

## Physics 135/163: Semester I Physics Lab

### Content of the Course

This laboratory course will cover topics pertaining to elementary mechanics. Goal: to witness some of the laws and equations of physics “in action”. In this course, we will not be “verifying” these laws; they’ve been tested for hundreds of years and seem pretty sound. Instead, we will concentrate on making connections between what you observe in the lab and the theoretical concepts and equations discussed in lecture and in the textbook.

This separately graded course will, in some ways, parallel the material covered in lecture, but the 2 courses are not closely tied together. Sometimes you will encounter concepts in the laboratory course first, and other times, it will be the other way around. Occasionally, you may even perform an experiment related to material that is not covered in the lecture class.

### Prerequisites:

For Physics 135 (fall and spring semesters, summer): concurrent enrollment in Physics 125.

For Physics 163 (fall and spring semesters): concurrent enrollment in Physics 153.

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### Spring 2016 Schedule of Laboratory Topics

Week of February 8	<b>No Labs</b>
Week of February 15	Significant Figures AND Introduction to Computational Analysis
Week of February 22	Acceleration in Freefall AND Virtual Physics Labs (Cannonball)
Week of February 29	Vector Addition/Force Table
Week of March 7	Projectile Motion AND Atwood's Machine
Week of March 14	<b>Lab Quiz #1 (see study guide on website)</b>
Week of March 21	<b>No Labs</b>
Week of March 28	<b>No Labs (Spring Break)</b>
Week of April 4	Impulse and Change of Momentum
Week of April 11	Collisions in 1-D
Week of April 18	Moment of Inertia
Week of April 25	Conservation of Angular Momentum
Week of May 2	<b>No Labs (Academic Festival)</b>
Week of May 9	Standing Waves
Week of May 16	<b>Lab Quiz #2 (see study guide on website)</b>
Week of May 23	<b>No Labs (finals week)</b>