

**Math 3124 / 9024, Fall 2016**  
**Complex Analysis**  
**Syllabus**

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

**Textbook:** *Complex Analysis*, by J.Bak and D.Newman, publ. Springer-Verlag (recommended).

**Prerequisites:** Math 2123A/B, or Math 2122A/B, and permission of the Mathematics department.

**Course web page:** <http://www.math.uwo.ca/~shafikov/3124/>

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

**Course Coordinates:** Course meets MWF 9:30 - 10:30 AM in SH 3355.

**Course Description:** The Cauchy-Riemann equations, elementary functions, branches of the logarithm and argument, Cauchy's integral theorem and formula, winding number, Liouville's theorem and the fundamental theorem of algebra, the identity theorem, the maximum modulus theorem, Taylor and Laurent expansions, isolated singularities, the residue theorem and applications, the argument principle and applications.

**Homework:** Homework will be assigned regularly and will include routine exercises as well as some challenging problems. Students enrolled in Math 9024 will be assigned additional problems.

**Exams:** There will be a Midterm and a Final Exam. The dates for these will be announced early in the semester.

**Evaluation:** Homework = 30%, Midterm = 30%, Final examination = 40%.

**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:  
[http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/accommodation\\_](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_)
- Downloadable Student Medical Certificate (SMC):  
[http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/medicalform.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf) 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.