

Semester	AUG 2023
Open to semester	3
Course code	PH2113
Course title	Introductory Quantum Physics
Credits	3 /
Course Coordinator & participating faculty (if any)	Rejish Nath*, Prasenjit Ghosh
Nature of Course	Lectures and Tutorials
Pre-requisites	None
Objectives (goals, type of students for whom useful, outcome etc)	Get familiar with the basic concepts of quantum mechanics
Course contents (details of topics /sections with no. of lectures for each)	Historical background, Black Body Radiation, Photoelectric effect, discrete spectra, Thought experiments, Wave-particle duality, Wave packets, correspondence Principle and connection to classical mechanics, The Uncertainty principle, The wave function and probability interpretation, Postulates of quantum mechanics, Schrödinger equation, expectation values, Operators, simple problems of wells, barriers and oscillators in one dimension, Hydrogen atom.
Evaluation /assessment	End-Sem Examination-40% Mid-Sem Examination-40% Others-quiz-20%
Suggested readings (with full list of authors, publisher, year, edn etc.)	Introduction to quantum mechanics by David J Griffiths Quantum Mechanics: Concepts and Applications by Zettili, Nouredine. More references will be provided during the course