Cosmic Catastrophes

The Lives and Deaths of Stars

AST 309N

January 19, 2011

- Handouts
- Syllabus/Schedule
- Webpage: http://www.as.utexas.edu/astronomy/education/spring2011/wheeler/309n.html (also blackboard)
- Book: Cosmic Catastrophes (second edition)
- Five exams
- Grading: plus/minus grading will be used for the final grade; for example: 79.5 – 83.3 B-, 83.4 – 86.6 B, 86.7 – 89.4 B+. (do not drop lowest exam -- but extra credit!)
- Grades are not curved: 90 - 100 A, 80 - 90 B, etc.
- Review Sessions - Thursday, 5 - 6 PM

Extra Credit

On exams (2 points):

Astronomy in the News,
NASA's Astronomy picture of the day
http://antwrp.gsfc.nasa.gov/apod/astropix.html

Sky Watch Project - details on web site, in handout. Log of observations: up to 5 points on each exam. Due at each hourly exam.

Keep an eye on Betelgeuse in Orion, also locate Sirius A, the Crab Nebula, Cassiopeiae A, Cygnus X-1, Sagittarius A, others. **1) Record enough information so that I can tell you actually went out at night and tried to see something. 2) Give a brief summary of why they are important.** Some of these can be seen with the naked eye, some not. Some can be seen now, some later in the term. Some in the morning, some in the evening. **Beware clouds!**

- Book - electronic copy available through University library system. Can only download 20%.

- http://catalog.lib.utexas.edu/search/X?SEARCH=Cosmic+Catastrophes: access with uteid and password.

- Schedule - start with Chapter 6
- Leave room for Chapters 13 and 14 and extra stuff

Reading: Chapters 1 thru 5 for background plus Chapter 6 - Supernovae

Chapters 1 & 2 - AST 301

- Particles, forces, neutrinos
- Charge repulsion
- Pressure -
  - Thermal
  - Quantum
- Nuclear Reactions

Chapters 3, 4, & 5

- Binary Star Evolution
- Accretion Disks
- White Dwarfs

Will refer to as needed