

## ME 319, Fall 2016

Session	DATE	TEXT SECTIONS	TOPICS	HOMEWORK ASSIGNMENT
1	22-Sep	1, 2-1 to 2-6; 3-1 to 3-12	Review: Bending, Mohr's Circle, etc.	Set #1, 1-31, 3-15, 25, 34b, 39b,c, 48, 72, 77
2	27-Sep	5-1 to 5-11	Failure Theories	5-2*, 3*, 21, 36
3	29-Sep	Continued	Continued	5- 43, 49\$, 60, 63
4	4-Oct	3-14 to 3-16	Vessels, Disks, Press & Shrink Fits	3- 108, 111, 119; 5-70, 71, 74
5	6-Oct	3-19, 6-16	Contact Stresses	Set #2, 3-138, 140
6	11-Oct	4-7 to 4-10	Strain Energy &	4-68, 75, 76, 80, 88, 97, 101
7	13-Oct	Hand Out	Castigliano's Theorem	Set #3
8	18-Oct	6-1 to 6-5, & 6-7 to 6-8	Intro. to Fatigue Loading	6-1, 2, 8, 9
9	20-Oct	<b>Exam #1 ( tentative )</b>	Chapters 1 2, 3, 4 & 5	Sessions 1 to 7
10	25-Oct	6-9, 10; 3-13; 5-2	Fatigue Strength & Factors, Stress Conc.	6-11 to 6-14 & 6-19
11	27-Oct	6-11 to 6-13	Fluctuating Stresses	6-27&, 6-28#, 30
12	1-Nov	6-14 to 6-16	Combined Loading, Cum. Fatigue	6-20 to 6-24#, 6-56\$, 60; Set #4
13	3-Nov	Continued		
14	8-Nov	8-1 to 8-9	Fasteners	8-4, 6, 8, 26, 33, 47
15	10-Nov	8-10 to 8-12	Fasteners (fatigue loading)	8-51\$, 60\$, 61, 64, 76, 77
16	15-Nov	7-1 to 7-8	Shafts	7-1, 2, 4, 5, 6, 26, 28, 33
17	17-Nov	<b>Exam #2 ( tentative )</b>	Chapters 6, 7, 8	
18	22-Nov	10-1 to 10-8	Springs	10-3, 7, 8, 20, 21
19	24-Nov	ACADEMIC HOLIDAY		
20	29-Nov	10-10 to 10-15	Springs ( fatigue loading )	10-31, 39, 40
21	1-Dec	Review/Catchup		

Final Exam: **ME 31901 Thursday December 8, 2016, 9:10-11:10 AM**  
**ME 31902 Thursday December 8, 2014, 11:30AM-1:30 PM**

§ Use all applicable theories of failure

\*Plot the results on failure loci.

\*\* Do all four cases of prob. 5-7 and plot on failure loci.

§ Use ASME instead of Gerber

& Use Modified Goodman instead of Gerber