PHY225 SYLLABUS – SPRING semester, 2025.

Week	Room	Date	Experiments
1	101	Jan 27 to Jan 31	Equipotential and Electric Fields
2	100	Feb 03 to Feb 07	The Millikan-Fletcher Experiment
3	101	Feb 10 to Feb 14	Force between Two Current Carrying Wires
4	100	Feb 17 to Feb 21	DC Electrical Measurements
5	101	Feb 24 to Feb 28	Geometrical Optics
		Mar 03 to Mar 07	RECESS
		Mar 10 to Mar 14	SPRING RECESS
6	100	Mar 17 to Mar 21	The Oscilloscope and its Use
7	101	Mar 24 to Mar 28	Interference and Diffraction
8	100	Mar 31 to Apr 04	Alternating Current Circuits
9	101	Apr 07 to Apr 11	Determining the Refractive Index of Air
10	100	Apr 14 to Apr 18	Determination of the Ratio e/m for the Electron

IMPORTANT NOTES:

Laboratory Courses
The Department of Physics offers four undergraduate laboratory courses: PHY106, PHY108, PHY224, and PHY225. Each course consists of ten practical experiments. Specific experiment dates are provided in the SYLLABUS for each course, which also indicates any breaks between sessions.

Laboratory Layout
Each laboratory session accommodates a maximum of 18 students, divided into pairs working at nine identical workstations. The number of sections per course is determined by total enrollment. Details about the experiments and schedules can be found on the SYLLABUS on Blackboard platform, the Undergraduate Physics Labs website, and on the side doors of the laboratory rooms.

Laboratory Procedures
During the first session, students meet their assigned instructor, who provides an overview of the course and explains the laboratory policies. At the end of each laboratory session, students must submit their completed work to the instructor for evaluation. Throughout the semester, three exams will be administered during the laboratory period. Each exam is worth 100 points, contributing 30% to the final grade. The remaining 70% is based on students' performance during experiments and the quality of their written reports.

Laboratory Safety Regulations
For the safety of both students and laboratory equipment, students may only enter the laboratory when the instructor is already present, consuming food or beverages inside the laboratory is strictly prohibited at all times. If a student needs to eat or drink for health-related reasons, they must request permission from the instructor and step outside the laboratory to do so. Instructors are encouraged to inspect the equipment before each student begins their experiment. For electrical circuits, it is essential to verify proper connections to prevent malfunctions or hazards. Any damage to equipment caused by improper handling or lack of attention will be the student's responsibility. Such incidents may result in a reduction of their grade, and in severe cases, could lead to fail the lab.

Attendance Policy
The laboratory program adheres to a strict schedule due to the high demand for spaces and the rotation of multiple sections. Missing a laboratory session results in a 10% reduction in the final report grade based on the total possible points. If the absence coincides with an exam, those points will also be forfeited. Missing three or more laboratory sessions leads to an automatic failing grade.

Excusable absences include ***participation in university-authorized events*** (with an official UM letter), ***illness*** (supported by a valid medical note), or ***the death of a family member*** (documented with an obituary). Students with valid excuses must contact their instructor to coordinate a make-up session. Unjustified absences are not eligible for make-up opportunities, and the associated grade reductions will apply without exceptions.

These guidelines outline the framework for ensuring organization, fairness, and success in the Department of Physics laboratory courses.

Coordination of Physics laboratories