



MA232 Aug. 3:0

Introduction to Algebraic Topology

Instructor

Subhojoy Gupta

Email: subhojoy@iisc.ac.in

Teaching Assistant

Paramita Pramanick

Email: paramitapramanick@gmail.com

Department: Mathematics

Course Time: Tue., Thu., 3:30-5PM

Lecture venue:

Detailed Course Page:

Announcements

Brief description of the course

This course is meant for students who have completed a basic course in topology. Topics covered include fundamental group, covering spaces, and simplicial homology.

Prerequisites

Topology (MA231) or permission of the instructor

Syllabus

Fundamental group, covering spaces, simplicial homology.

Course outcomes

The students learnt:

1. techniques to compute the fundamental group of topological spaces, and the proof that it is a topological invariant.
2. acquired an understanding of covering spaces and the correspondence with subgroups of the fundamental

group.

3. learnt how to compute simplicial homology groups of a simplicial complex.

Grading policy

50% for the final, 40% for the midterm, 10% for homework and quizzes.

Assignments

Resources

Algebraic topology by A. Hatcher,

Introduction to Algebraic Topology by W. Massey.