

Math 9303A, Fall 2009
Introduction to Several Complex Variables
Syllabus

Coordinates: Tuesday 9:30 - 10:30 AM, Thursday 9:30 - 11:30 AM in MC 106.

Instructor: Rasul Shafikov, MC 112, shafikov@uwo.ca (emails will be answered within 48 hours).

Office Hours: TBA.

Textbook: *Holomorphic Functions and Integral Representations in Several Complex Variables* (Graduate Texts in Mathematics v. 108) by Michael Range. The book is available at the Western bookstore, and is also on a two-hour reserve at the Taylor library.

Course web page: <http://www.math.uwo.ca/~shafikov/9303/>

Visit this page for up to date information on the course.

Course Description: The goal of the course is to give a gentle introduction to several complex variables. The material will include some basic function theory in several complex variables, general discussion of domains of holomorphy, and characterization of pseudoconvexity. This will roughly correspond to Chapters 1 and 2 of the textbook, and some material from Chapter 6. If time permits, we'll discuss some basic properties of Stein manifolds.

Prerequisites: Solid background in one complex variable.

Homework: There will be 4 or 5 homework assignments. This will include routine exercises as well as some challenging problems.

Presentation: Every graduate student will give an in-class presentation on a topic arranged with the instructor.

Evaluation:

- (1) Homework = 70%,
- (2) Presentation = 30%.