



PH350 Jan 3:0

Physics of Soft Condensed Matter

Instructor

Jaydeep K basu

Email: basu@iisc.ac.in

Teaching Assistant

Roobala C; Nafisa Begam; Nimmi Das A

Email: nimmi@iisc.ac.in

Department: Physics

Course Time: Tue, Thu 11:00-12:30

Lecture venue: Lecture Hall II

Detailed Course Page:

Announcements

Brief description of the course

This is an elective course and people who have completed 4 years of courses in Physics after their 12th standard can take this course. The course gives the basic principles and application of soft matter physics towards understanding properties and phenomena occurring in materials like polymers, colloids, surfactants etc

Prerequisites

People who have taken basic course in statistical physics and fluid mechanics can take this course.

Syllabus

Polymers, colloids, surfactants, glasses and gels, x-ray, neutron and light scattering, structure factor and form factor,

Course outcomes

The course gives the basic principles and application of soft matter physics towards understanding properties and phenomena occurring in materials like polymers, colloids, surfactants etc. General principles of understanding structure, dynamics as well as flow and mechanical properties of these materials would also be

covered.

Grading policy

20% topical students seminars; 45% final and 35% mid-sem. Assignments are provided but not graded.

Assignments

Resources