UNIVERSITY OF PETROLEUM & MINERALS
DEPARTMENT OF CIVIL ENGINEERING

Structural Analysis I - CE 305
Course Outline

Text: Structural Analysis - Hibbeler.

Lecture	Chapter	Subject
1	1	Introduction
3	2	Reactions (beams, trusses, simple frames, and arch type structures).
3	3	Shear and Moment Diagrams
3	4	Analysis of Trusses
4	5	Influence Lines
		EXAM
8	8	Deflections of Determinate Structures: Review of Direct Integration, Moment Area Method, Conjugate Beam Method, Virtual Work, Castigliano's. Theorems, and Maxwell's Reciprocal Theorem.
5	7	Approximate Analysis of Statically Indeterminate Structures.
		EXAM
9	9	Analysis of Statically Indeterminate Structures: Deflection Superposition, Castigliano's Theorems, ~~The Three-Moment Theorem~~, and The Slope-Deflection Method.
		EXAM
7	9	Analysis of Statically Indeterminate Structures: The Moment Distribution Method

Testing and Grading Policy

3 major exams ⎫
Homework   ⎬ 60%
Final Exam   ⎭ 40%

Important Notice: No late homework will be accepted.

CE 305

Assignment # 1

Solve the following problems in the text:

Problem 1-1

Problem 1-4

Problem 1-9

Problem 1-11

Problem 1-13

Problem 1-15