Math 7361   Complex Analysis   Spring 2020

Instructor: Paul Balister
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Class: MWF 9:10am–10:05pm, Dunn Hall 107

Office Hours: MWF 10:10am–10:40am, Dunn Hall 331, or by appointment

Textbook: Lecture notes will be provided. A good textbook is:
                 Complex Analysis by Elias M. Stein and Rami Shakarchi.

Description: This course will provide a mathematically rigorous development of the
                 beautiful subject of complex analysis. In many ways complex analysis
                 is actually easier than real analysis, with many applications, and it also
                 acts as an excellent introduction to topology. More advanced topics
                 such as the Riemann Mapping Theorem, the Prime Number Theorem,
                 and Elliptic functions, will be covered, time permitting.

                 Prerequisites for the course include an ability to understand and
                 develop proofs at a graduate level (such as in the 7000-level real
                 analysis and algebra courses). The course will be fairly self-contained,
                 and so knowledge of Math 6361 is *not* required. However knowledge of
                 6000-level real analysis will be assumed.

Grades: A-F with +/- grades will be used. Grades will be based on:
                 1. Weekly homework assignments (45%)
                 2. Class participation (10%)
                 3. Mid-term in-class exam (15%)
                 4. A final, in-class exam (30%)

                 Homework will be set on Fridays and will be due the following Friday.

                 Class participation will involve active discussion of problems in class,
                 and presenting solutions at the board.

Collaboration: Students are allowed, and even encouraged, to discuss homework and
                 other problems with other students. However, the write up of the
                 homework must be the work of the student alone (i.e., no word-for-
                 word copying). Also, if you know how to do a problem, please don't just
                 immediately tell other students the complete solution! Give hints and
                 advice on how to approach the problem instead.

Final exam: **Friday, May 1, 10:30am**.