



California State University, Sacramento  
 Department of Communication Sciences and Disorders  
GRADUATE (Au.D.) SYLLABUS

Semester/Year: Summer/2022	Course: CSAD 631: Amplification II	Section: 01
Meeting Days: Monday/Wednesday	Meeting Times: 4:30 PM-6:05 PM	Location: Folsom Hall 2204
Instructor: Charles Sanders, Au.D.	Email: csanders@csus.edu	Phone: 916-835-0510 (cell)
Office Location: Zoom	Office Hours/Appointments: Tuesdays/Thursdays 8:00 AM-9:00 AM by appointment (via Zoom)	

**Catalogue Course Description:** 3 units

Advanced study of digital amplification systems, including hearing aids and assistive listening devices. Practical approaches to the fitting of devices are discussed.

**Prerequisites:** Admission to Doctor of Audiology program; CSAD 611, CSAD 612, CSAD 613, CSAD 614, CSAD 621, CSAD 622, CSAD 622L, CSAD 623, CSAD 624

**Term Typically Offered:** Summer only

**Place of Course in Program:**

This course is designed to provide first-year Doctor of Audiology students with an understanding of the practical basis for the clinical use of hearing aids. The classes will progress through the various stages of hearing aid consultation, fitting, verification, and counseling.

<b><u>Sacramento State Graduate Learning Goals (GLG)</u></b>	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

## Course Learning Outcomes:

### **GRADUATE**

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 631 SPECIFIC STUDENT LEARNING OUTCOMES:**

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

1. Describe candidacy and communication needs for patients with hearing loss.
2. Obtain MCL and UCL using clinical procedures.
3. Compare hearing aid manufacturers, hearing aid styles, and electronic/acoustic features.
4. State the steps in the decision-making process for audiologists and patients selecting amplification.
5. Explain physical characteristics of hearing aids that can be modified for patients based on patient needs and common complaints.
6. Identify hearing aid styles, features, and characteristics based on a clinical case report.
7. Troubleshoot hearing aid problems (earmold, devices, electroacoustic analyses) based on a clinical case report.

<b>Course Learning Outcome</b>	<b>Components Indicating Competence</b>	<b>Grades Received</b>
1-7	Midterm and Final Quiz 1-7	
2	Project 1	
3	Project 1	
4	Midterm	
5	Final	
6	Project 2	
7	Project 3	

## Textbooks and Materials:

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

ISBN-13: 978-1597568531

ISBN-10: 1597568538

## Course Requirements/Components:

**Course Format:** Hybrid in person lecture and zoom.

**Remediation:** *If you receive a midterm grade lower than a B, you are required to sign up for an office hour to discuss your exam. If you cannot come during office hours, I will set up a special appointment time with you. I will analyze your exam with you and identify areas where you have had difficulty with specific course learning outcomes/competencies. I will give you specific strategies and suggestions that will help you establish competence and knowledge in these areas.*

**Make-up Policy:** There are no make-up quizzes or exams. Your attendance is required live at every class period to take these quizzes and exams. The syllabus clearly states necessary dates. Your lowest quiz will be dropped. This is provided to you to allow unforeseeable events preventing you from taking a quiz. No make-up exams are given unless there is a documented medical emergency with written proof. Any absences will require a doctor's note. Being late for an exam or quiz will not entitle you to extra time. Please make sure you arrange your schedules to be here on time for the exams. If you miss a short quiz because you are late for class or absent you will not be given another to make up you will lose those points.

**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.

**Scholarly Writing and Publishing Principles:** The course (and this entire program) will follow the Publication Manual of the American Psychological Association for citation (APA Style). You will be provided with those guidelines. It would also serve you better if you were to purchase the APA manual.

**Readings:** The assigned readings are not optional you will be tested on the material. The material will only be covered briefly in class. All readings will have their links posted on Canvas or be list on Cavass for your required Texts. This course requires extensive reading. Information from these readings will be on the exams. Each manufacturer will provide white papers that you will need to read. Be prepared and read all reading assignments prior to class.

**Policy on attendance:** 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. Your attendance is required daily. Assessments will be given each class session. In order to perform well you must be present on the zoom call. 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.

Given the full-time, intensive nature 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.

**Group Discussions:** If you need to speak to your classmate on an issue not pertaining to the lecture please use the chat feature. Refer to the netiquette section on Canvas for more specifics. If it pertains to the class please ask me or address the entire class. Please keep your behavior in class professional.

**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 of the Au.D. Student Handbook).
- 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.

Access the CSUS Library is a requirement of this course. Please become familiar with library access and login information as quickly as possible. This will make your life much easier. Link the CSUS Library to any scholarly search engine you use as this will give you access to required readings of journal articles. Do not pay for any articles. As a CSUS student you should have free access to the library and its resources. The Department has access to the Health Sciences Librarian Rachel Stark. She is available to you for assistance and questions on how to utilize the library effectively. <https://library.csus.edu/directory/rachel-stark>

Access to CANVAS is a requirement of this course. Campus computers are available for student use in many locations. Laptops are available to loan out as needed. Please contact the Department for further information. This course is posted on CANVAS. All lecture material and required readings not in the text book will be available only on CANVAS. I do not recommend printing the lectures until the day before class as the content could possibly change. Grades and statistics for the tests will be posted on CANVAS. Please forward interesting links to me as I will post them for the benefit of the entire class. Required readings will be posted in WORD or PDF format on CANVAS. All submissions must be in WORD or PDF format.

## **Mac PAGES submissions will not be accepted.**

### Course Requirements/Components:

Microsoft Office Suite

- WORD
- EXCEL
- POWER POINT
- Adobe Reader

### **Grading Policy:**

Assessments: All assessment will be given during synchronous class periods. These assessments will include 2 Projects (200), 2 Exams (200), and 7 Quizzes (70).

**Project 1:** You will obtain MCL and UCL information and conduct a hearing aid fitting with REM on another student. (100)

**Project 2:** You will write a comparative analysis of two hearing aid manufacturers. (100)

**Exams:** There will be 1 midterm exam and 1 final exam for the semester. The midterm will include a combination of multiple-choice questions, short answer and essay questions. This class is cumulative. You will need to have a good understanding of the material to continue to the next section. All previous subject matter maybe tested during these exams. All exams are required. (200 points). **There are NO MAKE-UPS.**

**Quizzes:** There will be 7 short quizzes. (70) The quizzes will be given each class period following the seminar. **There are NO MAKE-UPS.** The quizzes will include areas covered in manufacturer presentations.

Letter grades are assigned according to the following scores:

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

## Schedule

<i>Date</i>	<i>Activities</i>	<i>Readings</i>	<i>Assessments</i>
Wednesday June 1	Introduction to Course NOAH Hearing Aid Consultation	Day 1	
Monday June 6	Pre-Behavioral Assessments Hearing Aid Exam and Selection	Day 2 Chapter 15 Behavioral Assessments During Clinical Fittings Criteria for Hearing Aid	
Wednesday June 8	Hearing Aid Fitting Counseling	Day 3 Chapter 18	
Monday June 13	Widex Jodi Sasaki Confirmed		

Wednesday June 15	Verification	Chapter 16 Probe-Microphone Measures: Rational and Procedures	Quiz
Monday June 20	Verification	Aided Testing Functional Gain Speech Noise	
Wednesday June 22	Starkey Susanne Rotan Confirmed	White Papers	Quiz
Monday June 27	Ryan Woods E3 Confirmed	Chapter 17 Probe-Microphone Measures: Clinical Uses	Quiz
Wednesday June 29	Phonak Harvey Sparks Confirmed	White Papers	Quiz
Monday July 4	Independence Day	Campus Closed	
Wednesday July 6	Signia Steve Macko Confirmed	White Papers	
Monday July 11	Oticon 1 Kristi Montgomery Confirmed	Gaeta to Proctor	Quiz
Wednesday July 13	Oticon 2 Kristi Montgomery Confirmed	Gaeta to Proctor	Quiz
Monday July 18	Paul Sanchez DCA Confirmed		
Wednesday July 20	No Class	Begin Project 2	Exam On Canvas
Monday July 25	Ear Molds External ear Canal Conditions		
Wednesday July 27	Hearing Aid Dispensers Examination Prep		
Monday August 1	HAF Project 1		Probe Measures
Wednesday August 3	HAF Project 1		
Monday August 8	HAFU		

<b>Wednesday August 10</b>	HAC Trouble Shoot Retube		
<b>Monday August 15</b>	Final		Case History

## Course Policies/Procedures:

### Online Learning

For additional information, please review the [CSAD Handbooks](https://www.csus.edu/college/health-human-services/communication-sciences-disorders/student-resources.html) website  
<https://www.csus.edu/college/health-human-services/communication-sciences-disorders/student-resources.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 through the [Canvas Student Tour](#).

- ***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. Please see [Guidelines for Online Discussions](#).

### 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.

## Additional Information

### 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.

### 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: <http://www.csus.edu/umannual/student/stu-0100.htm>

**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, shall be reported to the [Office of Student Conduct](#).

## 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. All assignments are to be composed using APA format and style unless otherwise noted.

## 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.

## Inclusivity:

Students in this class are encouraged to be active participants in all aspects of the course, including but not limited to lectures, synchronous and asynchronous activities, discussion posts, etc. Each of us must show respect for each other, as our class represents a diversity of beliefs, backgrounds, and experiences. This enriches all of our learning experiences together. Our individual differences deepen our understanding of one another and the world around us, rather than divide us. In this class, people of all ethnicities, genders and gender identities, religions, ages, sexual orientations, disabilities, socioeconomic backgrounds, regions, and nationalities are strongly encouraged to share their rich array of perspectives and experiences. If you feel your differences may in some way isolate you from our classroom community, or if you have a specific need, please contact the instructor early in the semester. Your instructor will work with you to ensure that you become an active and engaged member of our class and community.

## 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 Office of Services to Students with Disabilities (SSWD), 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 SSWD and meet with a SSWD counselor to request special accommodation before classes start. **Sacramento State Services to Students with Disabilities (SSWD)** 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, SSWD provides consultation and serves as the information resource on disability related issues to the campus community. SSWD 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 [sswd@csus.edu](mailto:sswd@csus.edu).

## Basic Needs Support

If you are experiencing challenges with food, housing, financial or other unique circumstances that are impacting your education, help is just a phone call or email away! The CARES office provides case management support for any enrolled student. Email the CARES office at [cares@csus.edu](mailto:cares@csus.edu) to speak with a case manager about the resources available to you. Check out the [CARES website](#).

## 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/student-affairs/centers-programs/testing-center/>
- Library: <https://library.csus.edu/> for consultation : Rachel Stark, MS, AHIP, [stark@csus.edu](mailto:stark@csus.edu)
- Services to Students with Disabilities: <https://www.csus.edu/student-affairs/centers-programs/services-students-disabilities/>
- Student Health and Counseling Services at The WELL: <https://www.csus.edu/student-life/health-counseling/>
- Student Academic Success and Education Equity Programs: <https://www.csus.edu/student-affairs/retention-academic-success/>
- Crisis Assistance and Resource Education Support (CARES): <https://www.csus.edu/student-affairs/crisis-assistance-resource-education-support/>
- 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>
- Peer & Academic Resource Center: <https://www.csus.edu/student-affairs/centers-programs/peer-academic-resource/>
- SMART Thinking (tutoring resource): <https://www.csus.edu/student-affairs/centers-programs/degrees-project/internal/documents/smarthinking.pdf>

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

## **CSAD 631 Amplification II**

### **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