

# Math 618-600, Spring 2005

Professor Emil J. Straube

MWF 11:30 - 12:20, THOM 121

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Office hours: MWF 1:00 - 2:00, but feel free to come and see me any time.

Text: Robert E. Greene and Steven G. Krantz,  
*Function Theory of One Complex Variable*,  
American Math. Society 2002

**Prerequisites:** This is the second semester of the *Complex Analysis* qualifier sequence. Accordingly, Math 617 or equivalent is required.

**Course Content:** We will cover much (but not all!) of chapters 6 through 12 in the text. A brief list of topics is as follows: Riemann mapping theorem, harmonic functions, Weierstrass factorization, theorems of Weierstrass and Mittag-Leffler, Jensen's formula, entire functions of finite order, analytic continuation along a curve, monodromy, the elliptic modular function, Picard's theorem, topological issues, Runge's theorem, Mergelyan's theorem

**Grading Policy:** There will be three exams worth 100 points. All exams will be takehome.