



The Graduate Center of CUNY  
Ph.D. Program in Mathematics  
Course Syllabus

Course Title: Functions of a Complex Variable II

Course #: MATH 70400

Time and Location: Wed. & Fri. 12:00PM - 1:30PM

Instructor Name: Sudeb Mitra

Contact Information: Sudeb.Mitra@qc.cuny.edu

Pre-Requisites: TBA

Office Hours: TBA

Description:

Here is a list of topics we plan to cover:

- (i) Analytic continuation and the monodromy theorem
- (ii) Mittag-Leffler's theorem and Weierstrass's theorem
- (iii) Harmonic functions, Poisson's formula, Harnack's principle, and The Dirichlet Problem
- (iv) Introduction to Elliptic Functions
- (v) Introduction to Riemann surfaces and
- (vi) Introduction to Quasiconformal Mappings.