

### Course Information

Semester & Year: Spring 2024

Course ID & Section #: Astro 11 (E5798)

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](mailto: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%)

### Accessibility

College of the Redwoods is committed to making reasonable accommodations for qualified students with disabilities. If you have a disability or believe you might benefit from disability-related services and accommodations, please contact your instructor or [Disability Services and Programs for Students](#) (DSPS). Students may make requests for alternative media by contacting DSPS based on their campus location:

- Eureka: 707-476-4280, student services building, 1<sup>st</sup> floor
- Del Norte: 707-465-2324, main building near library
- Klamath-Trinity: 530-625-4821 Ext 103

If you are taking online classes DSPS will email approved accommodations for distance education classes to your instructor. In the case of face-to-face instruction, please present your written accommodation request to your instructor at least one week before the needed accommodation so that necessary arrangements can be made. Last minute arrangements or post-test adjustments usually cannot be accommodated.

## Astronomy 11 Class Schedule

Wednesday, January 15, Class begins

Monday, February 19, **No Class, Holiday**

Monday-Friday, March 11-15, **No Class, Spring Break**

Monday, April 1, **No Class, Holiday**

Monday, April 15, In-Class Presentations Due

Friday, April 26, 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		---	<b>1</b>		Overview Slides,Space Imagery
3	<b>Unit 1</b>	---	<b>1</b>		Overview Slides
4		5.1, 5.2	<b>3</b>	16, 17	EM Radiation (Light), Spectrum
5		29.6,29.3,29.1-2	<b>2</b>	23, 24	Big Bang
6	<b>Unit 2</b>	7.4,21.1,21.3,14.3	<b>2</b>	25	Solar System Formation
7		14.4, 21.4-.6	<b>2</b>	---	Extrasolar Planets
8	<b>Unit 3</b>	8.1-8.4	<b>4</b>	27	Planet Earth
9		---	<b>5</b>	---	Space Exploration
10		9.1-9.4	<b>6</b>	28	The Moon
11	<b>Unit 4</b>	10.1, 10.4-.6	<b>7,8</b>	29 (Mars)	Mars
12	<b>Unit 5</b>	12.1-.3, 30.1-.4	<b>10</b>	30 (Moons).	Io,Europa,Titan,Enceladus,LIFE
13					<b>In Class Presentations Due</b>
14					<b><u>Paper Due</u>, Presentations</b>
15	<b>Unit 6</b>				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](http://www.nasa.gov) , [www.spacedaily.com](http://www.spacedaily.com) , [www.space.com](http://www.space.com) , [www.planetary.org](http://www.planetary.org) , [spaceflight.nasa.gov](http://spaceflight.nasa.gov) , and [www.spaceweather.com](http://www.spaceweather.com), [www.jpl.nasa.gov](http://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:** Friday, April 26, 2024. (**on Canvas**)

**Late Penalty:** Due by midnight, one grade lower every two days late, **not accepted after Mon, May 6.**

**Presentation Due Date:** Monday, April 15, 2024. (**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).

