

Physics 224 Labs – ALL SECTIONS

SYLLABUS – FALL SEMESTER, 2023

Week of	Room #	Experiment
Aug 28 + Sept 5-8	101	Introduction to Data and Error Analysis
Sept 11	101	Acceleration of Freely Falling Bodies
Sept 18	101	Viscosity
Sept 25	104	Gas Laws
Oct 2	104	Measurement of Specific Heat, Latent Heat of Fusion
Oct 9	102	Geometrical Optics
Oct 23	104	Transverse Waves in a String under Tension
Oct 30	100	Measurement of the Speed of Sound
Nov 6	102	Interference and Diffraction of Light
Nov 13	102	Determination of the Refractive Index of Air

IMPORTANT NOTES

1. The text of the upcoming experiment must be studied before coming to class. The text is available online in the Course Documents on Blackboard;
2. In the PRE-LAB TESTS folder on Blackboard there are two-problem online pre-lab tests based on the text of each experiment. The aim of the tests is to stimulate the independent study. Each pre-lab test contributes max 1.5 points credit towards the 100 points max final grade, aggregating to 15% of it. Deadline for the responses is one hour before the lab start;
3. There will be at least four in-lab quizzes during the semester over material of passed labs. They will count another 15% of the final grade;
4. Showing up on the first two class sessions is of high importance, so much so that missing them leads to automatic drop of the course;
5. One missed lab out of ten will decrease your lab report portion of the final grade by 10% automatically. Two missed labs will result in a failing grade. **Legitimate emergency cases should arrange for make up immediately** by contacting both the labs office at ugradlabs@physics.miami.edu and lab class instructors (regular and make up). There are no reading days for the labs, therefore no make ups can be performed past the last lab week.