

AST 301  
Introduction to Astronomy  
Fall 2010 MWF 11:00-12:00

Professor: John Lacy	TAs: Myoungwon Jeon	Bohua Li
Office: RLM 16.332	Office: RLM 16.216	RLM 16.212
Phone: 471-1469	Phone: 471-0445	471-8443
email: <a href="mailto:lacy@astro.as.utexas.edu">lacy@astro.as.utexas.edu</a>	email: <a href="mailto:myjeon@astro.as.utexas.edu">myjeon@astro.as.utexas.edu</a>	<a href="mailto:bohuali@astro.as.utexas.edu">bohuali@astro.as.utexas.edu</a>
Hours: T,Th 11-12 & after class	Hours: T,Th 3-4	Th 2-3

Review session: RLM 15.216B Wed 5-6  
web: [www.as.utexas.edu](http://www.as.utexas.edu) → courses → AST 301 (Lacy)

**Text:** “The Cosmic Perspective” by Bennett et al., 5<sup>th</sup> or 6<sup>th</sup> ed. (earlier editions probably OK, too)

**Prerequisites:** No prior college science or math courses are required. We will use high-school algebra in class and on homework.

**Contents:** The emphasis in this course will be on explanations for the phenomena and objects that occur in the Universe and how astronomers learn about them. This is a course for non-science majors, and no knowledge of physics is assumed, but we will discuss physical laws and how astronomers use them to explain their observations.

In-class interactive learning activities will be an important part of this course. Consequently, attendance and participation is required. You are also required to finish each week's reading assignment before class on Monday, so that you are prepared to participate in discussions. A weekly reading quiz and credit for assignments done during class will help encourage you to do the reading and participate in class.

**Homework:** A homework assignment will be handed out most Fridays, due the next Friday at the beginning of class. Some assignments will involve observations of the sky. You are encouraged to work together on homework, but you must write out your own answers and describe your own observations, in your own words. Duplicate homeworks will not receive credit. Late homeworks will be accepted for half credit until homeworks are returned.

**Tests:** There will be a quiz each Monday on the reading for that week and the topics covered the previous week. There will be four in-class exams and a final exam. Late exams will not be given (but see policy on dropped exams below). Exams will emphasize material discussed in class, but may include topics covered only in the text. All quizzes and exams will be closed-book and closed-notes, and calculators will not be allowed (or needed).

**Grades:** Grades will be based on homework (20% of the grade), the weekly quizzes (10%), in-class assignments (10%), the four exams (30%), and the final (30%). Your lowest quiz and homework scores (one of each) will be dropped. Your lowest exam score will be dropped, or if you want to keep all four exams, you may skip the final and your exam average will replace the final.

**Collaboration:** You are encouraged to study and work on homework assignments with other students, and you are encouraged to get help from the TA, but you must write out your own answers and make the

assigned observations yourself. If you copy another homework or let someone copy yours, both of you will receive zero credit. In-class assignments will be done in groups, and all group members will receive the same grade (if the assignment is graded).

**Schedule:**

<b>Week of:</b>	<b>Reading:</b>	<b>Topics:</b>	<b>Exams:</b>
Aug 25	Ch 1	Our Place in the Universe	
Aug 30	Ch 2	Motions in the sky	
Sep 8	Ch 3	History of Astronomy	
Sep 13	Ch 4	Laws of motion	Fri, Sep 17
Sep 20	Ch 5	Light and Matter	
Sep 27	Ch 7&8	Solar System & Formation	
Oct 4	Ch 10	Atmospheres	
Oct 11	Ch 11	Outer solar system	Fri, Oct 15
Oct 18	Ch 13	Other planetary systems	
Oct 25	Ch 14.2&15	Properties of stars	
Nov 1	Ch 17	Lives of stars	
Nov 8	Ch 18	Deaths of stars	Fri, Nov 12
Nov 15	Ch 20	Galaxies and the Universe	
Nov 22	Ch 22	Cosmology	
Nov 29	Ch 23	Big Bang	Fri, Dec 3