Astronomy 1109: Birth of the Universe  
Spring 2009  
Tues/Thurs 2:55 – 4:10 p.m., 102 Rockefeller Hall  
http://www.astro.cornell.edu/academics/courses/astro1109/  

Instructor: Ann Martin (graduate student in astronomy)  
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Office Officially: Space Sciences 514 (come here for office hours and appointments)  
Office Unofficially: Space Sciences 523 (if you need to find me, look here)  
Office Phone: (607)-255-9852  
Office Hours: Mondays, 9-11 a.m. and 12-1 p.m.; Tuesdays 4:30 – 5:30 p.m. (after class)  

Texts:  
- *Einstein's Dreams* by Alan Lightman  
- *The State of the Universe* by Pedro Ferreira  
- *Dark Cosmos* by Dan Hooper  
- Handbook: *Easy Writer: A Pocket Reference* by Andrea A. Lunsford. 3rd edition. (if you already own a handbook that you would like to use, please see me to make sure it includes everything you’ll need!)  

Course Description: The study of the origin, evolution, and ultimate fate of the Universe (known as cosmology) is riddled with issues that are not yet fully understood. In this course, we will investigate the current understanding of cosmology from the perspective of science newcomers who want to become better acquainted with the Universe. We will not use mathematical methods; rather, we will take a creative and philosophical approach to our exploration. Texts and stories by popular authors such as Dan Hooper and Alan Lightman will help us investigate some recent burning cosmological questions: What happened after the Big Bang? What exactly are dark matter and dark energy? What does the future hold?  

Assignments: There will be 4 short papers (~2-3 pages) and 3 longer papers (~4-8 pages), due throughout the semester. Drafts will be written and discussed for two of the essays, and we will spend time in class working on each of the assignments. There will be no written tests or final exam. We will have in-class reading discussions nearly every day that will count toward your attendance & participation grade; additionally, we will have peer review sessions and individual conferences that will count toward this portion of your grade.  

Attendance: 20% of your grade will be determined by your participation in reading discussions, peer reviews, in-class exercises and individual conferences, as attendance is crucial in this course. Chronic lateness (i.e. more than half of classes) will result in a reduction of your attendance grade. If you are concerned about missing class, come talk to me.  

Guidelines for Written Work:  
- All written assignments must be submitted as hardcopies at the beginning of class. No e-mailed papers will be accepted.  
- Use a word processor (no handwriting please, except for stuff we work on in class!)  
- Use 12 pt font with **double spacing**, and standard 1 inch margins, so there is room for comments.  
- Proofread your drafts before bringing them to class  
- Respect the page limits! (I will take off points for overly-long essays. Being concise is part of
the challenge!

- Be sure to cite & acknowledge any source that you use, following MLA format (we will go over this in class, but you’ll be responsible for using a handbook. You are always welcome to come to office hours or schedule a meeting with me if you have questions!)
- Know that you can always come see me to discuss work at any stage in the writing process!
- And you can also stop by Cornell’s Writing Walk-In Service, where tutors can help you with your writing (no appointment needed): [http://www.arts.cornell.edu/Knight_institute/walkin/walkin.htm](http://www.arts.cornell.edu/Knight_institute/walkin/walkin.htm)

**Late Papers & Extensions:** There will be no extensions for drafts due on peer review day. Peer review doesn’t work if you don’t bring a paper! Otherwise, you may get an extension on any ONE assignment, but only if you ask for the extension at least 24 hours before the assignment is due. For every business day that passes between when a paper is due and when you hand it in, you will lose 10% of your grade.

**Shared Writing:** Much of our work in this course is based on peer review and discussion of the writing process, so writing that is submitted in this course will sometimes be shared with the class or within groups.

**Grading:**
- 20% attendance and participation (10% daily class a&p, 5% peer review participation, 5% conference attendance)
- 5% each for Essay 1 and Essay 6
- 10% each for Essay 3 and Essay 4
- 15% for each for Essay 2 and Essay 5
- 20% for Essay 7, including preparatory work

**Official Stuff**
This instructor respects and upholds University policies and regulations pertaining to the observation of religious holidays; assistance available to the physically handicapped, visually and/or hearing impaired student; plagiarism; sexual harassment; and racial or ethnic discrimination. All students are advised to become familiar with the respective University regulations and are encouraged to bring any questions or concerns to the attention of the instructor.

Students with disabilities: In compliance with the Cornell University policy and equal access laws, I am available to discuss appropriate academic accommodations that may be required for students with disabilities. Requests for academic accommodations are to be made during the first three weeks of the semester, except in unusual circumstances, so that arrangements can be made. Students are encouraged to register with Student Disability Services to verify their eligibility for appropriate accommodations.

Academic Integrity: All the work you submit in this course must have been written for this course and not another and must originate with you in form and content with all contributory sources fully and specifically acknowledged. Make yourself familiar with Cornell’s Academic Integrity Code, available online at: [http://cuinfo.cornell.edu/Academic/AIC.html](http://cuinfo.cornell.edu/Academic/AIC.html). The code, together with a guide to *Acknowledging the Work of Others*, can be downloaded from: [http://theuniversityfaculty.cornell.edu/policies/pol_main.html](http://theuniversityfaculty.cornell.edu/policies/pol_main.html). In this course, the normal penalty for a violation of the code is an “F” for the term.