Izmir Institute of Technology
Department of Civil Engineering
CE 322 Introduction to Structural Analysis Spring 2024-2025 Course Outline

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Course Instructor	Doç. Dr. Gürsoy TURAN Department of Civil Engineering	Office: C-203 gursoyturan@iyte.edu.tr
Course Assistant	Ergun Alper KURT	Office: E-107 ergunkurt@iyte.edu.tr

Course Schedule: Mondays 09:45 – 10:30
Fridays: 13:30 – 15:30

Text Book: Structural Analysis, by : R.C. Hibbeler, Eight Edition in SI Units, 2011, Prentice – Hall.

Objectives: The objective is to learn the displacement based structural analysis techniques commonly used for the analysis of statically indeterminate structures.

Course Content: Displacement method of analysis: moment distribution (Sections 12.1, 12.2 and 12.3)

- for continuous beams
- for frames without side swaying

Displacement method of analysis: slope-deflection analysis (Chapter 11)

- for continuous beams
- for frames without side swaying
- for frames with side sway

Stiffness method (Sections 14.1, 14.2, 14.3, 14.4, 14.5, 14.6, 14.7)

- Analysis of truss structures
- Analysis of frames and beams (Chapters 15&16)

Grading

QUIZ 1	10%
Midterm 1	30%
Midterm 2	30%
Final Exam	30%