PHYS 3380 - Astronomy
Fall 2006

An essentially descriptive course outlining the current views of the universe and the sources of data supporting those views. We will study the solar system and its origin, stars, galaxies, pulsars, quasars, black holes, nebulae and the evolution of the universe. Opportunity to use a U.T. Dallas telescope is provided.

The students will gain an understanding of the nature of the universe and the physics that govern its existence and will develop an understanding of the tools that astronomers use to study the heavens. In particular, they will learn about the history of astronomy, stellar structure, orbital dynamics, and the life cycles of stars. The course will also provide a grounding for anyone desiring to enter into the field of Astronomy.

INSTRUCTOR:

- **Dr. Phillip C. Anderson 972-883-2875 — Room FO2.708D**
  email: phillip.anderson1@utdallas.edu

TEACHING ASSISTANT:

- **Lecture: Delilah Whittington 972-883-2867 — Room FO1.424**
  email: delilah.whittington@student.utdallas.edu

OFFICE HOURS:

- **Dr. Anderson: Tuesday/Thursday 11:00 – 12:00 PM and by appointment**
- **Ms. Whittington: Tuesday/Thursday, 12:30 – 1:45 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 (Nov 28 @ 2 PM) = 30%
  40% of the final will be comprehensive
- **Homework = 10%**

  Homework will be assigned on Tuesday and will be due the following Tuesday. Late homework will not be accepted. It is considered late after 3:30

PM Tuesday.

- **Projects – = 10%**

- **Attendance will be taken every class period and will be used to decide whether to raise or lower grades on the cusp. Also, some of the material that will be covered in the lectures is not in the text.**

Follow the links to each class's notes(at www.utdallas.edu/~pca015000). They will be available at least the day before the class.

SYLLABUS - Fall 2006

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