

The Doppler Effect

Below are some examples of opening statements found in physics texts in sections on the Doppler Effect. They show generalizations that don't take into consideration the acoustical experience of the deaf physics student. These examples are fine to use in the mainstream class, but be sure to include a visual example as well. I chose to use the bug-in-the-pond example in the demonstration lesson, for example. I could have used another visual example in addition to illustrations involving whistles, horns, and other sounds.

"Everyone has had the experience of hearing a train go by blowing its whistle, or a car with its horn going." R.L. Lehrman and C. Swartz, *Foundations of Physics*.

"We are all familiar with the increase in pitch of a sound when its source approaches us...And the decrease in pitch when the source recedes from us." A. Beiser, *Concepts of Modern Physics*

"Everyone has heard the change in pitch of an automobile horn that occurs when the listener, or the horn, or both are in motion relative to the medium (air) through which the sound is propagated." R.T. Weidner, *Physics*

"Most of us have heard the change in pitch of a train whistle as we were standing at a grade crossing and watching the train pass." F. Blatt, *Principles of Physics*

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A Demonstration Lecture in Physics for Deaf and Hard-of-Hearing Students in
Mainstream Settings

"The Doppler Effect"

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