

*Lives and Deaths of Stars*  
**ASTRONOMY BIZARRE (309N) COSMIC CATASTROPHES**  
Spring 2016 (Unique Number 46890)

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**TIME, PLACE:** MWF 2:00-2:50 AM, WEL 3.502

**INSTRUCTOR:** J. Craig Wheeler - a theoretical astrophysicist specializing in exploding stars and related topics.

**Office:** RLM 17.230, phone: 471-6407

**Email:** wheel@astro.as.utexas.edu

**Hours:** MWF 5 - 6 PM or by appointment; do not hesitate to talk to me if you have questions or problems. My job is to help.

**TEACHING ASSISTANT:**

Brian Mulligan

**Office:** RLM 16.216

**Phone:** (512) 471-0445

**Email:** bwmulligan @astro.as.utexas.edu

**Hours:** TTh 2:00 – 3:00 PM, or by appt.

**GRADER**

Emily Strickland

**Office:** TBD

**Phone:** TBD

**Email:** emily.strickland@utexas.edu

**Hours:** by appt.

**GRADES:** There will be five 50 minute long examinations each counting 20 percent of the grade. **The exams are scheduled for 2/5, 2/26, 4/1, 4/15 and 5/6.** *No exam is dropped.* The exams will be multiple choice. There will be no final exam. 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+. Averages above 93.4 get an A (no A+).

**EXTRA CREDIT:** sky watch project to identify objects or constellations containing objects such as supernovae and black holes that are relevant to the course (5 points maximum added to each exam). Questions on exams about astronomy in the news (2 questions, 2 points maximum per exam). It is possible to get 107/100 points on each of the five exams (see Extra Credit).

**COURSE DESCRIPTION:** Specialized course for non-science majors that will presume knowledge of basic astronomical concepts presented in Astronomy 301. There will be a minimum of mathematics, but a familiarity with basic algebra and scientific notation (“powers of ten”) will be helpful. Discussion of supernovae, neutron stars and black holes with applications to gamma-ray bursts, worm holes, determining the origin, state, and fate of the Universe, and hints of extra dimensions (see Schedule).

**TEXT: Cosmic Catastrophes:** *Exploding Stars, Black Holes and Mapping the Universe*, Second Edition, published by Cambridge University Press. An electronic edition (20% download restriction) is available from the UT library.

**HELP SESSIONS:** Help sessions will be held on Thursdays before exams at 5:00 – 6:00 PM to discuss class material and exams. This review will be held in TBD.

**DISABILITIES:** Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities, 471-6259.

**WEB SITE:** <http://www.as.utexas.edu/astrophysics/education/spring16/wheeler/309n.html>

(Note: we also use Canvas – we will link Canvas to this site and vice versa)

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