



E0 220 Aug 3:1

Graph Theory

Instructor

L. Sunil Chandran

Email: sunil@iisc.ac.in

Teaching Assistant

Email:

Department: Computer Science and Automation

Course Time: Tue, Thu 3:30-5 pm

Lecture venue: CSA 252

Detailed Course Page:

Announcements

Brief description of the course

Teaches elementary notions of graph theory with stress on proofs.

Prerequisites

None

Syllabus

Vertex cover, matching, path cover, connectivity, hamiltonicity, edge colouring, vertex colouring, list colouring; Planarity, Perfect graphs; other special classes of graphs; Random graphs, Network flows,

Introduction to Graph minor theory

Course outcomes

The student gets a thorough familiarity with basics of graph theory and its methods.

Grading policy

20,20, 40 percentatge for 1st mid term, 2nd mid term and final examination and

20 percentage for assignments.

Assignments

Resources

Reinhard Diestel, "Graph Theory", Springer (2010)

Douglas B. West, "Introduction to Graph Theory", Prentice Hall (2001)

A. Bondy and U. S. R. Murty, "Graph Theory", Springer (2008)

B. Bollobas, "Modern Graph Theory", Springer (1998)