

MATH 440/508: Complex Analysis
(3 credits)

Instructor: Mathav Murugan

Lectures: MWF 11-12 at MATH 203

Office hours: Monday 1-3, Friday 12-1 or by appointment at MATX 1104

Course webpage: <http://www.math.ubc.ca/~mathav/teaching/440-t1-19.html>

Text: *Complex Analysis* by Elias Stein and Rami Shakarchi. The textbook is available online at UBC Library.

Prerequisite: Math 300 (or equivalent) and a score of 68% or higher in Math 320.

Outline. The UBC course description is as follows:

- The residue theorem
- The argument principle
- Conformal mapping
- The maximum modulus principle
- Harmonic functions
- Representation of functions by integrals, series, and products
- Other topics at the discretion of the instructor.

Chapter 1,2,3 and 8 of the textbook will be relevant for this course.

References: Functions of One Complex Variable (I and II) by John Conway, Complex Analysis by Theodore W. Gamelin

Grading: Homework will be assigned approximately once every fortnight for 60% of the grade. Late submissions will not be accepted.

There will be a 2 hour midterm 5:30-7:30 PM on November 13 for 40% of the grade.