

AST 307

Introductory Astronomy for Science and Engineering Majors

Spring 2008
Unique #49470

MWF 10:00-11:00
RLM 15.216B

Professor: Daniel Jaffe
RLM 17.218
471-3425
dtj@astro.as.utexas.edu
Office Hrs: Tu 2:30-3:30, Th 11-12

T.A.: Athena Stacy
RLM 16.212
471-8443
minerva@astro.as.utexas.edu
M,W 1:30-2:30

Homework Help Session: Wednesday 5-6, RLM 15.216B

Course Contents: We will present an overview of the contents of the Universe, with a physical explanation of what is there. The emphasis will be on how astronomers study the Universe and explanations for what they find, rather than on descriptions. College-level physics and calculus are not required, but we will use high school math (some trigonometry) and science (Newton's laws).

Text: "Astronomy Today", by Chaisson and McMillan, 6th Edition Note: this book is aimed at non-science majors, and so uses less math than we will use. Lectures will give more quantitative explanations. Notes will be available to members of the class.

Homework: Homework will be assigned each Friday, due at the beginning of class the next Friday (as noted). Late homework will receive 1/2 credit. You may get help on homework (or anything else) from the professor or TA during office hours or by appointment. You are welcome to work on homework with other students, but verbatim copies of homeworks will not be accepted.

Quizzes: There will be 6 half-period quizzes, one roughly every two weeks. Changes to the topics to be covered will be announced in class the week before each quiz.

Grading: Homework will count 1/4 of your grade, quizzes will count 1/3, participation (class and extras) 1/12, and the final exam 1/3. Your lowest homework and lowest quiz score will be dropped. **Note: You will not be allowed to drop quizzes you have not taken or homework you have not handed in.** We will not have one make-up quiz at the end of the semester. You will only be eligible to take this quiz if you have either (a) an officially excused absence under university policy (sanctioned event, religious holiday) and have complied with the notification rules or (b) notified us *prior to a quiz* of a significantly impairing illness or injury. Exceptions to (b) will only be granted to those who can demonstrate that they were comatose (*not asleep*) before and during the quiz in question. Although this is not a writing class, test answers will usually consist of short written explanations, and we will count off for confusing or ungrammatical answers.

Schedule: Below is the planned schedule of lectures and quizzes. Quiz dates will be as shown. Topics covered are subject to change. Please consult the web version of this syllabus regularly to look for updates.

	Activity	Quiz Covers	Topic of the Day	Read by Today																																																																											
<u>January</u>																																																																															
14			Sky	Ch.1																																																																											
16			Sky																																																																												
18			Sky																																																																												
23			Copernicus	Ch. 2																																																																											
25	Homework 1 Due		Copernicus																																																																												
28			Copernicus																																																																												
30	1 st ½ Period Quiz	Ch.1+(2)	Copernicus																																																																												
<u>February</u>																																																																															
1	Homework 2 Due		Radiation	Ch. 3																																																																											
4			Radiation																																																																												
6			Radiation/Spectroscopy	Ch. 4																																																																											
8	Homework 3 Due		Spectroscopy																																																																												
11			Spectroscopy																																																																												
13	2 nd ½ Period Quiz	Ch. 2-4	Scopes	Ch.5																																																																											
15	Homework 4 Due		Scopes																																																																												
18			Scopes/Solar System	Ch.6																																																																											
20			Solar System																																																																												
22	Homework 5 Due		Solar System																																																																												
25			Planet Formation	Ch. 15																																																																											
27	3 rd ½ Period Quiz	Ch. 5-6	Sun	Ch. 16																																																																											
29	Homework 6 Due		Sun																																																																												
3			Sun																																																																												
5			Measure Stars	Ch. 17																																																																											
7	No Homework		Measure Stars																																																																												
<u>March 10-14: Spring Break</u>																																																																															
17			Measure Stars/ISM	Ch. 18																																																																											
19	4 th ½ Period Quiz	Ch. 15-17	ISM																																																																												
21	Homework 7 Due		ISM																																																																												
24			Star Formation	Ch. 19																																																																											
26			Star Formation																																																																												
28	Homework 8 Due		Stellar Evolution	Ch. 20																																																																											
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(makeup quiz for those eligible, topics TBA)																																																																															

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Exam: Please check the official university final exam schedule for the time and place of the final. For your convenience, I list here an unofficial version: Saturday May 10, 7-10 PM