

Astronomy 101 Lab Syllabus

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OH: Tuesday 6:15-6:45 pm, VABS 119
Classroom: Tuesday 6:45-8:45 pm, VABS 127 and online
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Welcome to Astronomy 101L! This lab section complements the Astronomy 101 lectures by building your intuition through experiments and theory. As such, please do not hesitate to ask any questions you have on the material; the ultimate aim is for you to understand concepts and be proficient in introductory Astronomy. Please note I reserve the right to change this syllabus if I see it fit to do so throughout the semester. (**pre- or co-requisite: ASTR 101**)

Objectives

Topics to look forward to include a brief history of Astronomy, an analysis of the behavior of stars and planets as seen from Earth, applying the scientific method, understanding the scales of the universe, how to use tools like telescopes and spectroscopes to observe and quantify the stars, a study of the formation and properties of objects in our solar system, an overview of gravity and electromagnetism, methods of discovery of planets around stars, the structure and activity of the Sun and its contextualization with other stars, the life cycle of a star, the structure of the Milky way and its comparison to other galaxies, the Big Bang theory in the context of recent observations, and the possibility of extraterrestrial life in the universe. Note that the lab is a math-based course, and the math is more math-intensive than the lecture; a knowledge of geometry and algebra is expected.

Title IX

UNM faculty, Teaching Assistants, and Graduate Assistants are considered “reponsible employees” by the Department of Education.¹ This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct, and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: <https://policy.unm.edu/university-policies/2000/2740.html>.

¹See p. 15 - <http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf>

Attendance

Lab attendance is mandatory. Students are required to complete all previous labs before attempting a new lab. There is a penalty for missed labs, but they may be made up on the instructor's time. **Any missed labs at the end of the semester result in your final grade lowering by a full letter grade!** You are responsible for informing me promptly of any excused reasons for tardiness or absence.

- **Tardiness:** If you are late, you will miss important information disseminated at the beginning of the lab, and be a burden to your peers, and lose points in Attendance and Participation that week.
- **Absences:** All absences must be promptly made up on the instructor's time before the next lab section. Unexcused absences carry a penalty even when made up.

Grading

Each lab is graded weekly for Attendance and Participation (1/3 of the lab grade) and Reports/Quizzes (2/3 of lab grade). A+ are given out rarely for exceptional work. Projects will be assigned throughout the semester; each of these is worth one entire lab grade.

Attendance and participation guidelines:

A	Active Participation	Fully participates in activities, engaged, makes sure to gain full understanding of material
A-,B	Passive Participation	Is tardy to lab, depends on others for information
C	Poor Participation	Is very late, checks phone during lab, distracted and/or distracts others.
0	No Participation	Attendance in another section not verified by TA (<i>see Absences</i>).

Lab report guidelines:

A	Standard	Questions answered fully and meaningfully, clearly and correctly, legibly and in an organized manner.
A-	Good	Report has minor error(s).
B	Acceptable	Report is OK, but there are errors and/or missing entries.
C	Unacceptable	Report has significant errors, unanswered questions, missing data, etc.
0	No report	No report is turned in. Authorship not verified by TA.

Students with Disabilities

Qualified students with disabilities needing appropriate academic adjustments should contact me as soon as possible to ensure your needs are met. Handouts are available in alternative accessible formats upon request.