

Syllabus: Astronomy 104

Sections 1-8, Spring 2025

This is an introductory course to astronomy, with more emphasis on active thinking than memorizing facts. The main points of this course are (1) a general understanding of astronomy, (2) what can be observed in the sky, (3) what we know about the stars and the Universe.

Lecture

Monday and Wednesday

Sections 1-2-3-4: 2:00-2:50 Sections 5-6-7-8: 4:00-4:50

(The two are not interchangeable, students must not come to the wrong section!)

Electronic devices must not be used during lecture.

Instructor

Dr. Tibor Torma, Department of Physics and Astronomy,
Lewis 208, 915-5627, ttorma@phy.olemiss.edu.

Office Hours

Monday and Wednesday 3:00 or call for appointment.

Textbook

J. Bennett et al: *The Cosmic Perspective*, 6th edition.

(Other editions, including electronic, are also acceptable, but only paper versions may be used during tests.)

Course Home Page

<http://www.phy.olemiss.edu/~ttorma/Astro/index.html>

(Note: the ~ sign is found on the keyboard left of number 1. Keep "shift" pressed for it. Watch for the capital A!)

Lectures: The lectures cover the material in the textbook from a different perspective. Lectures are based on Microsoft PowerPoint presentations. These presentations will be posted on the web right after class. The presentations do not give sufficient explanation by themselves - participation is necessary.

Computer/email requirement: Access to a computer with (i) Microsoft PowerPoint on it is strongly recommended. It is possible but quite awkward/inconvenient to work with a smartphone only. Access to email is absolutely required. ***Read your email every day!***

Homework: The lectures will include more detail than, as well as the logic of, what is in the presentations. Students are expected to (i) review each presentation before next class, and (ii) study and learn all material in the presentations that has been covered in class. (Use your notes.) This counts as homework. Textbook reading and internet search (usually Wikipedia) is needed for this. Note: it is possible to pass the course for students who do not do this additional studying, but achieving an A or B grade will not really be possible without it.

Home Page: The course comes with a neatly maintained home page. Students need to check it regularly, including the links.

Quizzes: The presentations contain several short quizzes during every lecture. Students are required to take these quizzes, and turn in their scantrons at the end of each class. *(Turning in another student's scantron constitutes cheating, do not do it!)*

The questions will be based on the day's lecture, plus possibly a few review questions based on the last class. No advance preparation is needed except for the review questions.

For each class and for each in-person test, each student must bring a **scantron # 16485**. This adds up to about 25 scantrons per semester.

Tests:

- Three one-hour tests are given during the semester on **Feb. 21, Mar. 21, and Apr. 25.**
- Each student must **pass** another exam that consists of a large number of basic multiple-choice questions. The questions and the correct answers are given out in advance and are available on the home page. The test is first offered on **Feb. 28.** Those who do not pass will be given two more chances to re-take it by the price of lost partial credit. Passing level is **90%,** but once a student passed, the score does not count into the grade. ***A student who does not pass this test will fail the course.***
- The two hour final exam is comprehensive. Note that the instructor does **not have the right** to give the final exam at a different time. The time is **May 5, Monday, 4:00-6:00 for Sections 1-2-3-4** and **May 9, Friday, 4:00-6:00 for Sections 5-6-7-8.**

Note that (except the finals) all tests are **on Fridays, at 2:00-3:00 pm for Secs. 1-2-3-4 and at 4:00-5:00 pm for Secs. 5-6-7-8, in person.** There is **no lecture on Fridays,** but students must make sure not to create a conflict with the test times. Excuses will be given out only in extremely serious circumstances. **Do not buy an air ticket** in conflict, because you will be asked to reschedule. Textbooks may be used for tests.

Laboratory and discussion: All students **must** take the laboratory and attend the section to which they are assigned. Lab is at night, according to a separate schedule for each section. Switching between sections of the lab will be difficult, and certainly not permitted after the first week of classes. Lab grades are awarded on the basis of the lab reports turned in by the students. There is a separate lab syllabus that clarifies the details.

Absences: Missed quizzes, tests and labs in general cannot be made up. Each student will be given, in the beginning of the semester, three quizzes worth of free credit to compensate for medical emergencies or other excusable absences. Only prolonged excused absences will be given special consideration.

Students with disabilities: All reasonable measures will be taken to accommodate any special needs. Inform the instructor in advance of any such need during lecture, discussion, laboratory or tests. Affected students are responsible for requesting special arrangements in time. However, no extra time can be offered for the in-class quizzes (in case this causes a severe problem, individual remedies might be considered).

Late enrollment: Students who do not attend the first week but enroll later will lose the missed quiz credit.

Grading: The grades are determined by the weighted average as follows:

Grading scale: A≥92%>A⁻≥90%>B⁺≥88%>B≥82%>B≥80%>C⁺≥78%>C≥72%>C≥70%>D≥60%>F			
REGULAR CLASS		HONORS SECTION	
Quizzes	10%	Quizzes	5%
First test	10%	First test	10%
Second test	13%	Second test	11%
Third test	16%	Third test	12%
Final test	21%	Final test	19%
Laboratory	30%	Laboratory	10%
		Semester project	33%

An honors student who does not achieve at least 60% of full credit in the semester project fails the course.

Drop test: the lowest % score (or a missed one) on Test 1-2-3 is replaced by the final test % if that is higher.

- **Anyone who fails the labs will fail the course, whatever his/her points would be otherwise!**
- **Anyone failing the "pass and fail" test will fail the course, whatever his/her points would be otherwise!**