## Math 448 - M13 - Complex Variables - Fall 2020

Instructor: Professor Alexander Tumanov E-mail: tumanov@illinois.edu Web: https://faculty.math.illinois.edu/~tumanov Office Hours: TBA by Zoom sessions. Class Meets: By Zoom -Tuesday and Thursday at 9:00 am for up to 80 min.

**Text**: S. D. Fisher, Complex Variables, 2nd Edition, Dover, 1999. A digital version is available for rental or purchase by individuals through the Illini Union Bookstore. A library copy is not available at this time. The book may be also available through the HathiTrust Emergency Temporary Access Service at: <a href="http://www.library.illinois.edu/proxy/go.php?url=https://hdl.handle.net/2027/m/dp.39015049078259">http://www.library.illinois.edu/proxy/go.php?url=https://hdl.handle.net/2027/m/dp.39015049078259</a> (HathiTrust makes books available with a number of caveats – only one user can view the book at a time, and downloading and printing is not possible.) The textbook will be used as a source of examples and homework assignments.

**Course Material**: Complex analysis is a fascinating subject and it has numerous applications to nearly every area of mathematics. It has important application to electrical engineering. I hope you will find it beautiful. We will cover Chapters 1-3 of the textbook and part of Chapters 4-5 if time permits.

**Homework**: Weekly homework assignments will be posted. Homework will NOT be collected or graded. You do your homework to learn the subject and prepare for exams and quizzes. Solutions will be posted.

**Quizzes**: Weekly quizzes will be given every Thursday in the beginning of the class period (9 am) except for the first week and except when an exam is scheduled for that week. As a rule, each quiz will cover material of the previous week. Quizzes will be about 15-20 minutes long. No make-up quizzes will be given. I will drop the lowest quiz when calculating your final grade (a dropped quiz may be a zero).

**Exams**: There will be three midterm exams on Thursdays (TBA) during regular Zoom class meetings. They will be open book exams. No make-up exams will be given. In case of documented illness or emergency, a midterm exam may be dropped.

**Grading**: Your course grade will be based on midterm exams, quizzes, and the final exam. Each midterm exam is worth 17.5%, quizzes altogether - 17.5%,

and the final exam - 30%. Tentative curve: A(+/-): 86-100%; B(+/-): 72-85%; C(+/-): 57-71%; D(+/-): 40-56%. I may slightly adjust the curve later to see it fit.

**Concluding Remarks**: The course will be challenging for most students. You will have to understand the proofs of theorems and derivations of formulas. Learn the ideas, don't memorize solutions to particular examples. Express yourself clearly. Start working early. Get prepared for every class meeting so you can participate. Your grade and satisfaction will depend on your effort.

## **Good Luck!**