Acoustics (ACS) 097S
First Year Seminar:
Musical and Noisy Acoustics
Fall 2002

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WWW: http://www.acs.psu.edu/users/sparrow/homepage.html

Acoustics Program Lab TA: Nathan Naluai, nnaluai@psu.edu

Brief description:

Sound waves surround us, and this seminar introduces the basic concepts of acoustics, the science and engineering of sounds. Examples are primarily taken from the areas of musical acoustics and noise control, but demonstrations also will be given in the related areas of transducers, concert hall acoustics, underwater acoustics, ultrasound, and bioacoustics. Students will perform lab experiments, make field tests, and perform computer simulations related to musical and noisy acoustics. Faculty from the Graduate Program in Acoustics and the Applied Research Laboratory will make guest appearances to discuss what they do in acoustical engineering. On-campus technical tours are planned. As a bonus, all students will receive sound level meters for future use.

Goals:

§ Learn about the great wide world of acoustics: from music to noise and everything in between.

§ Learn skills and habits helpful for a successful career in engineering and science.

§ Learn about Penn State.

Class prerequisites: High school math and high school physics.

Readings: Will be provided or put on reserve in the engineering library.
Web Site: To contain animations, supplementary materials, etc:

http://www.acs.psu.edu/users/sparrow/classes/fall2002acs097S.html

Schedule:

Class usually meets in the Hammond Building, Room 307, TuTh from 11:15 to 12:30 PM from October 17 until November 19, 2002. Sometimes the class will meet in room 314 Hammond, and this will be clearly posted on the door of room 307. The purpose of this unusual schedule is to get this entire FYS in after fall break but before Thanksgiving break. Special technical tours are planned, and those classes might be rescheduled. Stay tuned . . .

Grading:

This is intended to be a low-stress class with correspondingly low-stress assignments. However, grades are given, and they are based on

A. mini-lab reports (20 % in total)
B. discussions and active participation in class (20 %)
C. written reviews of events going on around campus (30 %)
D. final write up of noise measurements (30 %)

Grades will be assigned as

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Be on time:

Don’t be late with assignments: Unexcused late assignments will have 20% of face value deducted each day the assignment is late.

Class attendance is expected; if you can’t attend please let Sparrow know in advance.

Keep all of your assignments until after the semester is over. In the unlikely case that Sparrow’s computer dies, you would be asked to produce all of your graded assignments so that your grade can be assigned.
This publication is available in alternative media on request.

In order to facilitate learning of any students with disabilities, including those with hearing or sight loss, it is necessary for those students to inform the instructors so that alternative methods of instruction/evaluation can be provided.

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