MATH 762: Complex Analysis II

Course Syllabus for the Spring 2019

Instructor: Dr. Flavia Colonna

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Office Hours: MW 10:30 am -11:50 am or by appointment.

Prerequisite: Math 661 (Complex Analysis I) or permission of instructor.

Course Text: John B. Conway, *Functions of One Complex Variable I,* 2nd ed., Springer-Verlag, NY, 1978.

Main Topics: The maximum modulus theorem, spaces of analytic and meromorphic functions, the Riemann mapping theorem, infinite products and factorization of analytic functions, Runge's theorem, harmonic functions and the Dirichlet problem.

Homework: There will be six homework assignments. Good writing complete with details is required. **Typed work is expected**.

Presentations: Each student will prepare an **oral presentation** on a course topic and be prepared to answer questions on that topic.

Exams: There will be a take-home final exam assigned on the last day of classes. The due date is **Monday May 13 at 1:30 pm**.

Grading: The homework, the oral presentation, and the final constitute 50%, 20%, and 30% of the final grade, respectively.