

Welcome to Physics 50

Instructor: Sean Fraser

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Office hours: Mondays, Tuesdays, Wednesdays 1:20-2pm, 3:30-4:30pm, and also by appointment

The main purpose of this course is to practice solving physics problems and problem-solving strategies in preparation for other physics courses such as Physics 4A.

The format for class meetings will be a combination of lectures and "at-your-seat" practice work.

Course grades will be based on quizzes and/or exams. I will let you know the dates for quizzes and/or exams after the class has filled-out the anonymous survey for quiz/exam preferences. The format for quizzes/exams will be problems similar to homework and in-class problems. Ideally you will solve the problems by hand on paper, and then take a picture or scan of your work and upload it to Canvas. It is also fine if you prefer an electronic pad to pen-and-paper.

Update: Based on the survey results, there will be weekly quizzes on Thursdays. Each quiz covers the material for that week. There will be an optional midterm exam and optional final exam for those of you who wish to either gain further practice and/or improve your course grade. Your overall course grade will be determined by the best of: (1) average quiz score, (2) midterm and/or final exam, (3) combination of (1) and (2). Letter grades will be determined according to the approximate grading scale: A 100%-90%, B 90%-75%, C 75%-60%, D 60%-50%, F less than 50%.

The recommended textbook is the one listed online at the campus bookstore (Physics, 4th edition, by Walker. ISBN: 9780321905109. Publisher: Pearson. Copyright Year: 2014). However it is not strictly required if you are comfortable with the material and discussion presented in class. Homework problems from the book will be assigned for practice but not collected for grading (I will post the homework problems on Canvas with solutions).

We will most likely cover:

Chapter 1 Introduction to Physics

Chapter 2 One-Dimensional Kinematics

Chapter 3 Vectors in Physics

Chapter 4 Two-Dimensional Kinematics

Chapter 5 Newton's Laws of Motion

Chapter 6 Applications of Newton's Laws

Chapter 7 Work and Kinetic Energy

We may also have time for:

Chapter 8 Potential Energy and Conservation of Energy

Chapter 9 Linear Momentum and Collisions

Chapter 10 Rotational Kinematics and Energy

Chapter 11 Rotational Dynamics and Static Equilibrium

Some Important Dates:

JANUARY 15 Last day to add classes

JANUARY 17 Last day to drop classes without a W

JANUARY 28 Last day to request "Pass/No Pass"

FEBRUARY 25 Last day to drop classes with a W

Student Learning Outcome(s):

*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 mechanics.