

ENGR 51 Dynamics

Summer 2008

Tentative Calendar (subject to change) for 8th edition of the Textbook

Week	Date	Topic (Lecture Number)	Reading	Homework
1	6/16	Orientation, Introduction to Dynamics (11-1), Kinematics of particles in rectilinear motion (11-2, 11-2E)	11.1-5, Appendix A	#1 due 6/17 11: 20, 30, 48, 55, 109, 126, 133
	6/17	Kinematics of particle system (11-3, 11-3E), Curvilinear motion in rectangular coordinates (11-4, 11-4E)	11.6, 11.9-12	
	6/18	Curvilinear motion in other coordinates (11-5, 11-5E, 11-5E2)	11.13-14	#2 due 6/20 11: 143, 170 12: 10, 126, 38, 72
	6/19	Kinetics of particle: FMA method (12-1, 12-1E, 12-1E2, 12-1E3)	12.1-6	
	6/20	Angular momentum (12-2, 12-2E, 12-2E2)	12.7-10	
	2	6/23	Work, Kinetic Energy, and power (13-1, 13-2, 13-2E, 13-2E2)	
	6/24	Test 1(11-12) , Potential energy (13-3, 13-3E)	13.5-8	#3 due 6/24 13: 14, 21, 27, 69, 73, 193 #4 due 6/27 13: 121, 146, 155, 172 14: 5, 22, 31, 41
	6/25	Impulse and momentum(13-4, 13-4E, 13-4E2)	13.10-11	
	6/26	Impact (13-5, 13-6, 13-6E, 13-7, 13-7E, 13-7E2)	13.12-15	
	6/27	Particle systems Kinetics (14-1, 14-1E, 14-2, 14-2E, 14-2E2)	14.1-9	
	3	6/30	Rigid body translation and rotation (15-1, 15-2)	
	7/1	Test 2(13-14) , Relative velocity (15-3, 15-3E, 15-3E2)	15.6	#5 due 7/1 15: 12, 17, 45, 48, 61, 63, 70 #6 due 7/2 15: 78, 84, 96, 112, 113, 121 #7 due 7/3 15:170, 176, 177, 251
	7/2	Instant center (15-4, 15-4E, 15-4E2), Relative acceleration (15-5, 15-5E, 15-5E2, 15-5E3)	15.7-9	
	7/3	Rotating reference frame (15-6, 15-6C, 15-6E, 15-6E2)	15.10-11	
	7/4	<i>Holiday. Take a break!</i>		
4	7/7	Mass moment of inertia (16-1, 16-2, 16-2E)	Appendix B.1-B.5	#8 due 7/8 B: Download* 16: 6, 11, 39, 59, 69 #9 due 7/9 16: 80, 96, 100, 123 #10 due 7/11 17: 10, 17, 23, 29, 34
	7/8	Test 3(15.1-15.11) , FMA in rigid bodies (16-3, 16-3E, 16-3E2, 16-3E3)	16.1-7	
	7/9	Constrained plane motion (16-4, 16-4E, 16-4E2, 16-4E3, 16-4E4)	16.8	
	7/10	Work and Energy in rigid bodies (17- 1, 17-1E, 17-1E2)	17.1-7	
	7/11	Work and Energy in rigid bodies (17-1E3, 17-1E4, 17-1E5)		
	5	7/14	Impulse and Momentum in rigid bodies (17-2, 17-2E, 17-2E2, 17-2E3, 17-2E4)	
	7/15	Test 4(16-17.10) , Rigid bodies impact (17-3, 17-3E)	17.11-12	#11 due 7/14 17: 60, 63, 81, 85 #12 due 7/16 17: 88, 96, 102, 131
	7/16	Impact (17-3E2, 17-3E3)		
	7/17	3-D kinematics (15-7, 15-7E, 15-7E2)	15.12-15,	#13 due 7/18 15: 184, 253, 236 18: 7, 45, 147
	7/18	3-D kinetics (18-1, 18-1E, 18-2, 18-2E, 18-3)	B.6-8, 18.1-8	
6	7/21	Review		
	7/22	Final Exam 2-4pm		

Notes: Assignments are due at 12:01am Monday, Wednesday, and Friday mornings (i.e., Sunday, Tuesday, Thursday night), except A0 due before orientation and A1 due 12:01am on Tu 6/17 (Monday night).

* This problem will be made available for download on Blackboard

Last updated 06/11/08. The latest version can be found on Blackboard at <http://blackboard.cuesta.edu/>