

Spring 2021

Instructor Information

Instructor Wang Xu (Caleb) Email wxu3@alaska.edu Office Location & Hours 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: Offline/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	Lecture-	Lab	Quiz	Midterm 1	Midterm 2	Final	Total
	Questions						



Week	Торіс	Reading	Dates	HWK Due Date
Week 4	DC Circuits	Ch19:1-5, 5-8, Quiz 3	02/01,02/03,	02/12
Week 5	Magnetism	Ch20:1-6, 6-12, Mid-term 1	02/08,02/10,	02/19
Week 6	Electromagnetic Induction and Faraday's Law	Ch21:1-4, 4-7, Quiz 4	02/15,02/17,	02/26
Week 7	Electromagnetic Waves & Light: Geometric Optics	Ch22, Ch23, Quiz 5	02/22,02/24,	03/05
Week 8	The Wave Nature of Light	Ch24:1-5, 5-12, Quiz 6	03/01,03/03,	03/19
Week 9		Spring Break		



submit should reflect your own work. Copying of homework is absolutely not acceptable and will result in a grade of ZERO for the assignment.

Quizzes:

11 short quizzes will be given in class during the semester. They will be open-book tests, and calculators will be allowed (if needed). The quiz material given will be similar to the recent homework or topics covered in class. All necessary formulas will be provided.

Exams:

There will be two midterms and a final comprehensive exam. The first midterm will test the material covered in the first four weeks, and the second test will cover the material in weeks 5-10. The final will include material covered from the beginning of the semester, with more weight on the material covered after the second midterm (weeks 11-15). NO MAKE-UP QUIZZES OR EXAMS WILL BE GIVEN. If the student must miss a quiz or an exam