Spring 2013
Math 8702: Complex Analysis II

Lectures: MWF 2.30 - 3.20pm in Vincent Hall 209.

Office Hours: Monday 11.00 - 11.50am and Friday 3:30 - 5:10pm in Vincent Hall 355.

E-mail: akhmedov@math.umn.edu

Text: *Complex Analysis (3rd. Ed., McGraw-Hill)*, by Lars Ahlfors. The textbooks are available at the University bookstore, and also on reserve in Math Library.

Prerequisites: Math 8701 or Instructors permission.

Course web page: www.math.umn.edu/~akhmedov/M8702.html

Course Outline: This is a second course in complex analysis. The spring semester we plan to cover conformal mappings, harmonic functions, Dirichlet problem, the Riemann Mapping Theorem, complex analysis on tori (elliptic functions, modular functions), analytic continuation, Picard's Theorem, and some additional topics if time permits.

Grading: The course grade will be based on homework assignments, in-class midterm and a comprehensive take-home final, with the following weights:

Homework (35%)

Midterm (in class) (30%) (Wednesday, March 13)

Take Home Final (35%)

Homework: There will be 7 biweekly homework assignments, each worth 50 points, consisting of problems from the textbook and some additional problems. Homework will be a fundamental part of this course, and will be worth 350 points (35% of the course grade). The first homework assignment will be due on February 1. NO LATE HOMEWORK WILL BE ACCEPTED. You may work together on homework, but everyone must turn in their own written solutions. Please staple your homework before handing it in. Please check the course webpage for homework assignments and due dates: www.math.umn.edu/~akhmedov/M8702.html

Midterm and Final Exam: There will be an in-class midterm on March 13 and a comprehensive take-home final examinations. The exams worth $30\% + 35\% = 65\%$ of the final course grade. The due date of the take-home final will be announced during the semester.