

## Phys2211K and Phys2212K Lab Policies

### 1. Physics Lab Website: <http://physics.gsu.edu/butler/labs/>

On this website you will find:

- the lab to print out and bring with you (beginning with third week of class),
- videos (from Slice of Physics Youtube channel) and textbook chapter to prepare for lab,
- tutorial homework to be completed and turned in at the next lab period, and
- other helpful information.

### 2. The lab section for PHYS2211K /PHYS2212K consists of following three parts with allocated points for each lab.

A. <b>Tutorial:</b>	60 minutes	5 points	
B. <b>Lab :</b>	1 hour and 50 minutes	15 points	Total = 25 points
C. <b>Tutorial Homework</b>		5 points	

Your weekly lab and the tutorial are generally closely related. The concepts discussed in the tutorial and lab will generally be covered in your lecture prior to the lab. In addition, you will be expected to watch one or more short videos and read the assigned chapter to prepare you for the tutorials and labs. Each week you will do a 60-minute tutorial followed by a lab experiment. You will be working in groups of two or three for both the tutorial and the lab. The tutorial sessions will be conducted by a learning assistant (LA). The teaching assistant (TA) will then supervise the lab.

### 3. Nature of Tutorials and Labs

The tutorial book and the associated homework are sold in a bundle with the textbook at the bookstore. You can also buy the tutorial books online if needed. You will need the tutorial book by the second lab and you should bring it to your lab period each week.

After the first meeting, you will be expected to watch the assigned videos before you come to lab to be prepared to complete the tutorial on time. At the end of the tutorial the LA may or may not collect your work for grading. Assigned tutorial homework to complete and videos to watch before the next lab meeting are on the schedule and posted on the Physics lab website. The homework should be turned in to the LA at the start of the tutorial period.

The lab experiment starts immediately after the tutorial. You are supposed to complete the lab with a minimal set of instructions. There is no lab manual to purchase but you will need to print out the labs and bring them with you. Beginning with the second lab, you will need to bring a printed copy of the write up. The printed lab document will contain only absolutely necessary instructions and a set of questions to be answered during the lab. Often, you will have to think, discuss and come up with a procedure to conduct the lab. All the labs should be completed (taking data, doing calculations and writing up the answers) within the allocated lab time period (one hour and 50 minutes). Although the work is done in groups, everyone will submit their own written copy of the lab to the TA before leaving the lab. The TA will grade the lab write-ups. The TA will return the graded labs during the next lab meeting.

#### **4. Tutorial and Lab Grading**

Tutorials are meant to give you an opportunity to struggle with the concepts. Grading of the tutorial will be based on giving thoughtful and engaged responses, not necessarily on the accuracy of your answers. There is no formal lab report to write, but you are required to answer all questions given in the lab.

You will be marked off for late arrival. If you are more than ten minutes late you can only get half credit for the tutorial. LA's will not accept homework if you are more than ten minutes late.

The lab grade will be based on how well and accurately you take data, do calculations, make graphs, and answer the questions. Answering some questions may require making predictions. Predictions will not be graded for correctness but should reflect what you really believe will happen. Typically, after you make measurements you will be asked to explain why your prediction matched or didn't match with your experimental results. All questions should be discussed by your group and any disagreement should be resolved, if possible, prior, to the submission of the lab write-up. You will not get points for unreadable, incorrect, not relevant, or incomplete statements. If there are graphs to be printed, the TA will help you get them printed from the classroom printer. You will be using Excel or Capstone software to make graphs.

Each member of a group is expected to participate; you will lose points if you do not work with your group.

#### **5. Assessment tests**

An assessment test will be conducted during the first lab meeting and the last lab meeting. If you take the first test and do the Excel skills exercise your lowest non-zero lab grade will be replaced with a perfect score when your final average is calculated. The second assessment grade is graded for correctness and treated like a lab grade.

#### **6. Lab attendance and Grade**

Lab attendance is mandatory if you want to pass the course. You must turn in a complete lab report to get any credit for a particular lab. At the end of the semester your lowest grade will be dropped and the lowest non zero grade will be replaced with a perfect score if you took the first assessment test and completed the first exercise. The second assessment test score will be added to the lab grades and this score will be divided by eleven. This average will be worth 25% of your overall grade for the Physics course. The remaining 75% comes from the lecture portion of the course. To pass the lab portion of the course you must attend and complete the work for at least 8 labs.

## **7. Lab makeup (with another section only)**

You may not come to lab more than half an hour after the lab has started. During a semester you may make up two missed labs by attending another section. You must fill out a Lab Make up Form and have the permission of the instructor in the make-up lab. Turn your homework in to the instructor of the make up lab. You may not make up more than two labs without special permission from the lab coordinator. E-mail your regular TA to let him or her know if you have attended another section. There is no other provision for making up missed experiments.

## **8. Lab Policies**

State law forbids eating, drinking, or smoking in the lab room, and the instructors are required to enforce this rule. University policy requires that all cell phone, pagers, and similar devices must be turned off and earphones must be removed. If you are expecting a call due to some emergency, talk to the lab instructor at the start of the period.

Equipment is expensive and should be treated with the proper care. The TA may lower the grade if a student is careless with equipment. If something seems to be broken, or is not working properly, call the TA; do not try to fix the equipment yourself.

## **9. Labs, class tests and the final exam**

Some questions on your class tests and the final exam will be from the labs/tutorials since the labs, tutorials and lectures are interconnected. It is highly recommended that you attend all the labs and tutorials. You will be responsible for all the material, even if you did not attend the lab.