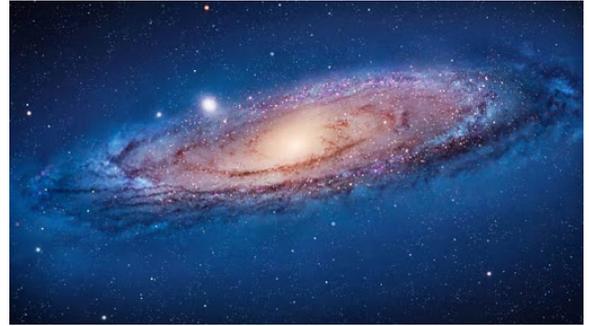


ASTR 2 — Overview of the Universe — Summer 2021

Remote Instruction: Zoom and Canvas
Meeting Time: MWF 1:00 - 3:30 PM
Meeting Dates: 6/21/2021 - 7/23/2021

Course overview: An overview of the main ideas in our current view of the universe. Covers: the night sky, planets, exoplanets, stars, galaxies, and the universe.



Professor: Amanda Quirk; call me Amanda (she/her/hers)

Contact: acquirk@ucsc.edu I will respond within one business day.

Office Hours:

Student Hour (focused on answering questions): Friday 11:00am
Coffee Break (focused on getting to know each: Tuesday 1:00pm
other, but questions are welcome):



Discord: <https://discord.gg/KZUPSM5UNU>

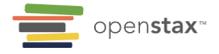
Wellness Statement: This class should never be prioritized above the health and wellbeing of the you or myself. We should all do what we need to take care of ourselves, especially now in the pandemic, and give each other grace. STEM is hard, but with support and hard work, everyone can succeed. This is the mindset I will run the course with and hope you will adopt it too.

Broad Learning Objectives:

1. You will engage with astronomy and make connections as to how it influences multiple cultures and our daily lived experiences.
2. You will see themselves as contributors to astronomical knowledge, practice some key skills of astronomers, and consider STEM as a potential career goal.
3. You will differentiate between planets, stars, galaxies, and the Universe in terms of scale and properties.
4. You will utilize basic math to make comparisons of astronomical phenomenon and scale and to develop problem-solving and communication skills that can be applied beyond this course.

Course website: Canvas — canvas.ucsc.edu





Textbook: *Astronomy*, OpenStax by Franknoi, Morrison, and Wolff
Click [here](#) for a free online version. Hardcopies can be purchased at the bookstore. The textbook will provide support but is not required.

< Astronomy

Introduction

Attendance and participation: Attendance and participation will give you time to interact with me and will support your learning, but are not required. All material will be posted on the Canvas site.

Lectures: Lectures are on Zoom on MWF 1:00-3:30pm PST. See the Zoom tab on Canvas for links. Sign into your UCSC Zoom to join. Lectures will be recorded, and videos and slides will be posted after class.

Zoom Etiquette: Please keep your microphone turned off to avoid distracting other students. If you have a question, please use the "raise hand" feature in Zoom (instructions [here](#)).



Homework Assignments: There are 8 homework assignments. Time will be given in class on Mondays/Fridays to complete the homework individually or in groups. There will be nongraded work for practice on Wednesday. The homework is meant to check your knowledge and to practice critical thinking with small writing responses or real-world activities. Solutions and videos of me solving the homework will be posted after the deadline.

- assigned Monday → due BY Friday 11:59 pm
- assigned Friday → due BY Sunday at 11:59 pm

These deadlines are set, so you can receive prompt feedback. Homeworks are available at the start of the week to complete and turn in at your pace.

End of Class Reflections: Every class will end with the same prompts, asking for you to genuinely reflect about your learning process in the class. These reflections are a way to check on your knowledge and to let me know if something didn't click. These reflections are on Canvas and will be graded for completion. Each reflection is due by 11:59 on the following Saturday.

Final Assessments: You will have five options for your final assessment:

1. a written exam similar to the homework
2. a paper analyzing a piece of Sci-Fi
3. a paper on the research of an astronomer (or a group of peoples)
4. an informational graphic visualizing a concept
5. a 15-day night sky observing log.

All options are due by 11:59pm 7/26. Please see the "Final Assessment Rubrics" folder in Files on Canvas for details about each option. You will be asked to turn in a draft of your final assessment for a homework in order to get feedback you can use to revise your assignment.

Late assignments: Assignment deadlines are made so that I can give you feedback promptly. If you need to turn in an assignment late, please email me to figure out the timeline of submission and receiving feedback.

Grading Weights and Estimated Time:

- Homework (45-60%, lowest will be dropped) — 30-60 minutes each
- Final Assessment (25-40%) — 1-3 hours total
- End of Class Reflections (15%) — 10 minutes each
- Extra Credit Assignment (5%) — 1 hour

You can select the weighting for the homeworks and final assessment during the last week of class via a Canvas quiz. The weighting for the homeworks and final assessment must be 85% total. If you don't select your own weighting, the default will be 55% for the homework and 30% for the final. Grade Scale: **A** 90 – 100% **B** 80 – 89% **C** 70 – 79% **D** 60 – 69% **F** 0 – 59%

Broad Schedule (see daily schedule for more details):

Week 1: Introduction, Earth and the Night Sky, Light and Gravity 

Week 2: Planets, the Solar System, and Exoplanets 

Week 3: Stars and Stellar Evolution 

Week 4: Black Holes, Galaxies, Galaxy Evolution 

Week 5: Cosmology and Review 

Accessibility Statement: I am committed to creating an academic environment that supports its diverse student body and aim to make this course as accessible as possible. If you need accommodations to achieve equal access in this course or find materials or participation to have barriers to your success, please let me know. You can talk to me, email me, and/or submit your Academic Access Letter from the Disability Resource Center (DRC) to me. I am more than happy to work to lower unanticipated barriers because that improves the course! I encourage all students to learn about the DRC and the UCSC accommodation process. You can see resources available to you at <https://drc.ucsc.edu/services-and-accommodations/sa-overview/index.html> and <https://library.ucsc.edu/services/patrons-with-disabilities>. I'm happy to help you access these resources. You can also make an appointment and meet with a DRC staff member. The phone number is 831-459-2089, or email drc@ucsc.edu.



Tips to Succeed: Be honest on the reflections so you can check your knowledge. Talk to me if you're having trouble or need an extension. Take time to view the feedback from your homework and learn from it. Also take notes when watching the lectures! It will help you remember material.

Slug Support Program: College can be a challenging time for students and during times of stress, it is not always easy to find the help you need. [Slug Support](#) can give help with everything from basic needs (housing, food, or financial insecurity) to getting the technology you need during remote instruction. To get started with SLUG Support, contact the Dean of Students Office at 831-459-4446 or you send an email at deanofstudents@ucsc.edu.



Counseling and Psychological Services: Many students at UCSC face personal challenges or have psychological needs that may interfere with their academic progress, social development, or emotional wellbeing. The university offers a variety of confidential services to help you through difficult times, including individual and group counseling, crisis intervention, consultations, online chats, and mental health screenings. These services are provided by staff who welcome all students and embrace a philosophy respectful of clients' cultural and religious backgrounds, and sensitive to differences in race, ability, gender identity and sexual orientation. Visit the [Counseling and Psychological Services](#) for more information.

Resource Centers: UCSC has several identity-based resource centers: <https://resourcecenters.ucsc.edu/>. These include the African American Resource and Cultural Center, the American Indian Resource Center, the Asian American/Pacific Islander Resource Center, the Chicanx Latinx Resource Center, the Lionel Cantú Queer Center, and the Women's Center.

Behavior, Instructional Rules, and Decorum: I will strive to welcome and support our students of all races and ethnicities, genders, sexual orientations, abilities, and religions. Students engaging in disruptive behavior will be asked to leave the lecture, section, or office hour. Threatening behavior toward other students, oneself, or the instructors will not be tolerated and handled according to [University policy](#). Harassment of any kind is unacceptable and will be dealt with directly by the instructor according to university policy. [Title IX](#) and [CARE](#) are available to all of you for support if you experience discrimination in this class. I encourage students experiencing any form of harassment in the context of this course to come either directly to the instructor or to take other appropriate action. Students should abide by the agreed upon Community Guidelines, which you all will have a chance to edit and add to the first day of class.

Academic Integrity: It is expected that you will present your original work and thoughts on assignments. The instructor and the students are expected to create an environment of academic integrity, in which we cite external sources that we use and give credit to our peers for their ideas. All work with a student's name on it will be assumed to be their own.



Daily Schedule:

All assignments are to be submitted on Canvas

Week	Monday	Wednesday	Friday	Saturday	Sunday
1	June 21 <ul style="list-style-type: none"> • Class Logistics 	June 23 <ul style="list-style-type: none"> • The Earth and the Sky 	June 25 <ul style="list-style-type: none"> • Gravity, Light, and the Moon • Pre-Course Survey (HW1) Due 11:59pm 	June 26 <ul style="list-style-type: none"> • Week 1 Reflections Due 11:59pm 	June 27 <ul style="list-style-type: none"> • HW2 Due 11:59pm
2	June 28 <ul style="list-style-type: none"> • Juneteenth Obs. (No live class — lecture will be uploaded) • Drop deadline! • The Solar System Pt 1 	June 30 <ul style="list-style-type: none"> • The Solar System Pt 2 	July 2 <ul style="list-style-type: none"> • Exoplanets • HW3 Due 11:59pm 	July 3 <ul style="list-style-type: none"> • Week 2 Reflections Due 11:59pm (no Monday reflection) 	July 4
3	July 5 NO CLASS	July 7 <ul style="list-style-type: none"> • Stars Pt 1 • HW4 Due 11:59pm 	July 9 <ul style="list-style-type: none"> • Stars Pt 2 • Mid-Course Survey (HW5) Due 11:59pm 	July 10 <ul style="list-style-type: none"> • Week 3 Reflections Due 11:59pm (no Monday reflection) 	July 11 <ul style="list-style-type: none"> • HW6 Due 11:59pm
4	July 12 <ul style="list-style-type: none"> • Black Holes 	July 14 <ul style="list-style-type: none"> • Galaxies Pt 1 	July 16 <ul style="list-style-type: none"> • Galaxies Pt 2 • Final Draft (HW7) Due 11:59pm 	July 17 <ul style="list-style-type: none"> • Week 4 Reflections Due 11:59pm 	July 18 <ul style="list-style-type: none"> • HW8 Due 11:59pm
5	July 19 <ul style="list-style-type: none"> • Cosmology • Extra Credit Due 11:59pm (optional) 	July 21 <ul style="list-style-type: none"> • Review Day • Class 13 Reflection and Review Questions Due Before Class • Grade Weighting Due • Due 11:59pm SET extra credit point due 	July 23 <ul style="list-style-type: none"> • Final Assessment Day 	July 24	July 25
6	July 26 <ul style="list-style-type: none"> • Final Assessment 				