

PHYSICS 330 *Atomic & Nuclear Physics*: Syllabus, Spring 2017
Instructor: Prof. S. Greenbaum

Text: *Modern Physics*, by Randy Harris, Second Edition PEARSON © 2008;
ISBN-13: 9780805303087

The formal part of the course begins with Chapter 3 (Waves and Particles I), although equations in special relativity (Chapter 2) are occasionally used as needed.

Chapters covered in lecture: 3 – 8 (elementary quantum and atomic physics), a small part of 9 (Boltzmann Distribution), and 11 (nuclear physics).

Approximate grading guide

In-class exams – 25% each
Final exam – 35%
Homework – 15%

Tentative Exam Dates

I. February 27
II. April 6
Final: May 22

Homework Assignments

- 1) Ch.3/ #15, 23, 27, 39
Ch.4/ #21, 25, 44,46,48,56,57,63,71
- 2) Ch.5/ #28, 47, 73
Ch.6/ #19, 23, 35
- 3) Ch.7/ #23, 33, 36, 37, 49, 78, 82, 90
- 4) Ch.8/ #27, 28, 35, 36, 42, 50,
57,65,75,84
- 5) Ch. 11/ # 13,15,22,29,31,35,52,
57,66,69,77

(Note: these can be lengthy assignments so a subset of the listed problems to be solved for HW will be announced in class)

The Fine Print

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NOTE: You may not bring your own calculator nor use your cell phone during exams. Calculators for your use will be distributed and collected. All personal electronic devices must be stored out of sight during exams.