

Syllabus for Descriptive Astronomy (Phys 191) Fall, 2006

Instructor information:

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Hours: MWF 10:30-11AM, or by appt.

Course objectives: This course is, as stated in the course catalog, “a survey of what is known about the [astronomical] universe and how it is known.” The knowledge you should strive to gain from your reading, lectures, and assignments is nothing less than a general qualitative idea of almost every thing that's “out there”: the qualities of space, the sun, the solar system, stars and galaxies, and so on, and how we know these things. The skills you should strive to develop are the ability to understand an astronomer's description of an astronomical phenomenon or discovery, including both what the phenomenon or discovery is and how it was discovered, and the ability to connect that understanding with what you can see with your own eyes, whether unaided, or through a telescope, or in a photograph or other image.

Text: *Universe: Stars and Galaxies* (2nd edition), by Roger A. Freedman and William J. Kaufman II.

Course web site: Important course resources such as announcements, homework assignments, mandatory pre-lecture guide questions, exam and homework grades, and answer keys will be posted on the course web site, accessed through K-State Online. (I assume everyone knows how to use K-State Online by now. Please let me know right away if my assumption is incorrect.)

Individual help: Any student wanting individual help is welcome to see me during office hours, or at other times by appointment.

Grading: Please note that exams count for only 56% of your grade. Submitting answers to guide questions, giving correct answers to homework questions, and participating in at least one observing session are all important in this class.

<u>Point distribution</u>		<u>Final grade determination</u>	
Observing session(s):	140	900 or more	A
Guide questions:	150	800-899	B
Homework questions:	150	700-799	C
Exam #1:	120	600-699	D
Exam #2:	120	599 or less	F
Exam #3:	120		
Final Exam:	<u>200</u>		
Total:	1000		

Observing session(s): Members of the North Central Kansas Astronomical Society (NCKAS) hold occasional public viewing sessions at one of several nearby “dark sky” sites. This is a great thing! They set up their own telescopes and other equipment to give others the chance to see the wonders of astronomy directly, and they bring their knowledge of astronomy to share so that you can see in your mind what's so wonderful about that clump of stars or diffuse glowing ring you see in the eyepiece. There are four public sessions currently scheduled, all on moonless Saturday nights, but NCKAS has kindly agreed to arrange for special sessions on other nights if there is enough interest. The class will be polled about this. This is your opportunity to practice connecting what you will learn in class with what you can see with your own eyes.

!! Participation in at least one observing session is expected, and counts for 14% of your grade. (You are of course welcome attend as many sessions as you like.)

Try to attend a session early in the semester, just to make sure you get it done, and definitely try to avoid waiting until the last month: it gets cold in December, and the weather deteriorates. See the “events” page at <http://www.nckas.org/> for the current schedule of public viewing sessions (and other neat stuff).

Pre-lecture guide questions: Each week, I'll post on the course website a set of conceptual questions about the material we are *about* to study. These questions will be similar to the “Questions to Guide Your Reading” in the textbook, except that these are really “Questions to Guide the Lectures.” By getting feedback from you about what you are already thinking about the subjects of the next few lectures, and by getting you wondering about it before the lectures, I hope to improve the quality and relevance of both what I present and what you take home. Any good faith attempt to give thoughtful responses to all the questions will receive full credit. Short and thoughtful responses are preferred. Feel free to include questions in your responses.

Your on-line responses to these questions are due every Sunday *before noon*. Feel free to turn them in a day or two earlier if you like. Each is worth 10 points. There are also optional pre-lecture questions for the first week, which you can submit before noon Tuesday of that week. You should try these just for the practice, to make sure the system is working, and to get a point of extra credit.

!! *Important note:* be sure to enter your K-State EID (*not* your student ID or social security number) on the form used for submitting your answers, or else I won't know who you are and I won't be able to give you the credit you deserve.

Homework: The due time for homework is the same as for the guide questions: Sunday, *before noon*. There are 15 assignments this term, one for every week except Thanksgiving week. Each assignment is worth 10 points. Homework questions will be distributed to you through the course website on K-State Online. The homework will be about material that has been studied. In contrast to the “guide questions”, accuracy of your answers *will* be what determines your grade on homework assignments.

Exams: There will be three 50-minute examinations during the term, and one final. All

scores will count. Makeup exams will be given only in special circumstances. The 50-minute exams are given in class on the days shown on the schedule. The final exam is comprehensive, with some emphasis on the material covered in the final weeks of instruction, but relying on material from the entire course. The exams will be similar (not identical) to the homework, except that you will record your answers on Scantron cards instead of on-line, and no books, notes, equation sheets, etc., can be used in the exams.

University Honor System: All students are participants in the University's Honor System. Among other things, this means that the Honor Pledge applies to all assignments, examinations, and other work in this class. In this class, you are permitted to work with (but not to copy from!) other students on homework problems, provided you acknowledge such cooperation by writing "I worked with" on the assignment. If anything is unclear about the Honor System, the Honor Pledge, the concept of "unauthorized aid", or anything else, please talk to me about it right away.

Academic Dishonesty Warning: Plagiarism and cheating are serious offenses and may be punished by failure on the exam, paper or project; failure in the course; and/or expulsion from the university. For more information refer to the "Academic Dishonesty" policy in the K-State Undergraduate Catalog and the Honor System Policy on the web at <http://www.ksu.edu/honor/>.

Students with Disabilities: If you have any condition such as a physical or learning disability which will make it difficult for you to carry out the work as outlined here, or which will require academic accommodations, please notify me and contact the Disability Support Services office (Holton 202, see also <http://www.ksu.edu/dss/>) during the first two weeks of the course.

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