

PHYS170 Professional Physics Seminar  
Fall 2006  
Wed 12-1 (PHY 0405)  
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## SYLLABUS

Phys 170 is intended primarily for freshman physics majors (others are welcome) to acquaint you with current areas of physics research. We will, however, discuss the involvement of physicists in all of the world's problems. Physics is a way of thinking about the world that has been found to be useful in every area of human activity, and most of you will not choose to make a career of research.

We can, however, do whatever we want with this hour each week. We have an opportunity to talk about the things you, as a physicist, will be expected to have opinions about, but which are unlikely to come up in your regular courses: scientific ethics, pseudoscience, social responsibility of scientists, and why the world is the way it is. That includes the eternal conflict between science and religion.

**ATTENDANCE: You are expected to attend every class.** Classes will be in a discussion format. To make it work you have to be there. **If something comes up that will prevent you from being at class, I expect to hear from you by email.**

**WHAT'S NEW:** You are expected to go to <http://www.bobpark.org> and subscribe to the weekly news/editorial.

**ASSIGNMENT:** The standing assignment for the entire class is to bring a news story from the past week, preferably taken from the Washington Post, or the New York Times, involving science (particularly physics) and society. I am not looking for stories about science so much as stories about national security, health, the economy, or environment that cannot be sensibly resolved without science.

**DISCUSSION LEADERS:** One or more members of the class will be assigned each week to present their news story and lead the discussion. The presentation should include whatever background information is needed to understand it..

**COMMUNICATING:** Success in physics, as in all fields, depends critically on your ability to communicate your thoughts to others. You are fortunate that your professor is old and his hearing is failing. You must therefore learn to speak loudly, which may be the most important skill you will pick up in college.

**GRADES:** This will not be the most challenging course you're taking, but don't take it too lightly.