

Abstract Submitted
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Enhancing a Physics Lab to Meet a Changing Demographic

CHARLES ALLISON, Texas A&M University - Kingsville, Dept. of Physics & Geosciences — The physics of sound and acoustics course has expanded in size and changed in student make-up to become dominated by communication sciences and disorders (CSDO) majors. The course content offers foundational material directly relevant to CSDO, especially in the arena of audiology. The lab experiments have stayed firmly routed in the basic physics and needed some enhancement. In Spring, 2014, the opportunity arose to work with a university experiment, FIG, where a class and lab were dedicated to a specific group of CSDO freshmen and it was decided to create a modified lab curriculum creating a larger experiment done over multiple labs to create an audiology test. Students were to design a semi-automated test using the lab's new digital audio workstation (DAW) equipment and incorporate this test audio into a video to guide an operator in filling out an audiology chart based on responses from the test subject. Results were mixed but the overall was positive with several students who were initially unaware of audiology career paths deciding to consider it for their own path. The approach proved worthy of being adapted into the standard course if broken into a series of normal lab experiments and offered as options to some of the standard experiments.

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