

PHYS 3380 - Astronomy

Fall 2005

This is mostly a descriptive course outlining the current views of the universe and the sources of data supporting those views. You will be provided with the opportunity to explore these mysteries in depth and learn about many important concepts from physics and astronomy using some basic physical principles and mathematics. We will discuss the solar system and its origin, stars, galaxies, pulsars, quasars, black holes, nebulae and the evolution of the universe. During the semester, the opportunity to use a U.T. Dallas telescope will be provided.

INSTRUCTOR:

- **Dr. Phillip C. Anderson 972-883-2875 — Room FO2.708D**
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TEACHING ASSISTANT:

- **Lecture: Russell Stoneback 972-883-2867 — Room FO1.424**
email: rstoneba@utdallas.edu

OFFICE HOURS:

- **Dr. Anderson: Tuesday/Thursday 11:00 – 12:00 PM and by appointment**
- **Mr. Stoneback: Tuesday/Thursday, 2:00 – 3:30 PM and by appointment.**

TEXT:

- **Foundations of Astronomy, Seeds, 8th Edition**
- **Slides will be available on the web at: www.utdallas.edu/~pca015000**

GRADING:

- **Exams (3)**
- **2 Exams (Sep 21, Oct 26) @ 25% each = 50%**
- **Final Exam (Dec 5 @ 2 PM) = 30%**
- **Homework = 10%**
- **Two at-home projects = 10%**

SYLLABUS - Fall 2005

Chapters 1 ,2, & 3	The Night Sky
Chapter 4	History of Modern Astronomy
Chapter 5	Newton, Einstein, and Gravity
Chapter 6	Light and Telescopes
Chapter 7	Information from Distant Objects
Chapter 8	The Sun
Chapter 9	Determining the Observable Properties of Stars
Chapters 10 & 11	Interstellar Medium and Star Formation
Chapter 12	The Evolution of Stars
Chapters 13 & 14	The Deaths of Stars
Chapters 15 & 16	Galaxies
Chapter 18	Cosmology
Chapter 26	Life in the Universe