# Phys 123X: College Physics I Syllabus

Fall 2024

## Instructor Information

Instructor Wang Xu (Caleb) Email wxu3@alaska.edu Office Location & Hours REIC 110, TBD

## General Information

## Course Description

Physics 123 is a four-credit course. It offers an overview of basic physics. We will begin with the basic language of physics, including how to record measurements and how to describe motion. Then, we will learn Newton's three laws of motion and a few important concepts: energy and momentum, etc. We will then move on to fluid mechanics and waves (including sound waves). Finally, we will end with temperature, heat, and the laws of thermodynamics.

### Lecture Schedule

Lectures: REIC 201/Mondays, Wednesdays, and Fridays, 9:15 am - 10:15 am

#### **Required Text**

Physics: Principles with Applications, Douglas C. Giancoli, 7th Edition, ©2014 |Pearson ISBN 9780321625922

## Grading Policy

Homework	Attendance	Lab	Quiz	Midterm 1	Midterm 2	Final	Total
20%	5%	10%	15%	15%	15%	20%	100%

Your final grade for this course will be based on a curve. The average of the curve will be the breakpoint between letter grades B- and C+. The standard deviation of the grade point distribution will separate subsequent letter grades.

## Lecture Schedule

Week	Торіс	Reading	Dates	HWK Due Date
Week 1	Introduction, Measurement, Estimation	Ch1:1-4, 4-8*, Quiz 1	08/26,08/28, <u><i>08/30</i></u>	09/06
Week 2	One Dimension Kinematics	Holiday, Ch2:1-4, 5-8	<del>09/02</del> ,09/04, <u>09/06</u>	09/13
Week 3	Two Dimension Kinematics	Ch3:1-5, 5-8, Quiz 2	09/09,09/11, <u>09/13</u>	09/20

Week	Торіс	Reading	Dates	HWK Due Date
Week 4	Newton's Laws	Ch4:1-4, 5-8, Mid-term 1	09/16,09/18, <u>09/20</u>	09/27
Week 5	Circular Motion & Gravitati	on Ch5:1-6, 6-10, Quiz 3	09/23,09/25, <u><i>09/27</i></u>	10/04
Week 6	Work & Energy	Ch6:1-5, 5-10, Quiz 4	09/30,10/02, <u>10/04</u>	10/11
Week 7	Linear Momentum	Ch7:1-4, 5-10, Quiz 5	10/07,10/09, <u>10/11</u>	10/18
Week 8	Rotational Motion	Ch8:1-5, 5-9, Quiz 6	10/14,10/16, <u><i>10/18</i></u>	10/25
Week 9	Static Equilibrium	Ch9:1-4, 4-7, Mid-term 2		11/01