

## Math 4156/9056A Fall 2017

### Complex Analysis II

#### Syllabus

**Coordinates:** Tuesdays 10.30 AM - 12.30 PM and Thursdays 11:30 AM - 12:30 PM in MC 107.

**Instructor:** Rasul Shafikov, MC 112, [shafikov@uwo.ca](mailto:shafikov@uwo.ca) (emails will be answered within 48 hours).

**Office Hours:** TBA.

**Textbook:** *Complex Analysis* by T. Gamelin published by Springer (UTM series), recommended.

**Course web page:** <http://www-home.math.uwo.ca/~shafikov/4156/>

Visit this page for up to date information on the course.

**Course Description:** We will cover the following topics: the Mobius transformations, the Argument Principle, Runge's theorem, Montel's theorem, the Riemann mapping theorem, Caratheodory's theorem. Time permitted, we may also cover some advanced topics at the end of the course.

**Prerequisites:** Mathematics 3124 or equivalent, or otherwise sufficient background in one complex variable.

**Homework:** There will be 4 or 5 homework assignments. These will include routine exercises as well as some challenging problems. Graduate students will be given additional problems to work on.

**Examination:** There will be an in-class Midterm on October 24 (mark your calendar now!) The final exam at the end of the course will be scheduled by the registrar. No electronic devices are allowed on the tests!

#### **Evaluation:**

- (1) Homework = 50%,
- (2) Midterm=20%,
- (3) Final examination = 30%.

**Senate Regulations on Scholastic Offences** Please note the following points, which are required to be stated in this outline by the Senate regulations. 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/> . Specifically, the following document outlines scholastic discipline for graduate students:

[http://www.uwo.ca/univsec/handbook/appeals/scholastic\\_discipline\\_grad.pdf](http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_grad.pdf)

**Medical Accommodation** For UWO Policy on Accommodation for Medical Illness see: Accommodation for Illness - Undergrads Downloadable Student Medical Certificate (SMC): under the Medical Documentation heading. Students seeking academic accommodation on medical grounds for any missed tests, exams, participation components and/or assignments worth 10% or more of their final grade must apply to the Academic Counselling office of their home Faculty and provide documentation. Academic accommodation cannot be granted by the instructor or department. Students who are in emotional/mental distress should refer to Mental Health@Western for a complete list of options about how to obtain help, see <http://www.uwo.ca/uwocom/mentalhealth/>