

Math 4156A // 9056A

Complex Variables II // Complex Analysis I

(Fall term 2013)



INSTRUCTOR:

Myrto Manolaki,
Assistant Professor and Post Doctoral Fellow,
Department of Mathematics, Middlesex College,
The University of Western Ontario,
London, Ontario, Canada.



CONTACT ME:

via email at: mmanolak@uwo.ca
or by knocking the door of the office: **MC 103H**
or by calling the number: **519- 661-2111, Ext. 86884.**



LECTURES:

Tuesdays and Thursdays 9:30 - 11 am, room MC 107.



PREREQUISITES:

Mathematics 3124a/b or equivalent.



TEXTBOOK:

***Complex Analysis*, Theodore W. Gamelin, Springer,**
which will be available at the campus bookstore.



EVALUATION:

80% homework + **20%** final examination.

Homework will include 5 assignments (one assignment per two weeks) and some class presentations. The final exam will be based on the topics covered in class.



COURSE OUTLINE:

**Möbius transformations; local behavior of analytic functions;
open and inverse mapping theorems; the maximum modulus principle;
Schwarz's lemma; harmonic functions; the Dirichlet problem on the disk; the
Schwarz reflection principle; analytic continuation; normal families; the
Riemann mapping theorem, conformal mapping.**

Time permitting, the last weeks we will discuss one of the topics: Approximation (Runge's theorem) or the phenomenon of overconvergence.

IMPORTANT SENATE POLICY:

Students are responsible for ensuring that their selection of courses is appropriate and accurately recorded and that all course prerequisites have been successfully completed. If the student does not have the requisites for a course, and does not have written special permission from his or her Dean to enroll in the course, the student may be removed from the course and it will be deleted from the student's record. This decision may not be appealed. A student will receive no adjustment to his or her fees in the event that he or she is dropped from a course for failing to have the necessary prerequisites.

STATEMENT ON ACADEMIC OFFENCES:

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_grad.pdf

MEDICAL EXCUSE REGULATIONS:

If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to the Dean's Office as soon as possible and contact your instructor immediately. It is the student's responsibility to make alternative arrangements with their instructor once the accommodation has been approved and the instructor has been informed. In the event of a missed final exam, a "Recommendation of Special Examination" form must be obtained from the Dean's Office immediately. For further information please see:

<http://www.uwo.ca/univsec/handbook/appeals/medical.pdf>

A student requiring academic accommodation due to illness should use the Student Medical Certificate when visiting an off-campus medical facility or request a Record's Release Form (located in the Dean's Office) for visits to Student Health Services. The form can be found here:

https://studentservices.uwo.ca/secure/medical_document.pdf