Course Syllabus

Jump to Today



University of Wisconsin-Madison

CD 859 Lab in Physiological Assessment Measures I

Cynthia G. Fowler, Ph.D.

Course: CSD 858 Auditory Electrophysiological Measures

Term: Spring, 2018

CS&D 859. Laboratory in Physiological Assessment in Audiology I

Laboratory experiences in the concepts and procedures for physiological assessment of the auditory system, with emphasis on otoacoustic emissions and auditory brainstem responses. Clinical applications and case studies integrate these recordings with behavioral assessment of the auditory system.

Class is 1 credits. Class meets **2 hours** each week for 15 weeks. An additional 4 hours per week of outside class times is expected for a 1 cr. Lab. This time includes recording, interpreting, reading, writing reports, and preparing for a final laboratory exams.

Instructor: Cynthia G. Fowler, Ph.D.

Email: cynthia.fowler@wisc.edu

Office hours: Wednesday 12-1 PM or by appointment

Office: 382 Goodnight Hall

Required Textbooks:

Katz, J., ed. (2015). Handbook of Clinical Audiology, 7th Edition. Baltimore: Lippincott Williams & Wilkins.

*Burkard, R., Don, M., and Eggermont, J.J. (eds). 2007. Auditory evoked potentials: Basic principles, and clinical applications. Wolters Kluwer/Lippincott Willians & Wilkins. Philadelphia, PA.

Robinette and Glattke (eds). (2007) <u>Otoacoustic Emissions: Clinical Applications</u>, 3rd ed. Thieme Medical Publishers.

Recommended Textbook:

Jacobson, J.T., ed. (1994). Principles and applications in auditory evoked potentials. Boston: Allyn and Bacon. This book is no longer in print, so the chapters we will use are posted. You may be able to pick up a copy cheaply on a discount book website.

Course webpage: https://canvas.wisc.edu

All course materials and announcements are posted on the website. Be sure to check it regularly.

Course objectives

Upon successfully completing this course, the student will be able to

- 1. Describe the normal anatomy and physiology of the cochlea
- 2. Describe how the cochlea transduces sounds into electric potentials
- 3. Describe how to record and interpret ECochGs
- 4. Discuss how to record an auditory brainstem response
- 5. Determine how to interpret normal and pathological response
- 6. Describe how the cochlea creates optoacoustic emissions
- 7. How to record and interpret otoacoustic emissions
- 8. How to integrate the information from behavioral and physiological responses to determine the status of the auditory system in a patient.

Course Schedule

Jan 30-Feb 6: Introductory ABR (Due Feb 13)

Feb 13-20: ABR: Electrocochleography (Due Feb 27

Feb 27-Mar 6: Diagnostic ABR (Due Mar 13)

Mar 13-27: ABR: Threshold applications (Due Apr 4)

Tone pips and BC ABR: Bone conduction thresholds applications (Due Apr 4)

Mar 21: Spring Break

Apr 3-Apr 10: ABR Case Studies

Apr 17-24: OAE: Spontaneous, TEOAE, DPOAE, Screening and suppression (Due May 2)

Apr 24-May 3: ABR Lab practical

All laboratory assignments (except cases) are to be done in groups of 3 or 4 students. Each student will be the examiner and the patient for each lab assignment. The group should turn in one copy of the marked waveforms, graphs, and answers to the questions. The same grade will be assigned to all members of that group. Each student is responsible for knowing how to record and analyze the data.

There will be an individual lab practical at the end of the semester. Each student will be required to hook up a "patient" and run an ABR for diagnostic and threshold purposes. Students will sign up in pairs for the practical; one student will be the tester and the other will be the "patient". Each session (individual) will be scheduled for one hour.

Grades

Laboratory assignments @ 10% each

Laboratory practical @ 30%

If you have any special needs, please make an appointment to see me during the first week of classes, so that I can accommodate any disabilities or religious observances.

If my office door is open, you are welcome to come in for questions or assistance. If you would like to schedule times, please let me know. It is usually easiest to contact me by email.

Required Textbooks:

Katz, J., ed. (2009). Handbook of Clinical Audiology, 6th Edition. Baltimore: Lippincott Williams & Wilkins.

Robinette and Glattke (eds). (2002) <u>Otoacoustic Emissions: Clinical Applications</u>, 2nd ed. Thieme Medical Publishers.

Grading Scale:

All grades are awarded based on the percentage score earned. Because UW – Madison and UW – Stevens Point have different grading scales, grades will be assigned based on the home campus of the student using the table below:

Percentage	100- 93	92.9- 90	89.9- 88	87.9- 82	81.9- 80	79.9- 78	77.9- 72	71.9- 70	69.9- 68	67.9- 60	<60
UW – Madison Letter Grade	Α	A-B		В	В-С		С	C-D		D	F

Academic Integrity (taken from http://www.wisc.edu/students/UWS14.htm)

Academic honesty requires that the course work (drafts, reports, examinations, papers) a student presents to an instructor honestly and accurately reflects the student's own academic efforts. UWS 14.03 defines academic misconduct as follows:

"Academic misconduct is an act in which a student

- (a) seeks to claim credit for the work or efforts of another without authorization or citation;
- (b) uses unauthorized materials or fabricated data in any academic exercise;
- (c) forges or falsifies academic documents or records;
- (d) intentionally impedes or damages the academic work of others;
- (e) engages in conduct aimed at making false representation of a student's academic performance"
- (f) assists other students in any of these acts."

Examples include but are not limited to the following: cutting and pasting text from the web without quotation marks or proper citation; paraphrasing from the web without crediting the source; using another person's ideas, words, or research and presenting it as one's own by not properly crediting the originator; stealing examinations or course materials; signing another person's name to an attendance sheet; hiding a book knowing that another student needs it to prepare an assignment; collaboration that is contrary to the stated rules of the course, or tampering with a lab experiment or computer program of another student.

If academic misconduct has occurred, the student may be subject to one or more of the following penalties: an oral or written reprimand, a lower grade or a failing grade in the course, university disciplinary probation, suspension, or expulsion. See additional information regarding academic misconduct at http://www.wisc.edu/students/UWS14. (http://www.wisc.edu/students/UWS14.

RULES, RIGHTS & RESPONSIBILITIES

See the Guide's to <u>Rules</u>, <u>Rights and Responsibilities</u>
(http://guide.wisc.edu/undergraduate/#rulesrightsandresponsibilitiestext)

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

McBurney Disability Resource Center syllabus statement: "The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. Faculty [I], will work either directly with the student [you] or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA." http://mcburney.wisc.edu/facstaffother/faculty/syllabus.php)

DIVERSITY & INCLUSION

Institutional statement on diversity: "Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals.

The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world." https://diversity.wisc.edu/ (https://div

Course Accessibility and Accommodations

We wish to fully include persons with disabilities in this course. Please let us know, within the first two weeks of the course, if you need any special accommodations in the curriculum, instruction, or assessments of this course to enable you to fully participate. We will maintain the confidentiality of the information you provide. Online information:

- Access and Accommodations Resource Coordinators
 - http://www.wisc.edu/adac/facstaff/coord.html)
- Equity and Diversity Resource Center
 - http://www.wisc.edu/edrc/disability/)
- Facilities Access
 - http://www.fpm.wisc.edu/accessibility (http://www.fpm.wisc.edu/accessibility)
- McBurney Disability Resource Center
 - http://www.mcburney.wisc.edu/ (http://www.mcburney.wisc.edu/)
- Madison ADA Policies
 - http://www.wisc.edu/adac (http://www.wisc.edu/adac)

Religious Observances and Personal Emergencies

This information is taken from a memo dated 7/22/2005 written by Peter Spear, Provost and Vice Chancellor for Academic Affairs, David Musolf, Secretary of the Faculty, and Lori Berquam, Interim Dean of Students. "A listing, though not exhaustive, of religious holidays is available on the website:

nttp://www.interfaithcalendar.org (http://www.interfaithcalendar.org/). A student's claim of a religious conflict should be accepted at face value. A great variety of valid claims exist for religious groups and there is no practical, dignified, and legal means to assess the validity of individual claims. State law mandates that any student with a conflict between an academic requirement and any religious observance must be given an alternative means of meeting the academic requirement. The law also stipulates that students be given a means by which the can conveniently and confidentially notify an instructor of the conflict...Three guidelines have been developed to provide clarity for both students and instructors: (1) Announce early in the semester that students may notify the instructor within the first two weeks of class of the specific days or dates on which he or she requests relief. Including this information on your course syllabus is another appropriate method to make sure your students are informed of the policy; (2) Make-ups may be scheduled before or after the regularly scheduled requirement; and (3) It is understood that instructors may set reasonable limits on the total number of days claimed by any one student."

Official Syllabus

Official Syllabus

The **Official Syllabus** is a UW-Madison tool allowing instructors to enter official syllabus information for a course in a consistent format, as all syllabi must feature the same <u>standard information</u>

(https://teachlearn.provost.wisc.edu/course-syllabi/) .

When first opened, the Official Syllabus template is pre-filled with data from the official course offering. Remaining information will need to be entered using the Edit button. To submit an official syllabus and make it visible to students, it must be published. See this document (https://kb.wisc.edu/luwmad/page.php? id=78761) for instructions on using the Official Syllabus.

Course Summary:

Date Details	
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