KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS

DEPARTMENT OF PHYSICS

Physics 101 Lecture Schedule - Spring 2017 (Term 162)

Week	Date	Topics	Chapter	Sec	Useful Links
1	05 Feb.	Units, Changing units, Significant Figures	01	1	
	07	Length, time, mass (powers of ten), Dimensional Analysis	01	2,3	Sig. Figures 1
	09	1-D motion, Displacement, Velocity and acceleration	02	1-3	
	12	Constant acceleration, Free fall, Graphical Integration	02	4-6	Components 1
2	14	Vectors and Their components. Adding Vectors	03	1,2	Adding 1
	16	Multiplying Vectors	03	3	
Thursday –16 Feb. 2017- Last day for dropping courses without permanent record					
3	19	2D & 3D motion with constant acceleration.	04	1-3	Displacement 1
	21	Projectile motion, Uniform Circular Motion	04	4,5	Projectile1,2
	23	Relative Motion in 1 D and 2 D	04	6,7	Circular 1, 2
4	26	**Review**	---	---	
	28	Newton's laws	05	1	Gravity 1
	02 Mar.	Some particular forces,	05	2	
5	05	Applying Newton's laws	05	3	Ramp 1
	07	Friction	06	1	Friction 1
	09	Uniform Circular Motion	06	3	
	12	**Review**	---	---	Circular 2, 3
6	14	Kinetic Energy and Work	07	1-3	Spring 1
	16	Work done by Weight and Spring - power	07	4-6	
Thursday- 16 Mar. 2017 – Last day for dropping courses with grade of "W"					
7	19	Potential energy	08	1	Pendulum 1
	21	Conservation of Energy	08	2,4,5	COM 1
	23	Center of mass, Newton's second law for a system of particles	09	1,2	
8	26	Linear momentum and impulse	09	3,4	
	28	Conservation of Linear momentum, Kinetic Energy in Collisions	09	5,6	Conservation 1
	30	Collisions in 1-D and 2-D	09	7,8	Collisions 1
02-06 April: Mid-term Break					
9	09 Apr.	**Review**	---	---	
	11	Rotational motion , Rotational Variables	10	1-3	
	13	Kinetic Energy and Rotational Inertia	10	4,5	
Thursday 20 April. 2016: Last day for withdrawal from all courses with grade of "W"					
10	16	Torque and Work in Rotational Motion	10	6-8	Torque 1
	18	Rolling, Kinetic Energy of Rolling	11	1-3	Rolling 1
	20	Torque and Angular momentum	11	4-6	
11	23	Conservation of angular momentum	11	7,8	Ang. Mom. 1
	25	**Review**	---	---	
	27	Equilibrium, Examples of Static Equilibrium	12	1,2	
12	30	Elasticity	12	3	Young's Modulus
	02 May	Newton's law of Gravitation	13	1-3	Shear Modulus 1
	04	Gravitation Inside Earth, Gravitational-potential energy	13	4,5	
13	07	Kepler's laws, Satellites	13	6,7	Kepler 1
	09	**Review**	---	---	
	11	Fluids at Rest	14	1-3	
14	14	Pascal's Principles, Archimedes Principle.	14	4,5	Buoyancy 1
	16	The Continuity Equation, Bernoulli's equation	14	6,7	Bernoulli 1
	18	Oscillations, Simple Harmonic Motion (SHM), Energy in SHM	15	1,2	
Thursday - 18 May 2016: Last day for withdrawal from all courses with grade of WP/WF					
15	21	The Simple Pendulum, The Physical Pendulum	15	4	
	23	**Review**	---	---	Pendulum 1
	25	**Review**	---	---	

Wish you a successful semester. ***Dr. Ayman El-Said (Physics 101- Coordinator)***