Syllabus: Mathematical Physics, PHYS 3513

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Time and location: MWF 12:30–1:20, PS 121


Office hours: WF 3:00–4:00 or by appointment

Exams: Midterm I, Midterm II, Final

Homework: assign problems once a week on Fridays, due in a week

Quizzes: assign problems once a week on Mondays, due before the lecture on Wednesdays

Grading: homework 25%, quizzes 5%, Midterm I 20%, Midterm II 20%, Final 30%

Grading scale: A=(85-100), B=(70-84), C=(55-69), D=(40-54), F=(0-39)

Outline of topics:

* Infinite series (Ch.1)
* Complex numbers (Ch.2)
* Linear algebra (Ch.3)
* Partial differentiation (Ch.4)
   ⇒ Midterm I exam
* Multiple integrals (Ch.5)
* Vector analysis (Ch.6)
* Ordinary differential equations (Ch.8)
* Functions of a complex variable (Ch.14)
   ⇒ Midterm II exam
* Fourier transforms (Ch.7)
* Special functions (Ch.11)
* Series solutions of differential equations (Ch.12)
* Partial differential equations (Ch.13)
   ⇒ Final exam