



Syllabus for Astronomy 11

Course Information

Semester & Year: Fall 2025

Course ID & Section #: Astro 11 (E0382)

Instructor's name: Dr. Jon Pedicino

Day/Time/Location: MW 1:15-2:40 PM, Hum 129

Course units: 3.0

Instructor Contact Information

Office hours: MW 9:00-10:00, Hum 209

Email address: jon-pedicino@redwoods.edu

Catalog Description

An examination of the geologic processes that have shaped the planets and moons of our solar system. This class will specifically look at the formation of the solar system, the history of space exploration, missions to the moon and Mars, and the search for life.

Course Student Learning Outcomes (*from course outline of record*)

1. Critically analyze data, specifically astronomical images.
2. Analyze imagery in the context of evolutionary history, age, ability to support life for a particular set of astronomical objects.
3. Recognize a wide variety of planetary geologic constructs and astronomical objects.
4. Analyze how the scientific method is used to understand natural phenomena.

Grading

75% (100 pts each)-Summaries, 12.5% (100 pts)- Paper, 12.5% (100 pts)- In-Class Presentation

A (>93.3%), A- (90-93.3%), B+ (86.7-89.9%), B (83.3-86.6%), B- (80-83.2%), C+ (76.7-79.9%), C (70-76.6%), D (55-69.9%), F (<55%)

Educational Accessibility & Support

College of the Redwoods is committed to providing reasonable accommodations for qualified students who could benefit from additional educational support and services. You may qualify if you have a physical, mental, sensory, or intellectual condition which causes you to struggle academically, including but not limited to:

- Mental health conditions such as depression, anxiety, PTSD, or bipolar disorder
- Common ailments such as arthritis, asthma, diabetes, autoimmune disorders, and diseases
- Temporary impairments such as a broken bone, recovery from significant surgery, or a pregnancy-related disability
- Neurodevelopmental disorders such as a learning disability, intellectual disability, autism, acquired brain injury, or ADHD
- Vision, hearing, or mobility conditions

Available services include extended test time, quiet testing environments, academic assistance and tutoring through the LIGHT Center, counseling and advising, alternate formats of course materials (e.g., audio books, braille, E-texts), assistive technology, learning disability assessments, approval for personal attendants, interpreters, priority registration, on-campus transportation, adaptive physical education and living skills courses, and more. If you believe you might benefit from disability- or health-related services and accommodations, please contact Student Accessibility Support Services (SASS). If you are unsure whether you qualify, please contact Student Accessibility Support Services (SASS) for a consultation: sass@redwoods.edu.

SASS office locations and phone numbers

Eureka campus

- Phone: 707-476-4280
- Location: Learning Resource Center (Library)

Del Norte campus

- Phone: 707-465-2353
- Location: main building, near the Library

Klamath-Trinity campus

- Phone: 707-476-4280

Astronomy 11 Class Schedule

Monday, August 25, Class begins

Monday, September 1, **Holiday, No Class**

Monday-Friday, November 24-28, **No Class, Fall Break**

Monday, November 17, In-Class Presentations Due

Sunday, December 7, Paper due (on Canvas)

Astronomy 11 Topics/Outline

Online open textbook: <https://openstax.org/details/books/astronomy-2e>

Class videos on Youtube: <https://www.youtube.com> , Search Redwoodsastronomy (numbered videos)

<u>Week</u>	<u>Summary</u>	<u>Openstax Text</u>	<u>Slide Set</u>	<u>Youtube video</u>	<u>Topic</u>
1		1.2,1.4, App C/D.	---	3, 4	Intro, Units, Scientific Method
2		No Class Monday			Overview Slides, Space Images
3	Unit 1	---	1		Overview Slides, Space Images
4		5.1, 5.2	3	16, 17	EM Radiation (Light), Spectrum
5		29.6,29.3,29.1-2	2	23, 24	Big Bang
6	Unit 2	7.4,21.1,21.3,14.3	2	25	Solar System Formation
7		14.4, 21.4-.6	2	---	Extrasolar Planets
8	Unit 3	8.1-8.4	4	27	Planet Earth
9		---	5	---	Space Exploration
10		9.1-9.4	6	28	The Moon
11	Unit 4	10.1, 10.4-.6	7,8	29 (Mars)	Mars
12		12.1-.3, 30.1-.4	10	30 (Moons).	Io,Europa,Titan,Enceladus,LIFE
13	Unit 5				In Class Presentations Due
14					<u>Paper Due, Presentations</u>
15	Unit 6				Summary of missions, MISC

Research Essay/Presentation Requirements

Astronomy 11

Topic: As assigned/chosen from the class list of space missions. I would suggest consulting the internet for information. Some good places to start are www.nasa.gov , www.spacedaily.com , www.space.com , www.planetary.org , spaceflight.nasa.gov , and www.spaceweather.com, www.jpl.nasa.gov .

Length: 3-5 typed (**Minimum 1100 words**) pages, excluding figures and list of references.

Sources: Minimum Three (3) sources other than encyclopedias and textbook.

Required: Essay, References (citations), Reference List (bibliography).

Essay Due Date: Sunday, December 7, 2025. (**on Canvas**)

Late Penalty: Due by midnight, one grade lower every two days late, **not accepted after Friday, December 12.**

Presentation Due Date: Monday, November 17, 2025. (**In Class**)

***Note:** Presentation must be approximately 8-10 minutes in length and may include visual media such as powerpoint slides.

Note: **Bibliography** should be a list of all sources you have consulted with full information given about each. Normally this includes title, author, publisher, page numbers, year, etc. Internet sites should be listed with their site address (i.e. <http://www.....>). To simplify, you might list each site as site 1, site 2, etc., and then reference them in that way in the text of your paper.

You should directly **reference** any idea, fact, or quotation that is not your own or common knowledge (i.e. 'the Earth is round' does not need a reference). You are free to use any reference style you would like (MLA, APA). The simplest style includes the author's name or title and the page number or the website (site 1, site 2, etc) following the referenced fact, quote, or idea in parentheses.

An example: The meteoritic impact in the Yucatan peninsula is believed to have led to the extinction of the dinosaurs. (Kring, 1993) or (site 1).

