### DE ANZA COLLEGE - PHYSICS 50 - WINTER 2017

Instructor: Dr. Ron Qian (Dr.Q) Email: qianron@fhda.edu

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Office: S75

Office Phone: 408-864-8800 Office Hours: W 4:30-5:20PM,

Lecture Hours: M and W 5:30 – 7:20PM (S75)

Final Exam Date: Mon, March 27 from 6:16-8:15 PM, pencil it in on your calendar NOW! No make-up

finals or alternative dates will be allowed.

Text: James S. Walker, *Physics*, 4th edition, Addison-Wesley, 2009

Prerequisites: high school Algebra I / Algebra II

### **OBJECTIVE**

Physics 50 is a preparatory course for Physics 4A. It is an algebra-based course in introductory Classical Mechanics. Topics include one-dimensional kinematics, scalar and vectors quantities, two-dimensional kinematics, Newton's three laws of motion, universal gravitation, and work/kinetic energy. We will cover chapters 1 - 7.

The main objective of the course is to help students develop a fundamental understanding of the principles and laws of Newtonian physics, and to apply them to solve a wide variety of problems in daily lives as well as modern space exploration.

#### **ATTENDANCE**

You are expected to be in class at the beginning of each class for the rest of the quarter. An attendance sheet will be passed at the beginning of class. If you miss signing the attendance sheet **FIVE** or more lectures you may find yourself dropped from the class. However, it is your responsibility to ensure being dropped or withdrawn from the course in order to avoid an "F" in the course if you stop attending lecture or lab. Cell phone use can be very distractive, and is generally NOT allowed during lectures, unless directed otherwise by the instructor for that particular class period.

### **MATERIALS NEEDED**

- \* A binder / loose-leaf notebook for archiving handout notes and homeworks (can be shared with other classes with dividers)
- \* Scientific calculator recommended: Casio fx-260 (~\$10 on Amazon, ebay, or in Staples)
- \* Composition style notebook
- \* Ruler

**CLASSNOTES** (handouts) Your classnotes will be posted along with HW assignments on your Physics 50 **Course Studio** (<u>myportal.fhda.edu / Student tab / Course Studio / Course Tools / Files</u>). It is your responsibility to print out the notes ahead of time. Here is one important reason: our pace will be **FAST**, and you will **NOT** have time to take down the entire notes. The classnotes will make your life easier, and above all, allow you to pay **MORE ATTENTION** to lecturing and **reasoning** behind problem solving. You may highlight, add comments, or fill in the missed info occasionally on the printouts.

**HOMEWORK** (No name on top of the first page → at least 20% deduction in credit)

Homework will be assigned on a regular basis, and will be posted along with classnote handouts on your Physics 50 **Course Studio**. HW will be collected at the beginning of the class, and it is your responsibility to put the finished homework in your folder (organized by the first letters of last names) in one of the two crates at the back of the classroom. It is also your responsibility to take the returned homework from your folder in another crate at the back of the classroom (20% deduction in credit for not taking it if you are present).

Homework is important to your success in this course, therefore you need to put a solid effort into the homework. This is how you will learn physics and succeed in the class. (The quizzes will generally be based on the homework and lecture material). If you are having difficulties with the class/homework, here are some recommendations to help you succeed in the class: 1) Ask for help during class and attend office hours; 2) Work together and discuss problems with other students in the class; 3) Math & Science Tutorial Center.

On the homework, quizzes, as well as on the exams, you need to **SHOW ALL YOUR WORK** in complete details in order to receive full credit. Your solutions should show your step-by-step process and logic that was used to obtain the answer. No credit will be given if no work is shown even if you obtain the correct answer to the problem. There will be some sharing of HW keys of important problems. Some of the answers to homework will be posted on my homepage.

# De Anza College Academic Integrity

"The following types of misconduct for which students are subject to disciplinary sanctions apply at all times on campus as well as to any-off campus functions sponsored or supervised by the college: cheating, plagiarism or knowingly furnishing false information in the classroom or to a college officer"

### **QUIZZES** (No name → 20% deduction in credit)

There will be a quiz every other Wednesday at the end of class. The dates are listed at the end of this syllabus. We will also have pop quizzes (5-10min) given unannounced. The quizzes will generally be based on homework problems and lecture material for the corresponding weeks. If you miss a quiz without an excuse (see definition below for "excused absence"), you will get a ZERO for that quiz.

# **EXAMS**

There will be one midterm in-class exam and a comprehensive final. The dates are listed at the end of this syllabus. The key to the success on the exams is preparation; attend the lectures, do the homework, read the textbook, and ask questions if you don't understand any contents. If you miss the midterm without an excuse, you will get a ZERO for that exam. If you miss the final for any reason, you will receive a ZERO for the test. There is no make-up for the final.

Note: If there is a dispute in the grading of any exam homework, quiz, or exam I will consider looking at them a second time only if it is handed back to me within 2 school days after I return them.

### HOMEWORK/CLASSWORK/LAB GRADING RUBRIC

- \* Nobel Laureate (N): excellent work (100%)
- \* Research Scientist (R): very good work (90%)
- \* Lab technician (L): satisfactory (80%)
- \* Trainee (T): work requiring significant improvement (70%)
  - "N-" = 95%, "R-" = 85%, "L-" = 75%, "T-" = 65%

\* Missing (M): (0%)

### **GRADING POLICY**

Grades will be based on the following components with the weighting factors below.

HW's/Lab/Reading summaries 15%

Ouizzes 40%

Midterm exam 20%

Final Exam 25%

Grades will be determined as follows:

88% --->100% = A

76 % ---> 87% = B

65% ---> 75% = C

54% ---> 64% = D

0% ---> 53% = F

## **DEFINITION OF EXCUSED ABSENCE:**

You have an excused absence only if

- a) you notify me before class begins (by email) AND
- b) there is a doctor's note, a death in the family, or other documentation of extraordinary circumstances, deemed appropriate at the sole discretion of the instructor. The general rule of thumb for an excused absence: the act of coming to class would have caused an irreversible hardship to the student.

### **IMPORTANT DATES**

Saturday, Jan. 21:: Last day to add quarter-length classes. Add date is enforced.

Sunday, Jan. 22:: Last day to drop for a full refund or credit (quarter-length classes). Drop date is enforced.

Monday, Jan. 23:: Last day to drop a class with no record of grade. Drop date is enforced.

Friday, Feb. 3:: Last day to request pass/no pass grade. Request date is enforced.

Friday, March 3:: Last day to drop with a "W." Withdraw date is enforced.

Monday, Jan. 16:: Holiday: Observance of Martin Luther King's Birthday

Friday-Monday, Feb. 17-20:: Holiday: Presidents' Day Weekend (no classes)

Quiz 1: Wed, Jan 18 Quiz 2: Wed, Feb 1

Midterm exam: Wed, Feb 15

Quiz 3: Wed, Mar 1 Quiz 4: Wed, Mar 15

Final Exam Date: Mon, March 27