Introduce self – office is 4219 Chamberlin, but not there much – text or email!


Course page: physics.wisc.edu/undergrads/courses/current/107

Handouts:
• Physics Preconceptions quiz – answer honestly!
• ‘Classical or Modern?’ quiz
• Draft syllabus

What are people into?
What do you want to get from this course?
What's a good way to do that?

Administrative stuff
• Discussion section on Monday is optional, but helpful for learning material and doing homework in groups with me present
• Homework due at start of class on Wednesdays
• Four Tests in class, each counts 25% of total test score (“final” is just another test). Schedule subject to change as we go.
  ◦ Wed, Sep 28
  ◦ Wed, Oct 26
  ◦ Wed, Nov 23???
  ◦ Thu, Dec 22.
• A term project is due in class on Wed, December 15. The format is very wide open, get your topic/plan approved by me before you get started. It could be a paper, an experiment, something original that YOU have created.
• Grading:
  ◦ Tests 60%  (15% each)
  ◦ Homework 15%
  ◦ Term Project 15%
  ◦ Lecture/Discussion Participation 10%

Expectations
• KEEP UP WITH COURSE!
• Read assigned text BEFORE lecture
• DO HOMEWORK
• Study with friends!
• ASK ME if you have questions!! TELL ME what you'd like to learn!
• Identify examples of physics (classical and modern) in life around you every day
What is Physics? True or False:

• Physics is a religion
  ◦ 01-01-hawking-god-created-integers.jpg
  ◦ 01-02-hawking-grand-design.jpg
• Physics is an art
  ◦ 01-03-kim-dylla-stellarator-painting.jpg
• Physics is a branch of philosophy
  ◦ 01-04-newton-principia.jpg
• Physics is the most fundamental science
• Physics requires math (and if so, whose math?)
  ◦ throw a ball – there's physics, where's the math?

Look at physics around you, every day

• My gas grill at 10F outside – why did the gas stop at full flame?
  ◦ 01-05-my-grill.jpg
• Bicycle cable in winter – why so stiff?
• Motorcycle racer – how can he remain upright at such a lean?
  ◦ 01-06-valentino-rossi-catalunya.jpg

Lecture Demos
1. LISTEN to the setup – what's going on?
2. PREDICT what will happen (you learn more if you're wrong!)
3. OBSERVE what happens
4. ANALYZE what happened (was your prediction correct? Partially?)

Assignment:
• Do the two quizzes for your own review at end of the semester
• Play in the Physics Museum (ongoing assignment!)
• Read Chapter 1