

AST 101 – Introduction to Astronomy – FALL 2025

Instructor: Luis Anchordoqui, Gillet 132, phone: 347-577-4119, E-mail: luis.anchordoqui@gmail.com

General Info: This course is classified as “Zero Textbook Cost.” The material for the course is available at the course website.

Course website: <http://www.lehman.edu/faculty/anchordoqui/101.html>

Texts: No textbook required. Lecture notes available in the course website. You may use any textbook to complement the lectures.

Lectures: Tuesdays and Thursdays 13:30 – 14:45, Gillet 226. Lectures begin August 26, 2025

Office Hours: Tuesdays and thursdays 13:00 -13:30

Labs: Two labs will be given during the semester: November 13, December 4

Tests: Four tests will be given during the semester: September 30, November 4, November 25 December 11

Final: There will be a comprehensive final exam; Thursday December 18; Time: 13:00-15:00.

The final is mandatory and you are responsible for making sure that you can attend at this time.

Grading policy: The overall course grade will be determined as follows:

30 % - lab group assignments (15% each)

40% - midterm exams (10% each)

30% - comprehensive final exam

Letter grades will be assigned according to the guidelines

A.= 90 - 100

B.= 80 - 90

C.= 60 - 80

D.= 50 - 60

F = below 50

The cutoffs for +’s and -’s will be decided at the end of the semester.

Provisional Course Outline

Astronomy, Astrophysics, Cosmology, and Astrobiology

(Please note this may be revised during the course to match coverage of material during lectures, etc.)

1- From Ptolemy to Newton

1st week: Astronomy 2500 years ago

2nd week: Copernican revolution and Kepler's laws of planetary motion

3th week: Newtonian celestial mechanics

2- Stars and Galaxies

4th week: The Milky Way

5th week: Astronomically far away: Parallax and distance measurement

6th week: Classifying stars: The Hertzsprung-Russell diagram

7th week: The birth and death of stars like the Sun

8th week: Supernova and black holes

3- Lookback time

9th week: Hubble's law and the expanding Universe

10th week: The Big Bang theory

4- Exoplanets and Exolife

11th week: The habitable zone

12th week: Are we alone? Space colonization and the Fermi paradox

How to be successful in this course
PLEASE READ CAREFULLY

1. This is not a correspondence course. Attendance at lectures is highly encouraged.
2. Make sure you visit the course website regularly. Check the announcements.
3. TESTS: Multiple choice with questions taken from the lectures
4. test problems are loosely based on those you will find in the worksheet assignments. Please check the schedule of tests for conflicts with religious observance. Please let me know ASAP if you see any conflicts; a different time will be arranged so that you can take the test. Make-up tests will be given only for valid reasons.
5. Please contact me immediately if you think that a genuine mistake has occurred in the grading of tests. Clerical errors in grading will of course be rectified as soon as possible.
6. Students with special requirements/learning disabilities should see me as early as possible during the semester. Note that it is the responsibility of students with special accommodations to contact the instructor as early as possible to make the appropriate arrangements for testing. Please note that I cannot allow students to take tests under conditions different from those experienced by the rest of the class (extra time, separate room, etc.) unless they have the appropriate paperwork (VISA form) from the Student Accessibility Center. The Student Accessibility Center will issue formal instructions to me about how students with disabilities are to be accommodated.
7. STATEMENT REGARDING AI AND CHAT GPT In this course, academic integrity and originality are paramount. Therefore, you are not permitted at any stage of your coursework to use. Generative AI tools, which are systems like ChatGPT that can create content such as text, images, or music based on input data. This includes activities like generating ideas, drafting, or finalizing assignments. However, tools designed to assist in grammar and spelling, such as Grammarly, are acceptable. If you have any uncertainties about the use of specific tools or need clarification on this policy, please consult the professor.