



Introduction to Audiology

Audiolab Assignment: Auditory Wellness 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: Introduction to Pure-Tone Audiometry

Instructor Information

Purpose

This assignment presents students with information about and practice with performing pure-tone audiometry.

General Information

This assignment is appropriate for students enrolled in an undergraduate Introduction to Audiology course or Aural Rehabilitation course. This assignment is also appropriate for graduate speech-language pathology students who are completing clinical clock hours for hearing. 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. **No prerequisite skills are required for this assignment; however, a basic understanding of psychophysical testing methods (e.g., method of limits) and a basic knowledge of hearing healthcare and the importance of hearing for oral communication will facilitate the active learning activity.**

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 Auditory Wellness 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. The amount of time for the student to complete testing will also depend on any prior experience that student has 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.
- Manipulation of audiometer controls.
- Using unmasked pure-tone air and bone conduction testing.
- Trying different psychophysical methods, including the method of limits (and adaptations of the method of limits) and the method of constant stimuli.
- Practicing 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 Auditory Wellness 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 regular hearing evaluations in adulthood.
- The importance of early identification of hearing loss.
- Test frequencies and order of frequency presentation.
- How to determine which ear to test first.
- Typical threshold search procedures (i.e., “down-10, up-5” procedure).
- Differences between air- and bone-conduction testing.
- The importance of obtaining a comprehensive case history.

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

- After reading the case history, were there additional questions you would have liked to ask your patient? What additional questions would you have asked and why?
- Did you test 125 Hz? Why or why not?
- More advanced students only: After you completed air- and bone-conduction testing, what additional tests, if any, would you want to conduct?
- Based on your patient’s air-conduction thresholds, was it important to include bone-conduction testing? Why or why not?
- How did you make your decision regarding how to best describe your patient’s hearing status? Did you need both air- and bone-conduction to make the determination?
- How would you counsel each patient?

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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