PHYS 1406: "Physics of sound and music" Spring 2022

Welcome to "Physics of sound and music"!

Please read the Course Syllabus and Course Calendar for the upcoming semester. These are posted on the course website: https://josephromano.github.io/PHYS1406/ Relevant information will also be posted via Blackboard.

Given the recent spike in COVID-19 cases due to the omicron variant, the first 3 weeks of class will be held remotely, via zoom. But this is only a temporary change. After that time, classes will resume in normal face-to-face mode in SC 010.

In this class, we will discuss principles of sound, acoustics, music, and musical instruments. We will also have a few performances by guest musicians and student volunteers from class.

You do not have to have a background in physics and music for this course. A high school background in science and math should be sufficient.

The following two books are required for the course:

Physics 1406 Physics of Sound and Music Course Guide and Laboratory Manual, by Prof. Walter Borst, which includes the lab manual and is a comprehensive collection of notes, sample homework problems, exams, etc. This should be available at the bookstore in the Student Union Building.

How Music Works: The Science and Psychology of Beautiful Sounds, from Beethoven to the Beatles and Beyond, by John Powell. Unfortunately, I didn't request it in time to have it available at the bookstore. But you can get it from e.g., amazon.com. A new paperback version is \$16.49, while the kindle version is only \$5.99.

The lab sections of the course start on the week of Feb 7th (see the Course Calendar for details). The lab assignments are part of the required *PHYS 1406 Course Guide and Laboratory Manual* for the class.

I am looking forward to seeing you!