

Course: SPPA 331 Basic Audiology Fall 2013 M,W,F - 9:30 -10:20a.m. BH 161
3 Semester Credits

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Required Textbooks: Martin, F. N. Introduction to Audiology, Eleventh edition (2012). 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.

This course meets the following Audiology KASA standards:

Standard IV-A: Foundations of Practice-A1, A2, A4, A8, A10, A12, A13, A21, A23, A24, A25

Standard IV-B: Prevention and Identification-B1, B3, B5

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 (excused or unexcused). Absences beyond that will jeopardize your grade 2% per day missed after the third day. Three tardies equals one absence. 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 - 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. Exams missed due to illness require

a physician note verifying the illness to make up the exam.

4. Laboratory Assignments:

- A. Observation:** Each student will observe 4 hearing evaluations during the course of the semester. Observation report forms are available in the clinic or on our website. If you are enrolled in the Pre-clinical class (SPPA 270), these observations can count toward the 25 hours required for that class as well. 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 - 20 points total.**
- B. Screening:** Each student will perform 10 screening (20 dB HL at 250,500, 1000, 2000, 3000, 4000, 6000, and 8000 Hz) audiograms using the portable audiometer. You will be assigned a day to use the screener.. You will develop your own screening form with all necessary information. It is due at the beginning of class on the date noted in the course outline.
Each screening is worth 5 points - 50 points total.
- C. Pure Tone Tests:** Each student will perform 4 pure tone air and bone conduction threshold tests. Two patients can be class members, two must be non-class/major 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. Two patients can be class members, two must be non-class/major members. 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. **Summarize** your results on the bottom of the audiogram . This assignment will be due at the beginning of class on the date specified in your course 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 assigned three hearing disorders to research. Submit a two to three page report about each disorder including signs/symptoms, etiology, medical management, typical hearing results (type and degree) and history/progression of the disorder. History would include, progression of the disorder and the affect on the anatomy, who discovered the disorder, different medical management procedures that have been tried to correct the disorder and typical remediation techniques used currently. The total report should be 6-9 pages typed with at least 5 references. **DO NOT** cut and paste for this project. Properly site sources and include a complete bibliography. Please attach the RUBRIC labeled Basic Audiology Research with your paper. - **100 points**

Total Lab Points - 250 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. Late work may not be graded as soon as work that has been turned in on time.

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 and successfully correct missed questions on the exam you may earn 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 and correcting the questions would be 15 points. Although this requires extra work on your part, the extra points can increase your grade significantly. Anyone who misses points on an exam, even those above 80%, may re-write missed questions and earn up to 50% of the points missed. However, it is only required for students who receive below 80%. Re-writes **MUST** be your own work. This is an exam. You may use your textbook and class notes to look for correct answers on the exam. You may **NOT** ask other classmates for correct answers on exams.

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. If 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 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. Please plan to eat prior to class so that you can easily participate in class and take notes.

11. **E-Mail** – you are responsible for checking your Andrews e-mail account for messages from class. Please check your e-mail on a regular basis for important messages.

Tentative Class Schedule

Month	Date	Topic	Assignment	Martin Reading
Aug	26	Intro. Pathway of Sound		2
	28	Anatomy Review		2
	30	Tuning Fork Tests	Quiz	2
Sept	2	NO CLASS		
	4	Tuning Fork		2
	6	Audiometer/screening	Quiz	4
Sept	9 Class starts at 9:00	Audiometer/screening	Week of spiritual emphasis (WSE)	4
	11	Audiogram interpretation	WSE	4
	13	Audiogram interpretation	WSE	4
Sept	16	Audiogram interpretation		4
	18	Physics of Sound		3
	20	EXAM 1		
Sept	23	The Decibel		3
	25	The Decibel cont.		3
	27	Binaural Hearing	Quiz	
	30	Loudness and Pitch		3
Oct.	2	Speech audiometry	Two observations due (4A)	5
	4	SDT/SRT	Quiz	5
Oct	7	Speech Discrimination		
	9	Closed set/open set		5
	11	Outer ear anatomy	Quiz	5
Oct	14	NO CLASS - Fall Break		9
	16	Outer ear - functions	Screenings due (4B)	9
	18	EXAM 2		
Oct	21	Outer ear - disorders		9
	23	Middle ear - anatomy		10
	25	Middle ear - functions	Quiz	10
Oct	28	Middle ear - disorders		10

	30	Middle ear - disorders		10
Nov	1	Middle ear - disorders	Pure tone lab due (4C)	
	4	Middle ear - disorders		10
	6	Inner ear - anatomy		11
	8	Inner ear - anatomy	Quiz	11
	11	Inner ear - functions	Two Observations due (4A)	11
	13	Exam 3		
	15	NO CLASS - ASHA		11
	18	Inner Ear - disorders		11
	20	Inner ear disorders		
	22	Inner ear disorders	RESEARCH due (4 E)	
	25	Inner ear - disorders and central auditory pathway		11, 12
	27	NO CLASS Thanksgiving		
	29	NO CLASS Thanksgiving		
Dec	2	Central auditory pathway - disorders		12
	4	Case studies	SPEECH Lab due (4D)	
	6	Exam Prep day - No required class. Review session		
Dec	9 (10AM-12)	FINAL EXAM	COMPREHENSIVE	EVERYTHING

Pure Tone Lab Rubric

Name _____

Date _____

Audiogram	1	2	3	4	
Neatness	1	1	1	1	4/ _____
Proper air symbols	1	1	1	1	4/ _____
Proper air Frequencies tested	1	1	1	1	4/ _____
Proper bone symbols	1	1	1	1	4/ _____
Proper bone frequencies tested	1	1	1	1	4/ _____
Personal information filed out	1	1	1	1	4/ _____
PTA/Reliability	1	1	1	1	4/ _____
Details	1	1	1	1	4/ _____
Comments/recommendations	2	2	2	2	8/ _____
Total					40/ _____

Speech Lab Rubric

Name _____

Date _____

Audiogram	1	2	3	4	
Neatness	1	1	1	1	4 / _____
SRT/PTA agreement	2	2	2	2	8 / _____
PTA calculation	2	2	2	2	8 / _____
Results in Proper boxes	1	1	1	1	4 / _____
List used	1	1	1	1	4 / _____
Details	1	1	1	1	4 / _____
Comments	2	2	2	2	8 / _____
Total					40 / _____

Basic Audiology Research

Disorder	1	2	3	
Explanation of Disorder	5	5	5	15/_____
Etiology	5	5	5	15/_____
Signs and Symptoms	5	5	5	15/_____
Medical management	4	4	4	12/_____
Audiology/hearing loss information	6	6	6	18/_____
References/neatness	5	5	5	15/_____
Spelling/Grammar	3	3	4	10/_____
			Total	100/_____

Name: _____

Date: _____