

CURRICULUM PLAN 2025-2026

ODD Semester: VII, V, III, I

Dr. Rashmi Menon

Department of Physics

B.Sc.(H)-IVth year

Name of Paper and Code	Allocation of Lectures	Month-wise Schedule followed by the department
DSE: RESEARCH METHODOLOGY (2222013503) -45 Periods		
Unit - III – Journals, Database and Research Metrics Journals: Free, open source and paid journals, concept of peer reviewed journals, predatory and fake journals Databases: Indexing databases; citation databases (Web of science, Scopus); experimental physics databases (astrophysics (ADS, NED, SIMBAD, VizieR), biophysics (PubMed), particle physics (INSPIRE, CDS), condensed matter physics (X-ray database)) Research Metrics: Journal impact factor, SNIP, SJR, IPP, cite score; metrics (h-index, g index, i10 index, altmetrics), variations in research metrics across various disciplines, other limitations of the research metrics and impact factors	7	4-Aug to 15-Sept
Unit - IV – Scientific Conduct and Publication Ethics Current understanding of ethics; intellectual honesty and research integrity; communicating errors (erratum, correction and withdrawal); records and logs (maintaining records of samples, raw data, experimental protocols, observation logs, analysis calculations, and codes); scientific publication misconducts: plagiarism (concept, importance, methods and ways to detect and avoid plagiarism) and redundant publications (salami slicing, duplicate and overlapping publications, selective reporting and misrepresentation of data); environmental and other clearances (waste management, disposal of hazardous waste). COPE guidelines on best practices in publication ethics	8	22-Sept to 17-Nov