

Semester	AUG 2022
Open to semester	5,11
Course code	PH3173
Course title	Physics Lab-III
Credits	3 /
Course Coordinator & participating faculty (if any)	Sunil Nair*, Prasenjit Ghosh
Nature of Course	Lab
Pre-requisites	Physics Lab -II
Objectives (goals, type of students for whom useful, outcome etc)	Gain an understanding of the key concepts in modern physics using different experimental set ups
Course contents (details of topics /sections with no. of lectures for each)	1) Cornu's method 2) Faradays and Lenz's law 3) Axial magnetic fields 4) Zeeman Effect 5) Lock in Amplifier (Phase sensitive Detection) 6) Kundst tube (Additional experiments to be added)
Evaluation /assessment	End-Sem Examination-40% Mid-Sem Examination-60% Others-No mid-sem examination. Continuous evaluation - 60% %
Suggested readings (with full list of authors, publisher, year, edn etc.)	1. The Art of Experimental Physics: D.W. Preston and E.R. Dietz (1991), John Wiley. ? 2. An introduction to Error Analysis, John R. Taylor, University Science Books. ? 3. Advanced Practical Physics: B.L. Worsnop and H.T. Flint, Asia Publishing House ? 4. Analytical Experimental Physics: M. Ference Jr., H.B. Lemon and R. J. Stephenson (1970) University of Chicago Press. ?