

**Astronomy 201: *Astronomy for Science Majors***      Spring 2023

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

**Office Hours:** Room P243, Tu, Th 11:30 – 12:30, or by appointment

**Lecture:** Tu, Th 12:30 – 13:45, Room PA215

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

**Equitable 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 Equitable Access. Unless you opt out of Equitable 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 <https://www.shopaztecs.com/t-equitableaccess.aspx> for additional information about Equitable 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 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.

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 two midterm exams (25% each), and a comprehensive final (50%).

- **Midterm 1:** Thursday, February 23, 2023 during regular class time
- **Midterm 2:** Thursday, April 6, 2023 during regular class time
- **Final Exam:** Thursday, May 11, 2023 *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.

## ESSENTIAL STUDENT INFORMATION:

For essential information about student academic success, please see the SDSU Student Academic Success Handbook: <https://studentsuccess.sdsu.edu/>.

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. 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.