

PHY241: University Physics I (Spring 2016)

(Tentative Syllabus, Subject to Updates)

Date	Topic	Reading
T 01/12/16	Introduction	
W 01/13/16	Measurement, Estimating	1.1-1.7
F 01/15/16	Reference Frame, Displacement, Ave./Inst. Velocity, Acceleration	2.1 - 2.4
M 01/18/16	No Class (Martin Luther King Jr. Day)	
W 01/20/16	Motion at Constant Acceleration	2.5 - 2.6
F 01/22/16	Freely Falling Objects	2.7 - 2.7
M 01/25/16	Vectors and Scalars	3.1 - 3.5
W 01/27/16	Vector Kinematics, Projectile Motion	3.6 - 3.8
F 01/29/16	Force, Newton's First, Second, and Third Law	4.1 - 4.5
M 02/01/16	Mass, Weight, Normal Force, Free-Body Diagram, Problem Solving	4.6 - 4.8
W 02/03/16	Friction, Application of Newton's Laws	5.1 - 5.1
F 02/05/16	Catch-Up	
M 02/08/16	Test 1	
W 02/10/16	Uniform Circular Motion; Banked and Unbanked Curve	5.2 - 5.4
F 02/12/16	Newton's Law of Universal Gravitation; Satellite and Weightlessness	6.1 - 6.4
M 02/15/16	Kepler's Laws	6.5 - 6.5
W 02/17/16	Work Done by Constant and Varying Forces	7.1 - 7.3
F 02/19/16	Kinetic energy and Work-Energy Principle	7.4 - 7.4
M 02/22/16	(Non)-Conservative Forces; Mechanical Energy Conservation	8.1 - 8.5
W 02/24/16	Conservation of Energy; Escape Velocity; Power	8.5 - 8.8
F 02/26/16	Momentum Conservation; Collision and Impulse	9.1 - 9.3
M 02/29/16	Catch Up	
W 03/02/16	Test 2	
F 03/04/16	No Class (Conference)	
M 03/07/16	No Class (Spring Break)	
W 03/09/16	No Class (Spring Break)	
F 03/11/16	No Class (Spring Break)	

M 03/14/16	Elastic and Inelastic Collisions	9.4 - 9.7
W 03/16/16	Center of Mass; Angular Quantities, Constant Angular Acceleration	9.8; 10.1 - 10.3
F 03/18/16	Torque; Rotational Dynamics; Moment of Inertia	10.4 - 10.7
M 03/21/16	Rotational Kinetic Energy, Rolling Motion	10.8 - 10.9
W 03/23/16	Angular Momentum and Its Conservation	11.1 - 11.3, 11.6
F 03/25/16	No Class (Easter)	
M 03/28/16	No Class (Easter)	
W 03/30/16	Equilibrium, Stability and Balance	12.1 - 12.3
F 04/01/16	Simple Harmonic Motion	14.1 - 14.4
M 04/04/16	No Class (Conference)	
W 04/06/16	Simple Harmonic Motion, Simple Pendulum	14.5, 14.6
F 04/08/16	Damped and Forced Harmonic Motion, Resonance, Waves	14.7-8, 15.1 - 15.2
M 04/11/16	Waves	15.3 - 15.4
W 04/13/16	Superposition, Reflection, Transmission, Interference, Standing Wave	15.5 - 15.9
F 04/15/16	Catch Up	
M 04/18/16	Test 3	
W 04/20/16	Decibels, Sound in vibrating String and Air Columns	16.1 - 16.5
F 04/22/16	Beats, Doppler Effect, Shock Waves and Sonic Boom	16.6 - 16.8
	Fluids	Chapter 13
M 04/25/16	Fluids	Chapter 13
W 04/27/16	Catch Up	
F 04/29/16	Catch Up	
M 05/02/16		
W 05/04/16	Final Exam (1:30 - 4:00 pm)	
F 05/06/16		