Useful Books

IU Physics P451/551, Experiments in Modern Physics
Fall 2006 (class #20396/22338)

Please note that this list is by no means exhaustive! There are many dozens of excellent books, all relevant for this course. The ones listed here were chosen primarily because they contain information that is useful for several different experiments. The physics background needed for a particular experiment, though, may be best described in a book that is not on this list. So, learn to use your library! Check back here frequently as I will update this list as more are identified for specific experiments.

Modern Physics, General Text Books

- (There are many more modern physics texts in the library - look around until you find one you like!)

Modern Physics, Experimental

- D.W. Preston and E.R. Dietz, The Art of Experimental Physics. Wiley, 1991. Buy a copy of this book if you can afford it as many of the experiments that we do come from this book. Modern text on advanced physics experimentation. Contains general information, e.g., on error analysis, fitting, publishing results, programming, use of a PC, etc., but also specific experiments in thermodynamics, atomic, molecular, and condensed matter physics.
|                                    | - K. Siegbahn, *Beta- and Gamma-Ray Spectroscopy*. North-Holland, 1955. A bit technical and quite old ..., but if you need to know it, it's in there! |


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