Physics 2A Winter 2017

Instructor: Carrie Huang

Class Time: Tuesday and Thursday 5:30 pm – 7:20 pm

Classroom: S35

Office: S 13

Email: huangcarrie@fhda.edu

Office Hours: Wednesday 7:45 pm – 8:35 pm and Thursday 7:20 pm – 8:35 pm.

Final Exam: March 28, 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 in Classical (Newtonian) Mechanics. The main objective of the course is for the student to understand the laws/theories and principles of Classical Mechanics in order to be able to describe the motion of a system so that we can better understand the physical world around us. The foundation laws of Classical Mechanics are Newton's Laws of Motion. Thus, we can equivalently state that the main objective is for the student to learn and understand Newton's Laws of Motion from a conceptual and practical viewpoint.

PREREQUISITES: Mathematics 1A or 1AH (may be taken concurrently).

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.

<u>DISRUPTIVE BEHAVIOR</u>:
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 ➔ F

3 Exams: 30%,   (10% each. 100 points each, total 300 points)

7 Homework Quizzes: 30%   (5% each. Only pick 6 best scores. 50 points each. Total 300 points)

Lab: 20%   (10 Labs and one Lab Final)

Final Exam: 20%   (Final exam will be comprehensive. 200 points)

<u>EXTRA CREDIT</u>

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.

<u>IMPORTANT DATES</u>

1/21 (Sat)	Last day to add
1/22 (Sun)	Last day to drop with full refund and no record of grade
2/3 (Fri)	Last day to request pass/no pass grade
3/3 (Fri)	Last day to drop with "W"
3/28 (Mon)	Final Exam

<u>Tentative Schedule:</u>

The Instructor reserves the right to change the schedule.

Date	Lecture
1/10/17	Introduction and Chapter 1 Measurements Lab 1 WK 1
1/12/17	Chapter 2 Linear Motion
1/17/17	Quiz #1, Chapter 3 Vectors Lab 2 WK2
1/19/17	Practice on Chapter 3 Vectors
1/24/17	Quiz #2, Chapter 4 Motion in Two and Three Dimension Lab 2' WK 3
1/26/17	Practice on Chapter 4 + Review for Exam #1
1/31/17	Exam #1 + Review Exam #1 Lab 3 Vector sum WK 4
2/2/17	Chapter 5 Forces and Motions. Newton's Law of Motion
2/7/17	Quiz #3, Chapter 6 Applications of Newton's Law of Motion Lab 4 Projectile WK 5
2/9/17	Chapter 7 Kinetic Energy and Work
2/14/17	Quiz #4, Chapter 8 Potential Energy and Conservation Lab 5 Atwood WK 6
2/16/17	Practice and Review Chapter 5 through 8
2/21/17	Exam #2 + Review Exam #2 Lab 6 Centripetal force WK 7
2/23/17	Chapter 9 Center of Mass and Linear Momentum
2/28/17	Quiz #5, Chapter 10 Rotation Lab 7 Ballistic Pendulum WK 8
3/2/17	Chapter 11 Torque and Angular Momentum
3/7/17	Quiz #6, Chapter 12 Equilibrium and Elasticity Lab 8 Static Equilibrium WK 9
3/9/17	Practice and Review Chapter 9 through 12
3/14/17	Exam #3 + Review Exam #3 Lab 9 Pendulum WK 10
3/16/17	Chapter 15 Oscillation
3/21/17	Quiz #8 (15 min), Chapter 13 Gravitation WK 11
3/23/17	Practice and Review
3/28/17	Final Exam