

California State University, Fresno
Department of Communicative Disorders and Deaf Studies

CDDS 128

Observations in Audiology

Prerequisites: CDDS 80, 95; and CDDS 102 or CDDS 121; priority will be given to seniors; co-requisite: CDDS 131.

Purpose of this course:

This course is designed to provide a logical sequence between the instructional components and field work. Students observe various aspects of hearing evaluations and receive several hands-on training opportunities in the identification and assessment of hearing sensitivity in hearing impaired clients.

Textbooks required: Same as those for CDDS 131

Primary Learning Outcomes:

The goals for this course are intended to prepare the students for graduate study in Speech-Language Pathology or Deaf Education. The competent student will successfully attain the specific skills necessary to:

1. Perform hearing screening tests using the State of California guidelines.
2. Perform air and bone conduction hearing sensitivity measurements using pure tones.
3. Read and describe the basic audiological test results.
4. Perform sound level measurements

CDDS 128 Assignments

Assignment	Required # of test subjects/duration	Point Value
Otosopic examinations (3 video and 2 handheld)	5 subjects	25
Listening Check form	Semester long use	10
Sound level meter	1 assignment	15
Audiological screenings	15 subjects	25
Impedence screenings	3 subjects	25
Air and Bone Conduction threshold tests	2 subjects	50

Audiological observations	3 hours minimum	25
Attendance and lab participation		25
	Total points	200

Class assignments and written reports are to be turned in on the appropriate due date. It is essential that you attend all lab sessions.

1. The required three hours of observation of clinical activities should be completed on or before _____.
2. All assignments should be completed and turned in for grading on or before _____.
3. The above schedule and procedures for this course are subject to change in the event of extenuating circumstances.

CDDS 128 Lab Demonstrations and Assignment Schedule

Lab	Activity	Assignment
1	Tour audiology facilities	<ol style="list-style-type: none"> locate equipment know check-out procedures know basic care and handling precautions
2	Otoscopic evaluation	<ol style="list-style-type: none"> observe an otoscopic evaluation do 5 (3 video and 2 hand-held) otoscopic evaluations
3	Basics of audiometer	<ol style="list-style-type: none"> controls and operation observe and do a listening check
4	Sound level measurement	<ol style="list-style-type: none"> learn to use sound level meters complete assignment
5	Pure tone screening	<ol style="list-style-type: none"> observe one cleared to perform one perform 15 hearing screenings
6	Pure tone threshold testing	<ol style="list-style-type: none"> observe one complete one threshold cleared to perform assignment complete AC and BC test thresholds for one subject Get feedback from the instructor Obtain AC and BC thresholds for the second subject

7	Impedance tests	a. observe an impedance screening test b. Complete 3 impedance screenings
8	Speech audiometry	a. observe one speech threshold test b. observe one speech discrimination test

The above schedule and procedures for this course are subject to change in the event of extenuating circumstances.

Required Syllabus Policy Statements

Students with Disabilities: Upon identifying themselves to the instructor and the university, students with disabilities will receive reasonable accommodation for learning and evaluation. For more information, contact Services to Students with Disabilities in the University Center Room 5 (278-2811).

Honor Code: “Members of the CSU Fresno academic community adhere to principles of academic integrity and mutual respect while engaged in university work and related activities.” You should:

- a) understand or seek clarification about expectations for academic integrity in this course (including no cheating, plagiarism and inappropriate collaboration)
- b) neither give nor receive unauthorized aid on examinations or other course work that is used by the instructor as the basis of grading.
- c) take responsibility to monitor academic dishonesty in any form and to report it to the instructor or other appropriate official for action.

Instructors may require students to sign a statement at the end of all exams and assignments that “I have done my own work and have neither given nor received unauthorized assistance on this work.” If you are going to use this statement, include it here.

Cheating and Plagiarism: "Cheating is the actual or attempted practice of fraudulent or deceptive acts for the purpose of improving one's grade or obtaining course credit; such acts also include assisting another student to do so. Typically, such acts occur in relation to examinations. However, it is the intent of this definition that the term 'cheating' not be limited to examination situations only, but that it include any and all actions by a student that are intended to gain an unearned academic advantage by fraudulent or deceptive means. Plagiarism is a specific form of cheating which consists of the misuse of the published and/or unpublished works of others by misrepresenting the material (i.e., their intellectual property) so used as one's own work." Penalties for cheating and plagiarism range from a 0 or F on a particular assignment, through an F for the course, to expulsion from the university. For more information on the University's policy regarding cheating

and plagiarism, refer to the Class Schedule (Legal Notices on Cheating and Plagiarism) or the University Catalog (Policies and Regulations).

Computers: "At California State University, Fresno, computers and communications links to remote resources are recognized as being integral to the education and research experience. Every student is required to have his/her own computer or have other personal access to a workstation (including a modem and a printer) with all the recommended software. The minimum and recommended standards for the workstations and software, which may vary by academic major, are updated periodically and are available from Information Technology Services (<http://www.csufresno.edu/ITS/>) or the University Bookstore. In the curriculum and class assignments, students are presumed to have 24-hour access to a computer workstation and the necessary communication links to the University's information resources."

Drop for serious and compelling reasons:

A request to drop a class for a serious and compelling reason must be completed in pen on an add/drop card and must be approved by the instructor, the department chair, and the University Dean of the Undergraduate Studies. Documentation will be required prior to approval of a drop for serious and compelling reasons. Failing or performing poorly in a class is not an acceptable serious and compelling reason within the university policy, nor is dissatisfaction with the subject matter, class, or instructor. If for some reason, you are not in a position to take this class and would like to drop it, please do so during the regular drop period.

Disruptive Classroom Behavior: "The classroom is a special environment in which students and faculty come together to promote learning and growth. It is essential to this learning environment that respect for the rights of others seeking to learn, respect for the professionalism of the instructor, and the general goals of academic freedom are maintained. ... Differences of viewpoint or concerns should be expressed in terms which are supportive of the learning process, creating an environment in which students and faculty may learn to reason with clarity and compassion, to share of themselves without losing their identities, and to develop and understanding of the community in which they live . . . Student conduct which disrupts the learning process shall not be tolerated and may lead to disciplinary action and/or removal from class."

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Assignments

Procedures to Follow to Complete the Two Audiologic Evaluations

Required for CDDS 128

Do not perform the test if there is evidence of inflammation of the ear or the subject complains of ear aches.

Explain why you are conducting the test (learning activity for your class).

Limitations of the test you are conducting:

You are not testing in a sound treated booth

You are not administering the comprehensive test battery

Give test instructions and familiarize the pure tones to him/her.

Ask if the subject has now or had in the past occurrences of tinnitus.

If yes, use pulsed or FM stimuli and familiarize the signal to the subject.

Ask if he has any questions about the test procedure.

Place the headphones making sure that the red phone is on the right ear and that the blue phone is on the left ear.

Ask if the phones need to be adjusted. And if needed, you make the adjustments. Ask the subject NOT to hold the phones during the test or remove them at the end of the test.

Record the threshold tracking results for each of the following frequencies.

Air Conduction Audiometry

Frequencies to be tested: 250-8000 Hz

Sequence of frequencies to be tested:

First ear: 1000 – 2000 – 4000 – 6000- 8000 – 1000 – 500 – 250 Hz

The other ear: 250 – 500 – 1000 – 2000 – 4000 – 6000 – 8000 Hz

Which ear first? Test the better ear first or if not sure which is better, test the right ear.

Threshold tracking

Test-retest variability

Bone Conduction Audiometry (either left mastoid or right mastoid) Placement

Frequencies (One ear only): 250-500-1000-2000-4000 Hz.

Hearing Threshold levels

Threshold tracking

Unmasked – either left ear or right ear

Audiogram

Plot the AC and BC thresholds on the audiogram.

Indicate whether the reliability of the responses was poor, fair or good.

Fill the identification information on the audiogram, including the name and age of the client.

***Important Note: After completing the threshold testing of one individual, show the teacher your results. Get approval before proceeding with the second evaluation

CDDS 131 Sound Level Assignments

Please use a Sound Level meter (digital) to make the following measurements.

1. Choose any two steady sources of sound. Examples: noise from a leaf blower, automobile with the engine running, car radio, static from a radio or TV when you turn the dial to a frequency between two stations, etc. Use your imagination. Make sure the primary source of noise you are measuring is considerably more prominent (louder) than the background noise. If you have a crowd of people talking all around you, the sound level measurements are not going to have much meaning because you can't be certain what you are measuring or where the source of sound is.
2. Check-out the sound level meter for an hour or so and make your sound level measurements in the campus area.
3. Students could work in groups but make sure each of you is making your own measurements. Select your own unique sound source to measure.
4. Keep the other environmental noises to a minimum – to the extent possible.
5. You can use a tape to measure the distance from the source or guesstimate when it is not practical to use a tape.
6. Measure the sound level in dBA – in a slow mode setting - at two distances from the source, such as, 3 and 6 feet or at 4 and 8 feet from the source or it could be 5 and 10 feet. They have to be multiples. Measuring at 3 feet and 5 feet would not work because 3 and 5 are not multiples. You get the idea. Measure the sound level at 0-degree azimuth (microphone directly facing the sound source). Please make sure that for each of your measurements the meter is at the same height.
7. Please turn the sound level meter off at the end of your measurements.
8. Write down the nature of your sound source, other environmental noises present, the azimuth, the distance and the corresponding dBA readings.
9. You may arrange the data you collected in a tabular form.

Source/distance/azimuth/sound level in dBA

You will have four sets of readings, two for each source.

10. Submit your printed assignment during the class on _____ in the CDDS 131 class.
11. Do not set the sound level meter to capture peak or max. If you select this option, the meter will measure only the maximum sound pressure and not the average dBA reading. Also, do not use the use meter if it is raining or very dusty.

Assignment - Writing Observation Reports

What should be included in the report of the hearing evaluation you observed?

Include ID info about the client, tester, date and time etc. You should use only initials of the client's name to maintain privacy.

Include some of the significant case history details, for instance, family history of hearing loss, history of middle ear infections.

Audiometric tests administered: Procedures, results, interaction between the client and the tester etc.

Exit interview: Test findings, how were they communicated? What was client's reaction? What were the treatment/follow-up recommendations? End the report with your personal observations/comments. Your single spaced typed report should be about a page long.

Note: The clinic policy requires clinicians and observers to dress appropriately for the professional setting.