# Fall 2007 Elementary Astronomy

# The Point

There are two main reasons for Elementary Astronomy. The first is to familiarize you with the Universe in which you live, and therefore give you some perspective about your place in it. The second is to give you enough information about how science works that you can judge the importance (or lack thereof!) of new scientific and technological discoveries.

# **Contact Information**

You might need to contact me, Dr. Stacy Palen. My office is in the next building, SL209. My office phone number is 626-7030, and my email is <u>spalen@weber.edu</u>. The course website, where homework and lecture notes will be posted, can be found at:

### The Points

Your grade in this class will be determined in the following way:

20% Midterm & 20% Final & 30% Labs & 30% Homework

The *midterm and final* are both short-answer or problem based. To prepare for these, study lecture notes and labs. The final exam will have both a cumulative and a non-cumulative part. These exams are take-home, and you will have them from Friday at the end of class to Monday at the beginning of class. During the exam period, you must not work together with others.

*Labs* are generally carried out in groups, and you usually hand in a worksheet at the end. They are designed to be completed (usually) within one class period, which leaves you plenty of time to read the book, the on-line notes, and do your...

*Homework*. These are a few questions per week, due every Wednesday. The purpose is to help you focus your studying time. You are responsible for checking on the homework assignments, which will be posted on-line.

# The Text

The book you got from the bookstore: 'On the Cosmic Horizon: Ten Great Mysteries for Third Millenium Astronomy' by Jeffrey Bennett is required reading for this course. This book costs about \$20, and will give you an idea of where astronomy is headed.

You are also responsible for very detailed lecture notes on-line. Astronomy is a fast-moving science, and by the time a formal textbook makes it into print, it's out of date. We can do better on-line.

# **Cheating policy**

Cheating is bad form, and will not be tolerated. But you knew that already. You may work together, but be sure to do your own work. The first time I catch cheating on the homework, I will divide the grade evenly among the involved parties. The second time, you will fail the course. Cheating on the midterm or final will cause you to fail the course.

# **Other Random Thoughts**

I will not be taking formal attendance, however you'll note that you have something due most days. Interesting, isn't it? You'd think I thought going to class was important or something... Never, EVER ask me 'Will this be on the exam?' If you think about it for even a second, you'll realize that this is a very rude question to ask a professor.

All other questions are fair game. Ask away---this may be the only time in your whole life that you have an astrophysicist at your beck and call. What are you saving your questions for? (This applies to your other courses as well!)

Date	Monday	Wednesday	Friday
8/27	Intro; Night Sky	Time Scales	Lab: Finding Things in the Sky
9/3	No School!	Time Scales	Lab: Phases of the Moon
9/10	Properties of Stars	Properties of Stars	Lab: The Seasons
9/17	Properties of Stars	Properties of Stars	Lab: Parallax
9/24	Properties of Stars	Star Formation	Lab: Spectral Classification
10/1	Planet Formation	Terrestrial Planets	(Planetarium Day)
10/8	Jovian Planets	The Sun	Lab: 51 Pegasi
10/15	The Sun	Planetary Nebulae	No School!
10/22	Supernovae	W.D./N.S./Pulsars	Lab: Planetary Nebulae;
			Midterm goes out
10/29	Black Holes	Black Holes	Lab: Black Holes
11/5	Normal Galaxies	Normal Galaxies	Lab: Center of the Milky Way
11/12	Big Bang I	Big Bang I	Lab: Dark Matter
11/19	Big Bang II	Big Bang II	No School!
11/26	The End of the Universe	The End of the Universe	Lab: Expanding Universe
12/3	Life in the Universe	Life in the Universe	Lab: Drake Equation
12/10	Final Exam Due, 11 am		

Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities (SSD) in Room 181 of the Student Services Center. SSD can also arrange to provide course materials in alternate formats if necessary.