss options. You are also welcome to contact Disability Resources (520-621-3268) to establish reasonable accommodations.

6. All students are expected to know and abide by the **Code of Academic Integrity**. Conduct prohibited by the Code consists of all forms of academic dishonesty, including, but not limited to: cheating, fabrication, facilitating academic dishonesty, and plagiarism as set out and defined in the Code of Conduct, failure to observe rules of academic integrity established by the faculty member for a particular course; and attempting to commit any act prohibited by the Code. A violation of the Code may result in a report of the incident being sent to the Dean of Students and a copy of that report being filed in the student’s departmental records. The complete Code of Academic Integrity can be found at http://deanofstudents.arizona.edu/policies-and-codes/code-academic-integrity

7. **Statement of Copyrighted Materials**: Students are advised that all lecture notes, lectures, study guides and other course materials disseminated by the instructor to the students, whether in class or online, are original materials and as such reflect intellectual property of the instructor or author of those works. All readings, study guides, lecture notes and handouts are intended for individual use by the student. Students may not distribute or reproduce these materials for commercial purposes without the express written consent of the instructor. Students who sell or distribute these materials for any use other than their own are in violation of the University’s Intellectual Property Policy (available at http://www.ott.arizona.edu/uploads/ip_policy.pdf). Violations of the instructors copyright may result in course sanctions and violate the Code of Academic Integrity.

8. **Change in Syllabus**: This syllabus is a tentative document and is subject to change with reasonable advance notice. The policies on grading and absences will NOT change.
## Learner Outcomes for SLHS Coursework Relative to ASHA 2014 Standards

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<tr>
<th>Learner Outcomes</th>
<th>IV-B</th>
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<th>IV-C 4</th>
<th>IV-C 5</th>
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<th>IV-C 7</th>
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<th>IV-D 9</th>
<th>IV-E</th>
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<th>V-A</th>
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<tbody>
<tr>
<td>1. Describe normal speech production physiology</td>
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<td>2. Discuss the relation of speech production to speech</td>
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<td>3. Describe the nature of the acoustic speech signal</td>
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<td>4. Discuss current theories of speech perception</td>
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<td>5. Discuss measurement principles and their applications to speech production, speech, and speech perception</td>
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<td>6. Demonstrate professional oral and written skills</td>
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ASHA Standards (SLHS 567 - Fall, 2014)