PHY f303K: ENGINEERING PHYSICS I (Summer 2020; First session)

Unique # 86025

MTWTHF 10:00 a.m.-11:30 a.m.

1. Instructor: **Dr. Maxim Tsoi**
Office hours: TBA or by appointment
You may contact me via e-mail: tsoi[at]physics.utexas.edu

TA: **TBA**
E-mail: TBA
Office hours: TBA or by appointment

2. Course materials:

Textbook: Ohanian and Markert, Physics for Engineers and Scientists, Volume I, 3rd Ed. This course covers chapters 1 through 18. The syllabus represents the nominal amount. Additional concepts, if needed in HW problems, will be included.

Canvas: http://canvas.utexas.edu/ contains this Syllabus, provides access to Lectures, Office hours, Announcements.

Quest: http://quest.cns.utexas.edu provides access to Homework, Tests, Final, Grades, Announcements.

This course makes use of the web-based Quest content delivery and homework server system maintained by the College of Natural Sciences. This homework service will require a $30 charge per student for its use, which goes toward the maintenance and operation of the resource. Please go to http://quest.cns.utexas.edu to log in to the Quest system for this class. After the 12th day of class, when you log into Quest you will be asked to pay via credit card on a secure payment site. You have the option to wait up to 30 days to pay while still continuing to use Quest for your assignments. If you are taking more than one course using Quest, you will not be charged more than $60/semester. Quest provides mandatory instructional material for this course, just as is your textbook, etc. For payment questions, email quest.billing@cns.utexas.edu.

Zoom: http://zoom.its.utexas.edu/ will be used to access Lectures, Lecture recordings, Office Hours (via Canvas/Zoom). You will not be able to access a Zoom meeting until your upgrade to Zoom 5.0 (https://zoom.its.utexas.edu/zoom-upgrade).

3. Prerequisite: Credit with a grade of at least C- or registration in Mathematics 408D, 408L, or 408S, and Physics 103M; and an appropriate score on the physics assessment exam.

4. Quantitative Reasoning: This course may be counted toward the quantitative reasoning flag requirement. Quantitative Reasoning courses are designed to equip you with skills that are necessary for understanding the types of quantitative arguments you will regularly encounter in your adult and professional life. You should therefore expect a substantial portion of your grade to come from your use of quantitative skills to analyze real-world problems.

5. Drop deadlines: 6/5 - Last day of the official add/drop period; 6/9 - Last day to drop a class for a possible refund; 7/9 - Last day to drop a first-term class, with required approvals.

6. Students with disabilities: The University of Texas at Austin provides upon request appropriate academic adjustments for qualified students with disabilities. For more information, contact the Services for Students with Disabilities at 512-471-6259, 512-410-6644 (VP) (http://ddce.utexas.edu/disability/).

7. Interactive quiz oriented teaching: We intersperse lectures with interactive quiz (poll) sessions. Questions for these "IQ"-questions are chosen to highlight the course materials and give students guidance in doing HW problems. Good understanding of textbook examples, IQ questions, and homework problems will help you to understand the physics of this course.

8. Study suggestions: Students are responsible for assigned sections of the book even if they are not covered in class. Read the material to be covered in class before coming to class, and a second time afterward. Start working on your homework problems as soon as they are available and turn your work in as soon as you have completed it (you get multiple tries for missed questions). Get help if you have trouble understanding the

material ! The importance of doing the homework assignments (and understanding them) can not be overemphasized. Very few students pass who do not do well in their homework. Please don't fall behind. Also, you should work the problems at the end of the chapter, looking for particularly interesting ones to solve in addition to those which you have done for homework.

9. Lectures: *Synchronous mode:* Lectures will take place (live) MTWTHF at 10am; all times here and below in Central Daylight Time (CDT) (UTC-5). The lectures can be accessed via Canvas (Canvas calendar will have links to all the lectures). *Asynchronous mode:* the lectures will be recorded and the recordings will become available on Canvas shortly after every lecture. ***Class recordings are reserved only for the use of members of this class (students, TAs, and the instructor) and only for educational purposes. Recordings should not be shared outside the class in any form. Violation of this restriction could lead to Student Misconduct proceedings.***

10. Attendance: Class attendance for live lectures is not mandatory but is strongly recommended. Class interruptions such as chatting or video interference are unacceptable. Your cooperation in maintaining a good atmosphere for learning is required.

11. Formula sheet: The Formula sheet gives the basic formulas/principles which you will be learning in this course. We encourage you to use it as your study companion. It is meant to help you to organize the course materials, to do homework and to review for exams. Queries on the summary are welcome anytime. You can find this summary on Canvas/Files.

12. Homework/Tests/Final: (all online on Quest; see schedule below)

- **Homework:** The Quest homewrk service handles distribution and collection of the homework (HW) on the Web. Submit your HW to Quest expeditiously. **No late homework will be accepted.** Continue submitting answers until due time. Urgent messages related to HWs will be posted on Quest and Canvas. Solutions will be available on Quest after the due time.
- **Tests:** There will be 4 online Tests (also referred to as Midterm Exams). See below for time and place of each Test/Exam.
- **Final exam:** The final exam is comprehensive and mandatory. Friday, July 10, 7:00 pm–10:00 pm.

During each Test/Exam:

- During the exam you can use only SCRATCH PAPER, FORMULA SHEET, PEN/PENCIL, CALCULATOR**.**
- FORMULA SHEET: you can print it out in advance (available on Canvas/Files) or open the pdf file in a separate window.
- **Academic dishonesty will not be tolerated** (see link to University Honor Code)**.**

13. Grading policy:

- Homework (drop 2) 30%
- Tests (drop 1) 45%
- Final 25%

→ A grade report for each assignment/exam will be available on Quest after the due time. Final course %scores can be calculated as %score = 0.25*Final + 0.45*Test_average + 0.3*Homework_average. Final letter grades will be determined on the basis of the following rubric: A = 94-100; A- = 90-93; B+ = 87-89; B = 84-86; B- = 80-83; C+ = 77-79; C = 74-76; C- = 70-73; D+ = 67-69; D = 64-66; D- = 60-63; F = 0-60. Please note: to ensure fairness, all numbers are absolute, and will not be rounded up or down at any stage, thus a B- will be inclusive of all scores of 80.000 through 83.999. The University does not recognize the grade of A+. A curve may be used after the final exam, if needed, to bump the grades up (but not down).

No make up tests will be given. Student is required to take all four Tests. At the end of the semester, the Test with lowest score will be dropped. If a student misses a Test, the missing Test will be the one which will be dropped. If missing a test is due to a legitimate reason approved by the instructor, the student may alternatively choose a no-drop option, where the student's final exam score appropriately scaled may replace the score of the missing Test. After a missing test, the student needs to immediately communicate with the instructor through email. The student must save the email record and claim the no-drop option at the end of the semester. For the no-drop option to be applicable, the student must take the other three Tests.

First class reminders:

- The **Syllabus** for PHY f303K can be found on Canvas (http://canvas.utexas.edu/). It provides basics and answers most of your questions about this course.
- **1st class:** Zoom lecture is at 10am on Thursday, June 4 (access via Canvas/Zoom).
- **Quest Registration**: Go to the Web at "https://quest.cns.utexas.edu/student". Read 'Getting started instructions': "https://wikis.utexas.edu/display/questla/Getting+Started".
- **Homework:** Download homework #1 (HW01).
  - Notice the due time of homework #1 is at 4am on Tuesday, June 9 (think of it as Monday evening).
  - Instructions for submitting work: "https://wikis.utexas.edu/display/questla/My+Assignments"
  - Announcements related to homework, will be given on Quest and Canvas.
- All **office hours** will begin next week: TBA.
- Check your e-mail for messages about pre/co-requisite compliance. If you get one → contact Melva Harbin, Academic Program Coordinator (512-471-8856; mharbin[at]austin.utexas.edu) to correct the problem.