## Physics 101 Lecture Schedule - Fall 2017 (Term 171) Revised 25-09-2017

Week	Date	Topics	Chapter	Sec	Useful Links
1	17 Sep.	Units, Changing units, Significant Figures	01	1	
	19	Length, time, mass (powers of ten), Dimensional Analysis	01	2,3	Sig. Figures 1
	21	1-D motion, Displacement, Velocity and acceleration	02	1-3	
	24	National Day Holiday			Components 1
2	26	Constant acceleration, Free fall, Graphical Integration	02	4-6	Adding 1
	28	Vectors and Their components. Adding Vectors	03	1,2	
	,	Thursday – 28Sep2017 Last day for dropping courses without p	ermanent i	record	
3	01 Oct.	Multiplying Vectors	03	3	<u>Displacement 1</u>
	03	2D & 3D motion with constant acceleration.	04	1-3	Projectile1,2
	05	Projectile motion, Uniform Circular Motion	04	4,5	Circular 1, 2
	07	Relative Motion in 1 D and 2 D (Normal Sunday Classes)	04	6,7	
4	08	Review			
	10	Newton's laws	05	1	Gravity 1
	12	Some particular forces	05	2	
5	15	Applying Newton's laws	05	3	Ramp 1
	17	Friction	06	1	Friction 1
	19	Uniform Circular Motion	06	3	
	•	First Major Exam (Chapters 1 – 6): 25Oct2017			
	22	Review			Circular 2, 3
6	24	Kinetic Energy and Work	07	1-3	
	26	Work done by Weight and Spring - power	07	4-6	
		Thursday- 26Oct2017 - Last day for dropping courses with	grade of "V	V"	
7	29	Potential energy	08	1	Spring 1
	31	Conservation of Energy	08	2,4,5	Pendulum 1
	02 Nov.	Review			
8	05	Center of mass, Newton's second law for a system of particles	09	1,2	<u>COM 1</u>
	07	Linear momentum and impulse	09	3,4	Conservation 1
	09	Conservation of Linear momentum, Kinetic Energy in Collisions	09	5,6	
9	12	Collisions in 1-D and 2-D	09	7,8	Collisions 1
	14	Rotational motion, Rotational Variables	10	1-3	
	16	Kinetic Energy and Rotational Inertia	10	4,5	
	Т	Thursday, 23Nov2017: Last day for withdrawal from all courses v	vith grade o	of "W"	
10	19	Torque and Work in Rotational Motion	10	6-8	Torque 1
	21	Review			Rolling 1
	23	Rolling, Kinetic Energy of Rolling	11	1-3	
11	26	Torque and Angular momentum	11	4-6	Ang. Mom. 1
	28	Conservation of angular momentum	11	7,8	
	30	Review			Young's Modulus
	1	Second Major Exam (Chapters 7 – 11): 04Dec201	7		1
12	03 Dec.	Equilibrium, Examples of Static Equilibrium	12	1,2	
	05	Elasticity	12	3	Shear Modulus 1
	07	Newton's law of Gravitation	13	1-3	
13	10	Gravitation Inside Earth, Gravitational-potential energy	13	4,5	Kepler 1
	12	Kepler's laws, Satellites	13	6-7	
	14	Fluids at Rest	14	1-3	
14	17	Pascal's Principles, Archimedes Principle.	14	4,5	Buoyancy 1
	19	The Continuity Equation, Bernoulli's equation	14	6,7	Bernoulli 1
	21	Oscillations, Simple Harmonic Motion (SHM), Energy in SHM	15	1,2	
15	24	The Simple Pendulum, The Physical Pendulum	15	4	1
	26	Review			
	28	Review			<u> </u>
Thursday – 21Dec2017: Last day for withdrawal from all courses with grade of WP/WF					
Final Exam (Chapters 1 – 15), Monday, 01Jan2018 at 8:00AM					
Wish you a successful semester. Dr. M. B. Haider (Physics 101- Coordinator)					