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TEXT: *Mathematical Methods for Physics*, by H.W. Wyld, 2nd Edition, ISBN-10: 0738201251, | ISBN-13: 978-0738201252
Schaum's Mathematical Handbook of Formulas and Tables, 4th Edition, ISBN-10: 0071795375, ISBN-13: 978-0071795371

SUPPLEMENTS: Lower level: *Mathematical Methods in the Physical Sciences*, Boas
 Encyclopedic: *Mathematical Methods for Physics and Engineering: a Comprehensive Guide*, by Riley, Hobson and Bence; *Mathematical Methods*, Arfken
 Higher level: *Mathematics for Physics*, Stone and Goldbart

OFFICE HOURS: Monday 3-4 PM or after class

HOMEWORK: Every 1-2 weeks. **Late homework will not be accepted.** The lowest homework will be dropped.

GRADES: There will be two midterm exams and one final. **Dates of the exams may change if the class departs from the expected schedule. Changes will be announced in class.**

Homework 40%
 Midterm Exams 40%
 Final Exam 20%

FINAL EXAM: Friday, December 12, 2013, 8:00a.m. – 10:30a.m

Week of	Chapter	Comments
8/27	1	Partial Differential Equations (PDE)
9/1	1	No class Monday, 9/1 Standard PDE of Mathematical Physics
9/8	2	Separation of Variables and Ordinary Differential Equations (ODE)
9/15	2	Power Series Solutions to ODE; Eigenfunctions, Sturm-Liouville Equations
9/22	3	Sturm Liouville Problems; Legendre Equation
9/29	3	Spherical Harmonics and PDE with Spherical Symmetry
10/6	4	Boundary Value Problems with Spherical Symmetry; Intro to Bessel Functions
10/13	4	Bessel Functions: Properties and Applications
10/20	4, 5	Boundary Value Problems with Cylindrical Symmetry; Initial Value Problems
10/27	5, 6	Transient and Steady State Behavior, Normal Modes Exam on Chapters 1, 2, 3, 4
11/3	6	Examples: PDE Normal Modes
11/10	11	Complex variables
11/17	11	Application of Complex variables
11/24	12, 14	Monday only – Thanksgiving holiday Exam on Chapters 5 and 6
12/1	14	Applications of Complex Variables
12/8	review	Monday only

