MATH 311: COMPLEX ANALYSIS

Instructor:
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Office Hours: Tuesday 3.00 – 5.00
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Complex analysis begins with the study of the infinitesimal properties of functions defined on the complex numbers. Although the subject relies on the rudiments of real analysis, it has a distinct flavor. Differentiable complex functions enjoy remarkable structure: they are essentially all power series! This algebraic cornerstone makes the theory crystalline, not messy. On the other hand, our work will rely on basic geometric insight. In fact, the geometric essence of complex analysis is the basic situation analogized by much of modern geometry.

Text. Fundamentals of Complex Analysis with Applications to Engineering and Science, 3rd ed., E.B. Saff and A.D. Snider, Prentice-Fall (ISBN 0-13-907874-6)

Assignments, Exams. There will be weekly homework assignments. You are encouraged to work on homework together, but you must write up your homework individually. There will be a midterm exam and a final exam.

Grading. Your grade will be determined by the following weighting scheme:
30% – Homework and Participation
30% – Midterm Exam
40% – Final Exam

I expect you to comport yourself with honor, as derived from respect for the academic program, your peers and your instructors. Academic dishonesty will be punished severely.