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ME104–Engineering Mechanics II Spring 2020

Text: Meriam et al. *Dynamics.* 9th ed., (electronic) ISBN: 9781119390985. Wiley **Grades:** Quizzes (closed book): held in last 20 minutes of class, dates below, your best 4/6: 10%; tests 1,2: 20% each; final 50%. Homework: not collected or graded. **Tests:** Closed book, requiring symbolic answers. Tests cover only topics on which homework has been given. (Questions are different.) If you miss one of the two in-class tests, your grade for that missing test will be the appropriate fraction (two-fifths) of the grade you receive on the final 3 hour test.

Week	Monday	Торіс	Text
1	1/22	Kinematics: Cartesian coordinates Polar coordinates. Normal and tangential components	2.1-2.4 2.6 2.5
2	1/27	Translating axes	2.8
3	2/3 2/7	Constraints Newton's laws. Free–body diagram. 1st Quiz	$2.9 \\ 3.1 - 3.5$
4	2/10	Work and energy Impulse and momentum Angular impulse, angular momentum	3.6,3.7 3.8,3.9 3.10
5	2/17 2/21	Holiday Central forces 2nd Quiz	3.11, 3.12 3.13
6	2/24 2/28	Systems of particles 1st TEST (Fri.)	4.1,4.2 CLOSED BOOK
7	3/2 3/6	Kinetics of systems Plane kinematics of rigid bodies 3rd Quiz	$\begin{array}{c} 4.3 - 4.5 \\ 5.1 - 5.4 \end{array}$
8	3/9	Plane kinematics of rigid bodies	5.5 - 5.6
9	$3/16 \\ 3/20$	Rotating axes 4th Quiz	5.7
10	3/23 3/30 4/3	Spring break Plane kinetics of rigid bodies 2nd TEST (Fri.)	6.1–6.3 CLOSED BOOK
11	$4/6 \\ 4/10$	General equations of motion 5th Quiz	6.4,6.5
12	4/13	Work and energy	6.6
13	$4/20 \\ 4/24$	Impulse and momentum 6th Quiz	6.8
14	4/27	Impulse and momentum	