ASTRONOMY 1102 – Section 1

Instructor: Juhan Frank
http://www.phys.lsu.edu/faculty/frank/frank.html

Classes: MWF   12:40 – 1:30 PM, E130 Howe–Russell

Office Hours: MWF   1:30 – 2:30 PM, Nicholson 212–B

General Education Goals:

Astronomy 1102 is a General Education Course whose goals are the following:

- an appreciation of the methods of critical enquiry, with particular emphasis on *the scientific method*
- a comprehension of how knowledge is acquired and applied
- an understanding of the Universe we live in

Text: *The Cosmic Perspective*, by Jeffrey Bennet, Megan Donahue, Nicholas Schneider and Mark Voit, Addison–Wesley Longman, Inc., Menlo Park, CA (1999).

Prerequisite: Astronomy 1101.

Textbook Assignment: This course is the *second* of a two semester sequence: Astronomy 1101/1102. The second semester covers some basic astronomy and physics, some observational tools and thechniques used by astronomers, a description of stars, their orgin and evolution, galaxies, and the universe at large scales. We shall begin by reviewing basic concepts already covered in Astronomy 1101 (**1,2**). We shall discuss the properties of matter and energy (**5**), and the properties of radiation (**7**) and then jump to Part V, chapter **14** (Our Star, the Sun) and subsequent chapters **15-22**. Parts of the "supplementary" chapters **S1-S6** will be included as appropriate. I will cover in class all the material I consider important and refer to the text as required. You are responsible for reading the corresponding material in the text. It is advisable, whenever possible, that you read the material *before* you come to class, noting anything you do not understand. *Please ask questions during or after class.*

Homework Assignment: Homework exercises and problems will be assigned regularly. These will be either set by me or selected from the questions and problems at the end of the corresponding chapter. The homework assignments need not be handed in since they will **NOT** be graded but are intended as practice for tests.

Tutoring: You are encouraged to use the office hours for any help you may need on the course material, problem solving, or any other course–related matters. Additional help by TAs may be available at certain times and locations to be announced later. My office is located on the second floor of Nicholson (the old wing) at the end of a narrow hallway marked "212" above the doorway. When you stand facing the door to my office marked "B", you will find a notice board on the wall to your left. Announcements, solutions to

homework problems, answers to test questions and problems, and other course notices may be posted there.

Exams: There will be three 50 min tests on material covered since the previous test. These will be a mix of short questions on concepts and problems. I will hand out a study guide listing the material included in the test, referring to the relevant sections of the text, and giving a few examples of questions. Some questions and problems may be similar to what you will find on the homework assignments. These tests are set and graded by me. The maximum score on these tests is 100 points. If for some emergency or other **serious** problem you miss a test, a makeup test *may* be arranged in exceptional cases. Note, however, that the makeup test will contain *additionally all new material covered since the regular test.*

Final Exam: There will be a 2–hour *comprehensive* test on material covered in the entire semester, also set and graded by me. The maximum score on the final test is 200 points.

Midterm Grade: A midterm grade will be asigned as a means to quantify your progress. The midterm score will be converted to a 100 point scale by averaging the results of the first two tests, where each partial test is worth a maximum of 100 points. The midterm scores will then be analyzed statistically and curving will be introduced if necessary in order to assign grades.

Final Grade: The final score will be converted to a 100 point scale by averaging the results of all tests according to the formula:

$$(T1 + T2 + T3 + FE)/5 \, ,$$

where the partial tests and the homework are worth a maximum of 100 points each and the final exam is worth up to 200 points. The final scores will then be analyzed statistically and curving will be introduced if necessary in order to assign final grades.

Grade Scale: A: 88–100, B: 75–87, C: 60–74, D: 45–59, F: 0–44

IMPORTANT DATES

Fall 1999

Classes begin	Mon. Aug. 23		
Last drop w/o W	Mon. Aug. 30		
Labor Day Holiday	Mon. Sep. 6		
FIRST TEST	Fri. Sep. 17	12:40–1:30PM	E130 Howe–Russell
SECOND TEST	Fri. Oct. 15	12:40–1:30PM	E130 Howe–Russell
Midsemester Grades	Tue. Oct. 19		
Fall Holiday	Thu. Fri. 21/22		
Last drop with W	Fri. Nov. 5		
THIRD TEST	Fri. Nov. 12	12:40–1:30PM	E130 Howe–Russell
Last Class	Fri. Dec. 3		
FINAL EXAM	Wed. Dec. 8	12:30–2:30PM	E130 Howe–Russell
Final Grades	Tue. Dec. 14		