



California State University, Sacramento

Department of Communication Sciences and Disorders

GRADUATE (AuD) SYLLABUS

Semester/Year: Fall 2023	Course: CSAD 643: Tinnitus	Section: 01
Meeting Days: Mondays and Wednesdays	Meeting Times: 3-4:15 pm	Location: Folsom 2604
Instructor: Elaine Xu, Ph.D.	Email: c.xu@csus.edu	Phone: 916-278-4898
Office Location: Folsom 2306A or Zoom	Office Hours/Appointments: Mondays 1-2 pm, Wednesdays 10 am-noon, or by appointment	

Catalogue Course Description:

Prerequisite(s): Admission to Doctor of Audiology program; CSAD611, CSAD612, CSAD613, CSAD614, CSAD621, CSAD622, CSAD622L, CSAD623, CSAD624, CSAD631, CSAD632.

Term typically offered: Fall Only

Psychological and physiological models of tinnitus and hyperacusis, diagnostic methods, and management.

Place of Course in Program

This course provides students with information related to the theories and origins, causes, diagnosis, and management of tinnitus. Students will also be exposed to the current literature related to these topic areas. This course will focus on the evaluation and management of tinnitus.

Sacramento State Graduate Learning Goals (GLG)	Addressed by this course (Y/N)
Disciplinary knowledge: <i>Master, integrate, and apply disciplinary knowledge and skills to current, practical, and important contexts and situations.</i>	Y
Communication: <i>Communicate key knowledge with clarity and purpose both within the discipline and in broader contexts.</i>	Y
Critical thinking/analysis: <i>Demonstrate the ability to be creative, analytical, and critical thinkers.</i>	Y
Information literacy: <i>Demonstrate the ability to obtain, assess, and analyze information from a myriad of sources.</i>	Y
Professionalism: <i>Demonstrate an understanding of professional integrity.</i>	Y
Intercultural/Global Perspectives: <i>Demonstrate relevant knowledge and application of intercultural and/or global perspectives.</i>	Y
Research: <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 643 SPECIFIC STUDENT LEARNING OUTCOMES:

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

1. Define tinnitus and hyperacusis
2. Describe prior and current models and theories that support the etiology and pathophysiology of tinnitus
3. List common comorbidities associated with tinnitus
4. Differentiate between tinnitus types
5. Explain clinical procedures for obtaining case history and diagnosing tinnitus
6. Discuss contemporary approaches to tinnitus management, including rationale, evidence, and theoretical backgrounds

Course Learning Outcome	Components Indicating Competence
1-6	Exams
2, 3, 6	Research paper
1, 3, 4, 5, 6	Case study presentation
1-6	Resource guide

Textbooks and Materials:

Required Texts

Moller A.R., Langguth, B., DeRidder, D., & Kleinjung, T. (2011). Textbook of Tinnitus. Springer.

Optional Texts

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

Online Resources:

Canvas

Audiology Online - <https://www.audiologyonline.com/>

Audiology Pathologies - <http://www.audsim.com/audpath/>

Course Requirements/Components:

Course Format: In-person 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.

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

Class Attendance: Classroom attendance is mandatory for this course. Students are allowed 2- pre-excused absence (except on exam and presentation days). This absence must be communicated at least 48 hours before the scheduled absence date. Failure to do so or having more than 2- un-excused absence will result in a 2% reduction per occurrence from your grade up to a maximum of 20% total grade deduction.

Class Assignments: Course grades will be based on class participation, exams, research paper, case study presentation, and a resource guide. All written assignments will be submitted in APA format, 5 points will be removed for formatting errors.

Class Participation: Being able to express ideas and speak in a group are important skills that will serve you well throughout your career. Behaviors that count toward participation: asking questions, answering questions, making comments, and constructively disagreeing with something in the text or said in class by me or another student.

Exams: Student will complete three exams on Canvas throughout the semester. No make-up examinations will be given unless there is a documented emergency for which you have written proof.

Research Paper: Students will choose a topic covered in the course (e.g. neuroscience of tinnitus, assessment of hyperacusis, tinnitus retraining therapy, etc.) for this research paper assignment. The assignment should be submitted in APA format.

Case Study Presentation: Students will be assigned a case for a patient with tinnitus. The presentation should include the interview and case history, audiologic evaluation, rationale for selecting treatment, counseling approaches, and a critique of the selected treatment approach. Presentations should last between 10-15 minutes.

Resource Guide: Students will create a table that outlines options for tinnitus management (hearing aids, sound therapy devices, etc.) from various hearing aid and device manufacturers. This table is intended to be used as a resource for clinical rotations.

Wellness Activity (Extra Credit): Mental and physical wellness are incredibly important but are often neglected by graduate students in times of stress. To incentivize you to take care of yourselves, I am offering up to 3 “wellness” points that can be added to an exam of your choosing. Additional details on this policy will be provided on the first day of class.

Grading Policy:

Activity	Points	% of Grade
Class Participation	10	2%
Exam 1	100	20%
Exam 2	100	20%

Exam 3	100	20%
Research Paper	75	15%
Case Study Presentation	75	15%
Resource Guide	40	8%
Total Points Available	500	100%

Letter grades are assigned according to the following scores:

Grading

Grade	Points	Percentage
A	465-500	93-100%
A-	450-464	90-92.99%
B+	435-449	87-89.99%
B	415-434	83-86.99%
B-	400-414	80-82.99%
C+	385-399	77-79.99%
C	365-384	73-76.99%
C-	350-364	70-72.99%
D+	335-349	67-69.99%
D	315-334	63-66.99%
D-	300-314	60-62.99%
F	0-299	< 60%

Course Policies/Procedures:

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.

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. 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. Attendance for clinical practical is outlined in the clinic handbook.

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 for 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. Late submission will result in reduction in 2 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.

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.

TENTATIVE Course Schedule/Outline:

Date	Topic/Class Content	Readings from Moller. (2011). Textbook of Tinnitus unless otherwise noted.	Assignment/Activities	Notes
8/28	Overview of course History of tinnitus	Dietrich, S. (2004). Earliest historic reference of ‘tinnitus’ is controversial. <i>Journal of Laryngology and Otology</i> , 118(7), 487-488.		
8/30	Prevalence Hyperacusis	Møller, Langguth, DeRidder, & Kleinjung- pp. 29-37; 39-45		
9/4	Labor Day Campus Closed			
9/6	Physiological mechanisms	Møller, Langguth, DeRidder, & Kleinjung- pp.51-68; 77-93		

		Kaltenbach, J.A. (2011). Tinnitus: Models and mechanisms. Hearing Research, 276(1-2), 52-60.		
9/11	Neural models of tinnitus Other theories of tinnitus Cultural beliefs	Møller, Langguth, DeRidder, & Kleinjung- pp.95-98; 99-102; 103-112 Møller, Langguth, DeRidder, & Kleinjung- pp. 69-76, 133-144		
9/13	Medical aspects of tinnitus Associated disorders	Møller, Langguth, DeRidder, & Kleinjung- pp. 77-93, 161-169; 149-155 Havia, M., Kentala, E., & Pyykko, I. (2002). Hearing loss and tinnitus in Meniere's disease. Auris Nasus Larynx, 29(2), 115-119.		
9/18	Types of tinnitus	Møller, Langguth, DeRidder, & Kleinjung- pp. 9-12, 13-23, 25-27		
9/20	Review for Exam 1			
9/25	Exam 1		Exam 1	
9/27	Case history	Møller, Langguth, DeRidder, & Kleinjung- pp. 145-147, 215-222; 271-274, 279-284, 387-404		
10/2	Self-assessment scales	Møller, Langguth, DeRidder, & Kleinjung- pp. 387-404		
10/4	Audiologic assessment of tinnitus: Behavioral methods Hyperacusis	Møller, Langguth, DeRidder, & Kleinjung- pp. 285-291, 293-300, 311-316, 317-316, 327-335		
10/9	Audiologic assessment of tinnitus: Electrophysiological methods	Møller, Langguth, DeRidder, & Kleinjung- pp. 409-416, 417-421, 423-427		
10/11	Diagnosis of tinnitus	Møller, Langguth, DeRidder, & Kleinjung- pp. 381-385		
10/16	Management/treatment of tinnitus and hyperacusis	Møller, Langguth, DeRidder, & Kleinjung- pp. 535-556		
10/18	Hearing aids Sound therapy	Møller, Langguth, DeRidder, & Kleinjung- pp. 597-604; 605-612		
10/23	Sound devices, masking	Møller, Langguth, DeRidder, & Kleinjung- pp. 597-604; 605-612 Reavis, K.M., Rothholtz, V.S., Tang, Q., Carroll, J.A.,		

		<p>Djalilian, H., & Zeng, F.G. (2012). Temporary suppression of tinnitus by modulated sounds. <i>Journal of the Association for Research in Otolaryngology</i>, 13(4), 561-571.</p> <p>Hesse, G. (2016). Evidence and evidence gaps in tinnitus therapy. <i>GMS Current Topics in Otorhinolaryngology-Head and Neck Surgery</i>, 15.</p>		
10/25	Review for Exam 2			
10/30	Exam 2		Exam 2	
11/1	Tinnitus retraining therapy (TRT)	<p>Møller, Langguth, DeRidder, & Kleinjung- pp. 575-596</p> <p>Jastreboff, P.J. (2007). Tinnitus retraining therapy. <i>Progress in Brain Research</i>, 166, 415-423.</p>		
11/6	Psychological approaches	Møller, Langguth, DeRidder, & Kleinjung- pp. 557-561, 691-696		
11/8	Hyperacusis	<p>Møller, Langguth, DeRidder, & Kleinjung- pp. 455-461</p> <p>Jüris, L., Andersson, G., Larsen, H.C., & Ekselius, L. (2014). <i>Cognitive behaviour therapy for hyperacusis: A randomized controlled trial. Behavior Research and Therapy</i>, 54, 30-37.</p> <p>Paulin, J., Andersson, L., & Nordin, S. (2016). Characteristics of hyperacusis in the general population. <i>Noise & Health</i>, 18(83), 178-184.</p>		
11/13	Loudness estimation, discomfort	Hiller et al. (2006). Factors influencing tinnitus loudness and annoyance. <i>Archives of Otolaryngology- Head and Neck Surgery</i> , 132(12), 1323-1330.		
11/15	Tinnitus in audiology clinics Tinnitus support groups	<p>Møller, Langguth, DeRidder, & Kleinjung- pp. 563-673</p> <p>Henry et al. (2007). Randomized clinical trial: Group counseling based on tinnitus retraining therapy.</p>		

		<p><i>Journal of Rehabilitation Research and Development</i>, 44(1), 21-32.</p> <p>Beukes, E.W., Allen, P.M., Manchaiah, V., Baguley, D.M., & Andersson, G. (2017). Internet-based intervention for tinnitus: Outcome of a single-group open trial. <i>Journal of the American Academy of Audiology</i>, 28(4), 340-351.</p>		
11/20	Medical management of tinnitus	Møller, Langguth, DeRidder, & Kleinjung- pp. 613-618, 619-624, 625-637, 655-657, 661-662, 663-668		
11/22	Interdisciplinary management of tinnitus	<p>Møller, Langguth, DeRidder, & Kleinjung- pp. 687-689, 691-696, 733-747, 749-752, 753-761</p> <p>Ivansic et al. (2017). Results of an interdisciplinary day care approach for chronic tinnitus treatment: A prospective study introducing the Jena Interdisciplinary Treatment for Tinnitus. <i>Frontiers in Aging Neuroscience</i>, 9, 192.</p>		
11/27	Case Study Presentation		Case Study Presentation	
11/29	Case Study Presentation		Case Study Presentation	
12/4	Review for Exam 3			
12/6	Exam 3		Exam 3	
Final Week			Research Paper Resource Guide	12/15

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: <https://www.csus.edu/umanual/student/stu-100.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. Information for students regarding drop and withdrawal from classes is provided here:

<https://www.csus.edu/academic-affairs/internal/internal/documents/drop-and-withdrawal-policy.pdf>

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:

Services to Students with Disability (SSWD): Sacramento State is committed to ensuring an accessible learning environment where course or instructional content are usable by all students and faculty. If you believe that you

require disability-related academic adjustments for this class, please immediately contact Services for Students with Disabilities (SSWD) to discuss eligibility. A current accommodation letter from SSWD is required before any modifications, above and beyond what is otherwise available for all other students in this class will be provided. 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.

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.

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 to speak with a case manager about the resources available to you. Check out the [CARES website](#).

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.

CSUS Grading Policy

Information for students regarding grading is provided here:

<https://www.csus.edu/umannual/acad/umg05150.htm>

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
- 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 643 Tinnitus

Standard II-A: Foundations of Practice

- A1. Genetics, embryology and development of the auditory and vestibular systems, anatomy and physiology, neuroanatomy and neurophysiology, and pathophysiology of hearing and balance over the life span
- A7. Applications and limitations of specific audiologic assessments and interventions in the context of overall client/patient management
- A9. Implications of biopsychosocial factors in the experience of and adjustment to auditory disorders and other chronic health conditions
- A10. Effects of hearing impairment on educational, vocational, social, and psychological function throughout the life span
- 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)
- A15. Client-centered, behavioral, cognitive, and integrative theories and methods of counseling and their relevance in audiologic rehabilitation
- 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
- A17. Importance, value, and role of interprofessional communication and practice in patient care
- A18. The role, scope of practice, and responsibilities of audiologists and other related professionals

Standard II-B: Prevention and Screening

- B1. Educating the public and those at risk on prevention, potential causes, effects, and treatment of congenital and acquired auditory and vestibular disorders
- B2. Establishing relationships with professionals and community groups to promote hearing wellness for all individuals across the life span

Standard II-C: Audiologic Evaluation

- C1. Gathering, reviewing, and evaluating information from referral sources to facilitate assessment, planning, and identification of potential etiologic factors
- C2. Obtaining a case history and client/patient narrative
- C3. Obtaining client/patient-reported and/or caregiver-reported measures to assess function
- C4. Identifying, describing, and differentiating among disorders of the peripheral and central auditory systems and the vestibular system
- C5. Providing assessments of tinnitus severity and its impact on patients' activities of daily living and quality of life
- C6. Providing assessment of tolerance problems to determine the presence of hyperacusis
- C8. Selecting, performing, and interpreting developmentally appropriate behavioral pure-tone air and bone tests, including extended frequency range when indicated
- C10. Evaluating basic audiologic findings and client/patient needs to determine differential diagnosis and additional procedures to be used

Standard II-D: Counseling

- D2. Providing individual, family, and group counseling as needed based on client/patient and clinical population needs
- D3. Facilitating and enhancing clients'/patients' and their families' understanding of, acceptance of, and adjustment to auditory and vestibular disorders
- D4. Enhancing clients'/patients' acceptance of and adjustment to hearing aids, hearing assistive technologies, and osseointegrated and other implantable devices
- D6. Facilitating patients' acquisition of effective communication and coping skills
- D7. Promoting clients'/patients' self-efficacy beliefs and promoting self-management of communication and related adjustment problems

Standard II-E: Audiologic Rehabilitation Across the Life Span

- E2. Identifying the need for, and providing for assessment of, concomitant cognitive/developmental concerns, sensory-perceptual and motor skills, and other health/medical conditions, as well as participating in interprofessional collaboration to provide comprehensive management and monitoring of all relevant issues
- E3. Responding empathically to clients'/patients' and their families' concerns regarding communication and adjustment difficulties to establish a trusting therapeutic relationship
- E7. Developing and implementing individualized intervention plans based on clients'/patients' preferences, abilities, communication needs and problems, and related adjustment difficulties
- 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
- E22. Counseling clients/patients regarding the audiologic significance of tinnitus and factors that cause or exacerbate tinnitus to resolve misconceptions and alleviate anxiety related to this auditory disorder
- 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
- E24. Counseling clients/patients to facilitate identification and adoption of effective coping strategies to reduce tinnitus-induced stress, concentration difficulties, and sleep disturbances
- 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)

ACAE Competencies

CSAD 643 Tinnitus

Foundation

- 1. Explain basic cell, organ, and body systems, with special emphasis on the auditory and vestibular/balance systems and their interrelationships to the body as a whole over the lifespan, including newborns, infants, children, adolescents, adults, elderly and individuals with special needs.
- 2. Describe the development of normal auditory and communication processes, including the embryology and development of the auditory/vestibular, central nervous and related systems.
- 3. Explain theoretical and applied principles of acoustics, psychoacoustics, non-acoustic stimuli, and electronics as applied to the normal and disordered auditory and vestibular systems.
- 4. Identify the various localized and systemic processes that lead to dysfunction and disease.
- 6. Recognize the mechanisms of the various classes of pharmaceutical agents, their interactions, and safe, effective use for the treatment of disease and conditions affecting the ear, the auditory and vestibular systems, central nervous system and related systems.
- 7. Describe the structures and processes contributing to the development of auditory, vestibular and communication disorders and abnormalities.
- 8. Explain the impact of hearing disorders on communication for newborns, infants, children, adolescents, adults, elderly and individuals with special needs.
- 10. Explain the psychological and neurological bases for auditory and vestibular dysfunction and remediation.
- 11. Describe the science and methods employed, e.g., acoustical and pharmacological, for the preservation of hearing and balance disorders.
- 12. Critically evaluate the research foundation for hearing, balance and communication sciences.

Diagnosis and Management

- 3. Apply critical thinking skills to assess the patient's auditory and vestibular status.
- 4. Prescribe, perform and interpret clinical, laboratory and other diagnostic procedures and tests in consultation with other health professionals as may be required for proper management of the patient.
- 5. Interpret and synthesize the findings from the patient's history, examination and other diagnostic tests and procedures in order to identify the etiology, the pathogenesis of the condition, and the diagnosis.
- 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.
- 12. Characterize and implement evidence-based practice methods and a critical evaluation of the literature to provide optimal outcomes for diagnosis and treatment of auditory and vestibular disorders.
- 13. Integrate all aspects of a patient's life (development, participation, environment and culture), as identified by the International Classification of Functioning (ICF), World Health Organization (WHO) and World Health Assembly, May 2001, into the treatment management of patients with hearing and/or balance disorders (See Explanations).
- 14. Explain the basic concepts of probability and disease susceptibility, and the influence of genetic factors in the maintenance of health and development of disease, as it applies to patients with hearing and/or balance disorders.

Communication

- 2. Produce professional written reports on the diagnoses, evaluations and consultations encountered during clinical experiences.

Professional Responsibilities and Values

- 1. Adhere to professional ethics as they relate to the practice of audiology.
- 3. Describe social, cultural, psychological, and economic forces affecting diverse patient populations.
- 13. Develop and apply effective leadership, writing and verbal presentation skills to advocate for one's own profession and for patients served.