# Physics 4A SYLLABUS

 Schedule #s 51235 OR 51699 Spring 2016

Lecture classes: TW 8:00 - 9:50 AM

Lab classes: Th 8:00 - 10:50 AM OR Thurs 8 - 10:50

#### **Contact Information:**

Instructor Name: Lauren J. Novatne

Phone Number: 638 - 3641 ext. 3434

Email: lauren.novatne@reedlevcollege.edu

#### Office hours:

Monday 8:00- 9:00 AM, Thursday and Friday from 11 to 11:50 AM

## **Required Course Materials:**

- "Physics for Scientists and Engineers with Modern Physics", Giancoli, 4th edition, Pearson/Prentice Hall Publishers
- Mastering Physics is required for the homework.
- The course code is: PHYSICS4ABCSPRING2016

## **Course Objective:**

This course covers the topics of classical mechanics, properties of matter, gravitation, fluid mechanics, oscillatory motion and mechanical waves.

Students will gain skills in understand the complementary roles of experimental investigation and theoretical explanation in science, apply dimensional analysis to determine the units for an unknown quantity or to check the validity of equations, correctly report the units of an observable when it is measured or calculated and distinguish between important physical observables, such as velocity, acceleration and force.

#### Calendar:

- Holidays: Monday January 18<sup>th</sup>, Friday February 12<sup>th</sup> and Monday February 15<sup>th</sup>, March 21<sup>st</sup> - March 24<sup>th</sup>
- LAST DAY TO DROP THIS CLASS: FRIDAY March 11th. AFTER THAT DATE, I MUST GIVE YOU A GRADE!!
- Final Exam: Tuesday May17<sup>th</sup> at 8 AM in PHY 70 the room where the class is held

#### Homework:

Doing your homework assists you in two ways: 1) it helps you learn the material by practicing problem solving skills, and 2) it lifts your grade.

Your homework is 5% of your semester grade. This means that if you get 100% for the other parts of your grade, and don't do any homework, you will get a 'B', not an'A' for the course. It also means that if you do your homework, and your grade is a 75%, you will get a 'B' in the course, not a 'C'.

#### **Exams:**

There will be two midterm exams and one final exam. The exams have conceptual questions that are multiple choice in format. There are also some detailed physics problems that will need to be solved. The exams contribute <u>65%</u> of your semester grade, so they are very important to prepare for. Make up exams are discouraged. If you know that you will not be present in class for a scheduled exam, you must contact me PRIOR to the end of the class session within which the exam is given. Make up exams will be offered only for the occasion of your illness, a jury summons or an emergency (such as an auto accident). Otherwise, you will not be offered a make up exam.

There are occasionally some activities and quizzes given in class, some are announced, and others are not. If you do not communicate with me \*PRIOR TO THE END OF THE CLASS MEETING TIME\* that you are not going to be present in class, then you will receive a score of ZERO for that quiz, and you will not be able to make up the activity or quiz. You may inform me in person, by phone (leave a message on my voice mail if I don't answer the phone), or by email. Sending a message through a classmate or friend disqualifies you from the exemption. This is YOUR grade, so YOU must communicate with me regarding your ability to be present. I do <u>NOT</u> want to know <u>why</u> you will miss class - just that you will not be present. You will only be able to use three "passes" for the entire semester. After you use up your three passes, you will receive zero points for your absence.

#### Attendance:

You are required to be here, and be on time for every class. Being 5 minutes past the hour is considered tardy. If you complete the semester with 95% perfect attendance, I will add 2% to your semester grade. Perfect attendance means that you are not late, or you have exercised your "pass" for up to three class sessions for the entire semester.

Here is how I use the attendance to determine whether or not you get the "extra credit" of 2% on your semester grade:

If the number of days that we have class (when I am absent, that day is not counted in the total number of days that we meet) is 60, and you have been tardy 5 times, absent 2 days in addition to being tardy then here's the formula I use to determine if you have been present 95% of the time:

[Total days of class meeting - # half of your tardy days - # of days you were absent] divided by [total days of class meeting] = your % attendance

(60 - 2.5 - 2) / (60) = (55.5)/(60) = 0.925, which is 92.5%. You would NOT get the 2% "extra credit" attendance bonus added to your semester grade. You will need to be present for 57 days of the 60 to get the "extra credit". How you "spend" your 3 days (as 6 tardies, 3 absences or a combination of tardies and absences), for **this** example, is up to you. Remember, this is 3 days that have NOT been excused. Excused days do not count against your "extra credit" bank.

### Laboratory:

This class has a lab that is mandatory. There are lab reports that will be mostly provided for you. You will turn them in when they are due, at the end of each session. The reports will constitute 15% of your semester grade.

# **Participation:**

There are in-class activities that are graded on your participation. These activities are varied in type, and include computer simulations, problem solving sessions, and other activities that are designed to assist you in learning physics as well as assisting me in determining how well you are learning the material. Participation accounts for 15% of your grade, so it is important that you are in class <u>AND</u> participate. If you don't participate, you don't get the points just for being in class.

# **Grading Policy:**

% Grade for the Class	Letter Grade For the Class	Category of classwork	% of Class Grade
90 - 100 %	А	Homework	5%
80- 89 %	В	Exams	65%
65 - 79 %	С	Lab Reports	15%
55 - 64 %	D	Participation	15%
0 - 54 %	F		

# **Accessibility Accommodation**

If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the rehabilitation Act, please contact me as soon as possible.