## Spring 2016 Math 511 Complex Analysis Syllabus

Instructor: Professor Yiu Tung Poon

Office: 460 Carver

Office hours: M 12-1, 2-4 pm and R 12-1, 2-3 pm or by appointment.

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Catalog Description: (3 credits) Theory of analytic functions, integration, topology of the extended complex plane, singularities and residue theory, maximum principle.

Prerequisites: Math 414 or 465 or 501

Textbook: Function Theory of one complex variable by Robert E. Greene and Steven G. Krantz, AMS Graduate Studies in Mathematics vol. 40, 3<sup>rd</sup> edition. We will cover Sections 1.1 to 6.3 in this book. This covers the <u>topics</u> for the Complex Analysis part of the Analysis Qualifying Exam. If time permits, additional topics will be discussed.

Grading: There are 6 assignments, 2 tests and 1 final exam. The points are distributed as follows: 30% for the assignments, 20% points for each test and 30% for the final. The course grade will be based on the overall percentage. The cutoff points for A and B will not be higher than 90% and 75 %. Grades will be updated on Blackboard after each test and the final exam.

Assignments: There are 6 assignments. Each assignment carries 10 points. There will be 5 points for work on all problems. Some problems in each assignment will be graded. The correct ones will share the remaining 5 points. Assignment will be collected in class on the due date. Late assignment will be subjected to a penalty of 1 point for each (and part of a) day after the due date. Assignment 6 will be due on the last week of classes. In addition to these assignments, the student should also work on the other exercises in each section. Samples of past qualifying exams are also available. Answers to the assignment will be posted on Blackboard Learn.

Grader: Animesh Biswas, Carver 431, email: <a href="mailto:animbisw@iastate.edu">animbisw@iastate.edu</a>. If you have questions about the grading of assignments, please talk to Animesh first. If you can't resolve it, you can talk to me.

Tests and Exams: There are two tests and one final exam. The tentative dates for tests are 2/26 and 4/15. Details of the tests and final exam will be announced in the lectures and posted on Blackboard Learn.

Changes: Changes to this syllabus will be announced in lectures and posted on the web. Check the announcement on Blackboard Learn regularly for any update.