

Instructor: Professor Travis Barman
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Office: Kuiper Space Sciences, Room 436
Office Hours: 2:30pm to 3:30pm Tuesday and Thursday,
or by appointment

Grad. Teaching Asst. Kyle Pearson(pearsonk@lpl.arizona.edu)
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Room TBD, Kuiper Space Sciences
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Office Hours: TBD,
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Schedule: Tuesday and Thursday, 11:00 – 12:15pm,
Kuiper Space Sciences room 308

Course Objectives

The Earth is one planet in our Solar System and our Solar System is one of many thousands of known planetary systems. During this course we will explore various topics to help place the Earth (and Humanity) in a broad cosmic context. Both planetary and stellar properties will be covered. The course will introduce you to the concepts and techniques used in astronomy and planetary sciences to understand distant worlds.

Learning Outcomes

Upon completion of this course you will be able to identify the important properties of the Sun and its major planets, and explain how these properties compare to other large bodies in the galaxy. Using standard physical and chemical concepts, you will be able to explain current formation models for stars and planets. You will also be able to describe the diversity of planets populating the galaxy and how the properties of these distant worlds compare to the terrestrial and giant planets orbiting our Sun. You will also gain a quantitative understanding of the scale of the Solar System, the Solar Neighborhood, and planetary motions using equations, graphs and observations of the Moon.

This syllabus provides important information about the structure and content of the course. Syllabus updates will be posted on D2L as needed.

Textbook: *The Cosmic Perspective* (Bennett, Donahue, Schneider, Voit). The textbook is not required but strongly recommended for this course. Reading assignments will be from this book and it will be invaluable for preparing for exams.

Grades:	Exams 1,2,3:	45%
	Homework:	15%
	Observing Project:	20%
	Final Exam	20%
	90 – 100	A
	80 – 89.9	B
	65 – 79.9	C
	50 – 64.9	D
	< 50	E

Requests for incomplete (I) or withdrawal (W) must be made in accordance with University policies, available at <http://catalog.arizona.edu/2015-16/policies/grade.htm#I> and <http://catalog.arizona.edu/2015-16/policies/grade.htm#W>, respectively.

Exams: There will be three in-class “mid-term” exams, each counting 15% of your grade. There will be NO make up exams. If your final-exam score is greater than your lowest mid-term score (including a missed exam), your final exam score will replace that mid-term score. *If more time is needed to complete exams, you MUST notify the professor and contact DRC at least two weeks in advance to schedule a time to take the exam at the DRC testing facility.* The Final Exam Date/Time is set by the University, see here: <http://www.registrar.arizona.edu/schedules/finals.htm>
<https://www.registrar.arizona.edu/courses/final-examination-regulations-and-information>

The final for this class is scheduled for **Tuesday, May. 12, 10:30am – 12:30p.m**

Homework/Quizzes: Will be assigned approximately each week and due one week after assigned. Your lowest-scoring assignment in this category will be dropped. Homework/Quiz assignments will be administered online at the D2L course page.

Writing Requirement: This semester you will be observing the Moon and preparing a written report along with your observation logs. You will have one opportunity for revision. The details of the assignment will be posted on D2L.

Bonus Points: There will be opportunities to earn bonus points throughout the semester. You may earn up to a maximum of 5 bonus points (these are added to your final course grade).

Schedule: The following table lists the approximate order of topics:

Week	Topic	Assigned Chapter Reading
1	A Modern View of the Universe, Discovering the Universe for Yourself	1 2
2	The Science of Astronomy	3
3	Making Sense of the Universe	4
4	Understanding Motion, Energy, and Gravity	4
5	Light and Matter	5
6	Our Star / Star Birth	14/16
7	Star Stuff / Stellar Graveyard	17/18
8	Our Planetary System	7
9	Solar System Formation	8
10	Planetary Atmospheres	10
11	Jovian Planets	11
12,13	Other Planetary Systems (Exoplanets)	13

Exam 1: Feb. 25th

Exam 2: Mar. 31st

Exam 3: Apr. 30th

Final Exam, May 12, 10:30am - 12:30pm

Absence and Class Participation Policy

The UA's policy concerning Class Attendance, Participation, and Administrative Drops is available at <http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop>

The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable:

<http://policy.arizona.edu/human-resources/religious-accommodation-policy>.

Absences preapproved by the UA Dean of Students (or dean's designee) will be honored. See <https://deanofstudents.arizona.edu/absences>

Participating in the course and attending lectures and other course events are vital to the learning process. As such, attendance is *strongly recommended*.

Honors contract: PTYS170B is a Tier One science course available for an honors contract. For those requiring a contract, please contact the professor and complete this form:

<http://www.honors.arizona.edu/documents/students/ContractRequestFrom.pdf>

Classroom Behavior: Please turn off/disable your mobile phone during class. Students are encouraged to adhere to the UA Policy on Disruptive Behavior in an Instructional Setting. See: <http://policy.arizona.edu/disruptive-behavior-instructional>.

Posting videos, photos or recordings of lectures, exams, scorecards, etc. online or distributed by any media format is strictly prohibited (this includes social media forums). You may only make recordings for personal learning use and only after obtaining approval from the professor.

Threatening Behavior Policy: The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See <http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students>.

Accessibility and Accommodations: Our goal in this classroom is that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please let me know immediately so that we can discuss options. You are also welcome to contact the Disability Resource Center (520-621-3268) to establish reasonable accommodations. For additional information on the Disability Resource Center and reasonable accommodations, please visit <http://drc.arizona.edu>.

If you have reasonable accommodations, please plan to meet with me by appointment or during office hours to discuss accommodations and how my course requirements and activities may impact your ability to fully participate.

Please be aware that the accessible table and chairs in this room should remain available for students who find that standard classroom seating is not usable.

If more time is needed to complete exams, you should notify the professor and contact DRC at least two weeks in advance to schedule a time to take the exam there.

Code of Academic Integrity: Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See: <http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity>.

The University Libraries have some excellent tips for avoiding plagiarism, available at <http://www.library.arizona.edu/help/tutorials/plagiarism/index.html>.

Selling class notes and/or other course materials to other students or to a third party for resale is not permitted without the instructor's express written consent. Violations to this and other course rules are subject to the Code of Academic Integrity and may result in course sanctions. Additionally, students who use D2L or UA e-mail to sell or buy these copyrighted materials are subject to Code of Conduct Violations for misuse of student e-mail addresses. This conduct may also constitute copyright infringement.

UA Nondiscrimination and Anti-harassment Policy: The University is committed to creating and maintaining an environment free of discrimination; see <http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy>

Subject to Change Policy: Information contained in the course syllabus, other than the grade policy, may be subject to change with advance notice, as deemed appropriate by the instructor.