PHYS 364 (Mathematical Physics 1) -- Spring 2011

Time/Days: 10:30-11:20 (Mon., Wed., & Fri.)
Bldg/Room: PHY 313
Instructor: Bae-Yeun Ha (PHY 372)
Office Hour: Thursday 11:30-12:30PM

Textbooks:
• Mathematical Methods in the Physical Sciences, 3rd Edt. by M. Boas -- required(?)
• Mathematical Methods for Physics and Engineering, 3rd Edt. by K. F. Riley et al -- recommended
• A guided tour of Mathematical Methods for the Physical Sciences, 2nd Edt. by R. Snieder -- nontraditional but insightful

Exams: 1 mid-term (30%) & 1 final (50%)
Homework: ≈ assigned biweekly (20%)
Course web page: http://physics1.uwaterloo.ca/phys364/

TOPICS:

• Fourier series
• Sturm-Liouville theory
• Legendre, Bessel and other special functions
• Separation of variables & Partial differential Eqs.
• Green's functions

Prereq: MATH 227, 228; Honours Physics and Computational Science/Physics and Chemical Physics students only.
Antireq: AMATH 353