

COURSE SYLLABUS
CSD 857: Amplification I Lab, 1 s.h.
UW-Stevens Point
Spring 2023
Friday 9-11 am
Rooms 018 and 051 (Hearing Aid Labs 1 and 2), CPS

Professor: Dr. Rebecca L. Warner Henning

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Office Hours: Wednesday 3:30-4:30, Thursday 1:30-2:30, Friday 11-noon, & by appointment
Zoom and phone "office hours" appointments can also be arranged as needed, either during my regular office hours times or at other times. Please email or call me to schedule Zoom or phone appointments.

Teaching Assistant: Blake Voss

Prerequisites:

- 850 Hearing Science
- 854 & 855 Electroacoustics and Instrument Calibration
- 852 & 853 Hearing Assessment
- concurrent enrollment in 856 Amplification I

Required Readings:

Harvey Dillon, *Hearing Aids, 2nd edition*

ANSI S3.22 (posted on Canvas)

Verifit manuals (required reference, posted on Canvas)

Possible other sources TBA, will be posted on Canvas

Course Description:

This lab course is the companion to CSD 856 Amplification I. In this class, you will have the chance to practice "hands-on" clinical applications of the concepts taught in 856. Topics will include: hearing aid repairs and troubleshooting, earmold impressions, electroacoustic evaluation of hearing aids, probe microphone measurements, prescriptive procedures, and earmold and earshell acoustics.

Face Coverings:

- The wearing of face coverings is mandatory in all areas on the floor of the Speech, Language, and Hearing Clinic. Any student with a condition that impacts their use of a face covering should contact the [Disability and Assistive Technology Center](#) to discuss accommodations in classes. Please note that unless everyone is wearing a face covering, in-person labs cannot take place. This is the policy of the Speech, Language, and Hearing Clinic, and is not up to the discretion of individual instructors. Failure to adhere to this requirement could result in formal withdrawal from the course.
- For this lab, you also have the option to use a face shield in addition to a mask whenever you are practicing procedures or conducting labs that require you to be less than six feet from another person.

Student Requirements:

You must complete all of the following in order to pass this course:

Class Preparation

Any assigned readings must be completed *before class*. You should review and be familiar with the corresponding topics in the 856 class. Most of the readings and topics overlap with those assigned for 856. You are expected to review these readings and topics *again* before coming to lab.

Attendance

You are responsible for attending lab unless you are ill, have a personal or family emergency, have symptoms of Covid-19, or are in a quarantine or isolation period. **DO NOT attend lab if you are not feeling well, or if you have any symptoms of Covid-19, or if you are required to quarantine or isolate due to a Covid-19 positive test result.**

- Although excused absences may be necessary more often than usual due to the pandemic, I expect they will still be reserved for circumstances such as illness, caring for someone who is ill, or personal or family emergency. Otherwise, you should plan to attend lab every week, and excused absences should NOT be requested or used for routine or controllable circumstances like vacation, work, convenience, or errands.
- If you must miss lab, please contact the instructor as soon as possible. Repeated **unexcused** absences may result in a reduced grade or a failing grade for the course. **If you are concerned that a family or personal situation will cause you to miss lab repeatedly, please discuss this with me so that we can come to an acceptable solution.**

Lab Assignments

There will be a lab assignment most weeks. Most lab sessions will begin with an overview and some demonstration of what you'll need to, and you will have any remaining time to begin work on the assignment. Lab assignments / write-ups will usually need to be completed outside of class, and will usually be due 1-2 weeks after they are assigned.

Please see the "requirements for lab reports" at the end of this syllabus.

Revising Lab Assignments:

A maximum of two lab assignments may be revised / re-done, one time per lab assignment, for a higher grade up to a maximum of 90%. A student may choose to revise a lab if desired, but I may also require a lab revision if a student has not fully demonstrated the required competencies. It is possible for more than two lab assignment revisions to be required during the semester, but grade improvements will only be allowed on a maximum of two lab assignments.

Revised / re-done labs must be turned in to me within one week after you receive your original graded lab. You are also free to revise a lab on which you received an 90% or greater, but your original grade will not change. You might choose this option if you would like practice or more feedback on something you missed points on.

Practical Exams

There will be practical exams during the later part of the semester that will cover three topics: ANSI tests, electroacoustic tests at user settings, and probe microphone measures. The exams will cover set-up procedures and interpretations for all of the tests. *You must earn the minimum passing score*

(82%) on each topic of the exam in order to pass the class. If you do not achieve the minimum passing score on any topic, you must repeat each non-passing portion of the exam until you pass.

Grading:

70%: the mean (average) of your *percent correct* (NOT total number of points) on each lab

30%: the percent correct on your first attempt at each practical exam

Please see the information on “requirements for lab reports” at the end of this syllabus for information on how I will grade your lab reports.

Grading Scale

UW – SP											
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	F
Percentage	100-92	91.9-90	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

Accommodations for Disability or Health Condition:

If you have a short- or long-term disability or health condition that requires accommodations, please contact the Disability and Assistive Technology Center (DATC).

Religious Observances:

I will accommodate religious beliefs according to UWS 22.03 if you notify me within the first three weeks of the semester regarding specific dates that you will need to change course requirements.

Academic Misconduct:

The policies that apply to all UW System students and faculty regarding academic misconduct can be found here: <https://conduct.students.wisc.edu/academic-misconduct/>. (Although this is a UW-Madison link, these are UW System-wide policies). You are also responsible for reviewing and understanding all of the information about avoiding plagiarism at this link, especially the information on successful and unsuccessful paraphrases:

<https://writing.wisc.edu/handbook/assignments/quotingsources/>.

ASHA Standards/Competencies: The following American Speech-Language-Hearing Association (ASHA) Council for Clinical Certification (CFCC) 2020 standards for the Certificate of Clinical Competence in Audiology (CCC-A) are covered in this course (see table below).

ASHA CCC-A/CFCC (2020) standard; The student will demonstrate knowledge of (for items lettered A) and knowledge and skills in (for items lettered B-F):	Method of Assessing Competency
A5. Calibration [calibration only covered to a limited extent] and use of instrumentation according to manufacturers’ specifications and accepted standards	Passing grade on all labs that utilize the test box and/or probe microphone equipment; Passing grades on all practical exams

A6. Standard safety precautions and cleaning/disinfection of equipment in accordance with facility-specific policies and manufacturers' instructions to control for infectious/contagious diseases	Earmold impression lab successfully checked off
E8. Selecting and fitting appropriate amplification devices and assistive technologies	Passing grades on all labs, and Passing grades on all practical exams
E9. Defining appropriate electroacoustic characteristics of amplification fittings based on frequency-gain characteristics, maximum output sound-pressure level, and input-output characteristics	Passing grades on the electroacoustic measurement lab and the compression lab, and Passing grades on the ANSI and electroacoustic testing practical exams
E10. Verifying that amplification devices meet quality control and American National Standards Institute (ANSI) standards	Passing grade on the electroacoustic measurement lab, and Passing grades on the ANSI and electroacoustic testing practical exams
E11. Conducting real-ear measurements to (a) establish audibility, comfort, and tolerance of speech and sounds in the environment and (b) verify compression, directionality, and automatic noise management performance	Successful check-off of the probe microphone 1 lab, and Passing grade on the probe microphone 2 lab, and Passing grade on the probe microphone measures practical exam
E13. Conducting individual and/or group hearing aid orientations to ensure that clients/patients can use, manage, and maintain their instruments appropriately	Passing grade or successful check-off on the hearing aid orientation lab

A passing grade is a B or better. If a student fails to complete any of the tasks listed above, they will work with the course instructor to either redo the task or complete an additional task in order to demonstrate competency. If a student is not able to successfully complete this task, then an improvement plan will be initiated to remediate the skill in question. See the AuD handbook section on improvement plans.

Instructor's Objectives:

In order to help you achieve the above objectives, I will do the following:

- 1) Provide you with suggestions for study skills and strategies;
- 2) Come to class prepared to demonstrate the assignment;
- 3) Explain difficult concepts to the best of my ability;
- 4) Be available during office hours to answer questions or discuss the material;
- 5) Provide a non-threatening environment in which it is acceptable to "learn out loud," learn by trying new things and new ideas, and not always have the "right" answer.

Class Schedule

The following is a tentative schedule that is subject to change. I will announce all changes in class. There will be lab write-ups and/or practical assignments associated with nearly every lab.

Day	Date	Topic	Reading
T	Jan. 24	Intro to HA duty: HA repairs and troubleshooting; Earmold impressions	Dillon, chpt. 4 pp. 121-125; ANSI S3.22
F	Jan. 27	Mandatory earmold impression practice	
F	Feb. 3	Mandatory earmold impression practice	
F	Feb. 10	HA Components	Verifit manual for reference
F	Feb. 17	Electroacoustic measurement	ANSI S3.22
F	Feb. 24	Hearing aid orientation	
F	March 3	Modifying earmolds & earshells (practical assignment; no lab write-up)	Dillon pp. 167-169
F	March 10	Compression	
F	March 17	Practical exams: ANSI and electroacoustic testing	
F	March 24	No lab: spring break	
F	March 31	Probe microphone measures I	Verifit manual for reference
F	April 7	Probe microphone measures II	Verifit manual for reference
F	April 14	Catch-up / make-up as needed	
F	April 21	No lab meeting due to AAA conference; Fitting strategies/prescriptive procedures assignment: recommend completed by this date, or by Monday 4/24	
F	April 28	Practical exams: probe microphone measures Vent sizes/feedback assignment	Dillon chpt. 5
F	May 5	Capstone day: no lab	
Final Exam Week		Practical exam re-takes if necessary	

Requirements for Lab Reports

1. *Lab reports are to be written up individually*. You are permitted to consult with your classmates about the concepts covered in the lab, but *each student must write up his/her own lab report in his/her own words*. If a student does not follow this requirement, it will be considered academic misconduct.
2. Each student is to obtain his/her own measurements from beginning to end. You are permitted to verbally help each other, but each student must complete all of his/her own physical measurements. If a student does not follow this requirement, it will be considered academic misconduct.
3. The lab report must begin with a statement of the purpose(s) of the lab.
4. Lab reports must be typed. If sketches are required, they may be completed neatly by hand or by computer. Graphs may be neatly hand-drawn on graph paper or created using a computer.
5. All attachments to the lab report (e.g., ANSI printouts, probe mic. printouts, etc.) must be neatly labeled and attached at the end of the lab report. They must be labeled so that it is clear which attachment you are referring to in your written report. For example, your report may say, "ANSI test #1 shows that the hearing aid meets specifications...", and you must be sure that ANSI test #1 is neatly and clearly labeled.
6. All parts of the lab report must be neatly organized and labeled.
7. If the data gathered in lab lends itself to presentation in a table format, please do so.
8. If a table is included in the lab report, then the accompanying text (i.e., the body of the lab report) should explain and interpret the information in the table. Information in a table does NOT need to be simply re-stated in the text, but again, you should use the text to *explain* and *interpret* the information in the table.
9. Lab reports must be written in complete, grammatically correct sentences. Paragraphs should be used as needed.
10. Spelling errors should be minimized.
11. Technical terms must be used and spelled correctly. Refer to your textbook, references, or class notes for the correct usage and spelling.
12. If you refer to information from the textbook or any other outside references, you must cite the source using APA style and include a reference list in APA style at the end of your lab report.
13. Please feel free to ask me if you have questions about your lab report. I am happy to answer questions about your report before you turn it in.

Labs will be graded on a 30-point scale using the following criteria:

1. Information and accuracy: All essential main points and information are included and accurate, and all relevant details and concise supporting information (i.e., information that explains, defines, or illustrates the main points) are included and accurate.
2. Clarity and quality of student's own explanations: The issue/problem/concepts are presented and discussed clearly in a way that demonstrates the student has gained his/her *own* understanding, rather than simply reiterating information from readings or class. May contain original insights into an issue or problem, and/or may include examples or explanations that illustrate the issue or concept.
3. Statements and conclusions are supported with evidence: Statements, conclusions, and/or opinions are supported by accurate, relevant, and clearly presented evidence.

4. Applying information: The student applies information learned in class and/or readings to the lab results.
5. Precision: Written material is precise and specific. For instance, units are fully specified (such as Hz, dB HL, mmho, mL, etc.), descriptions are precise (Instead of writing, "She heard better," you might write, "Her thresholds were 5-10 dB better."), etc.
6. Graduate-level writing and mechanics: It is clearly written or presented, with very minimal or no spelling or grammatical errors. The writing structure and style are consistent with graduate-level academic writing. Technical terms are spelled and used correctly. References are used appropriately and cited and listed correctly in APA style.