Physics 2C Spring 2017

Instructor: Carrie Huang Class Time: Tuesday and Thursday 5:30 pm – 7:20 pm Lab Time: Thursday 7:30 pm – 10:20 pm Classroom: S17 Office: S 13 Email: huangcarrie@fhda.edu Office Hours: Tuesday 2:25 pm – 3:15 pm and 4:10 pm – 5:25 pm. Final Exam: June 27, 6:15 pm – 8:15 pm -watch out! Finals will not be given earlier or later. Textbook: Fundamental of Physics 9th Edition, Halliday, Resnick, and Walker.

COURSE DESCRIPTION:

This is a limited-calculus based course on Fluids Dynamics, Optics, Thermodynamics, and Modern physics. In this class, you will analyze the properties of fluids, investigate the field of optics, explore thermodynamics, assess special relativity and appraise quantum theory.

In the laboratory, continue to deepen an understanding of scientific procedure by applying theoretical models to classic experiments.

STUDENTS LEARNING OBJECTIVES

Critically examine new, previously un-encountered problems, analyzing and evaluating their constituent parts, to construct and explain a logical solution utilizing, and based upon, the fundamental laws of optics, thermodynamics, fluids, and modern physics.

PREREQUISITES: Physics 2B with a C or higher.

ADVISORY: EWRT 211 and READ 211 (or LART 211), or ESL 272 and 273.

ATTENDANCE:

In order to comply with federal guidelines De Anza College requires students to attend class and class attendance records to be kept. A student may miss a few classes for medical or personal reasons, however, unexplained absence of more than 2 consecutive days or frequent absence will result in a student being dropped from the course, and unexcused missed quizzes cannot be made up. **NO make-up exams will be given, PERIOD.**

HOMEWORK ASSIGNMENTS:

Homework will be assigned after each class. It is very important to do homework! If you have difficulty with the homework you can come to my office hours, work together with other students, or go to the **Math and Science Tutorial Center (Student Success Center).** The set problems should not be viewed as the only problems you can do: you are strongly encouraged to look through all of the problems at the end of each chapter and consider how each should be approached. Practicing with many problems is the key to master the concept and ace in exams.

STUDENT SUCCESS CENTER: http://www.deanza.edu/studentsuccess/

Deanza college has excellent tutoring services and I highly recommend that every student get regular tutoring if she / he needs it, or even if you don't need it. I will also try to set up group tutoring session by asking about the times that they are available. The tutorial center in S43 can often find a tutor for a group session. During summer session tutors may not be available.

QUIZZES:

There are nine (9) quizzes. The quiz questions will be homework problems. Make sure you do the homework, so you can do well on the quizzes! **Your lowest quiz score will be dropped.** No make ups for quizzes will be given. If you miss a quiz consider this to be your throw out.

EXAMS:

There will be three mid-term exams and one comprehensive final exam. All exams are closed book! To pass the class, you must take all the exams. **There are NO make-up exams**. If you miss an exam, you will get zero (0) point for that exam. Dates: TBD

ACADEMIC HONESTY POLICY :

Cheating consists of receiving or giving unauthorized aid during exams or duplicating and handing in assignments for absent students. It is acceptable to collaborate on Homework, Activities in Class, including Labs, but not on Exams. You must hand in your own written work. First offense will lead to zeros on the assignment or exam involved. Repeat offenses will lead to administrative involvement. Note that a zero on an exam will likely result in a failing grade.

DISRUPTIVE BEHAVIOR:

The college will enforce all policies and procedures set forth in the Standards of Student Conduct (see catalog). Any student disrupting the class may be asked to leave that class. Administrative follow-up may result.

<u>GRADING</u>:

Maximum 1000 points can be earned in this class.

90%-100%, 900 – 1000 points → A (97%-100% A+, 90%-92% A-)

80%-89%, 800 – 899 points → B (87%-90% B+, 80%-82% B-)

65%-79%, 650 – 799 points → C (77%-80% C+, 65% - 68% C-)

50%-69%, 500 – 649 points → D

50% or lower, 499 points or less \rightarrow F

2 Exams: 20%,	(10% each. 150 points each, total 200 points)		
7 Homework Quizzes: 30%	(5% each. 50 points each. Only pick 6 highest scores. Total 300 points)		
Lab: 20%	(10 Labs and one Lab Final)		
Final Exam: 30%	(Final exam will be comprehensive. 300 points)		

EXTRA CREDIT

You can receive up to 5% extra credit (50 points) during class. Extra credit will be only given in class. You must participate to earn. No make-up extra credit, PERIOD.

IMPORTANT DATES

4/22 (Sat)	Last day to add	
4/23 (Sun)	Last day to drop with full refund and no record of grade	
5/5 (Fri)	Last day to request pass/no pass grade	
6/2 (Fri)	Last day to drop with "W"	
6/27 (Tue)	Final Exam	

Tentative Schedule:

The Instructor reserves the right to change the schedule.

Date	Lecture	
4/11/17	Introduction and Chapter 14 Fluids	
4/13/17	Chapter 14 Continue	Lab 1 Density
4/18/17	Quiz #1, Chapter 18 Temperature and Heat	
4/20/17	Chapter 18 Continue	Lab 2 Archimedes
4/25/17	Quiz #2, Chapter 19 The Kinetic Theory of Gases	
4/27/17	Chapter 19 Continue	Lab 3 Bernoulli
5/2/17	Quiz #3, Chapter 20 Entropy	
5/4/17	Chapter 34 Images	Lab 4 Geometric Optics
5/9/17	Exam #1 + Review Exam #1	
5/11/17	Chapter 34 Continue	Lab Makeup
5/16/17	Quiz #4, Chapter 35 Interference	
5/18/17	Chapter 35 Continue	Lab 5 Interference
5/23/17	Quiz #5 Chapter 36 Diffraction	
5/25/17	Chapter 36 Diffraction	Lab 6 Diffraction
5/30/17	Exam #2 + Review Exam #2	
6/1/17	Chapter 37 Relativity	Lab 7 Diffraction #2
6/6/17	Quiz 6, Chapter 37 Continue	
6/8/17	Chapter 38 Photons and Matter Wave	Lab 8 Atomic Spectrum
6/13/17	Quiz 7, Chapter 38 Continue	
6/15/17	Chapter 39 More Matter Wave	
6/20/17	Chapter 40 All about Atoms	
6/22/17	Review + Q/A	Lab Final
6/27/17	Final Exam	