

Phys 124X: College Physics II Syllabus

Spring 2025

Instructor Information

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

General Information

Course Description

Physics 124X is a four-credit course. In the first half of the course, we start with classical physics: electricity, magnetism, and optics. Then, in the second half, we will swerve to modern physics: special relativity, quantum theory, nuclear physics, particle physics, astrophysics, and cosmology. Fasten your seatbelts; it's going to be a fast and bumpy ride.

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%	20%	100%

Your final grade for this course will be based on a bell curve. The average value 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	Topic	Reading	Dates	HWK Due Date
Week 1	Electric Charge and Electric Field,	Ch16:1-5, 5-12, Quiz 1	01/13,01/15, <u>01/17</u>	01/24
Week 2	Electric Potential	Holiday, Ch17:1-5, 5-10	01/20 ,01/22, <u>01/24</u>	01/31
Week 3	Electric Currents	Ch18:1-5, 5-10, Quiz 2,	01/27,01/29, <u>01/31</u>	02/07

Week	Topic	Reading	Dates	HWK Due Date
Week 4	DC Circuits	Ch19: 1-5, 5-8, Quiz 3	02/03, 02/05, <u>02/07</u>	02/14
Week 5	Magnetism	Ch20: 1-6, 6-12, Mid-term 1	02/10, 02/12, _____	02/21
Week 6	Electromagnetic Induction and Faraday's Law	██████████ 4-7, Quiz 4	02/17, 02/19, <u>02/21</u>	02/28
██████████	Electromagnetic Waves & Light: Geometri0.251 G[]			

