



PH314 - Survey of Astronomy

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Mitchell Chair in Astronomy

Department of Physics

Texas A&M University

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**PHYSICS 314: Survey of Astronomy: Cosmology and
Extragalactic Astronomy
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Instructor	Dr. Nicholas B. Suntzeff, Professor of Physics Mitchell/Heep/Munnerlyn Chair in Astronomy Office: Engineering-Physics Building, Room. ENP11502 Phone: 458-1786 E-mail: nsuntzeff@tamu.edu 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 mind. 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, inflation, 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.