

**Mathematics 6300 3.0 Complex Analysis**  
**June 17–July 26, 2019**  
**Mondays, Tuesdays, Thursdays and Fridays**  
Time: 11:30 a.m.–1:00 p.m.  
Place: S128 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  $SL(2, \mathbb{R})$ , 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, June 17, 2019

Last Day of Class: Friday, July 26, 2019

Test 1: Friday, July 5, 2019 in S128 Ross Building

Test 2: Monday, July 22, 2019 in S128 Ross Building

Final/Comprehensive Exam: Wednesday, August 7, 2019 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.