This section of Astronomy 170B1 is taught by Professor Marcia Rieke and Professor George Rieke:

Prof. M. Rieke: 621-2731, Steward Rm. 262

Prof. G. Rieke: 621-2832
Steward Rm. 272

Lectures in Steward Observatory N210
MW at 10am and also at 11am. Sometimes lectures are also on Friday but in general Fridays are reserved for discussion sections:

Discussion Sections:
(see syllabus)

Some Fridays at 10am:
Steward N210, Steward Observatory 202, ILC137

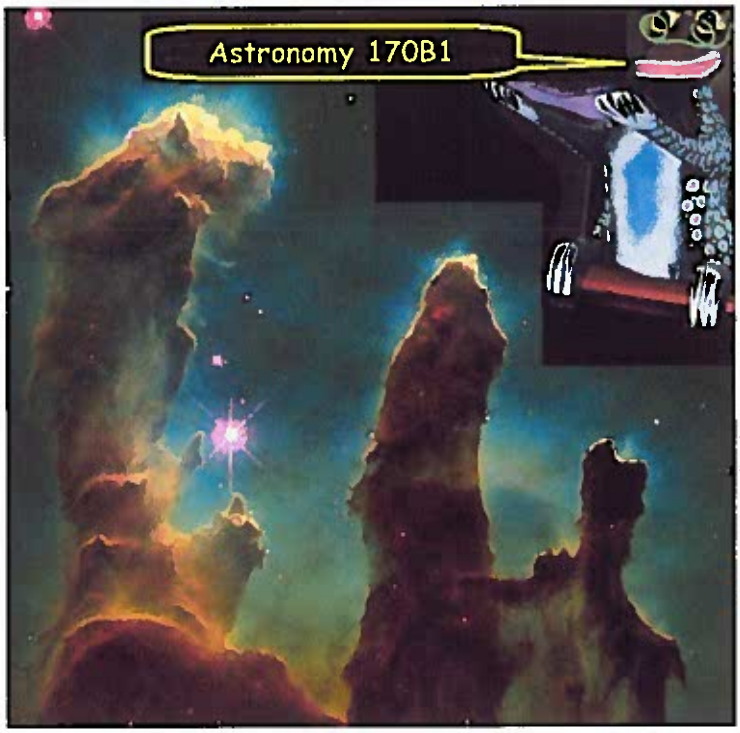
Some Fridays at 11am:
Steward N210, Steward 202 & 208
Check your room here!

Send an e-mail to the professors:
webacctir@gmail.com

Teaching Assistants:

Young Min Seo
Office in the small brown building northwest of the lecture hall
Office number: TR-110
Office hours: Thursdays, 10:00am

Decker French
Office upstairs in the "old building", enter to the SE of the lecture hall
Office number: 302
Office hours: Thursdays, 2:00pm



Announcements:

Class on Friday, September 5, will be held in the regular Lecture Hall (N210).

You will need a "Classroom Response Device," popularly known as a clicker. You can purchase one at the bookstore. Please check your entry on D2L to be sure that your clicker registered correctly. If you were not able to register your clicker in class, please email the clicker ID using the email address at the left.

A new homework due in discussion sections on Friday, Sept 12, is available here. The Scantron from to be used for answering will be distributed in class.

The first homework assignment is here. It calls for you to observe the moon starting this Friday (August 29) and running through Sept 29. It will be due in lecture Oct 1.

This course is one of the options to satisfy the General Education requirements in science at the University of Arizona. It is taught around a web-based text that is also used as the core lecture notes.

Table of Contents

Just for fun, look here:
Astronomy Picture of the Day

To exit to the home page, click here.

Astronomy 170B

If your computer won't play the movies, you can download a player at http://www.real.com/player. To get the free version, which works fine, click on RealPlayer FREE Download. You may want to make this player the default for all formats. Another free player (Quicktime) can be found at http://www.apple.com/quicktime/win.html. If the some of the movies still won't play, check the default programs your computer is using. For example, Windows Media Player refuses to play Quicktime (*.mov) so you need to make the Quicktime player the default for any with the .mov extension.

Procedures and grading policies

Below is the table of contents. Classes indicated as "lecture" will meet in N210 (large lecture hall), while those listed as "discussion" will be in one of the individual smaller classrooms designated for this purpose.

Get an outline for the notes here. You can use it to fill in notes for the topics and as a study guide.

Aug. 25	Monday	lecture	Introduction, Scientific Method, Scales in the Universe

How did astronomy get started?

Aug. 27	Wednesday	lecture	Appearance of the Sky, Beginnings of Astronomy

The story of our gaining an understanding of the planetary motions now begins. It allows us to examine how science works, in slow motion (about 15 centuries worth).

Aug. 29	Friday	lecture	Greek Astronomy, Ptolemy, Medieval Astronomy, Copernicus , Tycho
Sept. 3	Wednesday	lecture	Kepler, Galileo, Newton , Scientific Method (repeat)
Sept. 5	Friday	lecture	Physical Laws, Light

Sept. 8	Monday	lecture	Spectroscopy
Sept. 10	Wednesday	**Meet in Planetarium**	**Understanding the Sky**

Sept. 12	Friday	**discussion**	Sizes and distances, Lunar phases, motions on the sky
Sept. 15	Monday	lecture	Modern Physics, Observatories

We begin the story of what we have learned with these tools by looking at the origin of the Universe itself.

Sept. 17	Wednesday	lecture	The Big Bang, The Fate of the Universe , The Start of Everything
Sept. 19	Friday	**discussion**	**Spectroscopy Lab**
Sept. 22	Monday	lecture	Era of Nuclei, Era of Atoms and Era of Galaxies

Stars and galaxies are the foundation of our understanding of the Universe. Our understanding of stars starts with the sun.

Sept. 24	Wednesday	**EXAM**	review and practice
Sept. 26	Friday	**discussion**	Spectroscopy
Sept. 29	Monday	lecture	The Sun, Interior of the Sun

How does the sun compare with other stars? What happens as stars get older?

Oct. 1	Wednesday	lecture	Other Stars, Evolution of Stars
Oct. 3	Friday	**discussion**	**Sun Lab**
Oct. 6	Monday	lecture	Deaths of Stars, Stellar Black Holes
Oct. 8	Wednesday	lecture	Novae and Supernovae, Supernova Remnants
Oct. 10	Friday	**discussion**	Stellar evolution, HR diagram

Galaxies are huge systems of stars, gas, dust, and dark matter.

Oct. 13	Monday	lecture	Discovery of the Milky Way, Discovery of Galaxies, The Interstellar Medium
Oct. 15	Wednesday	lecture	Dark Matter, Distribution of Galaxies in Space, Types of Galaxy
	Friday	**discussion**	Photometry, standard candles, sun lab

Oct. 17			

Galaxies have a broad variety of characteristics, including cores containing supermassive black holes that produce dramatic activity.

Oct. 20	Monday	lecture	The Milky Way, Center of the Milky Way
Oct. 22	Wednesday	lecture	Active Galaxy Nuclei
Oct. 24	Friday	**discussion**	Review for exam

Star formation shapes the appearance of the Universe

Oct. 27	Monday	lecture	Formation of Stars, Spiral Arms, Growing Galaxies
Oct. 29	Wednesday	**EXAM**	review and practice
Oct. 31	Friday	**discussion**	Galaxies - billions and billions of them

Each planet in our solar system has unique properties that provide clues to the formation of the system

Nov. 3	Monday	lecture	Formation of the Solar System, Overview of Solar System
Nov. 5	Wednesday	lecture	Exploring Planets, Earth
Nov. 7	Friday	lecture	Earth
Nov. 12	Wednesday	lecture	The Moon, Mercury
Nov. 14	Friday	**discussion**	Missions to the planets
Nov. 17	Monday	lecture	Venus, Mars
Nov. 19	Wednesday	lecture	Jupiter, Saturn, Uranus, and Neptune
Nov. 21	Friday	**discussion**	Radioactivity, statistics

We learn more about the solar system from its smaller members.

	Monday	lecture	Jupiter's Moons, Moons and Rings

Nov. 24			
Nov. 26	Wednesday	lecture	Pluto, Solar System Debris

Is there intelligent life "out there?"

Dec. 1	Monday	lecture	Other Planets, Long Term Climate, Habitable Zones
Dec. 3	Wednesday	lecture	Formation of Life, Advanced Life
Dec. 5	Friday	**discussion**	Habitable planets, Kepler Mission
Dec. 8	Monday	lecture	Mass Extinctions, Emergence of Intelligence
Dec. 10	Wednesday	lecture	Contacting Other Civilizations
Dec. 12	Friday	**FINAL**	10:30am-12:30pm for 10am class review and practice
Dec. 15	Monday	**FINAL**	10:30am-12:30pm for 11am class review and practice