PHY 303K ENGINEERING PHYSICS I

Web Site: http://tesla.ices.utexas.edu/physics_303k

This site will contain all important information, e.g., exam dates, homework assignments. Please look at this site at least twice a week, especially if you miss a class.

Course Description: This course is a general survey of physics: matter, energy, conservation laws

Instructor: Professor Jim Chelikowsky Office: ACE 4.324 (NOT RLM!) Office Hours: MWF 3-4 pm (or by appointment) Phone: 232-9083 Email: jrc@ices.utexas.edu (email is better), please put "303 K" in the subject header.

Teaching Assistant (TA): Aditya Aravind (aditya@physics.utexas.edu)

Learning Assistants (LA's): Alex Fairchild (ajfairc@gmail.com), Seth Whitsitt (theleaderoftheplace@hotmail.com) and Travis Autry (travis-autry@mail.utexas.edu)

TA and LA's website (office hrs, online learning, coaching):

http://www.ph.utexas.edu/~303kcom/chelikowsky/

Class Meeting Times:

Lectures: Tuesday, Thursday 3:30-5:00 p.m. in PAI 2.48 TA Sessions: Monday 7-8 pm (56665, RLM 6.112) 8-9 pm (56675, RLM 6.112) Tuesday 7-8 pm (56670, GAR 0.120) 8-9 pm (56680, GAR 0.120)

Prerequisites: A very good high school physics course, Physics 306, or consent of the undergraduate advisor. Mathematics 408C, or 408K, and concurrent enrollment in 408L, and credit or registration for Physics 103M.

Text: Matter & Interactions I, Modern Mechanics, R.W. Chabay and B.A. Sherwood, Wiley, 3rd edition, 2011.

Other class materials: Online resources, lecture notes and clicker questions.

Evaluation:

4 Mid-term exams: 42 % [One exam will be dropped] Final exam: 25 % Homework: 15 % [3 homework assignments will be dropped] In class quizzes: 6% [4 quizzes will be dropped] TA section: 12% [computer models and attendance]

Exam schedule: All mid-term exams are from **7-8:30 p.m. Wednesdays, September 15, October 13, November 10, and December 1.** Note: *The mid-terms run 90 minutes.* Location to be announced on the web site. The final exam will be on **Saturday, December 11 from 2-5 p.m**. Location will be announced at a later date. The final exam will be comprehensive; other midterm exams will focus on the most recent material covered. Calculators will be allowed for the exams. Programmable calculators will be allowed, but the memory must be cleared before the exam. Academic dishonesty will NOT be tolerated.

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Quizzes: The lectures will be interspersed with interactive quizzes on a semi-regular basis. During these quizzes students are encouraged to discuss the problem with their neighbors. Clickers will be used for these sessions. The specific clickers used for this course are called "Iclickers." They are available at the UT-coop.

Homework: Homework assignments will be made on a twice weekly basis. The assignments will be web based and will allow you to work at your own pace, save the deadline for completion is absolute. Normally, each lecture will have a short homework assignment. The homework assignment will be due at 11:30 p.m., local time, usually on a Sunday and on a Wednesday.

Grading policy: The letter grade cutoffs for the exams will be determined by two schemes

- (a) Percent scores: A (>90%), B (89-76%), C(75-51%) D(50-40%), F(< 40%)
- (b) Scaled scores as determined by the QUEST system (which automatically scales the median to 500): A (>600), B (599-525), C(524-450), D(449-400), F(< 400).

The BETTER grade as assigned by the percent scores and scaled scores will be used.

Exam policy:

There is normally no make-up exam offered for any mid-term exams. If you have a legitimate excuse for missing an exam, you must have permission from the instructor beforehand. Legitimately missed exams will be replaced by rescaling the final exam.

TA and LA Sessions: These sessions will consist of computer modeling and discussions on materials covered in the lectures and textbook. The scores for these sessions will be assigned by the teaching assistant's (TA's). An integral part of our course is the use of learning assistants (LA's). The LA will serve as a mentor. The assignment of your LA mentor will be done at the TA sessions on Monday or Tuesday evening, depending on your assigned class.

First class reminders:

- ★ You need to have a textbook or a WebAssign access code. The class key is utexas 7199 1292.
- ★ You will also need an Iclicker.
- ★ Read frequently asked questions (FAQ) on QUEST. Enter your Iclicker serial number into your QUEST account.
- ★ Start working on the first homework assignment. Note the deadline for submission: 11:30 p.m. on Wednesday, Sept. 1st.
- ★ Read (or skim) the textbook and corresponding assignment BEFORE the lecture.
- ★ Collection of clicker questions (posted online). Selected questions from this collection will be used during the class. Study all the posted clicker questions; they will help you to learn the materials.
- ★ To take this course, you must enroll in 103M lab. Lab will begin on the week of 8/30. On lab schedule, when in doubt check with the lab supply room RLM8.316 (471-5352).
- ★ One week after class-begins, also check your pre/co-requisites. This issue will be handled by EMAIL. If you receive said email, please see undergraduate coordinator Pat Morgan in RLM 5.216.