College Physics I (PHY2053) Laboratory
Fall 2022

Meets: M 8:00-10:30am
Room: 102 Jones Hall
Instructor: Patricia Stampe
Email: patricia.stampe@famu.edu

Virtual Office Hours Zoom ID: TBA
Office Hours: TBA

Textbook: All materials required for this class are available for free on the course Canvas site. There are also worksheets available for each lab. It is strongly recommended that each student prints out and brings the worksheet along to lab for entering their data.

Course Structure: This class will consist of 6 in-class (L) and 6 virtual (V) laboratories. You will be divided into two groups, A and B, and will alternate between in-class and virtual laboratories. The schedule for this is below: Your instructor will inform you which group you are in during the first week of class. Your work for the labs will be submitted either in the form of worksheets(in-class experiments) or quizzes (virtual experiments), depending on the lab. This information is laid out in the schedule below.

*schedule may be adjusted due to evolving circumstances as the semester progresses

DATE	GROUP A	GROUP B
Week 1	Intro – both groups will meet together	
Week 2	Lab 1 – Laboratory Fundamentals -both groups	
Week 3	Lab 2 – Measurements & Instrumentation	Lab 3 – Vectors
Week 4	Lab 3 – Vectors	Lab 2 – Measurements & Instrumentation
Week 5	Lab 4 – Inst./Avg. Velocity & Acceleration	Lab 5 – Frictional Forces
Week 6	Lab 5 – Frictional Forces	Lab 4 – Inst./Avg. Velocity & Acceleration
Week 7	Lab 6 – Work/Kinetic Energy	Lab 7 – Collisions & Momentum
Week 8	Lab 7 – Collisions & Momentum	Lab 6 – Work/Kinetic Energy
Week 9	Lab 8 – Balance/Equilibrium	Lab 9 – Rotational Inertia
Week 10	Lab 9 – Rotational Inertia	Lab 8 – Balance/Equilibrium
Week 11	Lab 10 – Archimedes' Principle	Lab 11 – Hooke's Law/SHM
Week 12	Lab 11 – Hooke's Law/SHM	Lab 10 – Archimedes' Principle

Lab Rules : All students should read the lab material before they come to class. The class will begin at 8:10am. If you arrive late please remain outside of the room until the instruction is completed so the other students are not disturbed. After I have explained the experiment, I will then allow the late students to enter the room. The use of cell phones in the room is prohibited at all times.

Technology Requirements: In order to interact with the virtual lab simulations, you will often need a computer capable of playing simulations in a browser. Also, for maximum accuracy, a reasonable size screen is required: your cell phone screen will seldom suffice.

The instructions for all of the labs of the term, and all of the worksheet templates are available from the beginning of term. Worksheets are due at midnight on the day before the next lab period (i.e. Sunday PM). Quizzes are available to be done only on the day scheduled for the lab. All quizzes are due by midnight on the day of the lab. Students are strongly encouraged to begin work on the lab early, so that they will be poised to ask questions during the lab period. Questions may be asked via email at any time, however, emails sent after 8 pm may not be answered until the following day. As a result it is not recommended that you wait until late on the day the assignment is due to start the work! Last minute internet problems will not be accepted as a valid excuse for late work.

Late quizzes will not be accepted. Worksheets may be submitted up to two days late, but will have a late penalty of 25% per day assigned.

Lab write-up and submission can be done either by printing out the worksheet, filling it in by hand, and scanning it in as a PDF (PDF scanning apps are available free in the App/Google Play store), or editing the document in Microsoft Word and Excel, or equivalent (Google Docs). As a FAMU student, you have free access to Office 365 software, which can be downloaded from the FAMU EIT website, http://its.famu.edu/howtos/office365. Office 365 apps allow you to print to PDF for uploading on Canvas.

Grading:

Prelabs: (10%) A prelab that explains the lab procedure will be due at midnight (Eastern time zone) the night before the lab is scheduled. The prelab assignment will consist of a video going over the theory and instructions for the next day's lab, as well as questions to help with data analysis. Your grade on the embedded quizzes will automatically appear in your Canvas gradebook. The best browser to use for watching the prelabs is Firefox, which can be downloaded for free for all your devices. **Canvas can be a bit glitchy, so I strongly encourage you to take a screenshot of your results slide, including the time and date at the bottom of the screen. That way, if your grade does not record correctly automatically, you have some backup to verify your score.**

Worksheets: (40%): Worksheets should be brought along to class to be completed. Often all measurements and calculations can be done during the lab period, and it should be possible to complete the majority of the work, except perhaps the graphs before you leave the lab for the day. Late submissions for worksheets are accepted up to two days late, however, a late penalty of 25% per day or fraction thereof will be automatically applied. **Worksheets will not be accepted from students who are not on the attendance roster for that laboratory.**

Worksheets must be uploaded to Canvas as a SINGLE Word or PDF file. Graphs must be inserted into the document. Be aware that graphs can often be distorted during this process: you must verify that

your graph looks the same as it did on your graphing program. It is strongly recommended that you use screen capture to copy and crop your graph, save it as an image file, and import the image into Word.

Save your document with your full name in the title: e.g. "Vector_Worksheet_John_Smith", to avoid any possibility of mixup.

Under no circumstances should your lab report or any section thereof be the same as anyone else's. Should this occur, both (or all) students with identical reports or sections of reports will receive ZERO credit for this work. Turnitin plagiarism tracker will be used on the submissions. A plagiarism score of 40% or higher will result in a grade reduction of 10% for each 10% score higher than 40%. E.g. if your Turnitin score is 60%, you will have 20% deducted from your worksheet score.

Virtual Lab Quizzes: (30%): In virtual labs, your work will be submitted in the form of a Canvas quiz. In the case of a lab with a quiz, the quiz will ask you to enter online the values that you entered in the Tables in the lab instructions, and to answer the questions within the lab. You will be given two attempts to take the quiz. The second attempt is primarily in case you have an internet malfunction during the first attempt. However, if you score poorly the first time, you may try a second time to get a higher score. For this reason, it is strongly encouraged that you try the work early, so that you have time to ask your instructor for help during the lab period. Late quizzes will not be accepted.

Tests: (20%): Short (~1 hour) In-lab quizzes will be given during the weeks that you do labs 5 and 11. Quiz 1 (during lab 5) will cover material from Labs 1-4, and Quiz 2 (during lab 11) will cover material from Labs 5-10.

Attendance: More than one excused absence is grounds for a failing grade in the course. In-class attendance will be taken at 8:10AM. If you arrive late you are responsible for notifying the instructor that you have arrived. **Worksheets will not be accepted from students who are not on the attendance roster for that laboratory.**

Any evidence of cheating will result in a grade of zero for that assignment and possible reporting to the university. A second offense will result in a grade of "F" for the course.