Physics 164/165 Lecture and Lab Syllabus

The First and Second Courses of Algebra-Based Physics

1. General Information

Instructor: Hiro Shimoyama (Ph.D.) Office: T₃₀-4

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Office Hours: Designated; otherwise, make an appointment by email.

Prerequisite: Algebra, trigonometry, and related physics courses if needed

2. Specific Information

Beyond class time

The class related handouts and resources will be posted on the web. Emails are frequently sent out to inform on homework, exams, labs, etc. Check your university email account at least twice a week. You may also ask me questions by email anytime.

Attendance policy

Attending class is very important. If you missed classes for some reason, you should come to my office to understand the lectures to compensate your attendance. If you miss lectures more than:

- one-fourth of the total number ⇒ lowering one letter grade from the final grade
- one-third of the total number

 failing the class

For general advice,

☑ Tell your friends, girl/boy friend, parents, brothers/sisters, advisor, boss in the work place, roommates, fiancé, spouse, and any other people related to your daily life that you are studying at university; and participating in classes is also an important work.

☑ If you become sick, focus on recovering. If necessary, go to a medical doctor. If the illness continues for a long term, we may arrange the lecture at a different time/place so you can catch up with class. However, if you are incapable of studying or attending most of the lectures, you may have to leave the semester to focus on the medical treatment since it would ruin both your health and the academic achievement.

☑ If some problem in your life keeps you from coming to class, you should consult reliable persons or some expert, so you can come back to class as soon as possible.

☑ If your habit keeps you from attending class, try to refrain from it at least before class.

☑ Check your time schedule. If it is unmanageable, consult the related persons. If necessary, drop a class or reduce work loads.

Consideration to the extra credits

This will be given for your overall performance in this class. The keywords are effort, diligence, improvement, and better thinking skills. It is NOT a back-up plan for your better grade. This will be offered by the instructor if following are adhered to:

- Attend all lectures. (The attendance sheet is just a reference, not necessary to be the evidence.)
- Turning in every assignment (quiz, homework, test, exam, etc.) in time and completing it to your best ability. It must also be neat and legible.

^{*} You will be notified of exam dates in a timely manner. These dates will be final, and no discussion of changes will be considered. No make-up exams will be given unless you have a verified excuse from the related office.

- Class participation (asking questions)
- Improving your skills (progress in overall performance)
- When you are better than average

People who conduct themselves in the following manner will be ineligible for the extra consideration.

- Not working problems by yourself
- Leaving class or sleeping during lecture
- Frequently missing class even with excuse

For Physics Labs

All the datasheets are posted on the above web page (hirophysics.com). Print out before coming to the labs.

1. Very important notes

YOU MUST NOT LEAVE THE LAB WITHOUT OBTAINING THE PROPER RESULTS. <mark>SIGNATURE FROM THE INSTRUCTOR IS NECESARRY</mark> TO FINISH THE LAB.

- Finish <u>every calculation</u> before you leave. Without calculation and comparing with theoretical values, that will be recognized as no participation in the lab.
- Come to the lab on time. More than 20 minutes late will be absence from the lab. (However, it does not mean that you can be late until 20 minutes.)
- ✓ If you missed a lab, it will be no credit. <u>Do not copy the other's data and pretend to have attended the lab.</u>
- Write up the reports properly. Turning in <u>only</u> data sheets or <u>without doing questions</u> will be invalid. Writing a wrong discussion will not be accepted. (However, there is a chance to redo the reports.)
- Do not put the write-ups into <u>my mail box</u>. Do not slip the reports under the door. These might be thrown away.
- Do not work on lab reports or any other things during the lab time. You must focus on doing the experiment.
- Show proper results to have instructor's signature. After completed, clean the table and put everything in order.

2. Missed labs

Basically, there is no make-up lab. If you have to miss with an important reason, notify me. If possible, attend the lab in a different section. If the instructor is not me, please tell the instructor that you would like to make up the lab. If s/he allows you to join the section, participate in the experiment and have the instructor's signature before you leave. (It is difficult to make up a lab in the other time because the room is used for classes whole day.)

About Lab Report and Grading

General information

- There is NO point awarded if you attend the lab but does not write a report on it.
- Turn in labs on next week lab. Please do NOT put them in my mail box.
- More than half of the points should be awarded for your reasonable efforts on a lab
- Keep your graded reports and data sheets, which are the only evidence for your grade.

Format

A lab report will be graded as a 20-point scale. You should write down at least these:

- Title 5%
 - Include your name and section.
- **Introduction** (should be typed.) 5%
 - Summary of the experiment, purposes, equipment set up, procedures etc.
- **Data sheet** (**Results**) (needs my signature) 20%
 - Fill out all assigned items.
- Calculation 15%

You do NOT have to type. This is to know how you got the results. You can attach the paper to the report. If you use some software on computer, please specify the name, and tell me about the procedure to get the results briefly.

- Ponder the provided questions 25%
 - Be sure to address to the questions provided on the data sheets.
- Conclusions and Discussion (should be typed) 30%

You are supposed to write up: error analysis, causes of errors, comparison between theories and experimental results, things you learned, suggestions improving labs, connections between an experiment and your daily life experiences, things you did not understand, and answers or discussions of questions provided on a data sheet.

Note: You are allowed to discuss with your friends, and share the calculation, but write reports in your own words.

Lab Report Due Dates and Deduction

Reports are due one week from the day they are performed at the START of the laboratory session. Late reports will be penalized as follows:

- 1 day to 1 week late: 2 points deducted.
- 1 week to 2 weeks late: 5 points deducted.
- 2 weeks to 3 weeks late: 10 points deducted.
- More than 3 weeks late: reports not accepted.

Please do not work on lab reports during class (or lab) time.