

## WEEKLY SCHEDULE FOR PHYSICS 237

Week	Dates	Lecture Topics	Comments
1	March 27, 29, 31	Historical overview natural radioactivity, scattering Lifetimes, statistics, cross sections	
2	April 3, 5, 7	Rutherford scattering multiple Coulomb scattering	First lab Tues. Apr. 4
3	April 10, 12, 14	Interaction of radiation with matter charged particles EM radiation	
4	April 17, 19, 21	Nuclear physics (observable features) sizes, abundances, binding energy	
5	April 24, 26, 28	Nuclear physics (quantum treatments) deuteron partial wave analysis	<b>Midterm:</b> April 28 (in class)
6	May 1, 3, 5	Nuclear physics shell model, collective model EM transitions, beta and alpha decay	
7	May 8, 10, 12	Elementary particle physics neutrinos, leptons, baryons, mesons symmetries, bound states	
8	May 15, 17, 19	Elementary particle physics Feynman diagrams QED	
9	May 22, 24, 26	Elementary particle physics QCD, symmetry breaking	Last lab Mon. May 22
10	May 29, 31, June 2	Force unification and the standard model	No lecture May 29 <b>Final Exam:</b> May 31 (4:30 – 6:30 PM)