Course information—Math 147, Winter 2008

- Course: Mathematics 147 MWF 11:00–11:50 ET201

- Prerequisite: Math 140AB or consent of the instructor (if you have had 140A and are taking 140B concurrently, that is acceptable)

- Instructor: Bernard Russo MSTB 263 Office Hours MW 10:00-10:40 or by appointment (a good time for short questions is right after class just outside the classroom)

- There is a link to this course on Russo's web page: www.math.uci.edu/$\sim$ brusso

- Discussion section: TuTh 11:00–11:50 HICF 100M

- Teaching Assistant: Kenn Huber

- Homework: There will be approximately 10-12 assignments with at least one week notice before the due date.

- Grading:

First midterm	February 1 (Friday of week 4)	20 percent
Second midterm	February 29 (Friday of week 8)	20 percent
Final Exam	March 21 (Friday 8:00-10:00 am)	40 percent
Homework	approximately 12 assignments	20 percent

- Holidays: January 21, February 18

- Text: George Cain "Complex Analysis", Freely available on the web (see Russo's web page or go directly to http://www.math.gatech.edu/ cain/winter99/complex.html)

- Material to be Covered: All of the text with the possible exception of chapters 8 and 11. However, there will be some material that is not in the text.

- Catalog description: Rigorous treatment of basic complex analysis: complex numbers, analytic functions, Cauchy integral theory and its consequences (Morera's Theorem, The Argument Principle, The Fundamental Theorem of Algebra, The Maximum Modulus Principle, Liouville's Theorem), power series, residue calculus, harmonic functions, conformal mapping. Students are expected to do proofs.

- Math 147 is replacing the old Math 114B, and is intended for mathematics majors. The sequence 114A-147 is acceptable for the specialization in applied mathematics. You cannot take 114A after taking 147.

- Some alternate texts that you may want to look at, in no particular order. There are a great number of such texts at the undergraduate and at the graduate level.

  Undergraduate Level

  1. S. Fisher: Complex Variables
  2. R. Churchill and J. Brown; Complex Variables and Applications
  3. J. Marsden and M. Hoffman, Basic Complex Analysis
  4. E. Saff and A. Snider: Fundamentals of Complex Analysis

  Graduate Level

  1. L. Ahlfors; Complex Analysis
  2. J. Conway; Functions of one Complex Variable
  3. J. Bak and D. Newman; Complex Analysis