WINTHROP UNIVERSITY
PHYS 211 Course Schedule
Department of Chemistry, Physics, & Geology

DATE	TOPIC	CHAPTER	ASSIGNMENTS
8-23 W	Introductions, syllabus, Math test, Significant figures, Units, standards, SI system	1.1, 1.3,1.4	**Math &Physics Quiz**
8-25 F	**Recitation**: **problems solving** Converting Units, order of magnitude, Reference frames	1.5-1.6 and 2.1	
8-28 M	Displacement, velocity, acceleration	2.2, 2.3,2.4	
8-30 W	Motion at constant acceleration, Free Fall	2.5-2.7	HW#1
9-1 F	**Recitation**: **problems solving** Variable acceleration, Vectors and Scalars-Vector Addition -Graphical	2.8,3.1-3.3	**Quiz 1**
9-6 W	Units Vectors, Vector Kinematics	3.3-3.6	HW#2
9-8 F	**Recitation**: **problems solving** Projectile Motion, relative velocity	3.7-3.9	**Quiz 2**
9-11 M	Force & Newton's 1st Law, Mass	4.1-4.3	
9-13 W	Newton's 2nd Law, Newton's 3rd Law, Weight	4.4-4.6	**No Homework**
9-15 F	**Exam 1**	**Chap1-4**	**No Quiz**
9-18 M	Free body diagrams –solving problems	4.7-4.8	
9-20 W	Applications of Newton's Law-Friction-Uniform Circular Motion	5.1-5.2	HW#3
9-22 F	**Recitation**: **problems solving** Dynamics of uniform Circular Motion, Highways banked, non-uniform Circular Motion	5.3-5.5	**Quiz 3**
9-25 M	Newton's law of universal Gravitation, vector form, Gravity near earth	6.1-6.3	
9-27 W	Satellites and weightlessness, Kepler laws, type of forces in Nature	6.4-6.7	HW#4
9-29 F	**Recitation**: **problems solving** Work done by a constant Force, scalar product of two vectors	7.1-7.2	**Quiz 4**
10-2 M	Work by Varying Force, Kinetic Energy	7.3,7.4	
10-4 W	Work Energy Principle, Conservative and non-conservative forces	7.4 ,8.1	**No Homework**
10-6 F	**Exam 2**	**Chap 5-7**	**No Quiz**
10-9 M	Potential Energy, Mechanical Energy and its conservation	8.2,8.3	
10-11 W	Problem solving using conservational mechanical energy, conservation of energy	8.4-8.6	HW#5
10-13 F	**Recitation**: **problems solving** Energy Conservation with dissipative Forces, Escape Velocity, Power	8.7,8.8	**Quiz 5**

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10-18 W	Momentum and its relation to Force, Conservation of Momentum. Collisions and Impulse, Conservation of Energy	9.1-9.4	**No Homework**
10-20 F	**Exam 3**	**Chap 6-9**	**No Quiz**
10-23 M	Elastic Collisions in 1 Dimension, Inelastic Collisions	9.5,9.6	
10-25 W	Collisions in 2-3 D, Center of Mass (CM)	9.7-9.8	
10-27 F	CM and Translational Motion, Rotational Motion (Angular Quantities)	9.9, 10.1	**Quiz 6**
10-30 M	Vector Nature of Angular Quantities, Constant Angular Acceleration, Torque	10.2 - 10.4	
11-1 W	Torque and rotational Inertia, Solving Problems, Moment of Inertia	10.5-10.7	HW#6
11-3 F	**Recitation**: **problems solving** Rotational Kinetic and Translational Kinetic Energy	10.8,10.9	**Quiz 7**
11-6 M	Angular Momentum, Cross product, Torque as a vector	11.1,11.2	
11-8 W	Angular Momentum of a particle, Angular Momentum and Torque of System of particles, and for a rigid object	11.3-11.5	HW#7
11-10 F	**Recitation**: **problems solving** conservation of Angular Momentum, Oscillations of a spring	11.6-14.1	**Quiz 8**
11-13 M	SHM, Energy of SHO, SHM related to circular Motion, simple pendulum,	14.2-14.4	
11-15 W	Physical pendulum, damped harmonic Motion Forced Oscillations,	14.5-14.8	**No Homework**
11-17 F	**Exam 4**	**Chap 9-11**	**No Quiz**
11-20 M	Wave motion: transverse and longitudinal wave	15.1-15.3	
11-22 W-11-24 F	**Thanksgiving Break - no classes**		
11-27 M	The principle of superposition, Reflection and transmission, Interference. refraction	15.6-15.9	
11-29 W	Standing waves, resonance, Characteristics of Sound,	15.10,16.1-16.3	**HW#8**
12-1 F	intensity of sound, quality of sound and noise	16.4-16.5	**Quiz 9**
12-4 M	**Class evaluations** sources of sound, Interference of sound waves, Doppler effect, Applications	16.6-16.9	
12-7 TH 8:00 am	**Final Exam**		