

COURSE SYLLABUS
CSD 856: Amplification I, 2 s.h.
University of Wisconsin AuD Program
Spring 2022
MW 1:00-1:50
Room 234 in CPS, UWSP

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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.

E-mail communication: You are expected to check your school e-mail account at least once per weekday for any important class announcements. I typically reply to emails within two business days or sooner. I cannot guarantee that I will check email on evenings and weekends, so please plan ahead to avoid last-minute weekend or late-night “emergencies”.

You are not permitted to turn in an assignment late because you are waiting for a reply from me. If you’ve emailed me with reasonable advance notice (see later in this paragraph), but I haven’t replied within the timeframe given above, there is a chance I did not receive your message. Please check your sent-mail to see if it was actually sent, and try re-sending it or calling me. If you are emailing a question within 1-2 days or less of the deadline, I may not have time to reply/answer before the deadline. (I will do my best to reply, but sometimes it’s not possible if many urgent things come up at once). If I do not reply before the deadline, then you should submit your assignment by the deadline, using your best judgment to answer your question.

Prerequisites:

- At least second-semester AuD student status
- Concurrent enrollment in CSD 857 Amplification I Lab

Required Readings:

- Harvey Dillon, *Hearing Aids*, **2nd edition**
- Additional required readings on Canvas.

Credit Hour Policy Standard:

This class meets for two 50-minute class periods each week, and carries the expectation that students will work on course learning activities (reading, studying, viewing recorded lectures, completing quizzes, reviewing and organizing your notes, preparing for class, etc.) for about 2 hours outside of the classroom for every class period. More information about class meeting times and expectations for student work are included in this syllabus.

Course Description:

This course will cover much of the beginning to intermediate knowledge and skills that you will need to begin successfully fitting your patients with hearing aids! Amplification I is the first part of a roughly 2 1/2-semester course sequence on hearing aids. (Amplification II is the next course, and the 1/2 semester is in Pediatric Habilitation/Rehabilitation). The goal of this course is to cover the topics that will allow you to begin hands-on work with hearing aids in the clinic as soon as possible. Between lab and lecture, some topics include: the components and features of hearing aids, electroacoustic measurement and verification of hearing aids in couplers and real ears, taking earmold impressions, earmold and earshell acoustics, assessing patient needs and determining hearing aid candidacy, using prescriptive fitting strategies, and hearing aid repair and troubleshooting.

Even across 2 1/2 semesters, it is not possible to cover all the information you will need to know about hearing aids, and the specific **technology will change by the time you graduate**. Thus, my goal is to **cover the important foundation information** upon which you can build the necessary habit of continued learning. Peer-reviewed journal articles (i.e., articles in journals such as *JAAA*, *Ear and Hearing*, *American Journal of Audiology*, etc.) are the best source of unbiased, evidence-based information about the effectiveness of various hearing aid technologies. A disadvantage of these journals, though, is that the peer-review process moves more slowly than changes in hearing aid technology.

If you need to learn about how the latest hearing aid technology works, the best sources of current information are audiologyonline and the manufacturers themselves (i.e., information from your sales rep, the manufacturers' websites, or audiologists who work in technical support at the manufacturer). The disadvantage of information from these sources is that, since it has not gone through the peer-review process, it is often biased toward overestimating the benefits of new technology and new features from that manufacturer. You should view any claims of benefits or the "latest and greatest" from these (non-peer-reviewed) sources with a critical eye; in some cases, the claims are true, but they may also be exaggerated or presented as marketing material / advertising rather than as objective, evidence-based information. As you gain more experience and knowledge in hearing aids and research methods over the next few years, you will hone your ability to differentiate true benefits from marketing hype.

Face Coverings:

At all UW-Stevens Point campus locations, the wearing of face coverings is mandatory in all buildings, including classrooms, laboratories, studios, and other instructional spaces. 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 classes cannot take place. This is university policy and not up to the discretion of individual instructors. Failure to adhere to this requirement could result in formal withdrawal from the course.

Student Privacy and Intellectual Property of Recorded Lectures:

Lecture materials and recordings for this class are protected intellectual property at UW-Stevens Point. Students in this course may use the materials and recordings for their personal use related to participation in this class. Students may also take notes solely for their personal use. If a lecture is not already recorded, you are not authorized to record my lectures without my permission unless you are considered by the university to be a qualified student with a disability requiring accommodation [Regent Policy Document 4-1]. (You may contact me to request permission to record lectures). **Students may not copy or share lecture materials and recordings outside of class**, including posting on internet sites or

selling to commercial entities. **Students are also prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission.** Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

Course Format and Expectations:

- This class will meet in person in the UWSP and UW-Madison distance rooms as much as possible. If we must meet remotely due to the pandemic or other unforeseen circumstances, please see the guidelines about remote classes below.
- You are expected to attend class regularly. 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, personal or family emergency, etc. Class absences should NOT be requested or used for routine or controllable circumstances like vacation, work, convenience, or errands.
- **When attending a remote class, please remain attentive and engaged in the course. See below for additional information:**
 - If you would like to attend the remote class session but expect you may not be able to fully focus or participate (for example, if you are ill, or caring for someone who is ill, or caring for a dependent, etc.), please email me ahead of time if possible (or if it's not possible to email me ahead of time, then email me as soon as you reasonably can) to let me know about the situation.
 - If you are unable to attend the remote class session, please email me ahead of time if possible, or as soon as you reasonably can. The information above about excused absences also applies to remote class sessions.
 - **Please do not try to attend a remote course while you are driving, or while you are doing anything else that requires your full attention for safety!** Please plan your schedule so you can attend class from an environment that allows you to pay attention to class. If this is not possible on a particular day, please see the information above about requesting an excused class absence if necessary.
 - Although I prefer you participate with video whenever possible in any remote class sessions **(it helps me and everyone else to feel connected when we can see each other's faces! 😊)**, if your video will create repeated or disruptive distractions for others during the session, please disable your own video while the distraction is present, or for the entire session if necessary. It is NOT very distracting (so no need to disable video) if a family member or pet occasionally or calmly appears in the background; however it IS visually distracting if you move around a lot, or if you move your camera a lot, or if your pet repeatedly jumps all over you throughout class, or if a family member keeps asking you questions. I understand these things may happen, but please disable your own video if they occur for longer than a brief time.
 - In general, please mute your own audio unless you are speaking. There may be some occasions when, due to a faster pace of the discussion, it may be better to leave your audio un-muted, but most of the time it works best if everyone except the current speaker has their audio muted.

Student Requirements:

Personal situations and/or difficulty meeting course requirements:

If you are concerned that a family or personal situation may affect your ability to meet the class requirements, please discuss this with me (or with the graduate advisor or another faculty member on your home campus with whom you feel comfortable) so that we can be aware of the situation and figure out alternative arrangements if needed. It is far better to be proactive about discussing possible difficulties than to wait until your performance in the class has already suffered. I will not ask you for specific medical or personal information if you do not wish to share it; however, you will typically need to provide some type of documentation to at least one faculty member (either myself or the graduate advisor on your home campus) if a short-term accommodation is needed, or to the Disability Center on your home campus if ongoing or repeated accommodations are needed.

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

Respect & Professionalism

As doctoral students, I expect you to be prepared for class, and to regularly attend class (including any remote classes) with an attitude of respect, engagement, enjoyment, and professionalism. **I expect you to behave respectfully toward everyone in the class and myself.**

Reflection / Clinic Application Assignment

To encourage the process of learning and applying information, you are required to submit a clinical application reflection assignment during this class. See the separate assignment description for more information.

Online Quizzes

You are required to complete online quizzes in each unit of this course, and **you must receive a 90% or better on each quiz**. You are permitted to re-take each quiz an unlimited number of times **until the deadline**, and your highest grade on each quiz, by the deadline, will count toward your class grade. (If you receive a grade above 90% but less than 100%, you are welcome—but not required—to continue re-taking the quiz if you want to aim for 100%). The quizzes are designed to assess your knowledge of the foundation material, and to help you identify and correct any holes or misunderstandings in your **own** knowledge. Quizzes will also help you prepare for the types of questions and knowledge assessed on the Praxis exam. **For this reason, you are expected to complete the quizzes independently; however, you are allowed to refer to your own notes, textbook, and any other course materials while taking the quizzes.** You are allowed to discuss the general concepts on the quizzes with classmates, but you are **not permitted** to share answers or to take the quizzes together with any classmates.

Hearing Aid / OTC Guide

Throughout this course, you will be creating a guide for patients and for yourself on things to look for in a good-quality OTC hearing aid, and comparable things that a traditional hearing aid and fitting process can do better or differently. See the assignment description for more information. You are allowed to discuss the content of this assignment with your classmates, but **you are expected to write up/create your guide using your own format and your own words**, to ensure that you yourself understand the material.

Final Reflection Assignment

You will be required to complete a final assignment reflecting on some things you have learned this semester. See the assignment description for more information. **You are expected to complete this assignment independently.**

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 Center on your home campus.

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:

I expect all students to follow the course requirements for academic honesty. If you are tempted by academic dishonesty, I recommend you ask yourself why (Are you having trouble meeting an assignment deadline? Are you struggling to understand some course material? Are you having trouble understanding why an assignment is relevant or important?), and then address that underlying cause. For example, let me know you're having one of those problems, and we can discuss some possible solutions. You might also ask other AuD students for advice on those problems.

The policies that apply to all UW System students and faculty regarding academic misconduct can be found here: <file:///C:/Users/audsk/AppData/Local/Temp/14.pdf>. 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/>.

Grading:

Also see the information on the separate general grading information handout posted on Canvas. Your final grade is determined by averaging your *percentage* (NOT total number of points) on the following components:

Reflection / Clinic Application Assignment	15%
Online Quizzes	30%
Hearing Aid / OTC Guide	40%
Final Reflection	15%

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
UW – Madison Letter Grade	A	AB		B	BC		C	CD		D	F

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). For standards that are partially covered, **the portion covered in this class is bolded.**

Method of Assessing Competency: All of these competencies are assessed via all of the assignments. For each competency, a grade of at least 90% on the quizz(es) and a passing grade on the assignment(s) covering the corresponding material will serve as documentation that the student has met competency. **A passing grade is a B or better. If a student fails to meet competency on a task, 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.**

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):
A4. Principles, methods, and applications of acoustics, psychoacoustics, and speech perception, with a focus on how each is impacted by hearing impairment throughout the life span
A5. Calibration [calibration only covered to a limited extent] and use of instrumentation according to manufacturers' specifications and accepted standards
A16. Principles and practices of client/patient/person/family-centered care, including the role and value of clients'/patients' narratives, clinician empathy, and shared decision making regarding treatment options and goals
A18. The role, scope of practice, and responsibilities of audiologists and other related professionals
D4. Enhancing clients'/patients' acceptance of and adjustment to hearing aids, hearing assistive technologies, and osseointegrated and other implantable devices
E1. Engaging clients/patients in the identification of their specific communication and adjustment difficulties by eliciting client/patient narratives and interpreting their and/or caregiver-reported measures
E3. Responding empathically to clients'/patients' and their families' concerns regarding communication and adjustment difficulties to establish a trusting therapeutic relationship
E8. Selecting and fitting appropriate amplification devices and assistive technologies
E9. Defining appropriate electroacoustic characteristics of amplification fittings based on frequency-gain characteristics, maximum output sound-pressure level, and input-output characteristics
E10. Verifying that amplification devices meet quality control and American National Standards Institute (ANSI) standards
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
E13. Conducting individual and/or group hearing aid orientations to ensure that clients/patients can use, manage, and maintain their instruments appropriately
E17. Identifying the need for—and fitting—electroacoustically appropriate hearing assistive technology systems (HATS) based on clients'/patients' communication, educational, vocational, and social needs when conventional amplification is not indicated or provides limited benefit

Class Schedule

The following is a tentative schedule that is subject to change.

Day	Date	Topic	Required <u>Text</u> Reading (see Canvas for additional required readings)
M	Jan. 24	Intro to the course and to the HA fitting process	Dillon chpt. 1
W	Jan. 26	Intro to the course and to the HA fitting process	Dillon chpt. 1
M	Jan. 31	HA components & features	Dillon chpt. 2; chpt. 4 pp. 121-25 ; chpt. 3 pp. 56-68, 73-80, highlighted sections
W	Feb. 2	Unit 1 Quiz due by 11:59 pm HA components & features	Dillon chpt. 7, read all through top of p. 204, and then only highlighted sections
M	Feb. 7	HA components & features	
W	Feb. 9	HA components & features	
M	Feb. 14	Electroacoustic measurement of HAs in the test box	Dillon chpt. 4 pp. 82-96
W	Feb. 16	Unit 2 Quiz due No synchronous class meeting due to third-year IPE; required recorded lectures instead Electroacoustic measurement of HAs in the test box	
M	Feb. 21	Units 1 & 2 OTC and HA guide due Electroacoustic measurement of HAs in the test box	
W	Feb. 23	Electroacoustic measurement	
M	Feb. 28	Finish electroacoustic measurement; Start compression?	
W	March 2	Compression	Dillon chpt. 6; chpt. 12 section 12.1.7 (pp. 362-365)
M	March 7	Unit 3 (Electroacoustic Testing) Quiz due Compression	
W	March 9	Compression	
M	March 14	Compression No class meeting: spring break for Madison SP students view recorded lectures or other required class activity First possible day to submit clinic application reflection (due no later than April 26 by 1 pm)	

W	March 16	Verification & probe microphone measurements No class meeting: spring break for Madison SP students view recorded lectures or other required class activity	Dillon chpt. 4 pp. 97-118
M	March 21	No class meeting: spring break for Stevens Point Madison students view recorded lectures or other required class activity	
W	March 23	No class meeting: spring break for Stevens Point Madison students view recorded lectures or other required class activity	
M	March 28	Unit 4 (Compression) Quiz due Verification & probe microphone measurements	
W	March 30	Units 3 & 4 (Electroacoustic Testing & Compression) OTC and HA guide due Verification & probe microphone measurements	
M	April 4	Finish verification & probe microphone measurements? Earmold & earshell acoustics	Dillon chpt. 5
W	April 6	Unit 5 (Probe Mic. Measurements) Quiz due Earmold & earshell acoustics	Dillon chpt. 5
M	April 11	Earmold & earshell acoustics	
W	April 13	Unit 6 (Earmold & Earshell Acoustics) Quiz due Fitting strategies / prescriptive procedures	Dillon chpt. 10
M	April 18	Fitting strategies / prescriptive procedures	
W	April 20	Units 5 & 6 (Probe Mic. Measurements & Earmold & Earshell Acoustics) OTC and HA guide due Fitting strategies / prescriptive procedures	
M	April 25	Clinic application reflection due Fitting strategies / prescriptive procedures Start feedback & feedback management?	Dillon chpt. 4 pp. 118-121; Dillon chpt. 8 pp. 234-239
W	April 27	Unit 7 (Fitting Strategies/Prescriptive Procedures) Quiz due Feedback and feedback management	Dillon chpt. 4 pp. 118-121; Dillon chpt. 8 pp. 234-239
M	May 2	Feedback and feedback management	
W	May 4	Unit 8 (Feedback) Quiz due Catch up	
W May 11 by 9:00 am		Units 7 & 8 (Prescriptive Procedures & Feedback) OTC & HA guide due; Final Reflection due	

