California State University, Sacramento

AURAL REHABILITATION

CSAD661 - 3 units
Summer 2021 (AUD-2)

COURSE FACULTY
Course Instructor:
Folsom Hall office #:
Office Phone:
Office Hours:
E-mail address:

REQUIRED CLASS MEETINGS TIMES
Days and times:
Building: Folsom Room #:

REQUIRED TEXTS
Hull, R. (2013). *Introduction to aural rehabilitation*. Plural Publishing.

OPTIONAL TEXTS

COURSE WEBSITE
https://sacct.csus.edu
SacCT will be used as the learning management site for dissemination of course readings, handouts, slides, assignments, announcements, and tests/quizzes. The course faculty will have materials posted to SacCT at least 48 hours before class.

Instructor Communication and Response Time
Faculty strive to have open communication with students both within and outside of the classroom. Students are encouraged to contact faculty to discuss questions about the course. Responses to telephone or e-mail messages will usually be transmitted within 48 hours during regular working hours. If you do not have a response within this time period, please check your contact methods and resend the message. Faculty will generally respond to student questions received during evenings and weekends once they are back in the office during regular business hours.

GENERAL COURSE INFORMATION

PRE-REQUISITES
Admission to Doctor of Audiology program; CSAD611, CSAD612, CSAD613, CSAD614, CSAD621, CSAD622, CSAD622L, CSAD623, CSAD624, CSAD631, CSAD632, CSAD641, CSAD641L, CSAD642, CSAD643, CSAD651, CSAD652, CSAD653

COURSE DESCRIPTION

Overview

This course addresses the communication needs of adults and older adults with hearing loss. Students will learn the history of audiologic rehabilitation (AR), evidence for AR, clinical outcome measures and tools, and the impact of comorbidities associated with hearing impairment.

Approved Course Description (from CSUS Course Catalog)
Rehabilitative techniques and communication needs for adults and the aging population. Focus on minimizing communication difficulties and managing psychosocial aspects of hearing loss.

WHY IS THIS COURSE IMPORTANT?

In addition to hearing aids, aural rehabilitation is an important aspect of the rehabilitative process. Aural rehabilitation addresses the communication needs, negative effects of hearing loss, and management of technology for patients with hearing loss. Aural rehabilitation should be incorporated into clinical practice to improve patient satisfaction, compliance and success with amplification, and quality of life.

UNIVERSITY LEARNING GOALS

	1 Disciplinary knowledge	2 Communication	3 Critical thinking/analysis	4 Information literacy	5 Professionalism	6 Intercultural/global perspectives	7 Research
Addressed by this course	X	X	X	X	X	X	X

GRADUATE LEARNER OUTCOMES

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.

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

1. Summarize the age-related changes that occur throughout the peripheral and central auditory systems
2. Apply the World Health Organization ICF model to hearing impairment
3. Define “disability” and “handicap” as they relate to hearing impairment
4. Describe the use of hearing aids and hearing assistive technology in the older adult population, including types, considerations, and limitations
5. Summarize the evidence for auditory training in older adults
6. Discuss the role of the audiologist in the counseling and instruction of communication strategies, devices, and psychosocial support in the rehabilitative process
7. List examples of outcome measures for adults and older adults with hearing loss
8. Develop a plan for aural rehabilitation given a case study
9. Discuss the association of hearing loss with other medical conditions and the effects of other sensory impairments on a patient’s quality of life and communication

Graduate Learner Outcome	Component Indicating Competence	Grade(s) Received
1-7,9	Exam (100%)	

4,6,7,8,9	AR Plan	
4,6,9	AR Project	
6	Presentation	

COURSE/CLASS POLICIES

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.

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 necessary for this course. No more than three unexcused absences are allowed. Students are expected to arrive on time as class begins at X:XX am/pm.

Class Assignments
Course grades will be based on three exams, an aural rehabilitation project, three aural rehabilitation plans, and a case study presentation.

Aural Rehabilitation Project
Students will choose a topic (e.g. auditory training via iPhones, troubleshooting hearing aids, hearing aid orientation, resources in the community, communication strategies, etc.) for the Aural Rehabilitation project. Students will create a resource for their selected topic that could be used in the clinic or in off-site placements. The project should include references to reputable and valid sources and be visually appealing.

Aural Rehabilitation Plans
Students will develop three AR plans for patients seen in the clinic (on-campus or off-campus). The patient's audiograms and ages should be different for each plan. One patient must speak English as a second language. Students will develop an AR plan including a comparison of pre- and post- appointment outcomes, communication needs assessment, plans for amplification, and counseling considerations.

Case Study Presentation
Each student will present a case study of a patient with whom he/she has worked with on areas of the rehabilitative process. Case study presentations should be between 10-15 minutes and include the following sections: Background, audiologic evaluation, communication needs, at least one outcome measure, factors unique to the patient, plans for follow-up, and recommendations.

Exams

- **Exam absences**: No make-up examinations will be given unless there is a documented emergency for which you have written proof. Any approved make-up exams will be scheduled at the end of the semester (during finals week) and may be administered in a different format from the original exam.

- **Exam procedures**:

Last name of instructor (Semester Year)
Test arrival/start

Test duration and completion

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/umanual/AcademicHonestyPolicyandProcedures.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 affairs.

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 in accordance with the department's policy.

Accommodations
Inform your instructor of any accommodations needed. 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. 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

Course Requirement Grading

Activity	Points Available
AR Project	100
AR Plans (50 points each x 3)	150
Case study presentation	50
Exam 1	100
Exam 2	100
Final exam	200

TOTAL COURSE POINTS AVAILABLE	700

Overall Percentage Needed

Note: A grade of "B" or higher is required to count toward the minimum number of units needed to advance to candidacy.

Grade	Percentage
A	93-100%
A-	90-92%
B+	87-89%
B	83-86%
B-	80-82%
C+	77-79%
C	73-76%
C-	70-72%
D+	67-69%
D	63-66%
D-	60-62%
F	< 60%

COURSE SCHEDULE OF LECTURE TOPICS AND EXAMS

Date	Topic and Activity or Quiz and Exam	Readings/ Assignment
5/30	Review of anatomy and physiology Presbycusis	
6/4	Effects of aging on the auditory system	Hull- Ch. 16
6/6	Demographics of hearing loss WHO ICF model	Hull- Ch.2
6/6	Handicaps and disabilities Audiologic assessment and speech understanding in the older adult population	Hull- Ch.2-3 Pichora-Fuller, M.K., & Singh, G. (2006). Effects of age on auditory and cognitive processing: Implications for hearing aid fitting and audiologic rehabilitation. *Trends in Amplification*, *10*(1), 29-59. Lee, J.Y. (2015). Aging and speech understanding. *Journal of Audiology and Otology*, *19*(1), 7-13.
6/11	Rehabilitation and intervention Hearing aids	Hull- Ch.4, 13
6/13	Hearing assistive technology	Hull- Ch.4, 14 Chisolm, T.H., Noe, C.M., McArdle, R., & Abrams, H. (2007). Evidence for the

		use of hearing assistive technology by adults: The role of the FM system. *Trends in Amplification*, *11*(2), 73-89.
6/18	**Exam 1**	
6/20	Auditory training	Anderson, S., & Kraus, N. (2013). Auditory training: Evidence for neural plasticity in older adults. *Perspectives in Hearing and Hearing Disorders Research and Diagnosis*, *17*, 37-57.
6/25	Speechreading	Middelweerd, M.J., & Plomp, R. (1987). The effect of speechreading on the speech-reception threshold of sentences in noise. *Journal of the Acoustical Society of America*, *82*(6), 2145-2147. Tye-Murray, N., Sommers, M.S., & Spehar, B. (2007). Audiovisual integration and lipreading abilities of older adults with normal and impaired hearing. *Ear & Hearing*, *28*(5), 656-668.
6/27	Communication strategies	Ciorba, A., Bianchini, C., Pelucchi, S., & Pastore, A. (2012). The impact of hearing loss on the quality of life of elderly adults. *Clinical Interventions in Aging*, *7*, 159-163.
7/2	Counseling	Hull- Ch. 12
7/4	Communication devices	Hull- Ch. 13, 19
7/9	Environmental modifications and strategies	Helfer, K.S., & Wilber, L.A. (1990). Hearing loss, aging, and speech perception in reverberation and noise. *Journal of Speech and Hearing Research*, *33*(1), 149-155.
7/11	Social and emotional factors; psychosocial functioning Patient-centered approaches	Hull- Ch. 17-18 Yorkston, K.M., Bourgeois, M.S., & Baylor, C.R. (2011). Communication and aging. *Physical Medicine and*

		Rehabilitation Clinics of North America, *21*(2), 309-319.
7/16	Outcome measures	Newman, C.W., & Weinstein, B.E. (1988). The Hearing Handicap Inventory for the elderly as a measure of hearing aid benefit. *Ear & Hearing*, *9*(2), 81-85. Cox, R.M., & Alexander, G.C. (1995). The abbreviated profile of hearing aid benefit. *Ear & Hearing*, *16*(2), 176-186. Dillon, H., James, A., & Ginis, J. (1997). Client Oriented Scale of Improvement (COSI) and its relationship to several other measures of benefit and satisfaction provided by hearing aids. *Journal of the American Academy of Audiology*, *8*(1), 27-43.
7/18	Outcome measures	Thoren, E.S., Andersson, G., & Lunner, T. (2012). The use of research questionnaires with hearing impaired adults: Online vs. paper-and-pencil administration. *BMC Ear, Nose & Throat Disorders*, *12*, 12. Weinstein, B.E. (2013). Development and evolution of a self-report measure of hearing handicap. *CREd Library*. Doi: 10.1044/cred-dsa-bts-003.
7/23	Evidence-based practices in AR	Kricos, P.B., & Holmes, A.E. (1996). Efficacy of audiologic rehabilitation for older adults. *Journal of the American Academy of Audiology*, *7*(4), 219-229. Boothroyd, A. (2007). Adult aural rehabilitation: What is it and does it work? *Trends*

		in Amplification, *11*(2), 63-71. Bally, S.J., & Bakke, M.H. (2007). A peer mentor training program for aural rehabilitation. *Trends in Amplification*, *11*(2), 125-131. Saunders, G.H., & Chisolm, T.H. (2015). Connected audiologic rehabilitation: 21st century innovations. *Journal of the American Academy of Audiology*, *26*(9), 768-776.
7/25	Developing AR plans	
7/30	**Exam 2**	
8/1	Cultural and linguistic considerations	Lee, D.J., Carlson, D.L., Lee, H.M., Ray, L.A., & Markides, K.S. (1991). Hearing loss and hearing aid use in Hispanic adults: Results from the Hispanic Health and Nutrition Examination Survey. *American Journal of Public Health*, *81*(11), 1471-1474. Niemen, C.L., Marrone, N., Szanton, S.L., Thorpe, R.J., & Lin, F.R. (2016). Racial/ethnic and socioeconomic disparities in hearing health care among older Americans. *Journal of Aging and Health 28*(1), 68-94.
8/6	Vision	Saunders, G.H., & Echt, K.V. (2007). An overview of dual sensory impairment in older adults: Perspectives for rehabilitation. *Trends in Amplification*, *11*(4), 243-258. Schneider, J., Dunsmore, M., McMahon, C.M., Gopinath, B., Kifley, A., Mitchell, P., Leeder, S.R., & Wang, J.J. (2014). Improving access to

		hearing services for people with low vision: Piloting a "hearing screening and education model" of intervention. *Ear & Hearing*, *35*(4), e153-e161. Wittich, W., Southall, K., & Johnson, A. (2016). Usability of assistive listening devices by older adults with low vision. *Disability and Rehabilitation: Assistive Technology*, *11*(7), 564-571.
8/8	Cognition	Lin et al. (2011). Hearing loss and incident dementia. *Archives of Neurology*, *68*(2), 214-220. Mamo et al. (2017). Hearing care intervention for persons with dementia: A pilot study. *American Journal of General Psychiatry*, *25*(1), 91-101.
8/13	Other medical conditions	Stam, M., Kostense, P.J., Lemke, U., Merkus, P., Smit, J.H., Festen, J.M., & Kramer, S.E. (2014). Comorbidity in adults with hearing difficulties: Which chronic medical conditions are related to hearing impairment? *International Journal of Audiology*, *53*(6), 392-401. McKee, M.M., Stranksy, M.L., & Reichard, A. (2018). Hearing loss and associated medical conditions among individuals 65 years and older. *Disability and Health Journal*, *11*(1), 122-125.
8/15	Hearing assistive technology	Loovis, C.F., Schall, D.G., & Teter, D.L. (1997). The role of assistive devices in the rehabilitation of hearing impairment. *Otolaryngology Clinics of North America*, *30*(5), 803-

		847. Kricos, P.B. (2007). Hearing assistive technology considerations for older individuals with dual sensory loss. *Trends in Amplification*, *11*(4), 273-279.
8/19	Hearing assistive technology	Maidment, D.W., Barker, A.B., Xia, J., & Ferguson, M.A. (2016). Effectiveness of alternative listening devices to conventional hearing aids for adults with hearing loss: A systematic review protocol. *BMJ Open*, *6*(10), e011683. Aldaz, G., Puria, S., & Leifer, L.J. (2016). Smartphone-based system for learning and inferring hearing aid settings. *Journal of the American Academy of Audiology*, *27*(9), 732-749.
8/21	**Final exam**	

Please note that dates, topics, and assignments are subject to change. In the event of a change, you will be given ample notification of the change.