

Hearing and Speech Sciences 411

Introduction to Audiology

TR 11:00am to 12:15pm

Tydings Hall 2108



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Teaching Assistant: Arielle Abrams
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Office hours: Mon and Wed: 1 to 2pm or by appointment

Definitions

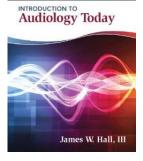
Audiology: The health profession responsible for caring for persons with hearing loss and related problems.

Audiologist: The primary health care professional who evaluates, diagnoses, treats, and manages hearing losses and balances disorders in adults and children.

Hall, Introduction to Audiology Today, 2013

Required Text: Hall, J.W. *Introduction to Audiology Today*, Pearson, Upper Saddle River, NJ. 2013

This text is also available electronically on Kindle



Prerequisites: HESP 311

Students are expected to have basic knowledge of the anatomy and physiology of the ear, of disorders of the auditory system, and of basic hearing science concepts. Course Schedule (all assigned chapters from Hall textbook)

L DC	Basic audiometric assessment	
January 26	Course Introduction, Audiology as a	Scope of Practice
	Profession	documents, Chapter 1
January 28	Introduction to Basic Hearing	Chapter 2
Talama arma O	Assessment Battery	Characters 4
February 2	Preparing for Hearing Assessment	Chapter 4
	Quiz due 2/8	
February 4	Behavioral Testing – pure-tone	Chapter 5
	audiometry	
_	In-class homework	
February 9	Behavioral Testing – speech audiometry	Chapter 6
	Quiz due 2/15	
February 11	Audiometric Interpretation	
	In-class homework	
February 16	Masking I	Chapter 7
	Quiz due 2/22	
February 18	Masking II	Chapter 7
,	In-class homework	1
February 23	Immittance audiometry – Tympanometry	Chapter 8, 212-227
10010001 / 20	In-class homework	
	Quiz due 2/29	
February 25	Immittance audiometry – Acoustic	Chapter 8, 228-234
rebruary 25	Reflexes	Chapter 6, 226-254
	In-class homework	
March 1	Review of quizzes, in-class assignments,	
March	and upcoming exam	
March 3	Exam 1	
March 5	Special audiology applications	
March 9		Chapter 0, 272, 282
March 8	Electrophysiology	Chapter 9, 272-283
March 10	Electrophysiology case studies	
	In-class homework	
March 15	Spring Break	
March 17	Spring Break	
March 22	Pediatric Assessment	
	Quiz due 3/28	
March 24	OAEs, Hearing Screenings	Chapter 8, 235-246
		Chapter 10, 288-295
March 29	Differential Diagnosis	Chapter 10, 296-208
	In-class homework	1 , 1 1 2

	Quiz due 4/4	
March 31	Vestibular Assessment	Chapter 10, 309-210
	In-class homework	
April 5	Non-Organic Hearing Loss & Appropriate	Chapter 9, 253-271
	Tests/Special Populations/Auditory	Chapter 12, 376-378
	Processing Disorders	Chapter 15, 448-455
	Quiz due 4/13	
April 7	Tinnitus	Chapter 15, 456-469
April 12	Hearing Conservation	Chapter 11, 347-350
	In-class homework	
April 14	Review of quizzes, in-class assignments,	
	and upcoming exam	
April 19	Exam 2	
	Management of hearing loss	
April 21	Amplification I	Chapter 13, 409-414
April 26	Amplification II and ALDs	Chapter 13, 414-417
	In-class homework	
	Quiz due 5/2	
April 28	Cochlear Implants	Chapter 13, 381-408
-	-	Chapter 16, 481-484
May 3	Cochlear Implants	
	In-class homework	
May 5	Counseling and aural rehabilitation	Chapter 14
May 10	Case studies and review	
May 12	FINAL – Note time: 8 to 10 am	

Grading

The grade a student will earn for this course will be based on the student's ability to convey understanding of the concepts and techniques covered in class and in the readings on in-class homework, online quizzes, and exams. This is intended to provide students with the opportunity to evaluate their mistakes and ask questions, thereby facilitating better understanding of the material. Feedback for the online quizzes will provided via the course website. Students are encouraged to see me during office hours or to make an appointment if further clarification is necessary.

Final grades in the class will be based on the percentage of the total possible points that the student earns. The breakdown of points by means of assessment and the grading scale are given below.

Grading System

Summary of point system:

Homework: 25 points each	10 x 25 pts =	250
Online Quizzes: 25 points each	7 x 25 pts =	175
Exams: 210 points	2 x 105 pts =	210
Final: 140 points	1 final =	<u>140</u>
		775

University of Maryland grade policy

<u>Percentage of</u> Possible Points	<u>Course Grade</u>
.970-1.00	A+
.930969	А
.900929	A-
.870899	B+
.830869	В
.800829	В-

Course Objective

Students will demonstrate a comprehensive knowledge of essentials of hearing science, basic audiological practices, audiometric interpretation, auditory

pathologies and associated audiological findings, and management of hearing disorders.

Course Objectives

This course is an introduction to the field of audiology. At the end of the course, students will:

- 1. Describe the profession of audiology;
- 2. Describe the basic principles of and how to perform the procedures for behavioral tests of hearing in infants, children, and adults;
- 3. Describe the basic principles of and how to perform physiological tests of the hearing & balance mechanisms, including immittance testing, otoacoustic emissions and auditory brainstem response testing;
- 4. Interpret behavioral and physiological test results;
- 5. Describe principles related to and devices used for the rehabilitation/ management of hearing disorders;
- 6. Describe the principles of ethical practice and the current scope of practice in the profession of audiology.

Means of Assessment

- 1. **Exams.** Two examinations and one final will be given. Exam questions are primarily short answer and will come from class lectures and assigned readings; therefore, attendance at all lectures is highly recommended. The use of any outside materials (books, notebooks, computers, cell phones, etc. during the exams is strictly prohibited. Exam attendance is mandatory.
- 2. **Online Reading Quizzes**. Students are expected to be familiar with the assigned readings prior to coming to class. Each student will be required to complete 8 quizzes on the course ELMS site that cover specified readings from the textbook. Further information is provided later in the syllabus. The lowest quiz score will be dropped
- 3. **Homework Assignments.** Eleven in-class homework assignments will be done throughout the course. The purpose of these assignments is to become familiar with various aspects of audiometric assessment and management, such as audiogram interpretation. Each assignment will be worth a total of 25 points. The lowest homework score will be dropped.

General Class Policies

Class Attendance

Regular class attendance and participation are highly recommended. It is the student's responsibility to obtain information from any missed lectures from classmates. In addition all classes will be recorded through Panopto.

Make- Up Exams

If a student is aware ahead of time that he/she will be absent on the day of an exam, the student may schedule a make-up exam provided that the student has an approved University Acceptance (e.g., religious observance) AND that I am notified in writing within the first two weeks of the semester (by Februarv 10. 2015). When the reason for an absence on the day of an exam is not foreseeable, the student must inform me as soon as possible. Please make every effort to contact me by phone or by email prior to class if you will be absent due to illness. Campus Senate policy requires students who are absent due to illness/injury to furnish documentary support to the instructor. You must provide written documentation verifying your illness/injury on the day that you return to class. You will not be allowed to make up exams if you have not provided this documentation in a timely manner. In addition, if it is found that you have falsified the documentation provided, you will be referred to the University's Student Conduct Office. Make-up exams will be scheduled at a time that is mutually agreeable to both the student and the instructor. If a student does not complete a particular exam, he/she will receive a zero for that exam.

Problems/Questions

Please do not hesitate to visit me during office hours or to make an appointment to speak with me if you are having difficulty with the material, if you have questions about how an exam or quiz was graded, or if you have other problems or issues related to the course you wish to discuss. Email is an excellent way to reach me outside of course meetings to ask minor questions or to arrange a meeting.

Special Accommodations

Every effort will be made to accommodate students who are registered with the Disability Support Services (DSS) Office and who provide a University of Maryland DSS Accommodation form which has been updated for the current semester.

Academic Learning Assistance is available for those students seeking help with time management, reading, note taking, and exam preparation skills. For information on these services, contact Learning Assistance Service (http://www.counseling.umd.edu/LAS/).

Class Cancellations

In the event that class is cancelled due to campus closures or to other emergencies, the missed class will be re-scheduled in its entirety on another day OR already scheduled classes may be extended. The decision regarding making up the lost class time and any related scheduling will be made by me in conjunction with the students. Every attempt will be made to arrive at a decision/time that is agreeable to all members of the class.

Academic Honesty/Classroom Behavior

The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council. please visit http://www.studenthonorcouncil.umd.edu/whatis.html. Adherence the to University's Code of Academic Integrity is expected and there will be a zero tolerance policy for violations. Any suspected violation of University policy will result in Student Honor Council proceedings. Students are expected to treat each other with respect. Disruptive behavior of any kind will not be tolerated. Students who are unable to show civility with one another or to me will be subject to referral to the Office of Student Conduct or to Campus Police.

Course Evaluations

Course evaluations for this class will be given online via the course website at the midterm and using the CourseEvalUM system at the end of the semester (4/27 through 5/13). Completing the evaluations and providing feedback as to what works and what could be improved in the course will be greatly appreciated.

Guidelines for the ELMS Course Site and Online Quizzes

Students must log on to the course website on a regular basis in order to fully participate in this class. Please plan to check the site frequently for announcements/updates and to take the online quizzes. In addition to the announcements and online quizzes, the class site will include the course syllabus, course content (including exam study guides), and exam grade postings.

Online Quizzes

Quizzes on assigned chapters of the course text will be administered through the ELMS site. The quizzes are intended to motivate students to complete the readings and to help students pick out important concepts from the readings. These quizzes are "open-book" in that students have access to the text while taking the quiz. **PLEASE NOTE: Quizzes will only be available for a limited amount of time and will no longer be available once they close. If the quiz is** posted on Thursday it will be available until the following Wednesday, and if it is posted on Tuesday it will be available until the following Monday.

Quiz Grading

Each quiz will be worth a total of 25 points. Students are expected to complete all quizzes. Prior to determining a student's final quiz grade, his/her worst score will be dropped. Therefore, students may miss one quiz without penalty.