

# Physics 5714: Methods of theoretical physics

Fall 2009

## Tentative Syllabus

Aug 24:	intro & diagnostic test
Aug 22-Sept 2:	vectors, div, grad, curl, integration, A&W 1.1-1.15
Sept 7-23:	linear algebra, A&W 3.1-3.6
Sept 28-30:	Test 1
Sept 30 - Oct 5:	infinite series, A&W 5.1-5.7
Oct 7-26:	complex variables, contour integration, A&W 6.1-6.7, 7.1
(Oct 9:	University holiday)
Oct 28-Nov 2:	infinite products, Gamma function, A&W 5.11, 8.1-8.2
Nov 4-9:	ordinary differential equations, 9.2, 9.4-9.6
Nov 11-16:	partial differential equations, A&W 9.1, 9.3, 9.7, 9.8, 10.5
Nov 18:	Test 2
(Nov 21-29:	Thanksgiving break)
Nov 30 - Dec 9:	Fourier series and transforms, A&W 14-15
Dec 11:	Final exam

All dates are approximate; time spent on any topic will be adjusted to the backgrounds of the enrolled students.