California State University, Sacramento

AUDIOLOGIC EVALUATION

CSAD614 - 3 units
Fall 2019 (AUD-1)

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
Katz, J. (2014). *Handbook of clinical audiology* (7th ed.). Wolters Kluwer.

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

COURSE DESCRIPTION

Overview

This course is designed to provide first-year Doctor of Audiology students with an understanding of the fundamentals of the comprehensive audiologic evaluation, including otoscopy,

immittance, pure-tone audiometry, and speech audiometry. The course will focus on assessment of older children and adults.

Approved Course Description (from CSUS Course Catalog)
Introduction to the purpose, diagnostic use, and procedures for basic clinical tests of auditory function in children and adults. Assessments including pure-tone audiometry, speech audiometry, masking, and immittance measures are discussed. Supervised, hands-on experiences will accompany lecture topics.

WHY IS THIS COURSE IMPORTANT?

This course introduces students to the principles of the audiologic evaluation. The theory behind various test procedures and clinical interpretation of results will be presented. Understanding of these concepts is essential for performing these assessments in next semester's clinical practicum. Practical applications will accompany lectures on each topic.

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**

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. State key parts of a patient case history
2. Describe the purpose of otoscopy
3. Perform otoscopy and report results
4. Explain middle ear status in terms of mass, stiffness, impedance, gradient, etc.
5. Correlate immittance test results with disorders
6. Perform immittance tests (tympanometry, acoustic reflex threshold, decay, etc.)
7. Relate the middle-ear muscle reflex to the interpretation of the acoustic reflex
8. Describe the type, degree, configuration, symmetry, and onset of hearing loss
9. Explain the process of bone conduction and its use in audiometry
10. Describe the basic components, transducers, and procedures used in audiometry to establish thresholds
11. Obtain pure-tone thresholds
12. Perform speech audiometry (speech threshold, word recognition)

Graduate Learner Outcomes	Component Indicating Competence	Grade(s) Received
1,2,4,5,7,8,9,10	Exams (100%)	

1,2,4,5,7,8,9,10	Quizzes (100%)	
2,3,6,8,11,12	Class activity (100%)	

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 ten quizzes, three exams, graded class activities, and one final exam.

Quizzes
Weekly quizzes will be available on SacCT one week prior to the due date. Students are expected to complete the quiz before the scheduled due date. Quizzes are based on assigned reading. Students will have 60 minutes to take the quiz; late submissions will receive a 0.

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**:

  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**
Quizzes (10 points x 10)	100
Class activities	150
Exam (date and material covered)	200
Exam (date and material covered)	200
Final exam (date and material covered)	300
TOTAL COURSE POINTS AVAILABLE	950

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
8/26	Introduction to course Overview of acoustics	Katz- Ch. 1
8/28	Overview of anatomy and physiology of the auditory system	Katz- Ch. 2
9/2	Case history	Katz- Ch. 7
9/4	Examination of the outer ear Otoscopy	Audiology Online. (2012). Otoscopy for audiologists.
9/9	Immittance	Katz- Ch. 8
9/11	Tympanometry	Katz- Ch. 9
9/16	Tympanometry (cont'd) Static immittance	Katz- Ch. 8-9
9/18	Acoustic reflex thresholds	Katz- Ch.10
9/23	Acoustic reflex decay	Katz- Ch. 10
9/25	Wide band reflectance	Rosowski, J.J., Stefelt, S., & Lilly, D. (2013). An overview of wideband immittance measurements techniques and terminiology: You say absorbance, I say reflectance. *Ear & Hearing*, *34*(Suppl 1), 9S-16S
9/30	Review for Exam 1	
10/2	**Exam 1**	
10/7	Sound booths and test environment Calibration	Katz- Ch. 2
10/9	Audiometers	Katz- Ch. 3 Mester, A.F., & Stephens, S.D. (1984). Development of the audiometer and audiometry. *Audiology*, *23*(2), 206-214.
10/14	Pure-tone air conduction	Katz- Ch. 4
10/16	Pure-tone air conduction Pure-tone bone conduction	Katz- Ch. 4
10/21	Pure-tone bone conduction	Katz- Ch. 4
10/23	Masking	Katz- Ch. 6 Munro, K.J., & Agnew, N. (1999). A comparison of inter-aural attenuation with the Etymotic ER-3A insert

		earphone and the Telephonics TDH-39 supra-aural earphone. *British Journal of Audiology*, *33*(4), 259-262.
10/28	Masking	Katz- Ch. 6
10/30	Hearing screening	Smith et al. (2011). Adult hearing screening: What comes next? *International Journal of Audiology*, *50*(9), 610-612.
11/4	Review for Exam 2	
11/6	**Exam 2**	
11/11	Speech audiometry	Katz- Ch. 5 Carhart, R. (1951). Basic principles of speech audiometry. *Acta Otolaryngology*, *40*(1-2), 62-71.
11/13	Threshold tests	Barrenäs, M.L., & Wikström, I. (2000). The influence of hearing and age on speech recognition scores in noise in audiological patients and in the general population. *Ear & Hearing*, *21*(6), 569-577.
11/18	Suprathreshold tests	
11/20	Speech intelligibility index	Kringlebotn, M. (1999). A graphical method for calculating the speech intelligibility index and measuring hearing disability from audiograms. *Scandinavian Audiology*, *28*(3), 151-160.
11/27	Considerations for speech audiometry testing Rollover	Summers, V., & Cord, M.T. (2007). Intelligibility of speech in noise at high presentation levels: Effects of hearing loss and frequency region. *Journal of the Acoustical Society of America*, *122*(2), 1130-1137.
12/2	Functional hearing loss	
12/4	Review for final exam	
12/12	**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.

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