

**Physics 1100**  
**Acoustics, Fall 2011**

**Instructor:** Dr. David Murdock, Bruner 221, [372]-3044 (Office)

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**Open office hours!**

**Meeting Time:** TTh, 5:30–7:50pm, Br 224. This can be changed to a time earlier in the day. But it probably won't be.

**Textbook:** There will be no official textbook; I will supplement the lectures with *lots* of handouts.

**Prerequisites:** A little high school algebra will be helpful, but the mathematical level of the class will be kept low.

**Course requirements:** 4 or 5 (fairly short) problem sets. One or two short reports on some topic in acoustics. Three exams.

**Grading:** 40% of grade based on the exams. 30% from the problem sets. 15% from the project. 15% for attendance. For the sake of completeness, I will quote percentages for which I will *guarantee* the following grades:

A: 80%–100%,   B: 65%–80%,   C: 50%–65%,   D: 30%–50%.

but I will adjust the cutoffs downward if I see fit!

**Attendance:** Since material will come from the lectures attendance is strongly encouraged! Attendance at videos will probably be required.

**Topics:** The basic physics of vibrations and waves; sound waves. Human hearing. Musical scales. Musical instruments. Sound amplification and recording. Acoustics of concert halls.

**The Point of All This:** To gain an appreciation of the application of scientific principles to the production of sound, mainly through music. The course will *generally* be non-technical but this can be changed if all the students have sufficient math background.

Students with a disability requiring accommodations should contact the Office of Disability Services (ODS). An Accommodation Request (AR) should be completed as soon as possible. The ODS is located in the Roaden University Center, Room 112; phone 372-6119.

Should normal classroom activities be disrupted by a flu outbreak, students will be given new instructions for the course via E-mail.