

PS 8970

Methods of Theoretical Physics II

Spring, 2008

INSTRUCTOR: An-Ban Chen, 305 Allison Laboratories

GRADING:	Homework	40 %	A: 80-100
	Tests	60 %	B: 60-79
			C: 50-59
			F: below 50

TEXTBOOK: **Mathematical Physics**, Eugene Butkov (Addison-Wesley)

REFERENCES:

The mathematics of Physics and chemistry, Margenau and Murphy (van Norstrand)

Mathematics for Physicists, P. Dennery and A. Krzywicki (Harper & Row)

Methods of theoretical Physics, Vol 1 & 2, Morse and Feshbach (McGraw-Hill)

TOPICS:

1. Fourier analysis and Laplace transform
2. Partial Differential equations
3. Special functions
4. Green functions

ACTIVITIES:

Except for the tests, all the other class hours will be used for lectures and discussions. Tests dates: February 7, March 13, and April 29. Homework problems are open for discussions. However, the final solutions must be the student's own work. Students may be asked to present the solutions in the class.