Week #9 Handout, 2008.03.18  
Astronomy 101, Professor Douglas Leonard

Announcements

- **Reading Quiz due tonight!** The Reading Quiz for Week 8 (“Week8_quiz”) is due tonight, Tuesday, March 18, by 11:55 PM.

- **Second midterm exam on Thursday:** The second midterm exam will be taken in class this Thursday, March 20, during our regular class time. All of the details about the exam format and content are given in the handout, “Second Midterm Exam Guide” (which is also available at the course web-site: http://sciences.sdsu.edu/~leonard/astro101), and in the Course Reader, pages 179 – 181, and p. 183. Here are the highlights:
  1. The exam consists of 50 multiple choice questions.
  2. You have the full class period (1 hour, 15 minutes) to complete the exam.
  3. No calculators are permitted (or needed).
  4. There will be a seating chart in effect for the exam; please do NOT take your seat until told to do so.
  5. Please bring the following to the exam:
     (a) One ParSCORE FORM No. F-289-PAR-L scantron form. These may be purchased at the campus bookstore and are pink in color. (Note: Many SCAN-TRON forms look similar; please do NOT purchase the F-288-PAR-L form – it looks similar to the correct form, but is in fact much wider and has different information on it.)
     (b) A number 2 pencil and a good eraser!
     (c) Your official “Exam cheat-sheet” (detached from the end of the Course Reader), with your name at the top, and all the information you want hand-written inside the box.

- **Reminder: Extra question & answer session Wednesday evening.** As announced last week, on Wednesday evening from 8:45 – 10:00 PM (Wednesday, March 19 – i.e., the evening before your exam) I will hold an extra help session in Rm. 216 of the physics-astronomy building. Come armed with all questions that have cropped up during your studying!

- **Reminder: Star Party Wednesday evening.** As announced last week, on this Wednesday evening from 7:45 – 8:45 PM (note slight change in start time), there will be an optional “Star Party” held on the rooftop of the physics-astronomy building. Please note that this event will be canceled in the event of poor weather (clouds, rain). SO, before heading over, at 6 PM please be sure to check out the course website (http://sciences.sdsu.edu/~leonard/astro101) to make certain the event is still on! For more details on this special event, please see the handout Star Party Information.

Reading Guide and Homework Assignment

*(Note: No on-line reading quiz for this week’s assignment)*

Most of the material covered during Tuesday’s lecture is contained in chapters 8 – 12 (and the beginning of Chapter 13) of the text, from which no formal readings are assigned this week – all of the information that you are required to know is contained on the slides contained in the Course Reader. Thus, the reading assignment for this week is simply to **read those slides** in the Course Reader! Note that none of this week’s formal reading assignment covers material that is contained on this Thursday’s exam, which is limited to the material up to and including slide 185 in the Reader. So, if you wish to begin this assignment after Thursday’s exam, that is fine!

1. **Course Reader: Slides 186 — 193.**

   As stated in class (and above), the material that we covered from chapters 8 – 12 (and the beginning of Chapter 13) of the text is all contained on these slides from your Course Reader. Thus, be sure you read these slides very carefully. You may, of course, glance through the textbook if you wish (it goes into much more detail than we are covering).
2. On-line tutorial: On the “Week9_tutorial” section of the textbook website, look at the *Active Figure* called “Stellar Evolution of High and Low Mass Stars”. This shows the evolution of both low- and high-mass stars. Notice the two major differences: High-mass stars evolve *faster*, and are able to fuse *heavier* elements (right up to iron), than low mass stars. These applets were demonstrated in class on Tuesday.

(Isaac Newton (L) and Archangelo Corelli (R), c. 1690.)