

Astronomy 162 – Introduction to Stars, Galaxies & the Universe

Winter Quarter 2006 Syllabus

Lectures: MTWRF, 9:30-10:18am, 1008 Evans Lab (EL1008)

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Office Hours: Tues, Wed, Thurs 11:00-12:30, or by appointment

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Recommended Textbook: *Universe* 7th Edition, by Roger A. Freedman & William J. Kauffmann

Course Web Page: www.astronomy.ohio-state.edu/~pogge/Ast162

Course Objectives

Astronomy 162 is an overview of the universe beyond our solar system. The course is divided into three interlinking parts that will review what astronomers have learned about the stars, the galaxies, and the Universe. We will examine how these ideas have been developed and tested against observations, and explore a few of the outstanding problems faced by current astronomical research. The questions to be addressed include: What are stars? Where do stars get their energy? What is the fate of the Sun and other stars? What are galaxies? What is the Big Bang model of the Universe? What is "Dark Matter"? What is the ultimate fate of the Universe?

Homework Assignments

There will be five (5) Homework Assignments, each consisting of a short set of multiple-choice questions. The questions are open-book, open-notes, open-discussion, which you will answer using bubble sheets returned in class on the due date. Collectively the homework will count for 15% of your grade. These are not just practice quizzes, but instead are an opportunity to ask somewhat more challenging questions than I can on the quizzes.

No late homework will be accepted, except for legitimate, documented emergencies.

In-Class Quizzes

There will be four (4) in-class quizzes, scheduled for the following Fridays:

In-Class Quiz 1: Friday, January 20

In-Class Quiz 2: Friday, February 3

In-Class Quiz 3: Friday, February 17

In-Class Quiz 4: Friday, March 3

The quizzes will be held at the normal class time.

The quizzes will cover the material in the lectures and readings since the previous quiz. All of the quizzes are **closed-book, closed-notes multiple-choice** tests.

Makeup quizzes are only offered by advance arrangement with the professor. Exceptions are for legitimate, documentable emergencies and require no advance notice. If you will be away on an official University-sponsored activity (e.g., sports teams, band, etc.), please bring me a letter from your

coach, director, etc. **in advance** of the quiz. Quizzes must be made up by the Wednesday after the quiz you missed, otherwise that quiz becomes the one that I will drop in computing your final grade.

Final Exam

The Final Exam will be on **Wednesday, March 15 from 9:30-11:18am in 1008 Evans Lab**. Attendance at the Final Exam is mandatory. The final will be **comprehensive**, covering all lectures, and has the same multiple-choice format as the in-class quizzes, only 2× longer. It is worth **40%** of your grade.

No makeup final will be offered. Persons who miss the final exam will be given an incomplete (I) with an alternative grade equal to getting a zero on the final, and have to make it up during Spring Quarter 2006 to avoid the alternative grade.

In keeping with official University policy, early finals will **not** be available for those persons who wish to depart early for spring break. Please plan ahead and make your travel plans accordingly.

Grading Policy

- The 5 homeworks collectively account for **15%** of your grade.
- I will drop the lowest score of the 4 in-class quizzes to compute your quiz grade. Together, the 3 remaining in-class quizzes will account for **45%** of your grade.
- The final exam accounts for **40%** of your grade, and must be taken by all students.
- All grading, homework and exams, is done on a standard C+ curve.

Lectures & Readings

Lectures will be daily, 9:30-10:18am, in 1008 Evans Lab. The daily lectures are your primary resource for this course. The textbook is only used as a secondary reference from which I will suggest related readings. We will not (and cannot) cover all of the topics in the second half of the book during a 10-week course. In between these two resources in importance are the daily lecture notes available on the web. While you will very likely find these notes to be useful aids for studying and following along in lecture, they are not substitutes for regular attendance. Most students find that the best strategy is to print out the notes, bring them with to class, and then add their own notes in the margins. Remember, these are only *outlines* of what I cover each day in class, not comprehensive transcripts of the lectures.

In general, students who do not attend class regularly score one whole grade below those who attend class (i.e., a D instead of a C).

Related Readings in *Universe*

Because introductory astronomy textbooks designed for non-majors are rarely organized exactly the same as our courses, we will not strictly follow the order of topics in the book. You can expect to jump around some as the course progresses. As such, instead of specific reading assignments, each section of the course has related reading *suggestions* from the text. Not all topics in this course are covered by the book, and similarly not all topics covered in the book will be discussed in class. You are only responsible for the contents of my lectures.

Students with Disabilities

Any student who feels that he or she may need an accommodation based on the impact of a disability should contact Professor Pogge to discuss their specific needs. We will rely on the Office of Disability Services at OSU to verify the need for accommodation and to help develop the appropriate strategies. Students with disabilities who have not previously contacted ODS are encouraged to do so, by visiting

the ODS website (www.ods.ohio-state.edu) and requesting an appointment. Please take care of this well in advance of the quizzes, as processing the paperwork takes time.

Academic Misconduct

All OSU professors are required to report suspected cases of academic misconduct to the Committee on Academic Misconduct. See the University's Code of Student Conduct for details. The most common forms of misconduct in classes like are copying from another student's exam or homework assignment. All cases will be investigated following University guidelines.

Classroom Etiquette

To help establish and maintain a courteous, distraction-free learning environment in our classroom, I ask that all students please observe the following basic rules of behavior during lectures and exams:

Use of cell phones and pagers is prohibited.

This includes using cell phones for instant messaging, email, web, pictures, etc. When in class, all cell phones and pagers must be **turned off** (i.e., not in a standby or "silent ring" mode).

Use of Wireless Laptops or other networked devices is prohibited.

Surfing the web, instant messaging, reading email or typing on a keyboard during class is very distracting to those around you. When in class, all laptop computers and other networked devices (e.g., PDAs, Blackberries, etc.) must be turned off and put away. The only exceptions are approved devices for enhancing sound or vision for the hearing/vision impaired.

Please do not start packing up until class is completely over

Nothing is more rude or distracting than the noise of notebooks closing and jackets and backpacks rustling while the professor is trying to finish up. I'll be very clear when we're done, and I work very hard to stay on time, so please wait until I get to the end.

If you come late or have to leave early, please sit near the back of the room.

This will make your late arrival or early departure less disruptive for your fellow students.

No conversing during lectures.

Please respect the wishes of your fellow students to listen to the lecture, and do not carry on conversations during class.

Your cooperation in these observing these rules is greatly appreciated.