

## COURSE SYLLABUS (2 Page)

**Course Number:** PHYS 2101L  
**Course Name:** Physics for Science and Engineering I Lab

**Credits and Contact Hours:** 1

**Instructor:** Staff

**Textbook:** Realtime Physics Active Learning Laboratories, Module 1, Mechanics “The Physics Suite”, by Sokolof, Thornton, and Laws.

**Catalog Description:** Experiments selected from motion on an inclined plane, circular motion, momentum and energy in collisions, torques, and conservation laws. Use of the computer for organizing, graphing and analyzing data. If a student has completed PHYS 1101L with grade of C or above in a previous semester, the student is exempted from taking PHYS 2101L. Two laboratories each week.  
*Most Recently Offered (Day): Spring 2016, Fall 2015, Summer 2015*  
*Most Recently Offered (Evening): Spring 2016, Spring 2015, Spring 2014*

**Pre-Requisites/Co-Requisites:** PHYS 2101

**Course is: Required (R)**

**Goals:** To develop knowledge of fundamental principles and laws of chemistry; the relationship of atomic structure to physical and chemical properties of the elements.

### **Student Outcomes Addressed:**

- A. an ability to apply knowledge of mathematics, science, and engineering  
an ability to design and conduct experiments, as well as to analyze and interpret data

### **Course Topics:**

- Introduction to Motion
- Changing Motion
- Force and Motion
- Work and Energy
- Conservation of Energy