



Bill Ashmanskas <bill.ashmanskas@gmail.com>

PHYS364-401-2010C: physics 364

William Ashmanskas <ashmansk@hep.upenn.edu>

Sat, Sep 4, 2010 at 7:44 PM

Dear Class,

I am Bill Ashmanskas, the instructor for Physics 364 this fall. I look forward to meeting you in the first lecture on Wednesday, September 8, at 2pm. I hope to guide you through a fun and useful course in which you will learn to understand and to build a wide range of commonly used analog and digital electronic circuits. I will try to teach you things that you are likely to find relevant if you build experiments in a lab, if you enjoy tinkering on your own workbench, or even if you just like to understand how the gadgets that surround us work.

The first lab session will be Monday, September 13, at 5pm. As currently scheduled, there will be 12 (evening) labs and about twice as many (afternoon) lectures. I feel strongly that you will learn far more from time in the lab, building and debugging circuits and working directly with me, Jose, and your fellow students, than you will from watching me lecture at a blackboard. So I would like you to consider seriously the possibility of replacing the Wednesday afternoon lectures with Thursday evening labs. If you agree (to be decided by consensus when we meet in person), we would hold labs on Monday and Thursday evenings and lectures only on Monday afternoons. Please keep this possibility open as you fill in the details of your schedules for the semester.

To keep the labs and lectures as productive for you as possible, there will be weekly reading assignments that will connect closely with the labs. I was not able to find any textbook that looks to me to be a worthwhile investment of O(\$100) of your money. (Once the third edition of Horowitz & Hill finally exists, I expect that it will be worth buying.) So instead I acquired a dozen copies of the first (1991) edition of D.V. Bugg's electronics textbook, ISBN 9780750301107, which I will loan to you for the semester when we first meet.

In case you'd like to get a head start, I have put the first week's reading material (and a bit more) in the "Documents" section of the Physics 364 "Blackboard" web site, accessible from www.library.upenn.edu under "Courseware / Blackboard." Before lecture on Monday, September 13, you will need to have read pages 1-20 of Horowitz and Hill and from Bugg's text chapter 1, chapter 2, and sections 9.1-9.5. Read the Horowitz and Hill pages first, as they are a much more concise presentation of essentially the same material.

I look forward to meeting you next week. If you have questions, please don't hesitate to email me at ashmansk@hep.upenn.edu.

Take care,
Bill
