Physics 221 Section 005 (42031) Recitation and Laboratory Syllabus

Time
Day: Thursday
Recitation: 1:25pm-2:15pm; Laboratory: 2:30pm-3:20pm

Instructor
Course Instructor Name: Ao Teng
UTK’s e-mail: ateng1@utk.edu
Office Hours: Friday, 2:30pm-3:20pm, or by appointment
Physics Tutorial Center (Nielsen 201)
TA Office: SERF 309
Office Phone Number: 865-974-8762

Course Description
This is the supplemental laboratory phase of the Physics 221 course. The purpose of this laboratory is to expose you, in a hands-on laboratory setting, to the physics topics covered in lecture. You will be required to perform experiments covering a wide range of physics concepts in kinematics, dynamics, thermal physics, and optics.

Course Materials
The laboratory manual for Physics 221 is Contemporary Introductory Physics Experiments by James E. Parks, Hayden-McNeil Publishing, ISBN 978-0-7380-3083-8. This manual is available at the UT Book and Supply Store. All of you should have a copy of the laboratory manual before the first lab class. Please make sure to bring this book to every laboratory session.

Recitation
Before every laboratory there will be an hour-long recitation period. You are expected to come to every recitation. Please come to class having read the new lab! Typically you will be given a quiz at the beginning of every recitation over the new laboratory material. The quiz will also include a few questions covering basic lecture concepts. There will be no makeup quizzes! Following the quiz, specific problems or topics related to the week’s lecture will be covered.

Laboratory
You are expected to read the experiment before coming to the lab session. Generally you will work in pairs to perform the experiments. The partners should collaborate and have approximately equal contribution when performing the experiments.

Lab Reports
Every student must write their OWN lab report. At the start of every laboratory session, you will be required to hand in a lab report over the previous week’s experiment.

This lab report will need to include all of the following:

- **Heading**: Title, your name and your partner’s name, and the date you performed the experiment
• **Introduction**: a clear statement about the scientific objective of the lab and a little on the theory behind it including relevant equations, variables and units

• **Procedure**: Don’t quote the manual word for word, summarize what you did. Keep it short!

• **Data**: All relevant data, analysis and graphs

• **Results**: An analysis of the results. What does the data say happened? Include possible sources of error.

• **Conclusion**: What did you learn in the lab? Argue the significance of your results.

In most cases your TA will return graded lab reports to you one week after you hand them in but in some exceptional cases it may take 2 weeks to grade your report. TA will post the grades of the lab report also on Blackboard. You should look for these grades under your specific section rather than under the merged section of your class. If there is a concern about a grade you must contact your TA within one week of receiving your graded lab report.

**Attendance**
Lab attendance is mandatory. It is expected that you to show up on time for every recitation and lab session. Do not be late. If you must miss lab due to extenuating circumstances (ie. serious injury, illness, or a death in the family) it is your responsibility to contact your TA as soon as possible. TA may allow you to make up the laboratory during the same week.

**Typical Grading Procedure**
Lab Reports 85%
Quizzes 15%

Lab reports will account 100% of grade when no quiz is given

**Classroom Policies**
Please respect your fellow students and please respect your TA. Do not come to class late. Do not talk when TA is talking. Turn off your cell phones, beepers, and MP3 players and pay attention!

All students are expected to abide by the University Honor Statement. Any kind of cheating will not be tolerated. In this course, cheating might include making up data, copying off your neighbor on quizzes, or handing in a lab report that is partially or fully identical to another student’s. If TA catches you cheating, s/he will assign you a zero for whatever it is you are cheating on. A second offense will result in a grade of zero for the laboratory portion of the course and a report to the Office of Student Judicial Affairs.

**Course Outline**
The schedule of experiments can be found online at http://www.phys.utk.edu/labs/ph221syl.pdf
If this schedule changes, TA will notify you by e-mail.

**Announcements**
For announcements check your Section pages on Blackboard regularly.