PHYSICS 4A COURSE SYLLABUS

INTRODUCTION TO COURSE AND INSTRUCTOR

Semester SPRING 2023	**Program/Department** Physics Reedley College
Course Name Phys 4A - 51074 PHYS SCI/ENG	**Instructor Name** Dan Brown
Units 4 units	**Office Location** N/A
Lab Time Friday 9 - 11:50am	**E-Mail** db050@reedleycollege.edu
Location PHY 70	**Office Hours** Questions can be sent through email/Canvas OR through Zoom by appointment
Website We will use Canvas for this course https://scccd.instructure.com/	

It is usually expected that students will spend approximately 2 hours of study time outside of class for every one hour in class. Since this is a 4 unit class, you should expect to study an average of 8 hours outside of class each week.

Prerequisites for the course: Proficiency in High-School Algebra, Geometry, and Trigonometry Math 75/Calculus I or MATH 75A & B/Calculus with Review IA & IB (definitely taken in previous semesters): inequalities, functions, graphs, limits, continuity, differential calculus, introductory integral calculus, and applications. Math 76/Calculus II (taken either concurrently or in previous semesters): Techniques and applications of integration, improper integrals, conic sections, polar coordinates, and infinite series.

WHAT YOU NEED FOR PHYS 4A:

- **Physics for Scientists and Engineers with Modern Physics 4th ed. by Giancoli**
    - There are books available in the library (Homework problems will be assigned out of the book)

Course goals: Upon completion of this course, students are expected to be able to analyze, predict, and model the linear or rotational motion of macroscopic objects under the influences of various external forces.

Student Learning Outcomes: Students will develop a strong foundation to identify, analyze, and solve problems within the core disciplines described in the textbook, “Physics for Scientists and Engineers with Modern Physics” 4th ed. by Giancoli, which are universally recognized as standards in undergraduate physics education.

Homework:

A set of homework problems will be assigned for each chapter. The assignments are due in homework sets during the lab shown on the schedule. **The homework problems will come from the textbook (mostly). Your solutions may be typed OR handwritten (write legibly). For full credit, show your work (including equations and calculations), draw pictures (when applicable), include units, box your final answer.**

LATE HOMEWORK WILL NOT BE ACCEPTED. THERE ARE NO MAKE-UP HOMEWORK ASSIGNMENTS.

Working together with classmates and consultation with fellow students is encouraged. However, copying and turning in somebody else's solutions as your own is considered cheating, no matter what the source of these solutions may be. You will get zero points for the first transgression. The second instance will result in a cumulative score of zero for the homework portion of the final grade. A third instance will result in an F for the course and possibly additional penalties. As a practical matter, remember that homework assignments are intended to help you master the concepts covered in lecture. Just copying a classmate's solution will therefore have a very negative impact on your performance in the exams.

Quizzes:

During the semester there will be quizzes given on a weekly basis. The quizzes will be given for each chapter we cover. They'll be available on Canvas for 1 week at a time and you'll have unlimited attempts on them. The format of the quizzes will be multiple choice, with each quiz worth a total of five (5) points.

There are no make up quizzes. In particular, save for the exceptions under "Exams" below or barring unforeseen circumstances beyond your control, there is no excuse for missing a quiz.

Exams:

There will be 3 midterms and a comprehensive final exam.
Midterm 1: Friday, February 24
Midterm 2: Friday, March 31
Midterm 3: Friday. May 5
Final: Monday, May 15, 9am - 10:50am

THERE ARE NO MAKE UP EXAMS.

Exceptions to this rule will only be considered provided **documented** medical or legal excuses (a judgment call will be made by the instructor and/or the department) are provided before, **or within a reasonable time frame after**, a missed exam.

Course Grading:

Your grade in this class will be based on:

Homework	20%
Quizzes	5%
Labs	10%
Midterms	45% (15% each)
Final exam (comprehensive)	20%

Final Grades: A: 85.0-100, B: 75.0-84.9, C: 60.0-74.9, D: 50.0-59.9, F: 0-49.9. Final grades will *not* be curved.

Attendance:

This is a virtual asynchronous course for the lecture portion, so it is up to you to keep up to date with announcements, posted lectures, assignments, etc.

Labs meet **in-person** every Friday in PHY 70. Be sure to wear closed-toed shoes to the lab. Our first in-person lab meeting will be Friday, January 20th.