



California State University, Sacramento  
 Department of Communication Sciences and Disorders  
 Doctor of Audiology (Au.D.)  
**SYLLABUS & COURSE OUTLINE**  
**CSAD 622: Amplification I**

|  |   |                          |
|--|---|--------------------------|
| Semester/Year:<br>Spring 2025  | Course:<br>CSAD 622: Amplification I  | Section:<br>01           |
| Meeting Days:<br>Mondays, Wednesdays                                   | Meeting Times:<br>10.30 am to 11.45 am  | Location:<br>Folsom 2204 |
| Instructor: Soumya Venkitakrishnan, Au.D., Ph.D.                       | Email: <a href="mailto:s.venkitakrishnan@csus.edu">s.venkitakrishnan@csus.edu</a> |                          |
| Office Hours: Mondays and Wednesdays , 8.30-9.30 am, Thursdays, 3-4 pm | Location: 2404G, Folsom Hall  |                          |

### Catalogue Course Description:

**CSAD 622 Amplification I.**

**3 Units**

**Prerequisite(s):** Admission to the Doctor of Audiology program; [CSAD 611](#), [CSAD 612](#), [CSAD 613](#), and [CSAD 614](#).

**Corequisite(s):** [CSAD 622L](#)

Introduction to electroacoustic analysis and characteristics of hearing aids. Includes components of hearing aids, hearing aid gain and fitting formulae, and basic signal processing.

### Sacramento State Graduate Learning Goals (GLG)

| Sacramento State Graduate Learning Goals (GLG)   | Addressed by this course (Y/N) |
|--|--------------------------------|
| <b>Disciplinary knowledge:</b> <i>Master, integrate, and apply disciplinary knowledge and skills to current, practical, and important contexts and situations.</i> | Y                              |
| <b>Communication:</b> <i>Communicate key knowledge with clarity and purpose both within the discipline and in broader contexts.</i>                                | Y                              |
| <b>Critical thinking/analysis:</b> <i>Demonstrate the ability to be creative, analytical, and critical thinkers.</i>   | Y                              |
| <b>Information literacy:</b> <i>Demonstrate the ability to obtain, assess, and analyze information from a myriad of sources.</i>                                   | Y                              |

|  |   |
|--|---|
| <b>Professionalism:</b> <i>Demonstrate an understanding of professional integrity.</i>   | Y |
| <b>Intercultural/Global Perspectives:</b> <i>Demonstrate relevant knowledge and application of intercultural and/or global perspectives.</i>           | Y |
| <b>Research:</b> <i>Conduct independent research resulting in an original contribution to knowledge in the focused areas of their graduate program</i> | Y |

## Expected Learning Outcomes (ELO)

Mastery of each student-learning outcome listed below is indicated by a grade of B or better on each component of the corresponding measures listed in the table. Students are required to track their progress towards meeting each learning outcome and must make an appointment with the instructor for any grade equal to or less than a B. The instructor will suggest strategies to help you establish competence and knowledge in these areas.

Students should track their progress towards meeting each learning outcome by listing their grades on the table below over the course of the semester.

### CSAD 622 SPECIFIC STUDENT LEARNING OUTCOMES:

Upon completion of this course, students will be able to:

1. Describe the development of hearing aids and hearing aid technology from a historical perspective
2. Explain circuitry and signal-processing strategies used in hearing aids.
3. State operational features used by major manufacturers of hearing aids.
4. Apply standardized methods of electroacoustic analysis to hearing aids.
5. Describe current clinical procedures used to determine hearing aid candidacy for amplification in children and adults.
6. Describe how earmolds can be modified for the patient and how these modifications affect the electroacoustic characteristics of the hearing aid.
7. Explain troubleshooting procedures used in clinical settings to repair and/or modify hearing aids.

| Course Learning Outcome | Components Indicating Competence  | Grades Received |
|-------------------------|-----------------------------------|-----------------|
| 1-7                     | Quizzes, mid-term, and final exam |                 |

## Textbooks, Materials, and Online Resources:

Required textbook:

Ricketts, T.A., Bentler, R. & Mueller, G.H. (2019). Essentials of modern hearing aids: Selection, fitting and verification. Plural Publishing.

(Get a student discount of 15% using the code ST15- if purchased from Plural Publishing)

Publication Manual of the American Psychological Association: 7th Edition, 2020; ISBN-13: 978-1433832178, ISBN-10: 1433832178

Other articles on Canvas.

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## Course Requirements/Components:

### Course Format

Lecture

### Class Preparation:

All required readings are for the date listed in the course schedule, not the following class period. Students are responsible for all assigned readings, **whether discussed in class or not**. 10% of the assessment questions for all tests will be from the textbook.

### Class Participation:

Students are expected to actively participate in class discussions and are required to have read the assigned material prior to class meetings.

### Exams/Quizzes

Exam/Quizzes absences: No make-up examinations will be given unless there is a documented emergency for which you have written proof. Although emergencies are unforeseen, I must be notified before the exam takes place. Any approved make-up exams may be administered in a different format from the original exam.

### Class Assignments

Course grades will be based on different assignments:

**Notes:** In this class, you're required to engage with the assigned readings by creating notes on the content. You have the flexibility to choose how you want to document your understanding of the material. Feel free to submit pictures of handwritten notes, annotated pages, mind maps, or any creative format that effectively captures your key takeaways from the assigned chapter or paper. The goal is for you to actively process and internalize the information, so use a method that works best for you. This will be a weekly assignment, and your notes should be submitted before the beginning of each class. This allows you to showcase your comprehension and encourages a personalized approach to notetaking.

**Assignment:** Self-assessment scales presentation: In this activity, students will be assigned a specific self-assessment or validation questionnaire, which they will present in 10-12 minutes. The presentation should include an overview of the measure's background and what it assesses. Students will also cover the process of administering and scoring the questionnaire, and how to interpret the results. Additionally, they will guide the class through an interactive activity using the questionnaire. This exercise is designed to deepen students' understanding of assessment tools,

enhance their presentation skills, and improve their ability to interpret and apply self-assessment measures in clinical settings. Refer to the rubric on Canvas for more details.

**Quizzes:** Quizzes (closed book/note) will be given in-person at the beginning of class time- you will have 30 minutes to complete it. Quizzes will be on Canvas and will utilize the lockdown browser. Quizzes (5 in number) will be given on the dates listed on the syllabus. *In case a student has accommodations, and wants to give the exam in the testing center, it is the student's duty to do the following: schedule the quiz at the test center on the same day before the class with enough time to come to class for the lecture following the quiz; The student should ensure the test center is booked in advance so that the exam can be taken at the chosen day/time.* Quizzes will be based on class lectures, assigned readings (10%), class activities/homework, and discussions and the topics assessed in the quiz will be informed to the students during the class. Quizzes may be composed of multiple choice, true/false, matching, labeling, case-based questions, and/or short answer questions. In the case of a documented medical emergency prior to the exam, the student will be required to notify the instructor in advance of the exam and provide documentation of the illness/injury or emergency. A make-up examination is subject to be scheduled during finals examination week. Different questions when compared to the original will be asked and being in a full essay format. It is the student's responsibility to ensure this is scheduled. If you do not complete one or more of the exams by the last day of the final exam period, you may receive a "0" on your exam(s) as per instructor discretion. Please note that you remain individually responsible for being aware of your exam dates and times posted in the course syllabus.

**Examinations** (mid-term, and final): Mid-term and final exam (closed book/note) will be given in-person. The mid-term will be given during class time on the date indicated on the schedule. The final exam will be on a date and time decided by the College. Exams will be on Canvas and will utilize the lockdown browser. *In case a student has accommodations, and wants to give the exam in the testing center, it is the student's duty to do the following: schedule the mid-term/ final exam at the test center on the same day as close to the test time as possible. The student should ensure the test center is booked in advance so that the exam can be taken at the chosen day/time.* The mid-term will cover information covered until the day of the mid-term, and the final exam will be comprehensive (covering all topics covered in the class/ labs/ readings). Exams will be the same format as the quizzes, but longer, and may be multiple choice, true/false, matching, labeling, case-based questions, and/or short answer questions. In the case of a documented medical emergency prior to the exam, the student will be required to notify the instructor in advance of the exam and provide documentation of the illness/injury or emergency. A make-up examination is subject to be scheduled during finals examination week. Different questions when compared to the original will be asked. It is the student's responsibility to ensure this is scheduled. If you do not complete one or more of the exams by the last day of the final exam period, you may receive a "0" on your exam(s) as per instructor discretion. Please note that you remain individually responsible for being aware of your exam dates and times posted in the course syllabus.

**Attendance and professionalism:** Classroom participation includes asking/ answering questions and engaging in discussions throughout the semester. **Professionalism** will include timely arrival in class, timely and professional response to emails (within 48 hours), engaging in the class, timely submission of assignments, no mobile phone use in the class except for emergencies, use of professional language in class, and with classmates, not interrupting other students/ faculty, and utilizing appropriate turn-taking skills, etc.

**Wellness activity** contains completing assigned wellness tasks. The student will complete these tasks for the month of February, March, and April. This is an extra-credit activity, and students are not required to do this. This activity is meant to improve students' wellness.

For more information on the assignments/ exam, please refer to Canvas.

For information about lab assignments, refer to the 622L syllabus, and/or the 622L, canvas course.

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# Grading Policy:

Table 1: Course Requirements and Grade Distribution

| Source                                    | % of Grade |
|---|------------|
| Classroom participation + professionalism | 5%         |
| Notes (x 10)                              | 15%        |
| Assignment<br>Self assessment scales      | 5%         |
| Quizzes (x 5)                             | 25%        |
| Mid-term                                  | 20%        |
| Final Exam                                | 30%        |
| Extra-credit (wellness)                   | 5%         |
| Total                                     | 100%       |

Letter grades are assigned according to the following scores:

Table 2: Points, Percentages and Letter Grades

| %                | Letter   |
|------------------|----------|
| 93-100%          | A        |
| 90-92.99%        | A-       |
| 87-89.99%        | B+       |
| <b>83-86.99%</b> | <b>B</b> |
| 80-82.99%        | B-       |
| 77-79.99%        | C+       |
| 73-76.99%        | C        |
| 70-72.99%        | C-       |
| 67-69.99%        | D+       |
| 63-66.99%        | D        |
| 60-62.99%        | D-       |
| < 60%            | F        |

## CSUS Grading Policy

The CSUS Grading Policy (Policy# 11476953) can be found at:  
<https://sacramentostate.policystat.com/policy/11476953/latest>

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# Attendance Policy

Students are expected to arrive in class on time, prepared to participate and engage in classroom activities for both in-person and synchronous/virtual interactions. Students are responsible for class content, lecture materials, assignments, announcements, and must be aware of changes in the class schedule. Students are advised that instructional faculty may include an attendance policy in courses, which may require attendance as part of the student's course grade. These policies will be set in the syllabus. **Greater than two absences will cause the initiation of an academic performance improvement plan (APIP).**

Given the full-time, intensive nature of this doctoral program, it is important that students contact instructors if they are absent or are anticipating absence, especially over an extended period of time. In the case of the latter, the Au.D. Program Director must also be notified. Attendance for clinical practica is outlined in the clinic handbook.

Student travel policy: <https://www.csus.edu/college/health-human-services/communication-sciences-disorders/internal/documents/policy/csad-student-travel-policy.pdf>

If you are sick, stay home and do not attend class. Notify your instructor. Please self-diagnose if you are experiencing any COVID- like symptoms (fever, cough, sore throat, muscle aches, loss of smell or taste, nausea, diarrhea, or headache) or have had exposure to someone who has tested positive for COVID contact Student Health & Counseling Services (SHCS) at 916-278-6461 to receive guidance and/or medical care. The CDC provides a good source of information regarding COVID-19 and a way to self-check symptoms: <https://www.cdc.gov/coronavirus/2019-ncov/index.html>

Students must adhere to COVID-19 policies regarding mask wearing and vaccinations as described on the CSUS website. Please see <https://www.csus.edu/compliance/risk-management/coronavirus.html> and <https://www.csus.edu/return-to-campus/return-to-campus-faq.html> for more information and updates.

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## Email

Students in the Au.D. program are required to maintain an active CSUS email address, which is linked to the student ID number. Official emails will be sent through CSUS email. Students are expected to regularly check their CSUS emails.

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## Course Policies/Procedures:

### **Commitment to Integrity**

As a student in this course (and at this university) you are expected to maintain high degrees of professionalism, commitment to active learning and participation in this class and also integrity in your behavior in and out of the classroom. *Writing, analytical, and critical thinking skills are part of the learning outcomes of this course, and so, all assignments should be prepared by the student. AI-generated submissions are not permitted and will be treated as plagiarism and will be reported to the office of student conduct.*

### **Late work/ regrading:**

All assignments must be submitted by the scheduled deadline. In the case that life events or other reasons prevent the student from submitting the assignment on time, contact the instructor to request an extension. This request should be made one week in advance, or as early as possible. This extension will not be provided more than twice during the semester and will not be provided for the final assignment. This extension will not be provided if the

student does not request this in advance. Late submission will result in reduction in 10% points per day of delay in submission. Grades will not be changed under any circumstances to elevate a grade level (e.g. B to B+) and no emails regarding the same will be entertained.

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## Tentative Course Schedule/Outline:

| Date         | Class / Lab | Topic/Class Content   | Reading<br>Book: Ricketts,<br>Bentler & Mueller  | Assignment:<br>Class                           | Assignment:<br>Lab |
|--------------|-------------|---|--|--|--------------------|
| 01/22<br>Wed | Class       | Course overview/ Expectations<br>History and laws in Audiology  | - Chapter 2<br>- Cavitt, K. (2015, August). Pricing strategies and delivery models for audiology items and services. AudiologyOnline, Article 14936. Retrieved from <a href="https://www.audiologyonline.com">https://www.audiologyonline.com</a>  | Notes 1:<br>Chapter 2<br>(Due end of the week) |                    |
| 01/23<br>Thu | Lab         | <b>Lab #1:</b> Counseling in the hearing aid consultation appointment   |  |  |                    |
| 01/27<br>Mon | Class       | History and laws in Audiology   |  |  |                    |
| 01/29<br>Wed | Class       | Determining candidacy for HAs-<br>Understanding the hearing aid candidate   | Chapter 3  | Notes 2:<br>Chapter 3                          |                    |
| 01/30<br>Thu | Lab         | Self-assessment scales- review and ask questions  | Chapter 7<br>Chapter 19  |  |                    |
| 02/03<br>Mon | Class       | Determining candidacy for HAs – Other assessments- cognitive assessments<br>Pre-fitting tests using frequency specific measures | Chapter 5<br>Article: Using Cognitive Screening Tests in Audiology<br>Article: Factors Associated With Hearing Aid Outcomes<br>Article: Feasibility and Repeatability of an Abbreviated Auditory Perceptual and Cognitive Test Battery<br>Article: Speech-in-noise hearing impairment is associated with increased risk of Parkinson's: A UK biobank analysis<br>Article: Hearing loss is not associated with risk of Parkinson's disease: A Mendelian randomization study | Notes 3:<br>Chapter 5                          |                    |
| 02/05<br>Wed | Class       | Pre-fitting tests using frequency-specific measures.  | Article: The Speech Intelligibility Index:   |  |                    |



|              |       |   |   |  |                                      |
|--------------|-------|---|---|--|--------------------------------------|
|              |       |   | What is it and what's it good for?  |  |                                      |
| 02/06<br>Thu | Lab   | <b>Lab #2:</b> Pre-fitting tests with frequency-specific and speech materials   |   |  | Lab #1: Video on HA consultation due |
| 02/10<br>Mon | Class | <b>Quiz # 1</b><br>Pre-fitting testing using speech material  | Chapter 6   | Notes 4:<br>Chapter 6                          |                                      |
| 02/12<br>Wed | Class | Student presentations on Self-assessment scales   |   | Self-assessment scales presentation (due 8 am) |                                      |
| 02/13<br>Thu | Lab   | <b>Lab #2:</b> Pre-fitting tests with frequency-specific and speech materials<br><b>Lab #3:</b> Hearing aid styles lab + activity (Time for discussion) |   |  |                                      |
| 02/17<br>Mon | Class | Pre-fitting testing using speech material   | Article: Audible Contrast Threshold (ACT™) Test: A Complete Guide<br><a href="https://www.interacoustics.com/academy/audiometry-training/advanced-tests/audible-contrast-threshold-test">https://www.interacoustics.com/academy/audiometry-training/advanced-tests/audible-contrast-threshold-test</a><br>Article: The Audible Contrast Threshold (ACT) test: A clinical spectro-temporal modulation detection test |  |                                      |
| 02/19<br>Wed | Class | HA selection- Hearing aid styles and fitting applications- Introduction   | Chapter 8   | Notes 5:<br>Chapter 8                          |                                      |
| 02/20<br>Thu | Lab   | <b>Lab #3:</b> Hearing aid styles activity  |   |  |                                      |
| 02/24<br>Mon | Class | HA selection- Hearing aid styles and fitting applications   | Article: Open-Fit Domes and Children with Bilateral High-Frequency Sensorineural Hearing Loss: Benefits and Outcomes<br>Article: Why Open Hearing Aid Fittings are Often Not the Best Choice for the Patient  |  |                                      |

|              |       |  |  |   |                               |
|--------------|-------|--|--|---|-------------------------------|
|              |       |  | Article: Dos and Don'ts of Open Fittings<br>Article: Open Fit Hearing Aids Explained: Styles, Pros and Cons<br><a href="https://www.soundly.com/blog/open-fit-hearing-aids">https://www.soundly.com/blog/open-fit-hearing-aids</a>                                       |   |                               |
| 02/26<br>Wed | Class | HA selection- Hearing aid styles and fitting applications  |  |   |                               |
| 02/27<br>Thu | Lab   | <b>Lab #2:</b> Pre-fitting tests with frequency-specific and speech materials<br><b>Lab #3:</b> Hearing aid styles lab |  |   | Lab #2: Pre-fitting tests due |
| 03/03<br>Mon | Class | Electroacoustic and other quality control techniques   | Chapter 13   | Notes 6:<br>Chapter 13                    |                               |
| 03/05<br>Wed | Class | <b>Quiz # 3</b><br>Electroacoustic and other quality control techniques  |  |   |                               |
| 03/06<br>Thu | Lab   | <b>Lab #4:</b> Electroacoustic and other quality control techniques  |  |   |                               |
| 03/10<br>Mon | Class | Electroacoustic and other quality control techniques<br>Review for mid-term  | Audiology Online course: The Basics of Electroacoustic Analysis<br><a href="https://www.audiologyonline.com/audiology-ccus/course/basics-electroacoustic-analysis-35817">https://www.audiologyonline.com/audiology-ccus/course/basics-electroacoustic-analysis-35817</a> |   |                               |
| 03/12<br>Wed | Class | <b>MID-TERM</b>  |  |   |                               |
| 03/13<br>Thu | Lab   | <b>Lab #4:</b> Electroacoustic and other quality control techniques  |  |   | Lab #3: HA styles due         |
| 03/17<br>Mon | Class | Fitting and verification of hearing aids- probe microphone measures  | Chapter 16<br>Chapter 17   | Notes 7:<br>Chapter 16+17                 |                               |
| 03/19<br>Wed | Class | Fitting and verification of hearing aids- probe microphone measures  | Article: Verification and Validation: Just the Standards, Jorgensen & Novak  |   |                               |
| 03/20<br>Thu | Lab   | <b>Lab #5:</b> Probe microphone measures   |  |   |                               |
| 03/24<br>Mon | Class | After fitting HAs- HA orientation, counseling  | Chapter 18: HA Orientation   | Notes 8:<br>Chapter 18:<br>HA Orientation |                               |
| 03/26<br>Wed | Class | <i>AAA Conference:</i> Lab #4, Lab #5, review article  | Article: Auditory Profile-Based Hearing Aid Fitting: Self-   |   |                               |

|              |       |   |  |                    |                                       |
|--------------|-------|---|--|--------------------|---------------------------------------|
|              |       |   | Reported Benefit for First-Time Hearing Aid Users<br>Article: The Importance of Audibility in Successful Amplification of Hearing Loss   |                    |                                       |
| 03/27<br>Thu | Lab   | <i>AAA Conference</i><br><b>Lab #5:</b> Probe microphone measures   |  |                    | Lab #4: Electroacoustic analyses due  |
| 03/31<br>Mon | Class | <i>Spring break: No class</i>   |  |                    |                                       |
| 04/02<br>Wed | Class | <i>Spring break: No class</i>   |  |                    |                                       |
| 04/03<br>Thu | Lab   | <i>Spring break: No class</i>   |  |                    |                                       |
| 04/07<br>Mon | Class | Ear impressions, earmolds, and associated plumbing  | Chapter 9  | Notes 9: Chapter 9 |                                       |
| 04/09<br>Wed | Class | <b>Quiz # 4</b><br>Ear impressions, earmolds, and associated plumbing                                     |  |                    |                                       |
| 04/10<br>Thu | Lab   | <b>Lab #6:</b> Ear impressions  |  |                    | Lab #5: Probe microphone measures due |
| 04/14<br>Mon | Class | Ear impressions, earmolds, and associated plumbing  | Article: Earmolds and More: Maximizing Patient Satisfaction  |                    |                                       |
| 04/16<br>Wed | Class | Listening checks<br>Hearing Assistive Technology<br>HA Accessories  |  |                    |                                       |
| 04/17<br>Thu | Lab   | <b>Lab #6:</b> Ear impressions  |  |                    |                                       |
| 04/21<br>Mon | Class | (Easter Monday)<br>Hearing Assistive Technology<br>HA Accessories   | Article: HAT- ASHA Webpage:<br><a href="https://www.hearingloss.org/find-help/hearing-assistive-technology/">https://www.hearingloss.org/find-help/hearing-assistive-technology/</a> |                    |                                       |
| 04/23<br>Wed | Class | <b>Quiz # 5</b><br>Hearing Assistive Technology<br>HA Accessories   | Article: Hearing Assistive Technology Considerations for Older Individuals With Dual Sensory Loss  |                    |                                       |
| 04/24<br>Thu | Lab   | <b>Lab #7:</b> Listening check (conventional + CROS)<br><b>Lab #8:</b> HAT and accessories-group activity |  |                    | Lab #6: Ear impressions due           |
| 04/28<br>Mon | Class | Hearing Assistive Technology<br>HA Accessories  | Phonak:<br><a href="https://www.phonak.c">https://www.phonak.c</a>   |                    |                                       |

|              |       |   |   |   |  |
|--------------|-------|---|---|---|--|
|              |       |   | <a href="https://www.starkey.com/en-us/hearing-devices/accessories">om/en-us/hearing-devices/accessories</a><br>Starkey:<br><a href="https://www.starkey.com/hearing-aids/accessories">https://www.starkey.com/hearing-aids/accessories</a><br>ReSound:<br><a href="https://www.resound.com/en-us/hearing-aids/accessories/tv-hearing-aid">https://www.resound.com/en-us/hearing-aids/accessories/tv-hearing-aid</a><br><a href="https://www.resound.com/en-us/hearing-aids/accessories/multi-mic">https://www.resound.com/en-us/hearing-aids/accessories/multi-mic</a><br><a href="https://www.resound.com/en-us/hearing-aids/accessories/remote-control-2">https://www.resound.com/en-us/hearing-aids/accessories/remote-control-2</a><br>Oticon:<br><a href="https://www.oticon.com/solutions/accessories">https://www.oticon.com/solutions/accessories</a><br>Widex:<br><a href="https://www.widex.com/en-us/hearing-aids/accessories/">https://www.widex.com/en-us/hearing-aids/accessories/</a><br>Signia:<br><a href="https://www.signia.net/en-uschargers-and-accessories/">https://www.signia.net/en-uschargers-and-accessories/</a> |   |  |
| 04/30<br>Wed | Class | Billing and coding for hearing aid services | <a href="https://www.asha.org/practice/reimbursement/medicare/aud_coding_rules/">https://www.asha.org/practice/reimbursement/medicare/aud_coding_rules/</a><br>- New Procedures ...<br>But No Codes<br><a href="https://www.asha.org/practice/reimbursement/coding/hcps_aud/">https://www.asha.org/practice/reimbursement/coding/hcps_aud/</a>  |   |  |
| 05/01<br>Thu | Lab   | <b>Activity with Dr. Roseberry's class</b>  |   |   |  |
| 05/05<br>Mon | Class | Tele-audiology in hearing aid services      | <a href="https://www.asha.org/practice/reimbursement/reimbursement-of-telepractice-services/">https://www.asha.org/practice/reimbursement/reimbursement-of-telepractice-services/</a><br>Article: Teleaudiology hearing aid fitting follow-up consultations for adults<br>Article: A Scoping Review of Technology and Infrastructure  | Notes 10: Articles for billing and tele-audiology |  |

|              |       |   |   |  |   |
|--------------|-------|---|---|--|---|
|              |       |   | Needs in the Delivery of Virtual Hearing Aid Services.<br>Article: Feasibility and Assessment of a Hybrid Audiology Service Delivery Model for Older Adult Hearing Aid Users: A Pilot Study |  |   |
| 05/07<br>Wed | Class | Catch up<br>Final Review<br><b>Lab #8:</b> HAT and accessories-group activity                             |   |  |   |
| 05/08<br>Thu | Lab   | <b>Lab #7:</b> Listening check (conventional + CROS)<br><b>Lab #8:</b> HAT and accessories-group activity |   |  | Lab #7:<br>Listening check due<br>Lab #8:<br>HAT/<br>Accessories-due on 05/15 |

\*\* Course schedule is subject to change as required to accommodate student learning or guest lecture/ material availability.

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# Hornet Honor Code

<https://www.csus.edu/student-affairs/internal/documents/hornet-honor-code.pdf>

As proud members and representatives of the Sacramento State Hornet community, we commit ourselves to actively promoting honesty, integrity, respect, and care for every person, ensuring a welcoming campus environment, and striving to help every member of our Hornet family feel a strong sense of belonging.

As Hornets, we will:

- Promote an inclusive campus and community
- Listen and respect each other's thoughts, interests, and views Value diversity and learn from one another
- Engage daily with mutual trust, care, and integrity
- Support a culture of honor and adhere to campus policies for honesty, ethics, and conduct
- Be proud to be Sac State Hornets.

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## Academic conduct

Students enrolled in the Au.D. program must adhere to the Department and University policies on academic misconduct. Please see the department's policy on academic misconduct ("Policy on Student Academic and Clinical Conduct"). The following are expectations for professional behavior in the classroom:

- Ethics: Students must uphold the ethical standards set forth by professional bodies in the field (see Appendices C and D).
- Respect: Students should demonstrate respect to their peers, instructors, and staff.
- Feedback: Students are expected to self-reflect and modify their work in response to feedback, while displaying non-defensive behavior to suggestions.
- Health: Students should maintain their personal wellness and health, attending to any needs in a timely fashion in order to support their academic and professional growth.
- Attire: Students should dress appropriately for class. Classes may be held in clinic space, so students are expected to observe the clinic dress code.
- Accountability: Students are expected to be accountable, honest, and professional for their activities and communications. The general principles of ethical behavior should be applied to their coursework, evaluations, and examinations.
- Language: Students should demonstrate professional oral and written communication, including emails. Discretion and professional language should be used in all modalities, emphasizing constructive rather than reactive use.
- Scholarship: Students should take an active role in their learning, recognizing their deficiencies and seeking to correct them, as part of their commitment to lifelong learning.
- Effort: Students should collaborate and work to complete tasks and assignments on time or by the set deadline. Students are expected to follow through on all activities while maintaining professionalism and intellectual curiosity.

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## Commitment to Integrity

As a student in this course (and at this university) you are expected to maintain high degrees of professionalism, commitment to active learning and participation in this class and also integrity in your behavior in and out of the classroom.

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## Sac State's Academic Honesty Policy & Procedures

“The principles of truth and honesty are recognized as fundamental to a community of scholars and teachers. California State University, Sacramento expects that both faculty and students will honor these principles, and in so doing, will protect the integrity of academic work and student grades.” Read more about Sac State's Academic Honesty Policy & Procedures at the following website:

<https://sacramentostate.policystat.com/policy/11300038/latest>

**Definitions:** At Sac State, “cheating is the act of obtaining or attempting to obtain credit for academic work through the use of any dishonest, deceptive, or fraudulent means.” **Plagiarism** is a form of cheating. At Sac State, “plagiarism is the use of distinctive ideas or works belonging to another person without providing adequate acknowledgement of that person's contribution.” Source: Sacramento State University Library Note: Any form of academic dishonesty, including cheating and plagiarism, may be reported to the office of student affairs.

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## Department Policy on Use of APA format

The Department of Communication Sciences and Disorders requires the use of the APA format and style. All students are required to reference the APA manual (7<sup>th</sup> edition.) All assignments are to be composed using APA format and style unless otherwise noted.

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## Understand When You May Drop This Course

It is the student's responsibility to understand when he/she need to consider disenrolling from a course. Refer to the Sac State Course Schedule for dates and deadlines for registration. After this period, a serious and compelling reason is required to drop from the course. Serious and compelling reasons include: (a) documented and significant change in work hours, leaving student unable to attend class, or (b) documented and severe physical/mental illness/injury to the student or student's family. Under emergency/special circumstances, students may petition for an incomplete grade. An incomplete will only be assigned if there is a compelling extenuating circumstance. All incomplete course assignments must be completed by the department's policy.

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## Equal Access

California State University-Sacramento, Department of Communication Sciences and Disorders, seeks to provide equal access to its programs, services, and activities for people with disabilities. If you have a documented disability and verification from the Disability Access Center (DAC), and wish to discuss academic accommodations, please contact your instructor as soon as possible. It is the student's responsibility to provide documentation of disability to DAC and meet with a DAC counselor to request special accommodation before classes start. **Sacramento State Disability Access Center (DAC)** offers a wide range of support services and accommodations for students in order to ensure students with disabilities have equal access and opportunity to pursue their educational goals. Working collaboratively with students, faculty, staff and administrators, DAC provides consultation and serves as the information resource on disability related issues to the campus community. DAC is located in Lassen Hall 1008 and can be contacted by phone at (916) 278-6955 (Voice) or (916) 278-7239 (TDD only) or via email at [dac@csus.edu](mailto:dac@csus.edu) Additional information can be found on the DAC website: <https://www.csus.edu/student-affairs/centers-programs/disability-access-center/>

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## Crisis Assistance & Resource Education Support (CARES) Support

If you are experiencing challenges in the area of food and/or stable housing, help is just a click, email or phone call away! Sacramento State offers basic needs support for students who are experiencing challenges in these areas. Please visit our Crisis Assistance & Resource Education Support (CARES) website to learn more about your options and resources available. <https://www.csus.edu/student-affairs/crisis-assistance-resource-education-support/>

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## Title IX

The University requires faculty and staff to report any personal disclosures of sexual misconduct including rape, dating/domestic violence and stalking to the Title IX Coordinator. Students who do not wish to report their experience to me or the Title IX Coordinator may speak to someone confidentially by contacting Student Health and Counseling Services.

Sac State is committed to supporting students and fostering a campus environment free of sexual misconduct and gender-based discrimination. If a student chooses to disclose to a faculty or staff member an experience related to sexual misconduct which includes rape, relationship violence, or stalking, all faculty and staff are obligated to report this disclosure to the university's Title IX Coordinator. Sac State's Title IX Coordinator is Mary Lee Vance. Please email [equalopportunity@csus.edu](mailto:equalopportunity@csus.edu) or (916) 278-5770. Upon receipt of the report, the Title IX Coordinator will contact you to inform you of your rights and options as a survivor and connect you with support resources, including resolution options for holding accountable the person who harmed you. Students who elect not to discuss their experience with the Title IX Coordinator can speak confidentially to the following confidential resources:

Student Health & Counseling Services at The WELL On Campus

Phone Number: 916-278-6461

Website: <https://www.csus.edu/student-life/health-counseling/counseling/>

Campus Confidential Advocate Email: [weave@csus.edu](mailto:weave@csus.edu)

On Campus Phone Number: 916-278-5850 (during business hours)

WEAVE 24/7 Hotline: 916-920-2952

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## Other Resources

The Office of Student Affairs maintains a list of campus resources/centers: <https://www.csus.edu/center/>

Testing Center: <https://www.csus.edu/testing/>

Library: <https://library.csus.edu/>

Student Health and Counseling Services at The WELL: <https://www.csus.edu/shcs/>

Sacramento State Disability Access Center (DAC): <https://www.csus.edu/student-affairs/centers-programs/disability-access-center/>

Peer & Academic Resource Center: <https://www.csus.edu/parc/>



Student Academic Success and Education Equity Programs: <https://www.csus.edu/saseep/>

CHHS Student Success Center: <https://www.csus.edu/college/health-human-services/student-success/>

Reading & Writing Center: <https://www.csus.edu/undergraduate-studies/writing-program/reading-writing-center.html>

SMART Thinking (tutoring resource): <https://www.csus.edu/student-affairs/centers-programs/degrees-project/internal/documents/smarthinking.pdf>

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## Additional Information

For additional information, please review the CSAD Handbooks website:

<https://www.csus.edu/college/health-human-services/communication-sciences-disorders/csad-handbooks.html>

**Zoom/ Online Instruction privacy and relevant rights and responsibilities:**

Any time that a class session is recorded during the COVID-19-related Remote Instruction Period, students will be notified. If students do not want their likeness during class participation included in the recorded class session, they may elect to not participate via video recordings. Recordings will be available for viewing during the Remote Instruction Period subject to the following:

Only students enrolled in the subject class during the Remote Instruction Period may view the recording.

- Students may not post or use the recordings in any other setting (e.g., social media) for any purpose. Students who violate this will be subject to student discipline, up to and including expulsion.
- Federal and California law as well as University policies protecting intellectual property rights and use of instructional materials (including any recordings of class sessions) remain in effect during the Remote Instruction Period.
- If faculty have any plan to use the recording for a different class in the future, the faculty member will need written FERPA consent from those students in the current class who are identifiable in any of the recordings. A FERPA consent form signed by all students in the course will also be needed if the recordings are made available to others beyond the classroom on a nonsecure digital platform.

**Important Tips for Success as an Online Learner**

There are some basic technical skills and requirements that you will need to have to be successful in this online course. If you have difficulties using Canvas, please go to this website: <https://www.csus.edu/information-resources-technology/canvas/canvas-for-students.html>

- ***Begin planning now for private, uninterrupted time in your schedule*** to complete the assignments – preferably in at least one-hour blocks and at least three times a week. It can be easy to fall behind!
- ***Check your email account regularly*** for updated information. We will be using your Saclink email account for communication. Use Saclink e-mail for private messages to the instructor and other students.
- Read directions carefully.
- For online communication, conventions of on-line etiquette ("netiquette"), which include a courtesy to all users, will be observed.

**Attitudes & Technical Skills Required**

You will find that the following attitude will significantly contribute to your success in this online class:

- A positive attitude towards technology
- An open mind towards online education

- Willingness to share your experiences with others
- Strong analytical and critical thinking skills for when you "get stuck"
- Resourcefulness - don't be afraid to click on links and explore and ask questions
- Time management

Online learning requires only basic technical skills:

- Be competent with file management (for example, creating a folder on your desktop, moving files from one location to another, finding a saved file)
- Possess internet navigation skills
- Update your Internet browser
- Send and receive email
- Create and save documents (Word, PowerPoint, Excel or HTML)
- Toggle between two open software applications on your computer
- Copy text from a word processing program and paste them into another program

### Technical Assistance

Seek help when you can't access Canvas or class materials.

- For technical assistance, contact the IRT Help Desk. Visit AIRC 2005 during [open hours](#) to speak with the IRT Service Desk Team, or call (916)278-7337. [IRT website.](#)
- For assistance with course materials, contact your instructor

### Spam and Phishing Scams

- Learn how to stay safe and protect yourself from hackers who may try to access your personal information: [Don't Fall for a Phishing Scam](#)
- Use anti-virus, anti-spyware, and anti-malware software. [Sac State's Software and Tools](#) available for download.
- Use pins and passwords to secure your computer and devices- don't share your password with anyone. Use strong passwords that include a combination of letters and numbers that no one can guess.

### Canvas Student App

Canvas is fully functional on many types of smartphones and tablets. Compatible devices include platforms such as iPhone/iPad/iPod Touch, and Android. However, it is recommended that you do not solely rely on one of these devices to complete your online course work. Access to a computer is still needed for many online activities. Visit the [Mobile section](#) of the [Canvas Guides](#) website for more information.

# Knowledge And Skills Acquisition (KASA) For Certification in Audiology

ASHA Knowledge And Skills Acquisition (KASA) tracking for courses and clinics in the AuD program can be found online in the student's CALIPSO account.

## Scientific and Research Foundations

- The basics of communication sciences (e.g., acoustics, psychoacoustics and neurological processes of speech, language, and hearing)

## Standard II-A: Foundations of Practice

- 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 and use of instrumentation according to manufacturers' specifications and accepted standards
- A6. Standard safety precautions and cleaning/disinfection of equipment in accordance with facility-specific policies and manufacturers' instructions to control for infectious/contagious diseases
- A7. Applications and limitations of specific audiologic assessments and interventions in the context of overall client/patient management
- A13. Principles of research and the application of evidence-based practice (i.e., scientific evidence, clinical expertise, and client/patient perspectives) for accurate and effective clinical decision making
- A14. Assessment of diagnostic efficiency and treatment efficacy through the use of quantitative data (e.g., number of tests, standardized test results) and qualitative data (e.g., standardized outcome measures, client/patient-reported measures)
- A22. Legal and ethical practices, including standards for professional conduct, patient rights, confidentiality, credentialing, and legislative and regulatory mandates

## Standard II-B: Prevention and Screening

- B4. Utilizing instrument(s) (i.e. sound-level meter, dosimeter, etc.) to determine ambient noise levels and providing strategies for reducing noise and reverberation time in educational, occupational, and other settings

## Standard II-C: Audiologic Evaluation

- C2. Obtaining a case history and client/patient narrative
- C3. Obtaining client/patient-reported and/or caregiver-reported measures to assess function

## Standard II-D: Counseling

- D1. Identifying the counseling needs of individuals with hearing impairment based on their narratives and results of client/patient and/or caregiver responses to questionnaires and validation measures

## Standard II-E: Audiologic Rehabilitation Across the Life Span

- 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
- E14. Identifying individuals who are candidates for cochlear implantation and other implantable devices
- 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
- E18. Providing HATS for those requiring access in public and private settings or for those requiring necessary accommodation in the work setting, in accordance with federal and state regulations
- E19. Ensuring compatibility of HATS when used in conjunction with hearing aids, cochlear implants, or other devices and in different use environments
- E20. Providing or referring for consulting services in the installation and operation of multi-user systems in a variety of environments (e.g., theaters, churches, schools)
- E23. Counseling clients/patients to promote the effective use of ear-level sound generators and/or the identification and use of situationally appropriate environmental sounds to minimize their perception of tinnitus in pertinent situations
- E25. Monitoring and assessing the use of ear-level and/or environmental sound generators and the use of adaptive coping strategies to ensure treatment benefit and successful outcome(s)

#### Standard II-F: Pediatric Audiologic (Re)habilitation

- F2. Counseling parents to resolve their concerns and facilitate their decision making regarding early intervention, amplification, education, and related intervention options for children with hearing impairment
- F4. Educating parents regarding optional and optimal modes of communication; educational laws and rights, including 504s, individualized education programs (IEPs), individual family service plans (IFSPs), individual health plans; and so forth
- F5. Selecting age/developmentally appropriate amplification devices and HATS to minimize auditory deprivation and maximize auditory stimulation
- F6. Instructing parents and/or child(ren) regarding the daily use, care, and maintenance of amplification devices and HATS

# ACAE Competencies

## Foundations

The student will be able to:

8. Explain the impact of hearing disorders on communication for newborns, infants, children, adolescents, adults, elderly and individuals with special needs.

## Diagnosis and Management

The student will be able to:

2. Apply audiologic diagnosis, treatment and management principles in diverse settings including, for example, private practice-based, educational and occupational/industrial environments.
6. Formulate a treatment plan and understand the implications of various treatment options.
7. Explain any relevant limitations for diagnosis and treatment and formulate a plan for consultation or referral, as appropriate.
10. Plan and implement treatment and rehabilitation methods used for the management of auditory and vestibular disorders, including all forms of personal amplification and hearing assistance technology.

## Communication

The student will be able to:

1. Communicate effectively, both orally and in written form, with patients, families, caregivers, and other healthcare and service providers.
2. Produce professional written reports on the diagnoses, evaluations and consultations encountered during clinical experiences.
3. Demonstrate empathy and active listening behaviors for patients and families.
4. Demonstrate understanding and respect for all individuals encountered in audiologic practice, regardless of disability, income, gender, sexual orientation, race, religion, culture or national origin.
5. Safeguard the privacy and confidentiality of a patient's medical record information.
6. Maintain accurate and complete upto-date patient records, with clear and appropriate documentation of each patient encounter.
7. Advocate for patient-centered care and shared decision-making by teaching self-advocacy skills to patients and family members.

## Professional responsibilities and values

The student will be able to:

1. Adhere to professional ethics as they relate to the practice of audiology.

2. Demonstrate sensitivity to the psychosocial dynamics of the doctor/ patient relationship.
  4. List professional, legal, public health, and public policy issues as they pertain to the various practice settings and community needs.
  5. Describe and apply practice management strategies and principles that are relevant to audiology.
  6. Discuss the business, personnel management, financial and reimbursement considerations necessary for operating an audiology practice.
  16. Describe and demonstrate understanding of the role and implications of tele-audiology on patient care.
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