

*K. Restorff Fall 2012*

## *Physics 161 Course Outline*

<i>Week</i>	<i>Dates</i>	<i>Reading</i>	<i>Topics</i>
1	9/5-9/7	1.1-1.10	Units, Vector components, Unit vectors
2	9/10-9/14	2.1-2.5	Products of vectors, 1 dimensional motion
3	9/17-9/21	2.6, 3.1-3.5	2 or 3 dimensional motion, Projectiles, Circular Motion, Relative velocity
4	9/24-9/28	4.1-4.6	Newton's Laws of Motion * <b>TEST #1</b> (Chapters 1,2,3)
5	10/1-10/5	5.1-5.5	Friction, Applications of Newton's Laws
6	10/8-10/12	6.1-6.4	Work, Kinetic Energy, Power
7	10/15-10/19	7.1-7.4	Potential Energy, Conservation of Energy * <b>TEST #2</b> (Chapters 4,5,6)
8	10/22-10/26	8.1-8.5	Momentum, Impulse, Collisions
9	10/29-11/2	9.1-9.6	Rotation of Rigid Bodies, Parallel-Axis Theorem, Moment of Inertia calculations
10	11/5-11/9	10.1-10.6	Dynamics of Rotational Motion * <b>TEST #3</b> (Chapters 7,8,9)
11	11/12-11/16	13.1-13.5 17.1-17.4	Gravitation Temperature Scales, Expansion
12	11/19	17.5-17.6	Heat, Calorimetry <b>Thanksgiving Break</b>
13	11/26-11/30	17.7, 18.1-18.3	Heat Transfer Equation of State, Ideal Gases
14	12/3-12/7	19.1-19.6	1 <sup>st</sup> Law of Thermodynamics, Processes * <b>TEST #4</b> (Chapters 10,13,17)
15	12/10-12/14	20.1-20.2 20.5-20.7	Heat Engines, 2 <sup>nd</sup> Law of Thermodynamics, Entropy
16	12/17	<b>**FINAL EXAM**</b>	(10:15 AM – 12:15 PM)