

Course: SPPA 331 Basic Audiology Fall 2007 M,W,F - 9:30 a.m. BH 161
3 Semester Credits

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Required Textbooks: Martin, F. N. Introduction to Audiology, seventh edition(2000). Englewood Cliffs, N. J. Prentice Hall, Inc.

Course Description: A survey of the normal auditory system, its anatomy and physiology, and the pathologies that affect its functioning. Areas of study include the physics of sound, standard reference levels, and auditory perception. Methods of administering and interpreting pure tone and speech threshold tests are presented.

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

1. Identify the structures of the auditory system.
2. Discuss the transmission of sound through the auditory pathway.
3. Explain the transmission of sound through air.
4. Learn simple tests of hearing using the tuning fork.
5. Administer the basic battery of auditory tests.
6. Correctly interpret pure tone threshold results.

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 four examinations throughout the semester worth 75 - 100 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. **Laboratory Assignments:**

- A. **Observation:** Each student will observe 6 hearing evaluations during the course of the semester. Observation report forms are available in the clinic. These observations will count toward your required 25 hours of observation. Be sure to obtain the audiologist's signature on the Observation Time Log (available in the department or in the clinic) for the time spent. Please do not wear jeans, flip flops, tank tops etc. when observing. Observation reports and time logs are due at the beginning of class on the date noted in the course outline. **Each observation is worth 5 points - 30 points total.**
- B. **Screening:** Each student will perform 5 screening (20 dB HL at 250,500, 1000, 2000, 3000, 4000, 6000, and 8000 Hz) audiograms on friends using the portable audiometer. A sign-up sheet will be posted for checking out the audiometer. You will develop your own screening form with all necessary information. You may begin this project after September 15. It is due at the beginning of class on the date noted in the course outline. **Each screening is worth 5 points - 25 points total.**
- C. **Pure Tone Tests:** Each student will perform 4 pure tone air and bone conduction threshold tests on friends. Two patients can be class members, two should be non-class members. Refer to chapter 4 in the textbook and class notes for instructions. In the comments section on the audiogram, **summarize** the type and degree of loss, if any. Audiograms are due at the beginning of class on the date noted in the course outline. Please attach the RUBRIC labeled Pure Tone Lab with your audiograms. **Each Pure Tone Threshold test is worth 10 points - 40 points total.**
- D. **Speech Tests:** Each student will perform 4 SRT and word discrimination tests on friends. Refer to chapter 5 in the textbook and class notes on proper procedure. These may be added to the pure tone audiogram done above if it is on the same person. Two patients can be class members, two should be non-class members. **Summarize** your results on the bottom of the audiogram. Due at the beginning of class on the date specified in your outline. Please attach the RUBRIC labeled Speech Lab with your audiograms. **Each speech test is worth 10 points - 40 points total.**
- E. **Research:** You will be given three hearing disorders to research. Submit a two to three page report about each disorder including signs and symptoms, etiology, medical management, typical hearing results and history of the disorder. History would include, progression of the disorder and its affect on the anatomy, who discovered the disorder, different medical management procedures that have been tried to correct the disorder and what is used currently today. The total report should be 6-9 pages typed with at least 5 references. Please attach the RUBRIC labeled Basic Audiology Research with your paper. - **90 points**

Total Lab Points - 215 Points

Late work will be discounted as follows: Assignments turned in within 24 hours of the due time will be discounted 5%. (Work turned in after class is considered late.) An additional

10% per day will be deducted until a 50% reduction has been reached . No credit will be given for work turned in after that time.

5. **REVIEW LABS:** If you receive less than 80% on any exam you will be required to attend a review lab pertaining to information on the exam. If you attend the lab, successfully correct missed questions on the exam and successfully complete a review quiz on the information missed on the exam you may Amake-up@ up to 50% of the points missed on the exam. For example, if you receive a score of 70/100 on an exam the maximum amount of points you may make up by attending the lab, correcting the questions and taking a review quiz is 15 points. Although this requires extra work on your part, the extra points can increase you grade significantly. Anyone who misses points on an exam, even those above 80%, may Amake-up@ up to 50% of the points missed. However, it is only required for students who receive below 80%.

6. 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.

7. **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+		

8. 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.

9. Andrews University is committed to the education of all students on campus. AIf you qualify for accommodations under the American Disabilities Act, please see the instructor as soon as possible for referral and assistance in arranging such accommodations.@

10. CELL PHONE and EATING in class. In a 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. Please plan to ear prior to class so that you can easily participate in class discussion and take notes.

11. 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.

TENTATIVE COURSE OUTLINE

	<u>Chapter</u>	Martin
Aug.	27 Introduction - Pathways of sound,	1
	29 Tuning Fork	2
	31 Tuning Fork Tests	2
Sept.	3 No class - Labor Day	
	5 Audiometer/screening	4
	7 Audiometer/screening	4
	10 Screening cont.	4
	12 Threshold Testing - Air	4
	14 Threshold Testing - Air	4
	17 Threshold testing - Bone (9:10-9:50)	4
	19 Audiogram Interpretation (9:10-9:50)	4
	21 Audiogram Interpretation (9:10-9:50)	
	24 Audiogram Interpretation	4
	26 Audiogram Interpretation	
	28 EXAM 1	3
OCT.	1 The Decibel Two observations due	3
	3 The Decibel cont.	3
	5 Physics of sound	
	8 NO CLASS - FALL RECESS	
	10 Loudness	3
	12 Pitch SCREENINGS DUE	
	15 Binaural Hearing	3
	17 Speech Audiometry	5
	19 Speech Audiometry	5
	22 SDT, SRT	5
	24 Speech Discrimination	5
	26 EXAM 2	5
	29 The Outer Ear Two Observations Due	8
	31 The Outer Ear - functions and disorders	8
Nov.	2 The Middle Ear	8
	5 The Middle Ear - Structures	9
	7 The Middle Ear - Functions and Disorders	9
	9 The Middle EAR	9
	12 EXAM 3	
	14 The Middle Ear - Disorders	9
	16 The Inner Ear - Structures	10
	19 The Inner Ear - Functions RESEARCH DUE	10
	21 NO CLASS THANKSGIVING BREAK	
	23 NO CLASS THANKSGIVING BREAK	

	26	The Inner ear Disorders Two Observations Due	10
	28	The Inner ear Disorders PURE TONES DUE	10
	30	The Central Auditory Nervous System	11
Dec.	3	The Central Auditory Nervous System - Function SPEECH LAB DUE	11
	5	The Central Auditory Nervous System- Disorders	11
	7	Case Studies and Review	
 FINAL EXAM: Monday, December 10, - 10:00a.m.-12:00 p.m.			