### ASTRONOMY 4 Section 04

#### **Solar System Astronomy**

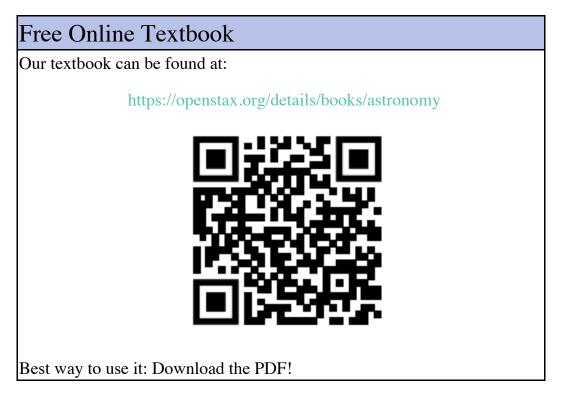
De Anza College Fall 2019

### **Course Information Summary**

Term: 2019 Fall De Anza | CRN: 00209 | Title: SOLAR SYSTEM ASTRONOMY | Course: ASTR D004.04 | Days: MW | Time: 04:00 PM - 06:15 PM | Room: PLT

Instructor: Srikar Srinath

Email: SrinathSrikar@fhda.edu



**Lectures:** Mondays & Wednesdays 4:00 – 6:15 pm in the De Anza Planetarium

Office Hours: After class in the Planetarium MW 6:15 - 6:45 pm

## Introduction to Astronomy 4

Astronomy 4 is an introductory-level course about the contents of our Solar System and what we have learned about them in the past 400+ years of telescopic observation and 59 years of space exploration.

The course has no prerequisites. However De Anza College does advise the following: English as a Second Language 5. The class is taught with the non-science major in mind.

# **Class Format**

Our in-class time will typically be broken up into 3 x 40-minute sessions with a 5-minute break between sessions. It will feature both lectures and audio/visual programs, including videos and demonstrations with the Fujitsu star projector and the Digital Sky system. You can expect to be tested on all of the material presented in class as well as in the textbook reading assignments below.

## Registration

If you wish to add the class, you must attend the first day, and you must obtain an add code from me. It is your responsibility to use the add code before the deadline.

## Attendance

Regular attendance is required. Attendance will be taken at every class meeting. Students with four or more unexcused absences from the class will be dropped. However, official withdrawal from the class is still the **student's responsibility.** 

## **Exams and Grades**

Your class grade will be based on your performance on midterm exams and the final exam. There will be **no extra credit**. **There will be no makeup exams**.

There are three midterm exams. They represent 50% of your grade. Your

lowest midterm grade will be dropped. If you miss an exam, that will count as your low score.

The final exam is **comprehensive** and will account for 50% of your grade.

The exams will be held **in class** on the following dates at 4:00 PM:

First Midterm:	Monday, Oct 7 2019
Second Midterm:	Monday, Oct 28 2019
Third Midterm:	Wednesday, Nov 20 2019
Final	Wednesday, Dec 11 2019

The exams will be multiple choice and graded on a curve. A ParSCORE Scantron sheet will be provided. You will need to bring a #2 pencil for each exam.

During tests:

- 1. After you start working on a test, you must hand it in before leaving the room.
- 2. If you arrive late for a test, you will not be given extra time to finish it.
- 3. Once the first person has turned in a test and left the room, no further latecomers will be given tests.

### Cheating

Cheating on any exam is grounds for a failing grade in the class and a permanent note in the student's file with additional punishment at the discretion of the administration. **JUST DON'T DO IT!** 

## **Course Outline & Reading**

Test dates are fixed, but lecture material is tentative based on progress

made in class. Tests will only feature topics covered in class or in the book until the testing date.

Week 1		
Sep 23	Ch 1	Cosmic Context
Sep 25	Ch 2.1	Diurnal, Annual, Planetary apparent motions
Week 2		
Sep 30 ancients	Ch 2.2-3.1	The origins of modern astronomy: From the
		to Kepler
Oct 02 gravity,	Ch 3.2-3.6	Newton's discoveries: How do motion,
		and orbits REALLY work?
Week 3		
Oct 07	Midterm 1	
Oct 09 seasons,	Ch 4.1-4.6	Review Test 1, What REALLY causes the
		and Moon Phases

Week 4

Oct 14	Ch 4.7	Eclipses
Oct 16 spectrosco	Ch 5 opy	Light, the electromagnetic spectrum, and
Week 5		
Oct 21 Earth and	-	How telescopes work; Observatories on
		space
Oct 23 planetary	Ch 7 & 8	Overview of our solar system; Dating
		samples and surfaces, and Earth: Our planet
Week 6		
Oct 28	Midterm 2	
Oct 30	Ch 9.1-9.4	Review Test 2; Earth's Moon
Oct 30 Week 7	Ch 9.1-9.4	Review Test 2; Earth's Moon
	Ch 9.1-9.4 Ch 10.1-10.3	Review Test 2; Earth's Moon Mercury and Venus
Week 7		
Week 7 Nov 04	Ch 10.1-10.3	Mercury and Venus

Nov 13	Ch 11-12.2	The Giant Planets and Jupiter's Galilean
Moons		

Week 9

- Nov 18 Ch 12.3-12.5 Titan, Triton, Pluto, and planetary rings
- Nov 20 Midterm 3
- Week 10
- Nov 25 Ch 13.1-13.2 Review Test 3; Asteroids
- Nov 27 Ch 13.3-14.2 Comets, Meteors, and Meteorites
- Week 11
- Dec 02 Ch 14.3, 15, 16 Origin of the solar system; The Sun
- Dec 04 Ch 21.3-21.6 Planets around other stars

Finals week

Dec 09 No class

Dec 11 Final 4-6 pm

#### **Planetarium rules**

We are guests in this planetarium and it is one of the most visited public spaces on De Anza campus. In order to maintain the Planetarium's

valuable services to the community, these rules will be strictly enforced:

- \* Absolutely no food, drink, or chewing gum is allowed.
- \* Do not litter.
- \* Do not leave bicycles or skateboards inside the building.
- \* Please keep your feet off the seats.

#### Student Learning Outcome(s):

\*Appraise the benefits to society of planetary research and exploration.

\*Compare and contrast the development of planetary systems and of the major panet types, including those factors that have led to Earth's unique characteristics.

\*Evaluate astronomical news items or theories concerning solar system astronomy based upon the scientific method.