

SYLLABUS
CE 566 Intermediate Structural Analysis
Fall 2006

Instructor:

Dr. John W. van de Lindt

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Textbooks suggested (no need to purchase): Fundamentals of Structural Analysis, K.M. Leet & C-M Uang; Structural Analysis 5th Ed., R.C. Hibbler, Prentice Hall.

Class: MWF 11:00-11:50 a.m., B1 Engr.

Course Objectives:

To refine ones understanding of structural analysis for beams, frames, trusses, and other members commonly used in design of structural systems beyond basic assumptions. This will enable students to understand average research papers on related subjects such that that they may pursue these topics on their own within their own research and eventually engineering practice.

Office Hours:

12:10-1:40 MW – Drop in times. For an appointment - please e-mail me and suggest a time to meet. I will let you know if I will be in my office then or give you several alternate times to choose from.

Attendance: Attendance is expected.

Grading:

Five Quizzes	50%
Homework	25%
Project	25%
Total	100%

Homework will be posted on my web page with the due date.

The project will begin in week 5 and final presentations will be given by the project teams during the time of the scheduled final exam.

Approximate Schedule

Week #	Subject(s)
1	Syllabus, intro, review of basic structural analysis, assumptions, energy techniques including virtual work
2	Review of direct stiffness methods for beams and frames
3-4	Direct stiffness method for trusses
5	Direct stiffness method for trusses continued
6-7	Project team proposals & discussion
8	Deflection including shear
9-10	Analysis of arches and cables
11-12	Influence lines including indeterminate beams, frames, trusses
13	Hybrid / composite system analysis
14	Instability / Buckling
15	Special application of analysis – ocean wave loading on oil rigs, etc
16	Project Presentations