

ME 316 MACHINE DESIGN

TEXT: Spotts & Shoup, Design of Machine Elements, 8th Ed.
ISBN 013048989-1 Pearson Prentice Hall 2004

WEEK	TOPICS	SECTIONS	ASSIGNMENTS
1	Fundamental Principles	1-1 thru 1-24	1.1, 10, 21, 90, 93
2	Working Stress and Failure Theories	2-1 thru 2-6	2.5, 12, 25, 28, 71
3	Design of Shafts	3-1 thru 3-11	3.1, 10, 22, 42
4	Springs	4-1 thru 4-12, 4-17	4.1, 4, 9, 10, 12
5	Screws	5-1 thru 5-8	5.2, 3, 4, 16
6	EXAM NO. 1 Belts, Clutches, Brakes, and Chains	6-1 thru 6-8	6.1, 3, 8, 10, 11
7	Belts, Clutches, Brakes, and Chains, (cont.)	6-9 thru 6-18	6.13, 15, 27, 28
8	Welded and Riveted Connections	7-1 thru 7-12	7.2, 3, 5, 8
9	Welded and Riveted Connections, (cont.)	7-13 thru 7-18	7.15, 17, 19, 27
10	Lubrication	8-1 thru 8-11	8.1,3, 5, 7
11	EXAM NO. 2 Ball and Roller Bearings	9-1 thru 9-15	9.1, 5, 6, 9, 12, 19
12	Spur Gears	10-1 thru 10-16, 10-18 thru 10-22	10.1, 3, 4, 7, 23
13	Helical, Bevel and Worm Gears	11-1 thru 11-8	11.12, 16, 19, 21
14	Miscellaneous Machine Elements	12-2,3,8,9,24	2,5,19,21,44
15	REVIEW AND FINAL EXAM	-	-