

Astronomy 201: *Astronomy for Science Majors* Spring 2022

Instructor: A. W. Shafter (ashafter@sdsu.edu)

Office Hours: Tu, Th 11:30 – 12:30, or by appointment

Lecture (until Feb 3): Tu, Th 12:30 – 13:45, <https://SDSU.zoom.us/j/89558030673>

Lecture (from Feb 8 on): Tu, Th 12:30 – 13:45, PA215

Text: *Foundations of Astronomy 14th Ed.* by Seeds and Backman

Immediate Access Course: Some or all of the required materials for this class are provided in digital format within Canvas. The materials are available by the first day of classes and are free through the add/drop date. The SDSU add/drop deadline is at 7:59 p.m. PDT but you have until 11:59 p.m. PDT to opt out of Immediate Access. Unless you opt out of Immediate Access by 11:59 p.m. PDT on the add/drop date, your SDSU student account will then be charged the special reduced price for use of the materials for the remainder of the semester. Please visit www.shopaztecs.com/immediateaccess for additional information about Immediate Access pricing, digital subscription duration, print add-ons, opting out and other frequently asked questions.

Brief Course Description:

Astronomy 201 is a GE course that will provide a broad overview of Astronomy. The course will describe the motions in the night sky, including an introduction to the solar system, the formation and evolution of stars, the nature of our Milky Way and other galaxies, and the origin and fate of the Universe.

We will cover material from many of the chapters in the textbook, but not all! For example, we will spend less time on the planets and the solar system than the book does. *The only material that you will be responsible for on exams will be covered in my lectures.*

This course is directed toward students with a strong interest in science, and serves as part of the preparation for the Astronomy major. As such, it is designed to be a more mathematical version of the survey course, Astronomy 101. Students with credit in Astronomy 101 and 201 will only receive a total of three units of credit toward graduation.

Key Student Learning Outcomes:

By the end of the semester students should be able to:

- Describe the phases of the moon and understand the seasons
- Describe what the analysis of light tells us about celestial sources
- Describe the 4 forces of Nature, and how they are relevant to Astronomy
- Describe the formation, evolution, and fates of stars
- Describe the how we measure distances to other galaxies
- Describe what we know about the formation and evolution of the Universe

Grading:

Grading will be based on three midterm exams (20% each), and a comprehensive final exam (40%).

- **Midterm 1:** Thurs, Feb 17, during regular class time
- **Midterm 2:** Thurs, Mar 17, during regular class time
- **Midterm 3:** Thurs, Apr 21, during regular class time
- **Final Exam:** Thurs, May 12, *from 10:30AM to 12:30PM*

Make-up exams will consist of essay questions only. I will assign homework, but the homework will not be turned in or graded. However, doing the problems will be extremely valuable in helping you focus on the important concepts and in studying for exams! I will be happy to discuss homework problems during my office hours.

Student Responsibilities:

Students will be ultimately responsible for how they perform in this course. I will not require you to attend lectures, nor will I take roll. However, I can virtually assure you that you will not do well unless you attend the lectures regularly and study the homework problems. I assume that students who choose to take Astronomy 201 over Astronomy 101 are mature enough to take responsibility for learning the material through attending lectures, asking questions, doing practice homework problems, and studying on your own outside of class.

ESSENTIAL STUDENT INFORMATION:

- Compliance with CSU/SDSU vaccination and facial covering policies is required (<https://sacd.sdsu.edu/student-rights/covid-policies>).
- Your SDSU email address will be used for all course-related communications.
- The Student Conduct Code (<https://sacd.sdsu.edu/student-rights/student-conduct>) prohibits conduct disruptive to instruction, including academic dishonesty and the unauthorized recording, dissemination, or publication (including on websites or social media) of lectures or other course materials.
- SDSU provides disability-related accommodations via the Student Ability Success Center (sascinfo@sdsu.edu — sdsu.edu/sasc). Please allow 10-14 business days for this process.
- The Family Educational Rights and Privacy Act (FERPA) mandates the protection of student information, including contact information, grades, and graded assignments. I will not post grades or leave graded assignments in public places. Students will be notified at the time of an assignment if copies of student work will be retained beyond the end of the semester or used as examples for future students or the wider public.
- As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. I am required to share information regarding sexual violence on SDSU's campus with the Title IX (<https://titleix.sdsu.edu/>) coordinator, Gail Mendez (619-594-6464), who will contact you to let you know about support services at SDSU and possibilities for holding accountable the person who harmed you. If you do not want the Title IX Officer notified, you can speak confidentially SDSU's Sexual Violence Victim Advocate (619-594-0210) or Counseling and Psychological Services (619-594-5220, psyc-serv@sdsu.edu).

Statement on Academic Dishonesty:

Students must work independently on all assignments and exams. All work turned in must be in the student's own words. Plagiarism in any form will not be tolerated, and will result in a zero for the assignment or exam. A second offense will result in a failing grade for the course.

Under CSU policy, instructors must report instances of academic misconduct to the Center for Student Rights and Responsibilities for disciplinary review by the University, which may lead to probation, suspension, or expulsion. Instructors may also, at their discretion, penalize student grades on any assignment or assessment discovered to have been produced in an academically dishonest manner.