

Text (required). Meriam et al. 2015 *Dynamics*, 8th ed.,Wiley.

Grades. Quizzes (weeks 3,5,···,11,14); your best 5: 10%; tests 1,2: 20% each; final 50%

Tests. Closed book, requiring symbolic answers. Homework: not collected or graded. Tests cover only topics on which homework has been given. (Questions are different.)

Week	Monday	Topic	Text
1	8/23	Kinematics: Cartesian coordinates Polar coordinates. Normal and tangential components	2.1–2.4 2.6 2.5
2	8/28	Translating axes	2.8
3	9/4	Holiday Constraints Newton’s laws. Free–body diagram.	2.9 3.1–3.5
4	9/11	Work and energy Impulse and momentum Angular impulse, angular momentum	3.6,3.7 3.8,3.9 3.10
5	9/18	Impact Central forces	3.11,3.12 3.13
6	9/25 9/29	Systems of particles 1st TEST (Fri.)	4.1,4.2 CLOSED BOOK
7	10/2	Kinetics of systems Plane kinematics of rigid bodies	4.3–4.5 5.1–5.4
8	10/9	Plane kinematics of rigid bodies	5.5–5.6
9	10/16	Rotating axes	5.7
10	10/23 10/27	Plane kinetics of rigid bodies 2nd TEST (Fri.)	6.1–6.3 CLOSED BOOK
11	10/30	General equations of motion	6.4,6.5
12	11/6 11/10	Work and energy Holiday	6.6
13	11/13	Impulse and momentum	6.8
14	11/20 11/22	Quiz 6 (I will be at APS/DFD) Holiday	
15	11/27	Vibration	8.1–8.3

FINAL TEST (closed book): Mon. 2017.12.11, 7-10pm