

ASTR 203 Stars
Tier 2 Natural Sciences

Lecture Meeting Time & Place: TuTh 11:00 AM-12:15 PM. Steward Observatory, Rm N210

Professor David Sand

Office: Steward Observatory N506

Email: dsand@as.arizona.edu

Office Hours: Tu/Th 9:00AM-10AM or by appointment

TA: Stefan Evans

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Office Hours: Wednesday 3:00-4:00PM

Final Exam The final exam will be held on December 10, 2018 at 10:30AM – 12:30PM

Required Textbook: For this course we will use “21st Century Astronomy, 5th Edition,” by Kay, Palen & Blumenthal. Only get the “Stars and Galaxies” portion of the textbook, unless you are very eager.

You also need to sign up for Norton’s SmartWork online system. Many of your homework assignments will be through that web site.

ABCD Response Cards: Please bring the ABCD response cards with you to class every lecture. Copies are provided on the first day of class, and you can print a color copy from the course web site.

Website: We will make regular use of D2L. It is your responsibility to check D2L regularly for course notifications, updates and assignments. Lecture notes, homework, additional materials....everything will be posted there.

You also need to sign up for Norton’s SmartWork online system. Many of your homework assignments will be through that web site.

Course Description and Topics Covered: In this course we will focus on the role of stars in the universe and in our daily lives. We will learn where stars come from, how they change with time, and how they die. Along the way we will examine the most important physical processes that govern the behavior of these astronomical objects. We will supplement the study of stars with readings of science news articles that will be the subject of regular in class writing assignments. Topics to be covered will include:

1. Method of Scientific Inquiry
2. Order of Magnitude Reasoning
3. Scales in the Universe
4. Motions on the Sky
5. Star Formation
6. Stellar Evolution
7. Supernovae
8. Black holes
9. Special and General Relativity
10. Planet Formation
11. Exoplanets

Grading: Your course grade will be based on –

1. Homework and Online Quizzes (drop lowest two scores): 15%
2. In class activities/writing (drop lowest score): 25%
3. In class tests (drop lowest score): 40%
4. Final exam: 20%

The class will not be curved. Grades are absolute, unless things go wildly wrong. The correspondence between final percentages and letter grades will be: **A: 85-100%; B: 70-85%; C: 50-70%; D: 30-50%; E: 0-30%.**

Course Schedule & Reading: A semi-definitive course schedule is now posted on the D2L web site. Note that the midterm dates are on September 20, October 23 and November 27. This schedule will be updated as the term goes by, depending on whether we fall behind or not. I will try not to change the midterm dates. The relevant chapters and sections that will be lectured on should be read before class. You will be responsible for the material at that time.

Deadlines: We will accept no late assignments. Much of the grading in this class allows you to drop your lowest grade for this reason (and others), so that illness, religious holidays, computer malfunctions, family emergencies, zombie attacks, etc are not a good reason to submit late work. Do not request that a deadline be adjusted unless your issue is serious enough that you have a valid Dean's excuse.

Make-Up Exam Policy: We do not give make-up exams. Instead, we will give 3 midterm exams and we will drop the lowest score, whether it is a zero due to an unavoidable absence or a lower score due to a bad day! Please note that the final exam is on December 10, and plan your travel plans accordingly. You are required to be here on December 10, or you will fail the course.

Public Lectures and Telescope Observing: This is not required, but you are encouraged to attend any of the series of public evening lectures hosted by Steward Observatory. See the listing at: <https://www.as.arizona.edu/public-evening-lecture-series>. Following all public lectures (which are held in this room, N210), the telescope dome outside this lecture hall will be open for viewing objects in the night sky (weather permitting). A small amount of extra credit will be offered for attending up to four lectures. Details will be provided at a later date.

Classroom Behavior Policy To foster a positive learning environment, students and instructors have a shared responsibility. We want a safe, welcoming, and inclusive environment where all of us feel comfortable with each other and where we can challenge ourselves to succeed. To that end, our focus is on the tasks at hand and not on extraneous activities (e.g., texting, chatting, reading a newspaper, making phone calls, web surfing, etc.).

Students are asked to refrain from disruptive conversations with people sitting around them during lecture. Students observed engaging in disruptive activity will be asked to cease this behavior. Those who continue to disrupt the class will be asked to leave lecture or discussion and may be reported to the Dean of Students.

Some learning styles are best served by using personal electronics, such as laptops and iPads. It is acceptable to use these devices for note taking only in this classroom. Students using electronic devices for purposes other than note taking will be asked to leave the lecture.

Threatening Behavior Policy The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See <http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students>.

Accessibility and Accommodations Our goal in this classroom is that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please let me know immediately so that we can discuss options. You are also welcome to contact the Disability Resource Center (520-621-3268) to establish reasonable accommodations. For additional information on the Disability Resource Center and reasonable accommodations, please visit <http://drc.arizona.edu>.

If you have reasonable accommodations, please plan to meet with me by appointment or during office hours to discuss accommodations and how my course requirements and activities may impact your ability to fully participate.

Please be aware that the accessible table and chairs in this room should remain available for students who find that standard classroom seating is not usable.

Code of Academic Integrity Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See: <http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity>.

UA Nondiscrimination and Anti-harassment Policy The University is committed to creating and maintaining an environment free of discrimination; see <http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy>

Subject to Change Statement. Information contained in the course syllabus, other than the grade and absence policy, maybe subject to change with advance notice, as deemed appropriate by the instructor.