SCCC 116 Course Syllabus - Spring 2006 Prof. Christina Lacey

General Comments

Astronomy is the process of finding out where we are and where we are going. In order to answer these questions, modern astronomy incorporates many of the results and methods of the other sciences. All sciences build models of the world. These models are often developed by controlled experiments. Astronomers do not have the luxury of experiments. We are forced to build many of our models with the constraint that we can look but not touch.

All sciences discover and collect data. The set of data are in themselves not the science. The science is the process. This is not to say that we don't need to know any of the data. Some information must be at your fingertips for the search. In this course, we will try to strike a balance between information and process.

Materials Needed

For the course you will need, in addition to this syllabus,

- 1. Astronomy Today by Chaisson/McMillan, Fifth Edition;
- 2. Laboratory Exercises in Astronomy for SCCC115-116, 1st edition or higher by Safko;
- 3. A calculator capable of trig and log functions such as the TI 30Xa (you are responsible for learning how to operate the calculator);
- 4. A bound laboratory logbook. (such as Roaring Spring 77475 or Apad26-251) It must be a separate volume from the class journal and fully devoted to the lab.

Grading

This will not be a self-paced mastery-oriented course such as ASTR 111. Your grade will be determined by the following:

Laboratory 25%
Exams (2 exams +1 Final) 30%
Homework 25%
Class Participation 20%

0.25*Lab + 0.25*Homework + 0.30*Exam + 0.20*Participation

Laboratory

Most of the laboratories will be held at Melton Observatory. Labs will start after sunset and the time will change after daylight savings starts. There may be some special astronomical events occurring, so meetings may also be held on a few other nights. On cloudy nights you may meet in PSC 324. Dr. Overcash will be in charge of the laboratories. At the end of the term, he will give me a numerical grade, which will count for 25% of your course grade.

Homework

Homework will be assigned each Thursday and collected the following Thursday.

Tests and Final Exam

The tests will be cumulative, but concentrate on material covered since the last test. The final will be cumulative. Questions will be multiple choice, short answer, or have relatively simple calculations. The purpose is to check understanding rather than memorization of information.

Class Participation

Group exercises will be conducted every class meeting. These exercises require full class participation. Class participation will be measured by a five-minute quiz given at the beginning of each class over material on the syllabus scheduled for that day's class.

Contact Information

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My office hours are Tuesday 2-4 pm in the Astronomy Center (007), located in the basement of PSC, and Wed. 1-3 pm in Rm. 503.

During the first week, each of you must send me your email address by emailing me at lacey@sc.edu.