

Department of Mathematics, Oklahoma State University

Complex Analysis II, Math 5293, Spring 2007

**Lectures:**

Tuesday 10:00 AM – 11:15 AM, Thursday, 10:30 AM – 11:45 AM in MS 428

**Instructor:** Mahdi Asgari

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Office Hours: By appointment.

**Course Description:**

This is the second semester of a year long course whose goal is to present a fairly complete treatment of the elementary theory of complex functions of one variable. It basically extends calculus to the complex plane. The topics to be covered were already included in the syllabus for the last semester.

**WWW page:** A web page with some information about the course will be maintained at <http://www.math.okstate.edu/~asgari/teach.html>

**Textbook:** Lars Ahlfors, Complex Analysis, Third Edition, McGraw-Hill, 1979.

Other supplemental material, which will be made available, may also be utilized throughout the course as needed.

There are a number of other books that would serve as good references for this course including:

S. Lang, Complex Analysis, 4th ed., GTM 103, Springer-Verlag, 2003.

R. Narasimhan, Complex Analysis in One Variable, Birkhäuser, 1985.

W. Rudin, Real and Complex Analysis, 2nd ed., McGraw-Hill, 1974.

R. Silverman, Introductory Complex Analysis, Prentice Hall, 1967.

D. Ullrich, Complex Made Simple, Notes (to be published).

**Grading:** Your final grade in the course will be based on the following:

Homework:	40%
Mid-term Exam:	30%
Final Exam:	30%

**Exams:** A mid-term exam will be scheduled in class approximately half way through the semester. The time will be announced in advance. There will also be a final examination given during the finals week. It is scheduled for Tuesday, May 1, 2007, 10:00 – 11:50 AM.

**Homework:** Your homework grade will be based on the following scheme. I will start a list of problems on the WWW page with due dates and periodically add problems to it. You are responsible for working on all of these problems. About every two weeks we set aside one class to go over problems. For each problem one of you will be asked to present his/her solution to the class and a different person will be asked to write up a complete solution for that problem (preferably typeset in  $\text{\TeX}$  or  $\text{\LaTeX}$ ). The person writing the complete solution will hand a copy to me and also make copies for everybody else. These write-ups are due at the beginning of the class following the problem session. Apart from these write-ups no other papers need to be handed in to me.

You will each get roughly the same number of opportunities to present and write solutions. However, the order will be randomly decided by me in the problem session. Your homework grade will be based both on the problems you present and problems you write up. For each problem you present or write I will assign a grade of 0, 1, or 2.

**OSU Syllabus Attachment:** For general university policies and important dates see: <http://osu.okstate.edu/acadafr/aa/syllabusattachment-Spring.htm>