Math 619 Complex Analysis, Spring 2016

Class Time:	MWF 3-3:50p.m. in 210 Deady Hall
Instructor:	Dr. Marcin Bownik
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Office Hours:	Monday, Wednesday, and Friday 2–3p.m., or by appointment
Textbook:	*Real and Complex Analysis*, W. Rudin, 3rd ed., McGraw-Hill

Background and goals. This course introduces students to the subject of complex analysis. Topics include: harmonic functions, the Poisson integral, the maximum modulus principle, conformal mappings, the Riemann mapping theorem, zeros of holomorphic functions, analytic continuation, and Hardy H^p spaces. The course continues the treatment from Rudin's book where Math 618 usually ends in chapter 10. We plan to cover most of the chapters 11–17 of the textbook.

Prerequisite. Math 616–618 Real Analysis or chapter 10 of Rudin's book.

Grading. There will be a couple of homework assignments. There will be no exams.

Supplementary books:
P. Duren, *Theory of H^p Spaces*, Dover 2000.
P. Duren, A. Schuster, *Bergman Spaces*, A.M.S. 2004.
J. Garnett, *Bounded Analytic Functions*, Springer 2007.