

MECHANICAL ENGINEERING DEPT COURSE OUTLINE



ME 7550  
Plates and Shells  
Fall 2004



**Text:** Stresses in Plates and Shells, 2nd Ed, A.C. Ugural, McGraw-Hill, 1999, ISBN 0-07-065769-6

**Instructor:** S.R. Swanson, Room 2136 MEB, Phone 581-6407, swanson@mech.utah.edu

**Homework:** homework assigned for previous week due on Wed at class time

**Office Hours:** M, W, F, 9:35-10:30; after 5:00 pm on M,W,; others by appointment

**Schedule:** M,W 3:40-5:00 pm, room MEB 1208

**Grading:** 2 Midterms @ 25%, Homework & Project 25%, Final 25%

<u>Date</u>	<u>Subject</u>	<u>Reading</u>	<u>Homework</u>
Aug 25	Intro, plate bending theory	ch 3	HO #1
30	plate bending theory		
Sept 1	Circular plates	Ch 4	4.1, 4.3, 4.12
6	HOLIDAY		
8	Circular plates		4.18
13	Simply supported plates	Ch 5	HO #2
15	Simply supported plates	5.2, 5.3	
20	Single series solutions	5.5	HO #3
22	Large deflections	Ch 10	10.2, 4, 6
27	Large deflections		
29	Midterm Exam No. 1		
Oct 4	Finite elements for plates	Notes	HO #4
6	Finite elements for plates	7.7-7.12	
11	Membrane stresses in shells	12.1-12.6	12.1, 3, 8
13	Membrane stresses in shells		
18	Membrane stresses in shells		12.9, 12, 16
20	Bending stresses in shells	13.1-13.7	HO #5
25	Bending stresses in shells		
27	Bending stresses in shells		
Nov 1	Applications		
3	Project assignment		
8	Applications		

10	Midterm Exam No. 2		
15	Finite element methods for shells	Notes	HO #6
17	Finite element methods for shells		
29	Finite element methods for shells		
Dec 1	Project presentations		
Dec 6	Project presentations		
8	Review		

Final Exam: Tuesday, December 14, 2004, 3:40-5:40 in MEB 1208

- The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the instructor and to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD) to make arrangements for accommodations.

All written information in this course can be made available in alternative format with prior notification.