

Mathematics 6300 3.0 Complex Analysis
May 1–June 12, 2017
Mondays, Tuesdays, Thursdays and Fridays
Time: 11:00 a.m.–12:30 p.m.
Place: MF S104 Ross Building, TR N812 Ross Building

Course Coordinator: Professor M. W. Wong

Office: N530 Ross Building

Office Hours: By Appointment Only

Telephone: (416) 736-2100 Ext: 33946

Website: <http://mwwong.info.yorku.ca>

Textbook: M. W. Wong, Complex Analysis, World Scientific, 2008

Course Objectives: This is a first graduate course in complex analysis. The prerequisite is an undergraduate course in mathematical analysis up to and including uniform convergence and its basic properties. A working knowledge of complex numbers is assumed. Students are expected that by the completion of the course to understand the concepts of and solve problems on holomorphic functions, Cauchy-Riemann equations, Cauchy's integral formula, maximum modulus principle, power series and Laurent series, zeros and singularities, the calculus of residues, biholomorphisms (conformal mappings), fractional linear transformations, Schwarz' lemma, automorphism groups of the unit disk and the upper half plane, $SU(1,1)$ and $SL(2, \mathbb{R})$, harmonic functions and the Schwarz problem on the unit disk.

Grading Scheme: There will be two 90-minute tests (25% each) and a 3-hour final exam (50%). Assignments for practice only will be given out throughout the course. The final grade for the course is based on the following distribution:

92%–100% A+

85%–91% A

80%–84% A–

75%–79% B+

70%–74% B

60%–69% C

0% —59% F

Comprehensive Exam: Students taking the course for the purpose of fulfilling the Ph.D. comprehensive exam requirement should note that the comprehensive exam will be identical with the final, but a score of at least 60% in the final is required for passing the comprehensive.

Important Dates:

First Day of Class: Monday, May 1, 2017

Last Day of Class: Monday, June 12, 2017

Test 1: Monday, May 15, 2017 in S104 Ross Building

Test 2: Monday, June 5, 2017 in S104 Ross Building

Final/Comprehensive Exam: Monday, June 19, 2017 in N638 Ross Building
(10:00 a.m.–1:00 p.m.)

Important Note:

There will be no make-up tests. Students missing a test with a good reason can request that the weight of the test be transferred to the final exam.