

PHYS-170 FALL-2015...Morse...Tentative COURSE OUTLINE (underdevelopment) version 1.4 (10/02/2015)

week	day	2015 Date	Lec #	Reading due	Lecture	Mastering Physics HW assignments, General comments	HW due
1	Mon	Aug 24	#1	introduction	Units, Standards	HW #0: Chap 1, Units.	
	Tues	Aug 25	#2	1.1-6	Vectors, Vector Components		
	Wed	Aug 26	#3	1.7-10	Unit-Vectors, Polar Coordinates		
	Fri	Aug 28	TA-1	***			
2	Mon	Aug 31	#4	2.1-2	1-D motion, displacements, velocity	HW #1: Chap 2, 1-D motion	
	Tues	Sep 01	#5	2.3-4	acceleration		
	Wed	Sep 02	#6	2.5-6	Constant Acceleration--Gravational Forces		#0
	Fri	Sep 04	TA-2	***			
3*	Mon	Sep 07	***	***	LABOR Day Holiday		
	Tues	Sep 08	#7	3.1-2	2, 3-D Motion	#2: Chap 3, 2, 3-D motion	#1
	Wed	Sep 09	#8	3.3-5	motion in the plane, in space		
	Fri	Sep 11	TA-3	***			
4	Mon	Sep 14	#9	4.1-3	Newton's 1st and 2nd Laws	#3: Chap 4 Newton's Laws, Chap 5 Application of Newton's Laws	#2
	Tues	Sep 15	#10	4.4-6	Friction forces, Circular Motion		
	Wed	Sep 16	#11	5.1-3	Applying Newton's Laws		
	Fri	Sep 18	TA-4	***			
5	Mon	Sep 21	#12	5.4-5	Circular Motion	#4: Chap 5, Applying Newton's Laws; Chap 6, Work-Energy	#3
	Tues	Sep 22	#13	6.1-2	Work, Kinetic-Energy		
	Wed	Sep 23	#14	6.3-4	Variable Forces, Power		
	Fri	Sep 25	TA-5	***			
6	Mon	Sep 28	#15	7.1-2	Gravitational Potential, elastic potential	#5: Chap 7, Potential Energy...Energy Conservation	#4
	Tues	Sep 29	#16	7.3-4	Conservative, Non-conservative Forces		
	Wed	Sep 30	#17	7.4-5	Energy Diagrams	End of material for Exam-I, Chap 1-7, Lec 1-17, HW #1-5	
	Fri	Oct 02	TA-6	***			
7	Mon	Oct 05	#18	8.1-3	Momentum and Impulse	#6: Chap 8, Momentum Conservation; Chap 9, Rigid Rotations	#5
	Tues	Oct 06	#19	8.4-6	Conservative of Momentum		
	Wed	Oct 07	#20	9.1-3	Angular Velocity and Acceleration		
	Fri	Oct 09	TA-7	***			
8*	Mon	Oct 12	***	***	Exam -I	#7: EXAM-I Covers: Chap. 1-7, Lec 1-17, Notes 1-17, HW #1-5	
	Tues	Oct 13	#21	9.4-6			
	Wed	Oct 14	#22	10.1-4	Torque and Angular Acceleration	Chap 10: Dynamics of Rotational Motion	#6
	Fri	Oct 16	TA-8	***			
9	Mon	Oct 19	#23	10.5-7	Conservation of angular momentum	#8	#7
	Tues	Oct 20	#24	11.1-5		Chap 11: Statics, Equilibrium, Elasticity, Springs, etc...	
	Wed	Oct 21	#25	12.1-3	Pressure, Density, Buoyancy	Chap 12: Fluid Mechanics	
	Fri	Oct 23	TA-9	***			

10	Mon	Oct 26	#26	12.4-7	Fluid flow, Bernoulli's Equation	#9	#8
	Tues	Oct 27	#27	14.1-4	Simple Harmonic Motion (SHM)	Chap 14: Period Motion, Simple Harmonic Oscillators	
	Wed	Oct 28	#28	14.5-8	Damped and Forced Oscillations		
	Fri	Oct 30	TA-10	***			
11	Mon	Nov 02	#29	15.1-3	Longitudinal and Transverse Waves	#10: Chap 15: Mechanical Waves, Energy in Wave Motion	#9
	Tues	Nov 03	#30	15.4-6	Wave interference and Boundary conditions		
	Wed	Nov 04	#31	15.7-8		End--Exam-II, Lec 16-32. HW #6-11, Chap 8-14, except 13	
	Fri	Nov 06	TA-11	***			
12*	Mon	Nov 09	#32	16.1-3	Sound Waves: Speed, Intensity, interference	#11: Chap 16, Sound Waves, Standing Waves, Musical Instruments	#10
	Tues	Nov 10	#33	16.4-6	Resonance		
	Wed	Nov 11	***	***	Veterans Day Holiday		
	Fri	Nov 13	TA-12	***			
13	Mon	Nov 16	#34	***	Exam -II	#12, Exam-II: Chap 8-12, 14, 15; Lec 16-32, HW #6-11	
	Tues	Nov 17	#35	16.7-9	Doppler Effect, Shock Waves		
	Wed	Nov 18	#36	17.1-3	Temperature and Heat	Chap 17; Heat and Temperature	#11
	Fri	Nov 20	TA-13	***			
14*	Mon	Nov 23	#37	17.4-7	Temperature Scales, Kelvin Scale	#13	#12
	Tues	Nov 24	#38	18.1-3		Chap 18; Thermal Properties of Matter	
	Wed	Nov 25	***	18.4-6			
	Fri	Nov 27	***	***	THANKSGIVING HOLIDAY		
15	Mon	Nov 30	#39	19.1-4	1st Law of Thermodynamics	#14: Chap 19 1st Law	#13
	Tues	Dec 01	#40	19.5-8			
	Wed	Dec 02	#41	20.1-4	2nd Law of Thermodynamics	#15, #16(practice only...not to be turned in)	
	Fri	Dec 04	TA-14	***			
16	Mon	Dec 07	#42	20.5-8			#14
	Tues	Dec 08	#43	13.1-4	Gravity, Planetary Orbits, Kepler's Laws		
	Wed	Dec 09	#44	13.5-8			#15
	Fri	Dec 11	***	***	STUDY DAY		
17	Mon	Dec 14	***	10:30 (72282)	Final Exam (in class) 9:45-11:45am	60%: Lec 33-45, HW #12-16, Chap 16-20, and 13- recent material	
						40%: Lec 1-32, HW #1-11, Chap 1-15, except 13-previous material	
	Fri	Dec 18		09:30 (72281)	Final Exam (in class) 9:45-11:45am	60%: Lec 33-45, HW #12-16, Chap 16-20, and 13- recent material	
						40%: Lec 1-32, HW #1-11, Chap 1-15, except 13-previous material	