

53:134 Structural Design II (Steel Structures)
Spring 2006 (Lecture Summary)
Week 1 (1/18 - 1/20/06)

1-18-06

- ◆ Introduction: Office hours, TA, text and reference books; grading; course learning objectives; course schedule.
- ◆ Course web page; AISC web site; others.
- ◆ Review: Chapter 1 of Rajan's book - Introduction. Types of structural systems, structural analysis - classical and numerical analysis techniques, structural design - introduction.
- ◆ **Read**: Chapter 1 of the text

1-20-06

- ◆ Review: Chapter 2 of Rajan's book - Determinate Structural Analysis. Determinate system; indeterminate system; degree of indeterminacy; equations of equilibrium; free body diagram; types of supports.
- ◆ Planar truss analysis - method of joints, methods of sections.
- ◆ Planar frame analysis - sign convention for shear force and bending moment, positive and negative faces, shear and moment diagrams.
- ◆ **Read**: Chapter 2 of the text.