

Fundamentals of Physics III

Physics 280 Summer 2016

Instructor: Dr. Timothy Jones
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Wednesdays, 7:00-9:50 PM, PISB 109
Office Hours: By appointment on campus, plus extensive e-mail help

Web-page:
<http://www.physics.drexel.edu/~tim/phys280/>

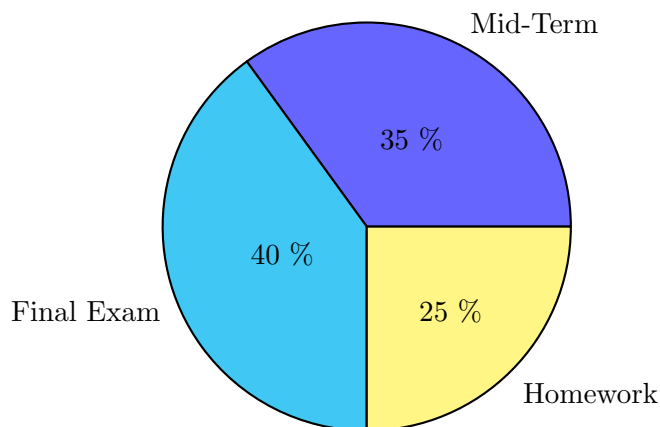
Textbook

University Physics with Modern Physics (Young and Freedman) 14th edition (or 13th edition)

About this course

This is the third of a three course sequence teaching fundamental physics to engineering and science majors. This course is designed to focus on modern physics. The first half of the course leads up to the revolution of quantum mechanics after focusing on the revolution of relativity. The second half of the course discusses the quantum revolution and its implications. Since this is an evening course, the three hour lecture will be a mix of lecture and recitations in which we review homework problems and work on problems together.

Grade



Exams/Quizzes

We will have a mid-term and a final exam. The final exam will be mostly on new material but will draw back on some of the material covered up to the mid-term.

Homework

Homework will be assigned weekly and graded on effort and correctness. The goal of homework is to get you to practice the problems well before the exams. Solutions will be posted one week after the homeworks are assigned. Generally, five problems will be assigned per week to be graded; of those, two or three will be graded on correctness, the others will be graded on effort.

Late Assignments

Homeworks are due one week after being assigned. If you happen to miss a class, you are encouraged to scan and e-mail the homework as soon as possible. I can also supply a fax number if that is more convenient. Homework assignments can not be accepted after the recitation covers the material. If you anticipate missing a test, please contact the instructor as soon as possible for a makeup test.

Academic Integrity

Students should refer to the student manual regarding academic integrity. Violations of this policy will result in a failing grade.

Weekly Schedule

WEEK	LECTURE TOPICS
1 (June 22)	Relativity Part I
2 (June 29)	Relativity Part II
3 (July 6)	Light as a wave
4 (July 13)	Light as a particle
5 (July 20)	Early Quantum Mechanics + Review
6 (July 27)	Mid Term
7 (Aug 3)	Quantum Mechanics I
8 (Aug 10)	Quantum Mechanics II
9 (Aug 17)	Quantum Mechanics III
10 (Aug 24)	A Tour of Modern Physics Frontiers
11 (Aug 31)	Final Exam