

Course: SPPA 310 Speech Science Spring 2014  
T/Th – 8:30-9:45 a.m. BH 161  
3 Semester Credits

**Instructor:** Darah Regal, AuD., CCC-A  
Assistant Professor of Audiology  
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**Required Textbooks:** Ferrand, Carole T. *Speech Science*, third edition (2014). Pearson.

**Course Description:** Provides intermediate level information regarding speech production, the nature of the speech signal, physics of sound and how speech is processed. Areas of study include anatomy, physics, speech and hearing disorders as well as neurophysiology. Understanding of speech production/perception and its impact on communication will also be discussed.

**Course Objectives:** By the end of this course, you will be able to:

1. Identify the anatomical structures of the speech and auditory systems.
2. Discuss the possible communication challenges of several speech and hearing disorders.
3. Explain the nature of several speech, language and hearing disorders.
4. Demonstrate skill in explaining etiologies, characteristics and developmental impact of speech and hearing disorders in oral presentations and written projects.
5. Possess knowledge of principles and methods of prevention, assessment and intervention for people with speech and hearing disorders.

### **Asha Certification Standards**

This course addresses the following Knowledge and Skill Areas (KASA) required for ASHA certification in Speech-Language Pathology by ASHA's Council for Clinical Certification (CFCC):

**Standard III-A:** Demonstrate knowledge of biological sciences, physical sciences, mathematics, and social/behavioral sciences.

**Standard III-B:** Demonstrate knowledge of basic human communication processes, including their biological, neurological, acoustic, psychological, developmental, linguistic and cultural bases.

**Standard III-C:** Demonstrate knowledge of the nature of speech, language, hearing and communications disorders and differences including their etiologies, characteristics, anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates.

## Course Requirements:

1. **Class Attendance:** Record will be taken during the first five minutes of class. Promptness is vitally important to the continuity of class discussion. If you find you will be unable to attend class, please notify the teacher **prior to the class** to make arrangements for making up the work and obtaining handout material. Three absences will be allowed. Absences beyond that will jeopardize your grade 2% per day missed after the third day. Prolonged illness with physician explanation will be dealt with individually.
2. **Quizzes:** There will be either a take home quiz or in class quiz each week - 10-20 points each.
3. **Examinations:** There will be two examinations throughout the semester worth 75 - 150 points each.

**Quizzes missed due to an excused absence will be prorated. Tests missed due to an excused absence may be made up within three days after the absence.**

4. **Projects:** Each week you will be assigned a project and the due date for the project pertaining to a specific chapter of study. These projects may include, but will not be limited to, brochures, power point presentations, written documents, web searches, demonstrations and oral presentations (10-75 points each). More information about specific requirements for each project will be given during the semester. One of my goals for this class is the help you discover your talents and abilities to relay information to other people about the course content. Consequently, you will be asked to present/prepare projects for different audiences such as parents, physicians, teachers, parents and co-professionals. When you have to present information, you learn it in a different way than a standard written exam.
5. Changes to this course outline, assignments, quizzes and exams may be changed as deemed necessary by the professor to foster optimal instruction. This can include additional assignments, review quizzes or assignments and extra credit.

**Grading:** Grades will be calculated on a percentage basis as follows:

94.0 - 100%	A	73.5-77.99%	C
90.0 - 93.99%	A-	70.0-73.49%	C-
87.5 - 89.99%	B+	65.0-69.99%	D
83.5 - 87.49%	B	Below 65%	F
80.0 - 83.49%	B-		
77.5 - 79.99%	C+		

6. Academic dishonesty including plagiarism, copying other students work, stealing quizzes or accepting stolen quizzes or exams is a serious offense. Possible consequences are a warning, reduced or failing grade, suspension or dismissal from the class, expulsion from

the university, and/ or degree cancellation.

7. Andrews University is committed to the education of all students on campus. If you qualify for accommodation under the American Disabilities Act, please see contact Student Success in Nethery Hall 100 ([disabilities@andrews.edu](mailto:disabilities@andrews.edu) or 269-471-6096) as soon as possible so that accommodations can be arranged.
  
8. CELL PHONE and EATING in class. In an effort to make the most valuable use of your time and mine, I am requesting that cell phones be turned OFF during class and that eating during class be discontinued. Cell phones ringing and/or vibrating are a distraction. If there is an emergency and you need to be reached by cell phone during class, you must discuss the emergency with me prior to class.
  - i. Please plan to eat prior to class so that you can easily participate in class discussion and take notes.
  
9. E-Mail – you are responsible for checking you Andrews e-mail account for messages from class. Please check your e-mail on a regular basis for important messages.
  
10. This course is designed to meet certain ASHA certification standards. The following knowledge and skill areas will be addressed:
  - A. Standard III-B The applicant must demonstrate knowledge of basic human communication and swallowing processes, including their biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases. This course will expect knowledge in the anatomical, neurological, acoustic, psychological, developmental, linguistic and cultural of several communication processes.
  - B. Standard III-C The applicant must demonstrate knowledge of the nature of speech, language, hearing, and communication disorders and differences and swallowing disorders, including their etiologies, characteristics, anatomical/physiological, acoustic psychological, developmental, and linguistic and cultural correlates. Specific knowledge for this course will be expected in the areas of articulation, voice, hearing and neurological disorders. Your presentations and projects will be designed to demonstrate this knowledge
  - C. Standard IV-B: Possesses skill in oral and written and other forms of communication sufficient for entry into professional practice. You will be beginning the process to become proficient in these areas through weekly projects assigned.

## TENTATIVE COURSE OUTLINE

Date		TOPIC	ASSIGNMENT
January	7	Orientation and Syllabus Review Chapter 1	
	9	Chapter 1 Nature of Sound – Web Web Pages/Presentations	Chapter 1
	14		Chapter 2
	16	Chapter 2 Resonance - Web	
	21*	Chapter 2 - Web	Web Page Presentations
	23*	Chapter 3 Articulation	<b>Chapter 3 Quiz</b>
	28		
	30	Chapter 4 Presentation Articulation Evaluation Chapter 5 Phonation	Equipment Presentation Due
February	4		<b>Chapter 5 Quiz</b>
	6	The Phonatory System Chapter 6 Clinical Application	<b>Brochure Rough Draft</b>
	11		
	13	Chapter 7 Respiratory System Respiratory System	<b>Brochure Due</b>
	18		
	20	Chapter 8 Evaluation Respiratory Disorders	<b>Chapter 7 Quiz</b>
	25	<b>MIDTERM EXAM</b>	
	27	Chapter 8	
March	4	Power Point Presentations	
	6	Power Point Presentation	<b>PowerPoint Due</b>
	11	Chapter 9 Auditory system Auditory System	<b>Chapter 9 Quiz</b>
	13		
	18	NO CLASS – SPRING BREAK	
	20	NO CLASS – SPRING BREAK	
	25	NO CLASS – Group Projects	
	27	NO CLASS – Group Projects	
April	1	Chapter 10 Clinical Application Auditory System	
	3		Letter Rough Draft
	8	Chapter 11 Nervous System	<b>Chapter 11 Quiz</b>
	10		<b>Letter Due</b>
	15	Chapter 12 Clinical Application Nervous System	
	17		
	22	Final Project Presentation	<b>Final Project Due</b>
	24	Final Project Presentation	
	29		
May	1	Comprehensive Final Examination 7:30-9:30 am	

\*Indicates Week of Spiritual Emphasis. No change of class meeting time.