

Physics 101 Lecture Schedule - Fall 2016 (Term 161)

Week	Date	Topics	Chapter	Sec	Useful Links
1	18 Sep.	Units, Changing units, Significant Figures	01	1	Sig. Figures 1
	20	Length, time, mass (powers of ten), Dimensional Analysis	01	2,3	
	22	Thursday-National day Holiday			
2	25	1-D motion, Displacement, Velocity and acceleration	02	1-3	Acceleration 1 Components 1 Adding 1
	27	Constant acceleration, Free fall, Graphical Integration	02	4-6	
	29	Vectors and Their components. Adding Vectors	03	1,2	
Thursday – 29 Sep. 2015- Last day for dropping courses without permanent record					
3	02 Oct.	Multiplying Vectors	03	3	Displacement 1 Projectile1,2 Circular 1, 2
	04	2D & 3D motion with constant acceleration.	04	1-3	
	06	Projectile motion, Uniform Circular Motion	04	4,5	
First Major Exam (Chapters 1 – 4): Wednesday Oct. 12th 2016					
4	09	Relative Motion in 1 D and 2 D	04	6,7	Gravity 1
	11	Review	---	---	
	13	Newton's laws	05	1	
5	16	Some particular forces,	05	2	Ramp 1 Friction 1
	18	Applying Newton's laws	05	3	
	20	Friction	06	1	
6	23	Uniform Circular Motion	06	3	Circular 2, 3 Spring 1
	25	Review	---	---	
	27	Kinetic Energy and Work	07	1-3	
Thursday- 27 Oct. 2015 – Last day for dropping courses with grade of "W"					
7	30	Work done by Weight and Spring - power	07	4-6	Pendulum 1
	01 Nov	Potential energy	08	1	
	03	Conservation of Energy	08	2,4,5	
Second Major Exam (Chapters 5 – 8): Monday Nov 7th 2016					
8	06	Review	---	---	COM 1
	08	Center of mass, Newton's second law for a system of particles	09	1,2	
	10	Linear momentum and impulse	09	3,4	
13-17 November: Mid-term Break					
9	20	Conservation of Linear momentum, Kinetic Energy in Collisions	09	5,6	Conservation 1 Collisions 1
	22	Collisions in 1-D and 2-D	09	7,8	
	24	Rotational motion , Rotational Variables	10	1-3	
10	27	Kinetic Energy and Rotational Inertia	10	4,5	Torque 1
	29	Torque and Work in Rotational Motion	10	6-8	
	01 Dec	Review	---	---	
Thursday 01 Dec. 2016: Last day for withdrawal from all courses with grade of "W"					
11	04	Rolling, Kinetic Energy of Rolling	11	1-3	Rolling 1 Ang. Mom. 1
	06	Torque and Angular momentum	11	4-6	
	08	Conservation of angular momentum	11	7,8	
12	11	Equilibrium, Examples of Static Equilibrium	12	1,2	Young Modulus1 Shear Modulus 1
	13	Elasticity	12	3	
	15	Review	---	---	
Third Major Exam (Chapters 9 – 12): Monday Dec 19th 2016					
13	18	Newton's law of Gravitation	13	1-3	Kepler 1
	20	Gravitation Inside Earth, Gravitational-potential energy	13	4,5	
	22	Kepler's laws, Satellites	13	6,7	
14	25	Fluids at Rest	14	1-3	Buoyancy 1 Bernoulli 1
	27	Pascal's Principles, Archimedes Principle.	14	4,5	
	29	The Continuity Equation, Bernoulli's equation	14	6,7	
Thursday - 29 Dec 2016: Last day for withdrawal from all courses with grade of WP/WF					
15	01 Jan 17	Oscillations, Simple Harmonic Motion (SHM), Energy in SHM	15	1,2	Pendulum 1
	03	The Simple Pendulum, The Physical Pendulum	15	4	
	05	Review	--	---	
16	08	Review			
11-23 Jan 2015:Final Exams (Chapters 1 – 15)					
<i>Wish you a successful semester.</i>			<i>Dr. Ayman El-Said (Physics 101- Coordinator)</i>		