

PSCI 2303 Physical Science I // Fall 2025 // MW 2:30 pm – 4:20 pm in PSCI 224

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Office hours: W 12:30 pm – 1:30 pm or by appointment (<https://jamunoz.youcanbook.me>)

Course description and learning outcomes

This course will give the student a broad understanding of the physical sciences (physics, chemistry and geology) via hands-on experiments and other activities. The course is an excellent way for education majors to gain an appreciation of the scientific method and of scientific knowledge. Upon completion of this course, the student will be able to: understand and recall fundamental principles and basic definitions from the physical sciences; solve conceptual physical science problems; solve simple quantitative problems in the physical sciences; and analyze experimental data.

Grading Policy:

Lab reports (1 per week on Wednesdays, 14 total, 4 points each)	56 points
Discussion (1 per week on Mondays, 14 total, 2 points each)	28 points
Quizzes (1 per week on Mondays, 14 total, 2 points each)	28 points
Essays (1 per month on last day of the month, 3 total, 10 points each)	30 points
Final presentation (1 on Friday December 12th at 10 am)	18 points
Total	160 points

A: 140 - 160 B: 120 - 139 C: 100 - 119 D: 80 - 99 F: 0 - 80

Lab reports:

On Wednesdays, you will perform a lab experiment from the Physical Science I bundle. The experiments will be uploaded to Bb so there is no need to buy the bundle. A report, along with a short write-up on how understanding the main physical science concepts in the lab helps your teaching, will be graded before you leave.

Discussion:

Videos will be posted on Bb ahead of time and will be discussed by the whole class on Mondays. Come prepared to share your ideas. I will evaluate the quality of your participation. Taking notes is highly encouraged as it will make writing your monthly essays easier.

Quizzes:

Weekly homework will be posted on Bb on Mondays and will be evaluated via short quizzes on Bb during lecture time the following Monday. The access code for the quizzes will be communicated by the instructor to those in attendance.

Essays:

Pick one of the discussion topics during the previous month and elaborate. Summarize the resources and the discussion, write about your opinion, whether you had one before the discussion or whether it changed what you thought, how having an opinion will affect your teaching (if at all), and how being aware of the arguments and minutiae makes your opinion stronger or weaker. Highly encouraged to share specific effects on your current or future teaching. 3 to 5 pages, double spaced, uploaded to Bb. I read your essays and comment on them. Please respect my time and intelligence by not using generative AI.

Final presentation:

Design a new experiment following the scientific method and using tools and materials from the lab. Should be about 30 minutes, groups of 4-5 people.

Lab make-ups:

There will be an opportunity to complete unfinished labs on Wednesday December 3rd, 2025 during regular class time.

Extra points:

A list of movies will be made available on Bb. Watch one of the movies and convince another student to do the same. Discuss with your partner the scientific aspects of the movie and relate the content to our weekly discussions. Then record together a five-minute summary of your conversation and share it with your instructor. Each student will earn 2 points and there is no limit to the number of points that can be obtained this way.

Students with Disabilities:

If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at <https://www.utep.edu/student-affairs/cass/>.

Statement on generative AI:

All work submitted for this course must be your own. Any use of generative AI tools when working on assignments is forbidden. Use of generative AI will be considered academic misconduct and subject to investigation.