

Astronomy 3, *The Physical Universe*

Spring 2007

And you may ask yourself, well, how did I get here?
Talking Heads, "Once in a Lifetime"

- The course meets Mondays, Wednesdays, and Fridays 10:30–11:20 AM, in Science Center 128.
- We will start and end class on time
- Please let me know in advance if you will miss a particular class.

You contacting me:

Eric Jensen

E-mail: ejensen1@swarthmore.edu

Office: Science Center 123, x8249 (or 610-328-8249)

Home: 610-604-0792, between 8:00 AM and 10:00 PM

Office hours: 1:30–4:00 PM Wednesdays, or any day right after class, or by appointment. Also, feel free to stop by my office any time; if I'm in my office, my door is generally open.

E-mail is a good way to contact me; I'm usually logged in during the day (and often in the evening), and I try to respond to e-mail relatively quickly. I check my e-mail much more often than my voice mail.

Me contacting you:

I expect you to read your e-mail at least once a day. While I will never issue an assignment or announce a quiz solely by e-mail, I may clarify homework problems or lab assignments, announce extra or changed office hours, etc., and it will definitely be to your advantage to keep up with your e-mail. If you prefer to use a different e-mail address than your standard campus address, please send me an e-mail message to that effect.

Course materials:

- Texts:
 - *An Introduction to Galaxies and Cosmology*, Jones and Lambourne (Cambridge University Press 2003)
 - *Six Ideas That Shaped Physics, Unit R: The Laws of Physics are Frame-Independent*, Moore, (McGraw-Hill 2002)
 - These texts will be supplemented with various readings on-line or handed out in class. There will also be several more textbook-like books on reserve in Cornell library, and I will often list supplementary reading from these if you want reinforcement of what we cover in class.
- You will also find it useful to have a scientific calculator for the lab exercises and homework.

Course web page:

There is a course web page at on Blackboard (<http://blackboard.swarthmore.edu/>) that will contain versions of most of the handouts and assignments given in class, as well as links to other sites of interest, updated information about course scheduling, links to images shown in class, and a form for you to send me anonymous feedback on the course. If you lose a copy of something handed out in class, you will probably be able to find it here (though of course you should feel free to ask me for another copy if you can't find it).

Labs:

For astronomy, the “lab” is the sky, so some of our lab work will be done outside, at night; given the difficulty of doing real cosmological observations from Swarthmore, there will be more indoor lab work than outdoor. Either way, in the interest of ease of scheduling, we will do the work at night. You should have already signed up for a lab section that meets either Wednesday or Thursday evenings 8:00–11:00 PM, in Science Center 187. We will do six labs, and labs will meet every **other** week, not every week; the first lab is the *third* week of classes (February 7 and 8). We will meet on our scheduled nights regardless of the weather. Our lab nights are listed on the course schedule.

Instructions for each lab will be handed out in class the week before the lab, and they will include instructions for the lab write-up as well.

Late or missing assignments:

If you miss a quiz, exam, or lab without making prior arrangements with me, you will receive a zero.

Any work that is turned in late will be docked 5% of the total points for that assignment per day (or fraction thereof, including weekend days) that it is late. For example, on a homework assignment that has 100 possible points and on which you score a 90, you will receive a 90 if it is turned in on time, 85 if it is one day late, 80 if it is two days late, etc. Work that is more than a week late will receive a flat 50% credit (assuming it is reasonably well done) but I will not make detailed comments on it. I reserve the right not to accept very late work, especially if I have already handed out solutions or discussed the problems in detail in class.

I will be firm and consistent about this policy. Late work, like everything else, has consequences, and since you know the consequences in advance you can act accordingly when trying to juggle a heavy workload. However, if you become extremely ill, suffer a death in the family, or something of similar magnitude occurs, please let me know as soon as possible and we can work out appropriate arrangements for you to complete your work. The sooner you let me know of a problem, the greater the chance that we can work out a solution. In particular, you must do everything you can to inform me of any problem *before the assignment is due*.

Grading:

Each Friday of the semester, there will either be some homework problems due or (roughly every three weeks) there will be an announced, in-class exam. I will not always check the homework problems in detail; for some problems I will simply give you full credit if you worked the problem carefully (whether or not you got it exactly right). *It will then be up to you to make sure you understand the problem, either from class discussion or from solutions that I will post on the course web page.*

The grading breakdown will be as follows:

Homework	35% (or 25%)*
Two in-class exams	15%
Labs and shorter observing exercises	25%
Final exam	25% (or 35%)*

* I will calculate your final score both with 35% homework/25% final and with 25% homework/35% final and give you the higher of the two scores.

Academic honesty:

When working on homework assignments and labs, I encourage you to work together (after first attempting to work through the problems yourself). However, once you have talked over a problem and decided how to do it, you must write up the solutions by yourself, in your own words. You should do this while sitting by yourself; when working with a partner or a group as you write, it's too easy to inadvertently copy someone else's phrasing or logic. Simply put, any work you turn in must be your own, and any time you make use of another's ideas or words you must cite that source properly. For more details, please see the College Bulletin. If you have *any* questions about what is or is not appropriate, please let me know and I'm glad to talk to you more about it.