DEPARTMENT OF MATHEMATICAL AND COMPUTATIONAL SCIENCES
UNIVERSITY OF TORONTO MISSISSAUGA

MAT334H5S LEC0102
Complex Variables
Course Outline - Winter 2018

Class Location & Time	Tue, 03:00 PM - 05:00 PM DV 2072 Thu, 02:00 PM - 03:00 PM DV 1142
Instructor	Jacopo De Simoi
Office Location	DH-3040
Office Hours	
Telephone	905-569-5698
E-mail Address	jacopods@math.utoronto.ca
Course Web Site	Course Website: Blackboard
Co-Instructor	Michael Yampolsky
Office Location	DH-3022
Telephone	905-828-5356
E-mail Address	yampol@math.toronto.edu
Teaching Assistant	Belal Abuelnasr
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Teaching Assistant	Vitali Vougalter
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Course Description

Theory of functions of one complex variable: analytic and meromorphic functions; Cauchy's theorem, residue calculus. Topics from: conformal mappings, analytic continuation, harmonic functions. [36L,12T]

Prerequisite: MAT102H5, 232H5/233H5/257Y5
Exclusion: MAT334H1, 354H1, MATC34H3 (SCI)
Distribution Requirement: SCI

Students who lack a pre/co-requisite can be removed at any time unless they have received an explicit waiver from the department. The waiver form can be downloaded from here.

Textbooks and Other Materials

Textbook: James Ward Brown and Ruel V. Churchill, Complex Variables and Applications, Ninth Edition, McGraw-Hill. (Students may wish to get the e-book version or an older edition because it is cheaper.)

Assessment and Deadlines

Type	Description	Due Date	Weight
Term Test		2018-02-01	25%
Term Test		2018-03-08	25%
Final Exam		TBA	50%
		Total	100%

More Details for Assessment and Deadlines

Term tests will be held in class on Thursday, 2-3pm

Tutorials will begin on January 15

Penalties for Lateness

N/A

Procedures and Rules

Missed Term Work

To request special consideration, bring supporting documentation to the instructor in person during office hours at least one week in advance.

In case of illness, bring a U of T medical certificate to the instructor within one week of the missed work. The certificate must specify the exact period during which you were unable to carry out your academic work. If a term test is missed, the weight of the other term test and/or final exam will be increased.

Missed Final Exam

Students who cannot write a final examination due to illness or other serious causes must file anonline petition **within 72 hours of the missed examination**. Original supporting documentation must also be submitted to the Office of the Registrar **within 72 hours of the missed exam**. Late petitions will **NOT** be considered. If illness is cited as the reason for a deferred exam request, a U of T Verification of Student Illness or Injury Form must show that you were **examined and diagnosed at the time of illness and on the date of the exam, or by the day after at the latest**. Students must also record their absence on ACORN on the day of the missed exam or by the day after at the latest. Upon approval of a deferred exam request, a non-refundable fee of $70 is required for each examination approved.

Academic Integrity

Honesty and fairness are fundamental to the University of Toronto's mission. Plagiarism is a form of academic fraud and is treated very seriously. The work that you submit must be your own and cannot contain anyone elses work or ideas without proper attribution. You are expected to read the handout How not to plagiarize (http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize) and to be familiar with the Code of behaviour on academic matters, which is linked from the UTM calendar under the link Codes and policies.

Final Exam Information

Duration:	3 hours
Aids Permitted:	None

Additional Information

Note on pre-requisites: pre/co-requisites will be checked during the period of**January 11-16, 2018 . If you do not have the required pre/co-requisites then you will be removed from the course at that time.** If you believe that you have the necessary background material, and are able to prove it (e.g., a transfer credit from a different university), then you should submit a '**Prerequisite/Corequisite Waiver Request Form**', which can be found on the MCS website, at https://www.utm.utoronto.ca/math-cs-stats/sites/files/math-cs-stats/public/shared/PrereqCoreqForm-2016-1.pdf

Submit the form to the instructor no later than January 10, 2018 You must give a**reason** for requesting a waiver. Simply submitting the form **does not** mean that you can stay in the course.

Material that will be covered in the course:

Chapter 1 Complex Numbers

Chapter 2 Analytic Functions

Chapter 3 Elementary Functions

Chapter 4 Integrals

Chapter 5 Series

Chapter 6 Residues and Poles

Chapter 7 Applications of Residues

Chapter 8 Mappings by Elementary Functions

Chapter 9 Conformal Mapping

Last Date to drop course from Academic Record and GPA is March 14, 2018.