HESP 706: Advanced Clinical Audiology  
Spring 2016  
Department of Hearing and Speech Sciences,  
University of Maryland, College Park  

Instructor: Samira Anderson, Au.D., Ph.D. Email: sander22@umd.edu  
Office Phone: 301-405-4224  
Dept. Phone: 301-405-4213  
Meeting Time: Wednesdays, 3:30 – 6:00 PM  
Meeting Location: Lefrak Hall, Room 0135  
Prerequisites: HESP 606  
Office: 0119B  
Office Hours: by appointment  

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COURSE SYLLABUS

REQUIRED READINGS

Required Texts:


Recommended Texts:


Module 1  Otoacoustic Emissions

January 27  Introduction; Site of Lesion Testing & Principles; Otoacoustic Emissions: Overview

Readings:

Dhar and Hall, Text, Chapter 1


**February 3** Otoacoustic Emissions: Anatomy and physiology, Classification

*Demonstration of Lab 1 (due February 17)*

**Quiz 1**

Readings:

Dhar and Hall, Text, Chapters 2 and 3


**February 10** Otoacoustic Emissions: Clinical measurement: instrumentation, calibration, protocols

*Presentation 1 - Mary*

**Quiz 2**

Readings:

Dhar and Hall, Text, Chapters 4 and 5


February 17  Otoacoustic Emissions: Clinical applications and efferent mechanisms

*Presentation 2 - Calli*

*Quiz 3*

Dhar and Hall, Text, Chapters 6-9

Readings:


February 24  Advanced immittance measures

*Demonstration of Lab 2*

*Presentation 3 - Maya*

Katz, Text, Chapter 9

Readings:

*Lilly, D.J., and Margolis, R.H. (2013). Wideband acoustic immittance measurements of the middle ear: introduction and some historical antecedents. Ear and Hearing, 34, 4s-8s*


March 2  Midterm

March 9  Advanced immittance measures
**Demonstration of Lab 2 (due March 23)**

**Presentation 4 - Jane**

Readings:


March 16  
Spring break

March 23  
Tinnitus: Neural mechanisms

**Presentation 5 - Kelly**

Quiz 4

Readings:


March 30  Tinnitus: Assessment; Nonorganic hearing loss;  
*Demonstration of Lab 3 (due April 13)*

*Presentation 6 - Jen*

Katz, Text, Chapter 33

*Quiz 5*

Readings:


**Module 4  Auditory Processing Disorders**

April 6  Auditory processing disorders: Auditory neuroscience

*Presentation 7 - Madie*

Readings:

Katz, Text, Chapters 27-28


April 13  
Auditory processing disorders: Evaluation  
*Demonstration of Lab 4 (due April 27)*

*Presentation 8 - Stephen*

*Quiz 6*

Readings:

Katz, Text, Chapter 29


April 20  
Auditory processing disorders: Differential Diagnosis & Intervention

*Quiz 7*

*Presentation 9 - Eve*

Readings:

Katz, Text, Chapter 30


April 27  
Guest Lecturer: Larry Medwetsky, Ph.D., Gallaudet University

*The Spoken-Language Processing Model*
May 4
Case studies
Review for final

May 11
FINAL EXAMINATION

**Grading System**

Summary of point system:
- Labs: 25 points each $\times 4$ labs = 100
- Quizzes: 25 points each $\times 7$ quizzes = 175
- Presentations: 25 points each $\times 1$ presentation = 25
- Midterm: 100 points 1 exam = 100
- Final: 150 points 1 final = 150

Total points = 550

**Learner Outcomes**

This course covers advanced clinical and experimental methods for evaluation of the peripheral and central auditory systems, including procedural considerations and interpretation of test results. By the end of the course, students will demonstrate knowledge of:

1. When/how to administer, interpret, and report the results of advanced audiological tests, including advanced immittance measures and otoacoustic emissions testing.
2. Audiometric techniques used in cases of suspected pseudohypacusis.
3. Tinnitus and hyperacusis assessment.
4. Assessment and management of auditory processing disorders.
5. The principles and practices of research, including experimental design and application to clinical populations.

Students are also referred to the Formative Assessment Form provided at the back of the syllabus.

**PLEASE NOTE:** It is the student’s responsibility to contact me to obtain my signature on the Formative Assessment Form at the end of the semester when all course work has been completed.

**Formative Assessments**

1. **Practical Lab Exercises and Reports:** Students will be required to complete practical lab assignments using appropriate assessment tools and to submit a report for each lab. See the course ELMS site for more specific information on these assignments, including due dates.

2. **Article Presentations:** Student will choose one article from the syllabus and will prepare and present powerpoint slides that summarize the article’s introduction, method, results (review each figure), and discussion. In addition, students will critique the article, suggest ways to improve the research, and propose a new research question. The presentation should not exceed 15 minutes. A grading rubric will be posted on ELMS.

3. **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 lecture content and readings from the textbook and articles. These quizzes are “open-book” in that students have access to the text while taking the quiz. The
students will have one week to complete the quiz. The quizzes are timed – but you will have 4 hours to complete it. Once you’ve started the quiz, you must finish it – you can’t go back to it later.

4. **Exams:** One midterm and final examination will be given. Exam questions will come from class lectures, quizzes, and assigned readings.

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**Guidelines for Practical Lab Exercises & Reports**

The lab exercises are designed to help you put into practice the concepts and procedures we cover in class. Handouts outlining instructions for the test procedures and reports can be obtained on the ELMS site.

**Lab Reports**

You must follow all guidelines for written work listed in this syllabus. The typed portion of the lab report should be limited to one page or less. Hard copies of all relevant printouts, graphs, tables or other raw data must be handed in by the due date. Although you may consult your textbooks and other resources, including your classmates, as you work on each lab, please make sure your write-up is your own.

**Submission of Reports**

Lab reports are due at the start of class or in the instructor’s mailbox by 1:00 PM on the dates indicated below. Three points will automatically be deducted from your lab grade for every day the report is late. The labs will cover the following topics:

- Lab #1: Otoacoustic Emissions due February 17
- Lab #2: Advanced Immittance Measures due March 23
- Lab #3: Nonorganic Hearing Loss due April 13
- Lab #4: Auditory Processing Evaluation due April 27

**Questions/Difficulties**

Please contact me as soon as possible if you have difficulties with or questions about a particular lab assignment, so that they can be resolved in plenty of time for you to complete the lab by the due date, and so that you have a better understanding the relevant concepts prior to exams.

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**University Policies**

**Academic Integrity**

The University administers an Honor Code and an Honor Pledge, available on the web at [http://www.bsos.umd.edu/for-students/advising/academic-integrity-honor-pledge-and-legal-aid-.aspx](http://www.bsos.umd.edu/for-students/advising/academic-integrity-honor-pledge-and-legal-aid-.aspx). The Code prohibits students from cheating on exams, plagiarizing papers, submitting the same paper for credit in two courses without authorization, buying papers submitting fraudulent documents, and forging signatures. Students are requested to write the following signed statement on each examination or assignment: “I pledge on my honor that I have not given or received any unauthorized assistance on this examination (or assignment).” Compliance with the code is administered by a Student Honor Council, which strives to promote a “community of trust” on the College Park campus. For additional information, see the Office of Judicial Programs and Student Ethical Development website: [http://robeson.rutgers.edu/studentlife/conduct.html](http://robeson.rutgers.edu/studentlife/conduct.html).
Accommodations for Students with Disabilities
If you have a documented disability and wish to discuss academic accommodations with me, please contact me before February 8th. If necessary, please contact the Disability Support Service (301-314-7682) for assistance in determining and implementing appropriate academic accommodations.

Confidentiality-Posting Grades
The University complies with the regulations set forth in the Buckley Amendment. The amendment protects the student from the disclosure of personal and academic information to anyone other than the student, including parents, except under special circumstances. Posting student grades with either student names or social security numbers-in whole or in part-is strictly prohibited. Grades will be available on ELMS, UMEG, or directly from the instructor.

Religious Observances
The University System of Maryland policy on religious observances provides that students should not be penalized because of observances of their religious beliefs; students shall be given an opportunity, whenever feasible, to make up within a reasonable time any academic assignment that is missed due to individual participation in religious observances. I will make every feasible effort to accommodate students’ requests based on attendance of religious observances. It is the student’s responsibility to inform me of any intended absences for religious observances in advance. Notice should be provided as soon as possible but no later than the end of the schedule adjustment period. Prior notification is especially important in connection with final examinations, since failure to reschedule a final examination before the conclusion of the final examination period may result in loss of credits during the semester. To review the University’s policy or view a variety of other religious holidays, see http://www.bsos.umd.edu/for-faculty-and-staff/faculty-resource-guide/faculty-responsibilities-inside-the-classroom/-canceling-classes.aspx for further details.

Online Course Evaluation, Spring 2016
Your participation in the evaluation of courses through CourseEvalUM is a responsibility you hold as a student member of our academic community. Your feedback is confidential and important to the improvement of teaching and learning at the University. I will ask that you complete the online course evaluation during class on April 20th.

Flu and other illnesses
The University of Maryland is concerned for the health of members of the University community. However, we are also concerned about the possibility that widespread illness could disrupt the academic enterprise of the University. If you have flu-like symptoms, please stay home and seek medical attention. You should return to classes only after your fever and symptoms have abated for 24 hours. I will follow the same policy. To continue the teaching/learning environment of our class even if you or I are absent, and/or classes are canceled, I plan to implement several contingencies this year:

1. I will communicate with all of you via ELMS if class is canceled for any reason;
2. In case of weather emergency, we will have an online class through ELMS;
3. I ask you to communicate with me if you are sick and will miss class;
4. I will post all ppt presentations and recordings to ELMS;

ELMS Course Website/ Course Readings
Students must log on regularly to their Canvas accounts in order to fully participate in this class. Please plan to check the site frequently for announcements. The class site will include the syllabus, the
course reading list, course content, information on and instructions for assignments, and grade postings.

There are a number of readings for the course, including chapters from the text and original journal articles. Students are expected to be familiar with the assigned readings prior to coming to class and to be prepared to discuss the readings during class.

If you have not previously used ELMS, information on ELMS and on how to logon is provided at the following website: under “Student Resources”. If you do not have access to a personal computer at home, you can access the Internet and your ELMS page at one of the open workstation laboratories on campus. Information on the location of open workstation laboratories and hours of operation can be found at http://www.oit.umd.edu/wheretogo or by contacting the Office of Information Technology (OIT) Helpdesk (for more information, see http://www.helpdesk.umd.edu).

Make-up Exams/Assignments
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 (1) the student has an approved University Acceptance (e.g., religious observance) and (2) the instructor is notified in writing within the first two weeks of the semester (by February 10th). Assignments are expected to be submitted by the dates indicated on the syllabus or in advance of the due date if the student anticipates being absent from class on the due date. The student should inform the instructor that he/she will be absent ahead of time to make arrangements to submit the assignment.

When the reason for an absence on the day of an exam or assignment is not foreseeable, the student must inform the instructor as soon as possible. Please make every effort to contact the instructor by phone or by email prior to class if you will be absent due to illness or other emergency. 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 turn in missed assignments or make up exams if you have not provided this documentation. 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 instructor and the student. Assignments are due immediately by electronic submission if possible or upon the student’s return to school. All missed exams and assignments not turned in will result in a grade of zero for that exam/assignment.

Problems/Questions
Please do not hesitate to make an appointment to speak with me if you are having difficulty with the material or with an assignment, if you have questions about how something 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.
## FORMATIVE ASSESSMENTS

**Student** ___________________________
**Semester:** SPRING 2016

<table>
<thead>
<tr>
<th>ASHA Standard</th>
<th>Method of Assessment (denoted by *)</th>
<th>Verification of Assessment (denoted by ✓)</th>
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<tbody>
<tr>
<td>No.</td>
<td>Title</td>
<td>Exam questions</td>
</tr>
<tr>
<td>B2</td>
<td>Patient characteristics and how they relate to clinical services</td>
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<tr>
<td>B4</td>
<td>Anatomy and physiology, pathophysiology and development of the auditory system</td>
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<td>B9</td>
<td>Principles, methods and applications of psychoacoustics</td>
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<td>B12</td>
<td>Infectious/contagious diseases and universal precautions</td>
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<td>B15</td>
<td>Principles and practices of research, including experimental design, statistical methods, and application to clinical populations</td>
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<td>B20</td>
<td>Laws, regulations, policies and management practices relevant to the profession of audiology</td>
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<tr>
<td>C4</td>
<td>Screen individuals for hearing impairment and disability/handicap using clinically appropriate and culturally sensitive screening measures.</td>
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<tr>
<td>D7</td>
<td>Perform audiologic assessment using physiologic, psychophysical and self-assessment measures</td>
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<td>D8</td>
<td>Perform electrodiagnostic test procedures</td>
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<td>D11</td>
<td>Document evaluation procedures and results</td>
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<td>D12</td>
<td>Interpret results of the evaluation to establish type and severity of disorder</td>
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<tr>
<td>D13</td>
<td>Generate recommendations and referrals resulting from the evaluation process</td>
<td>*</td>
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<tr>
<td>D15</td>
<td>Maintain records in a manner consistent with legal and professional standards</td>
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Instructor Signature: ____________________________________________

Samira Anderson, Au.D., Ph.D.