

PHYSICS 330 Atomic & Nuclear Physics: Syllabus, Fall 2015
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. October 8

II. November 12

Final: December 17

Homework Assignments

1) Ch.3/ #15,16,26,34,36
Ch.4/ #20,25,43,46,47,54,57,62,72

2) Ch.5/ #28,49,72
Ch.6/ #17,23,24,35

3) Ch.7/ #24,34,36,37,43,50,54,78,
81,82,83,89

4) Ch.8/ #27,30,34,35,36,41,48,49,52,
58,65,74,84

5) Ch. 11/ # 13,16,19,26,27,31,36,52,
55,57,65,69,70

(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

"In compliance with the American Disability Act of 1990 (ADA) and with Section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (Emotional, Medical, Physical and/ or Learning) consult the Office of AccessABILITY located in Room E1124 to secure necessary academic accommodations. For further information and assistance please call (212- 772- 4857)/TTY (212- 650- 3230)."

Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The college is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures.

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.