

PHYSICS 314: Survey of Astronomy: Cosmology and Extragalactic Astronomy

Fall 2007

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Class times: Tuesday/Thursday 11:10-12:25pm, Zach119B
Class location: Zach119B
Office hours: 12:30-2pm Tuesday/Thursday or email me for a time.
- Homepage** <http://faculty.physics.tamu.edu/suntzeff/courses/ph314>
- Textbook** An Introduction to Modern Galactic Astrophysics and Cosmology by Carroll and Ostlie.
800p. 2007 version.
- Philosophy** I want you to have fun in this class and expand your minds. I hope you are taking astronomy because you love to think about the origins of the Universe and what is in it. I want to take you on a tour of the Universe as I know it. We cannot cover all topics, but I will try to include as many subjects of present research to motivate the understanding of the nature of our Universe. We will discuss all the breaking news in astronomy, such as dark matter in galaxy clusters, the edge of the Universe, and the End of Everything. I will stress extragalactic astrophysics and cosmology. My goal is that at the end of the class, you will be able to understand all the news in cosmology, such as dark matter, dark energy, WMAP, PLANCK, reionization, first stars, inflatons, etc.
- Homework** The homework assignments are exercises for you to practice applying simple astrophysical concepts. Astronomy is an unusual science in that answers are often not precise because the objects studied are so distant. In many cases, the homework problems have no exact answers, only approximations. Some homework will be out of the book but augmented by other questions passed out in class. Homework will be due at the beginning of a Tuesday class. Some homework will be done using on-line research.
- Quizzes** We will have regular quizzes that will not be announced. I want you to try all the problems. I will grade the quizzes on a simple scale: A for a good effort, C for merely showing up in class, and F for missing the quiz.
- Essay** I will ask you to write one essay of about 3 pages (single spaced, 12pt font) on some articles about the philosophy of science or cosmology.

- Exams** There will be two midterms and a final exam. The final is not comprehensive. It is just the third midterm. The important dates are:
28 Aug first day of class
04 Oct first midterm
08 Nov second midterm
22 Nov my birthday
07 Dec finals (third midterm), 3-5pm
04 Dec last day of class (redefined day for Thursday, dead day)
- Grades** The grading will be a combination of quiz work, homework, midterms, essay, and "final". The grading is as follows: midterm and final 20% each, homework 15%, quizzes 15%, essay 10%.
- ADA Policy** *The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Room 126 of the Koldus Building or call 845-1637.*
- Honor Code** "An Aggie does not lie, cheat, or steal or tolerate those who do." I will expect that you also will abide by the following principle for homework, quizzes, and exams (unless the assignment is to be done as a group): For tests and assignments you should abide by the following code of conduct: "On my honor as an Aggie, I have neither given nor received unauthorized aid on this academic work." See the webpage: <http://www.tamu.edu/aggiehonor>. This honor code sets apart Texas A&M from other universities in the US and as an Aggie you should be proud to follow its rule.