MATH 224 : COMPLEX ANALYSIS
SPRING 2016

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THIS IS THE LAST TIME THAT A HANDOUT WILL BE PASSED OUT IN HARD-COPY!
All future announcements/assignments will be posted on the course webpage.

Books recommended for this course:

- Lars V. Ahlfors, *Complex Analysis*, 3rd Edition, McGraw-Hill International Editions
- John B. Conway, *Functions of One Complex Variable*, 2nd Edition, Springer International Edition (also available in a Narosa imprint)
- Theodore W. Gamelin, *Complex Analysis*, UTM Springer-Verlag

Course summary: This course is intended to be a first course on the theory of functions in one complex variable, and the focus will be on studying *holomorphic functions*. Essentially, we shall study the topics presented in chapters III through VII of Conway's book, although our treatment might differ from that of Conway's. We will pick and choose the special topics in Chapter VII — and cover this chapter it in its entirety only if time permits.

The importance of homework: During the course of the lectures, I shall indicate various problems — which will include points in the proof of a theorem being presented — for you to work on. These, plus other problems will be compiled into assignments. You will not be asked to submit this homework, but it is **essential** for your understanding of the subject that you work on these problems. Also see the section on quizzes.

On **most** weeks, a new assignment will be posted on the course webpage by **11:00 p.m. on Thursday or Friday.**

Quizzes: I will give a quiz **approximately** once every two weeks. They will be **unannounced** but will always be on a Wednesday or a Friday, towards the end of the lecture. The problem(s) on the quiz will be drawn from the most recent assignment that has been up on the webpage for **more than** 4 days.

Teaching assistants & office hours: To be announced (watch the course webpage)

Assessment: Your assessment will be based on:

Mid-term exam: *30%* or *25%*, Quizzes: *20%* or *25%*, Final exam: *50%*,

where the relative weights of the mid-term exam and the quizzes will be finalised some time after the mid-term exam has been graded.

Examinations: The mid-term exam will be held at a time that will be decided in class; the final exam will be according to the Institute final-examination calendar.