**University of Kentucky**

**Course: PHY 211 Sections: 010 and 012**

**Laboratory I for Algebra-based General Physics**

**Syllabus**

**TEACHING ASSISTANT (TA):** Ali Frotanpour **SEMESTER:** Fall 2015

**Class Webpage:** https://pa.as.uky.edu/afr236/phy-211-lab

**OFFICE:** CP 250 **Lab 010:** W 4:30pm-6:20pm in CP165

 **Lab 012:** R 4:30pm-6:20pm in CP165

**E-MAIL:** frotanpour@uky.edu

**PHONE:** 859-257-3941

**OFFICE HOURS:** W 2pm-4pm or by appointment (contact me by email)

**TA SUPERVISOR:** Dr. Max Brown **EMAIL:** max.brown@uky.edu **OFFICE:** CP 70 (in basement)

**NOTICE TO STUDENTS WITH DISABILITIES:**

**(Please address these concerns with Dr. Max Brown first. He will give the appropriate information to the TA).**

Any student who requires an accommodation due to a documented disability may contact the Disability Resource Center. The Disability Resource Center is located in Alumni Gym‚ Room 2‚ at the corner of Avenue of Champions and South Limestone Street (next to the Student Center and across South Limestone Street from Kennedy Bookstore) and can be found online at <http://www.uky.edu/StudentAffairs/DisabilityResourceCenter/index.html>

**COURSE SPECIFIC REQUIREMENTS, EXPECTATIONS, POLICIES:**

1. PHY 211 is an intensive laboratory course that will require your presence and focus two hours each week in the lab conducting the assigned experiment as part of a group AND approximately two hours of focused work outside of class writing your portion of the Lab Report.
2. Each class group members will be assigned one of three roles:
	1. Researcher – During class time, the researcher is primarily responsible for operating the laboratory equipment, taking measurements. In writing the report, the researcher is responsible for writing the research section and explaining the major steps of how raw data is analyzed to produced a final result.
	2. Data Analyst (DA) – During class time, the Data Analyst is primarily responsible for recording data into Excel and typing formulae in Excel. In writing the report, the DA is responsible for the Analysis section, editing the data tables and graphs to ensure that all data is legible, has appropriate units, and is properly labeled.
	3. Principal Investigator (PI) – During class time, the PI assists the other two roles and attempts to maintain the “big picture” to keep the group moving in a productive direction. In writing the report, the PI composes the Introduction and Conclusion sections, summarizing the entire experiment into simple, clear, and objective statements.
3. For University approved excused absences, I can schedule a time to do the Lab. For unexcused absences you will lose the lab grade. Groups that do not finish taking data during their regularly scheduled class period may schedule another time but %30 penalty will be applied to that specific lab final grade.
4. The lab report parts should be written by each individual, and the cover sheet of the lab should be signed by each lab member attesting to their authorship.
5. Electronic devices: You can use the computers provided in the lab. Using cell phones and personal laptops in the Lab are limited. Using those devices are allowed in the Lab in specific cases.

7) Cheating: Cheating in lab can include copying of data, manipulation of data to fit theoretical predictions, copying certain sections or entire lab report. In the case of cheating all group members will receive a zero on the lab.

**EVALUATION PROCEDURES:**

 **Individual Work**

Lab Report Section 40%

**Group Work**

 Lab Instructions Completed, and obeying lab policies 30%

 Teamwork-Lab report (as group) 30%

Total: 100%

*Lab Report Section:* Each group member will be required to write approximately 1/3 of the Lab report based on their assigned **role. Please refer to the Lab Report Template found on the Class Webpage/Blackboard/Canvas.**

*Lab Instructions Completed:* Lab groups must complete all parts of the lab (and write a lab report that reflects this) during the standard 110 minute class period to receive full credit.

 *Teamwork:* To receive full credit, group members must follow their assigned role and must develop a productive group dynamic.

**Lab Report:** The lab report should be written in only one font, symbols for variables should be consistent throughout, and all writers should be referring to the same data to craft their sections.

*Participation:* If a group member is unable to produce documentation for an absence, they will forfeit 50% of the points on the lab for that week, *Prelab, Instructions Completed,* and *Teamwork.*

**Schedule:** To keep all sections of the lab in line with each other the given schedule will be followed:

 August 26-28 NO LAB

 August 31- Sept 4 Lab 1 Measuring Paper

 Sept 8-11 NO LAB

Sept 14-18 Lab 2 Flat Track

 Sept 21-25 Lab 3 Incline Track

 Sept 28-Oct 2 Lab 4 Friction

Oct 5-9 Lab 5 Springs

 Oct 12-23 Lab 6 Energy (Two Week Lab)

 Oct 26-30 Lab 7 Gravity

 Nov 2-6 Lab 8 Damped Harmonic Motion

 Nov 9-13 Lab 9 Fluids or Rotation

 Nov 16-20 Lab 10

 Nov 23-27 NO LAB

 Nov 30-Dec 4 Lab 11

 Dec 7-11 NO LAB