



Introduction to Audiology

Audiolab Assignment: Hearing Aid Clinic

To complete this assignment, students will need to log into Audiolab. Students and faculty with active Simucase memberships may access Audiolab for free. To request access for you or your students, complete the Faculty Audiolab Access Request Form on the Simucase website.

Note that this document references guidance provided by ASHA and AAA, but does not provide links to their sites. You may wish to provide relevant links to your students prior to assigning this task.

Audiolab Assignment: Hearing Aid Clinic

Instructor Information

Purpose

This assignment presents students with information about hearing devices and practice with performing air- and bone-conduction pure-tone audiometry and interpreting audiograms.

General Information

This assignment is appropriate for students enrolled in an undergraduate Introduction to Audiology course or Aural Rehabilitation course. In addition, this assignment could be used with Doctor of Audiology students at the beginning of their programs. This assignment is designed to be used with the Audiolab Pure Tone Audiometry - Basic module. **Prerequisite skills for this assignment include understanding of the modified Hughson-Westlake technique for audiometric threshold search, how to plot audiometric data on an audiogram, and what it means to have different severities, types, and configurations of hearing loss.**

This assignment can be completed as an in-class or at-home activity. Within the Pure Tone Audiometry - Basic module, students may test five people at the Hearing Aid Clinic. Completing audiometric testing for each patient will take between 15 and 25 minutes, depending on the comfort of the student

performing the “down-10, up-5” (i.e., modified Hughson-Westlake) procedure and manipulating the digital audiometer, as well as role-playing as the examiner and any prior experience with audiometry.

There are many ways to use the Pure-Tone Audiometry - Basic module, including:

- Providing pure-tone audiometry instructions.
- Role-playing as the examiner.
- Asking case history questions.
- Practicing manipulation of audiometer controls.
- Performing unmasked pure-tone air and bone-conduction testing.
- Examining different psychophysical methods, including the method of limits, adaptations of the method of limits, and the method of constant stimuli.
- Using counseling strategies and hearing healthcare guidance.

In-Class Activity or At-Home Activity

Instruct students to log into Audiolab, navigate to the Pure Tone Audiometry - Basic module, and select Hearing Aid Clinic. Have them read the instructions. Students are not able to choose their patient, so instruct them to test the first patient that appears. The student should start by reading the short case history. You may ask them to consider additional questions to ask and have them write these questions down. They may include them in their final report once they complete testing.

Preactivity discussions in class can include:

- The importance of intervention for those with diagnosed hearing impairment.
- The impact of hearing impairment on communication across various listening environments.
- A review of how to perform pure tone air and bone conduction testing using the “down 10, up 5” (modified Hughson-Westlake) technique.
- A review of the standard protocol for pure tone audiometry, including order of testing, which ear to start with, and which frequencies to test.
- Different configurations of hearing impairment and how to describe them.
- Different severities of hearing impairment and how to describe them .
- Different types of hearing impairment and how to describe them.
- Different types of interventions for the various types and severities of hearing impairment.

If students complete this activity at home, they should come to class ready to present about each patient.

Debriefing Questions for In-Class and At-Home Activities

- What are the potential benefits of amplification devices for patients with hearing impairment?
- What factors may influence the patient's decision to adopt amplification as intervention?
- How might you counsel a patient with hearing impairment? How would you introduce available interventions?
- What makes a patient a good candidate for amplification?
- In addition to traditional amplification and cochlear implants, what else is available to support hearing in various environments (e.g., communication strategies, assistive listening devices)?
- How does noise impact listening to speech in your second language? How can you appropriately counsel your patient?
- Introduce the Veterans Affairs to students and provide basic information about hearing healthcare provided to US Veterans.

- What problem may arise with using a traditional three-frequency PTA to describe severity/degree of hearing impairment?

Other Instruction (optional)

You may wish to remind students that as a clinician, you should always try to treat the whole person. As an audiologist, you are diagnosing and treating auditory function and trying to improve a person's ability to communicate, connect with others, and fully engage in all aspects of their life. Invest in building rapport with your patient to better understand their communication challenges and what they want and need from your services. Simple conversations and case histories allow you to begin this process, but you should also listen carefully and use valid and reliable questionnaires.

Awarding Clinical Clock Hours

Students may earn 60 minutes of clinical clock hours in the area of hearing evaluation for completing the Auditory Wellness patient set. Faculty should follow ASHA guidelines regarding clinical simulation when awarding hours for audiology and speech-language pathology students.

Citation

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