

## **Astronomy 10 Syllabus**

Reedley College - Spring 2024



## **Course Description:**

An introduction to the astrophysics, the study of the solar system: the planets, the Sun, and other bodies. We will also look at the properties of other stars. This will include a look at the history of our understanding of the solar system and the cosmos, and a description of the relevant physics laws involved. The focus will be conceptual, but occasionally some quantitative aspects will be covered.

.pdf files for all lecture material will also be uploaded to Canvass AFTER the lecture is given.

**Labs:** Monday 5:00 PM – 6:50 PM

Wednesday 5:00 PM – 6:50 PM

... in PHY 70 at Reedley College

#### ASTRO-10-50000

Contact Information:

Instructor Name: Mike Bisset

Email: mike.bisset@reedleycollege.edu



#### Office Hours:

Mondays & Wednesdays 3:00PM - 4:00pm in PHY 70 or 75
Fridays 4:10am - 4:50pm in PHY 70 or 75 --- most weeks
Tuesday, Thursday via Zoom – more info TBA
I am also available to meet with you, either in person or on-line by appointment.
You need to reach out to me, and then we will definitely schedule time.

#### Required Course Materials:

- TEXTBOOK: Open Stax Astronomy,
   ISBN-10: 1-938168-28-3, ISBN-13: 978-1-938168-28-4
  - THIS TEXTBOOK IS AVAILABLE FREE ONLINE: https://openstax.org/details/books/astronomy

Prerequisites: none

Advisories: English 1A or 1AH

#### **Student Learning Outcomes:**

In this course, students will become familiar with the following phenomena:

- History of the study of the heavens
- Radiation
- Telescopes
- The solar system
- Stars
- Galaxies & Cosmology (MAYBE)

## Calendar:

- January 19 (F) Last day to drop a full-term class for full refund
- January 26 (F) Last day to register for a full-term class in person with add authorization
- January 26 (F) Last day to drop a full-term class to avoid a "W" in person
- January 28 (Su) Last day to drop a full-term class to avoid a "W" on Self-Service
- January 28 (Su) Last day to add a full-term class with add authorization on Self-Service
- March 8 (F) Last Day to drop a Spring 2024 full-term class (letter grades assigned after this date)
- May 17 (F) Last day to change a class to/from Pass/No-Pass grading basis
- January 15 (M) Martin Luther King, Jr. Day (HOLIDAY)
- February 16 (F) Lincoln Day (HOLIDAY)
- February 19 (M) Washington Day (HOLIDAY)
- March 25<sup>th</sup> 29<sup>th</sup> Spring Recess, no classes held
- May 13<sup>th</sup> 17<sup>th</sup> Finals week

## **Exams:**

There will be two midterm exams (each worth **25%** of the overall grade) and one final exam (worth **30%** of the overall grade).

The exams will be held during lab hours.

The exams contribute **80%** of your semester grade, so they are very important to prepare for.

Makeup exams will be given with pre-approval only.

Further details will be given during the semester.



## **Laboratory & Homework**:

This class has lab exercises that are mandatory. The lab scores make up 20% of your grade. Make plans to attend every lab session if possible! Lab scores are typically very generous, so missing labs (score = 0) will hurt you! Missed labs can be made up on some Friday afternoons without penalty. There may be quizzes given for a few labs.

Scores of such quizzes will be included in your lab score.

There will not be too much homework assigned. Occasionally, laboratory material will have to be completed outside of class-time. Homework score will be incorporated into the lab score.

## **Grading Policy:**

I do curve-grade, so the scores on the exams may not tell you exactly what your final score will be. After each test, I will display a score distribution for that exam, and tell you what it means. Basically, things only go up, not down. Near the end of the semester, I will offer some means of making up <u>some</u> points if a student has done poorly on some item (exams, homework, labs).

Category	% of Class Grade	
Midterm No. 1	25%	
Midterm No. 2	25%	
Labs, incl. quizzes &	20%	
homework	2076	
Final Exam	30%	

# Tentative Schedule for ASTRO 10 Spring 2024

## This schedule may be too ambitious! We may go slower.

Week		Meeting #	Date	Chapter	Asynchronous Lecture Subjects	LAB
1	М	1	Jan. 8	1	Survey of the cosmos	
1	W	2	Jan. 10	1	Celestial sphere	1 Measurement
2	М		Jan. 15	2	Constellations	HOLIDAY MLK B-day
2	W	3	Jan. 17	2,3	Ptolemy, Copernicus, Kepler	2 Math Practice
3	М	4	Jan. 22	3,4	Newton, tides	3 Mystery Constellations
3	W	5	Jan. 24	4	Earth, Moon, and Sky	4 Solar System scale
4	М	6	Jan. 29	5	Radiation	5 Motion of the Moon
4	W	7	Jan. 31	5	Blackbodies, atomic spectra	6 Observations
5	М	8	Feb. 5	6	Telescopes	REVIEW Chs. 1-5
5	W	9	Feb. 7	7	Survey of solar system	Midterm EXAM #1
6	М	10	Feb. 12	8	Earth	6 Observations continued
6	W	11	Feb. 14	9	Moon & Mercury	7 Kepler's Laws
7	М		Feb. 19	10	Venus & Mars	HOLIDAY Wash. B-day
7	W	12	Feb. 21	11	Jovian planets	REVIEW Chs. 6-10
8	М	13	Feb. 26	12	Moons, Rings, and Pluto (TNOs)	Midterm EXAM #2
8	W	14	Feb. 28	15,16	The Sun	8 Spectroscopy
9	М	15	Mar. 4	17,18	Other stars	REVIEW
9	W	16	Mar. 6	15	FINAL EXAM	FINAL EXAM
						+

#### STUDENT SUCCESS:

Technology Support:

https://www.reedleycollege.edu/campus-life/technology-help.html



Tutoring Services:

https://www.reedleycollege.edu/academics/tutoring-services/index.html

• COVID-19 information is uploaded to the Reedley College site: https://www.reedleycollege.edu/covid-19/index.html

DSPS contact information:

O Hours: Monday – Friday 8:00 am – 5:00 pm

o Phone: 559-638-0332

See more DSPS information here: <a href="https://www.reedleycollege.edu/student-services/disabled-student-programs-and-services/index.html">https://www.reedleycollege.edu/student-services/disabled-student-programs-and-services/index.html</a>

Any student needing accommodations should inform the instructor. Students with disabilities
who may need accommodations for this class are encouraged to notify the instructor and
contact DSPS early in the semester so that reasonable accommodations may be implemented as
soon as possible. All information will remain confidential.

### **Academic Dishonesty**

Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.

#### **CHEATING**

#### Warning: I am strongly disturbed by cheating. It is simply NOT worth it!!!!!

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely. 48 Administrative Policies 2022-2023 Reedley College Catalog

#### **PLAGIARISM**

Plagiarism is a specific form of cheating: the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights. Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on the particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents