

ASTR 1020

Introductory Astronomy 2: Stars & Galaxies

August 26, 2013




Syllabus is on-line at class website:
<http://lunar.colorado.edu/~jaburns/astr1020>

This semester, we are on a *Star Trek!*



Our Crew:

- Captain Jack Burns
- First Officer Lucas Miller
- Lt. Isaiah Blodgett
- Lt. Beth Moger
- Lt. Karyn Perdue
- Lt. Katherine Shanahan
- Ship's Counselor Wayne Schlingman




Astronomy & Space Exploration as Inspiration



Outline of Today's Class

- Course goals
- Course information
- Course overview




Goals

To develop a broad view of what we know about the Universe.

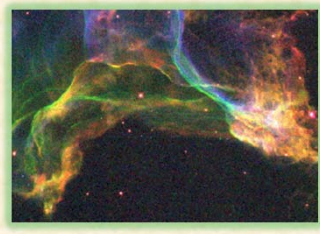
To understand the forces that shape the Universe and its history.

To help you understand how we figured out all this stuff!

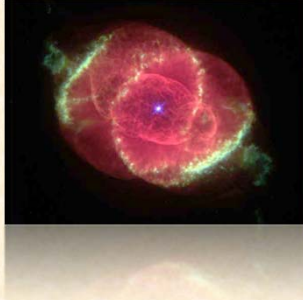


Who should take this course?

- Prerequisites: Astr 1010 or 1000.
- Recitation sections on Mondays, Tuesdays, & Wednesdays.
- Moderate amounts of quantitative work (algebra).
- More quantitative courses – Astr 1030 or 1040.



Course Information



COURSE HOME PAGE:

<http://lunar.colorado.edu/~laburns/astr1020>

You can find all assignments and handouts, a course calendar, lecture notes, and other useful things here!

Recitation Sections



- **8 sections**
 - Monday 10:00-10:50 am.
 - Tuesday 3-3:50 pm (2nd section, 014, cancelled).
 - Wednesday 9-9:50 am & 10-10:50 pm.
- **Goals**
 - Review material.
 - Weekly clicker quiz.
 - Group worksheet exercise.
- **Recitations meet this week at Sommers-Bausch Observatory**
 - Check which recitation section you are in before coming to recitation.

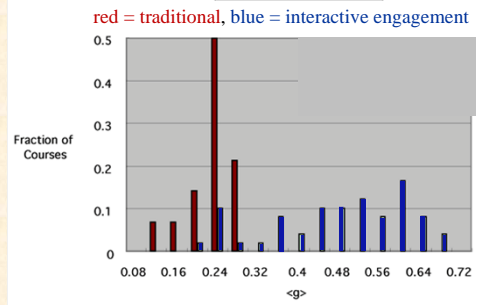
Why are we using clickers?

- Active learning lasts longer.
- You remember answers better than just a lecture.
- Clicker use leads to higher grades!
- You are given partial credit just for participating.
- Clicker questions allow you to find out if you understand.
- You can E-mail me with questions about clicker questions anytime!
- Register your iClicker via [MyCUinfo](#).



Credit starts September 9!

What difference does interactive engagement make?



<g> = fraction of concepts learned

Finkelstein and Pollock (2005). *Physical Review*, ST:PER, 1,1

If the history of the entire universe was condensed into a single year, the first civilization would have appeared about:

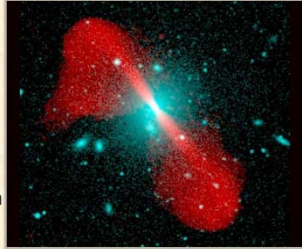
- September 1
- December 1
- December 30
- 9 p.m. December 31 (3 hours before year-end)
- 11:59:30 p.m. December 31 (30 seconds before year-end)

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- December 1
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How to succeed in this course

- **PUT IN THE TIME:**
3 credits at CU → 6-9 hours outside of the classroom each week.
- **READ THE TEXTBOOK BEFORE CLASS!**
- Come see us during office hours, and ask questions in class & during recitation.
- Study together with others who are in the class.



MasteringAstronomy

- All homework will be assigned via the online system *MasteringAstronomy*.
- Stay up with class assignments in conjunction with the reading.
- The course ID for Astr 1020 in *MasteringAstronomy* is **ASTR1020Fall2013**.

Planetarium sessions

- We will meet for class at the newly remodeled **Fiske Planetarium** 4 times this semester.



Observatory Nights

- Starting Friday night, open for general viewing.
- **Sommers-Bausch Observatory** (next to Fiske): 16" and 18" telescopes.
- We will be doing two observing sessions for Astr 1020 during the semester. Each session will have a worksheet, equivalent to a recitation worksheet. The second session will be extra credit.



Remember- you can get a copy of these slides after class from the course website!

For next time:

- Reading:
 - How to Succeed, p. XXIV to XXV.
 - Chapter 1, sections 1.1 & 1.2.
 - Summary of Key Concepts, p. 21-22.
- *Introduction to MasteringAstronomy* (complete by Sep. 4).