

UNIVERSITY OF CALIFORNIA AT BERKELEY
Department of Civil Engineering
Fall 2016

Structural Engineering,
Mechanics and Materials
Professor: S. Li

CE30/ME85 – Introduction to Solid Mechanics
Section II

Date	Class #	Topic	Readings	Homework	Notes
8/24	1	Introduction and Review of vector algebra	Chapter 1		
8/26	2	Force and moments (1)	Chapert 2	HW1 (S)	
8/29	3	Force and moments (2)	Chapter 2 & 3	HW2 (S)	
8/31	4	Forces and moments (3)	Chapter 2 & 3	HW2 (S)	
9/2	5	Statics: Equilibrium (1)	Chapter 3 & 4		HW1 (In)
9/5	6	Holiday	Chapter 3 & 4		
9/7	7	Equivalent force-moment systems	Chapter 3 & 4	HW3(S)	
9/9	8	Equilibrium of Rigid Bodies	Chapter 4		HW2 (In)
9/12	9	Friction force	Chapter 4	HW4 (S)	
9/14	10	2D Trusses (method of joints)	Chapter 6	HW4 (S)	
9/16	11	2D Trusses (method of sections)	Chapter 6		HW3 (In)
9/19	12	Frames and machines	Chapter 6	HW5 (S)	
9/21	13	Distributed force: Centroids	Chapter 5	HW5 (S)	
9/23	14	Distributed force: Moment of Inertia	Chapter 7		HW4(In)
9/26	15	Internal forces and stress	Chapter 8	HW6(S)	
9/28	16	Stresses (1)	Chapter 8	HW6 (S)	
9/30	17	Stresses (2)	Chapter 9		HW5 (In)
10/3	18	Deformation and strain	Chapter 9	HW7 (S)	
10/5	19	Stress-strain relation	Chapter 9	HW7 (S)	
10/7	20	Deflection of bars	Chapter 9		HW6 (In)
10/10	21	Static indeterminacy	Chapter 9	TBA	
10/12	22	Torsion of circular shafts (1)	Chapter 10	TBA	
10/14	23	Midterm exam (through lecture 20)			