Physics 201 Laboratory Schedule

Winter 2017

Week	Experiment	Description	Laptop Required
1	Graphing	Data reduction and graphical analysis	No
2	Vector Addition	Addition of 2-D vectors with analytic and graphical methods and experimentally tested by way of a force table	Yes
3	Constant Acceleration	Experimentally determining 'g' with motion along a near frictionless inclined plane. Computer aided graphing is also introduced	Yes
4	Projectile Motion	Test your skills and understanding of 2-D kinematics by measuring and predicting and measuring parameters for an object in flight	No
5	Force and Acceleration	Test Newton's 2nd law (relationship between force, mass and acceleration)	Yes
6	Friction	Measuring coefficients of friction	Yes
7	Uniform Circular Motion	Measuring the force required for a rotating bob to maintain a uniform circular path	Yes
8	Conservation of Energy	"Peg and Pendulum": Test relationship of gravitational potential energy and kinetic energy in a system where work done by non-conservative forces is negligible	Yes
9	Impulse and Momentum	A collision that directly tests the impulse-momentum theorem	Yes
10	Conservation of Momentum	Experimenting with collisions	Yes
11	Torque Balancing	Studying rotational equilibrium	Yes
12	Moment of Inertia	Experimentally determine the moment of inertia of a rotating system	Yes
13	Simple Harmonic Motion	Studying periodic motion with pendulums and mass-spring systems	Yes
14	Archimedes' Principle	Experimentally determine density of objects	Yes