# **Syllabus**

## Physics 1305 Introductory Astronomy: The Solar System

## **Summer 2006**

**Instructor:** Dr. Victor Andersen **Office:** 406B S&R1 Building

Office Hours: M-Th 1-2 p.m. other times by appointment Phone: 3-8666 email: vandersen@uh.edu
Course Website: http://www.uh.edu/~vanderse/
Text: Chaisson & McMillan, Astronomy Today, 5th edition

What You Should Bring to Class: Textbook, Notebook, Sharpened #2 pencil (the pencil sharpener in S&R1 117 sometimes doesn't work!), calculator.

**Course Etiquette:** In order to provide an environment conducive for learning for both you and your fellow students, there are several rules of common courtesy that must be obeyed.

- 1. Show up to class on time.
- 2. Do not leave class early, and do not rustle papers in preparation to leave before class is dismissed.
- 3. If you have your cell phone with you, turn it off before the beginning of class.
- 4. Be attentive in class: stay awake, don't read newspapers, etc.
- 5. If you absolutely must be late or leave or early on any particular day, sit near the door, try to enter or leave the classroom during a natural break in class, and make sure the door doesn't slam after you!

Students who do not practice common courtesy should expect their grades to be reduced substantially.

**Course Grading:** Your grade in this course will be determined from 4 sources: homework, a midterm and a final exam, and a number of pop quizzes throughout the semester.

**Grading Scale:** Your final grade will be computed using the following scale:

- A 160-200 pts.
- B+ 156-159 pts.
- B 135-155 pts.
- B- 130-134 pts.
- C+ 126-129 pts.
- C 90-125 pts.
- C- 86-89 pts.
- D 75-85 pts.
- F 74 points or less

Important Grading Notes!

- Your grade will be determined from four sources; homework, quizzes, a midterm, and a final exam.
- The midterm exam will cover the material from the first half of the course, the final exam will cover material from the second half.
- In order to determine where you stand in the class at any time, simply add up all the points you have received from on all graded material so far.

**Important Note About Homework:** The best way for you to learn the material in this course is to use it. The homework assignments are designed to do just that: allow you to practice the course material by answering specific questions using the facts and concepts we cover in this course. Do not be deceived by the fact that the homework questions are multiple choice. Most successful students find they must spend an average of 15 to 20 hours a week to complete the homework for this class. *Most students who receive D's or F's in the course have completed little, if any, of the homework.* 

#### A Warning and A Promise:

The warning: Astronomy is a demanding course. We will cover many important concepts from physics, and we will occasionally use some simple mathematics (nothing beyond high school algebra). The course will move quickly, and each new topic will build upon concepts covered previously. If you fall behind at any time, you will find it extremely difficult to get caught back up.

The promise: Few topics have inspired humans throughout the ages so much as the mysteries of the heavens. This class offers you the opportunity to explore these mysteries in depth, learning both about our tremendous modern understanding of the universe and about the mysteries that remain. If you work hard and learn the material well, this class will be one of the most rewarding classes of your college career.

### **Tentative Course Schedule**

Date	Subject	Reading
5-30	Course Introduction	
5-31	The Sky	Text Chpt. 1.1-1.7, Notes Chpt. 1
6-1	The Sky	
6-2	History	Text Chpts. 2.1-2.5; Notes Chpt. 2, 3
6-5	No Class	
6-6	Gravity & Motion	Text Chpt. 2.7, Notes Chpt. 4
6-7	Gravity & Motion	
6-8	Gravity & Motion	
6-9	Gravity & Motion Review	
6-12	Overview of Solar System	Text Chpt. 6, Notes Chpt. 5
6-13	The Earth	Text Chpt. 7, Notes Chpt. 6.1

6-14	The Earth	
6-15	The Moon & Mercury	Text Chpt. 8; Notes Chpt. 6.2-6.3
6-19	Midterm Exam (Will cover through the earth)	
6-20	Venus & Mars	Text Chpts 9-10; Notes Chpt. 6.4-6.5
6-21	The Gas Giants	Text Chpts. 11,12,13; Notes Chpt. 7
6-22	Moons of the Gas Giants	Text Chpt. 11,12,13, Notes Chpt. 8
6-26	Solar System Debris	Text Chpt., Notes Chpt. 9, 10
6-27	The Sun	Text Chpt. 16.1-16.6; Notes Chpt. 11
6-28	The Sun	
6-29	Formation of the Solar Syste	em Text Chpt. 15 Notes Chpt. 12, 13
6-30	Final Exam (Will cover the Moon & Mercury through the end of course)	