Math 300/101 Introduction to Complex Variables 2020W Term 1, Sep–Dec 2020

Instructor: Dr. G. Slade, MATX 1211, 604-822-3781, `slade@math.ubc.ca`.

Office hours: Indicated on Canvas.

Course webpage: Course materials will be found on Canvas `https://canvas.ubc.ca/courses/55303`.

Lectures on Zoom: Lectures will be given on Zoom (click on the Zoom link in Canvas) at the scheduled hours MWF 08:00-08:50. You are strongly encouraged to attend class at those times, and to take notes as you would do in a blackboard lecture. The lectures will be recorded and available in Canvas.

Piazza: There is a link to Piazza on Canvas. Please use Piazza for questions that arise in your learning and for questions about all issues related to the course.

Text: The course text is E.B. Saff and A.D. Snider, "Fundamentals of Complex Analysis," 3rd edition, Pearson Education Inc., (2003 – reissued in 2017).

Outline: The course will be based on topics from the first six chapters of Saff and Snider, namely:

1. Complex numbers
2. Analytic functions
3. Elementary functions
4. Complex integration and Cauchy's Theorem
5. Power series and Laurent series
6. Residue theory

Evaluation: There will be homework assignments, two tests, and a final exam.

Homework: Nine assignments will be given and marked for credit. Assignments are to be submitted on Canvas by 07:59 a.m. on the due date. This is a strict deadline: *no late assignments will be accepted.* The assignment schedule is as follows:

Assignment given	Assignment due
September 11	September 18
September 18	September 25
September 25	October 2
October 2	October 9
October 16	October 23
October 23	October 30
October 30	November 6
November 6	November 13
November 20	November 27

Tests: There will be two 50-minute tests held during the regularly scheduled class hours on the following dates:

Wednesday, October 14, Wednesday, November 18.

Final exam: There will be a final examination during the December examination period.

Final mark: The final mark will be calculated (subject to possible scaling) as follows:
Homework: 15% (best eight assignments)
Tests: 25% each
Final exam: 35%

Course policies: You are encouraged to discuss assignment problems with each other; it is a good way to learn. However, the solutions that you write up should be in your own words. Never copy your solutions from each other. If you find a solution on the internet, a book, or elsewhere, cite your source.

The tests and exam will be invigilated via Zoom and it is essential that every student have a webcam. Without a webcam, it will not be possible to complete the course.

Missing an assessment without a valid reason results in a mark of zero. Missing an assessment for a valid reason normally results in the weight of that assessment being transferred to the final exam. Examples of valid reasons include illness and travel to play a scheduled game for a varsity team. Examples of reasons that are not valid include conflicts with personal travel schedules or conflicts with work schedules. Any student who misses an assessment is to present to their instructor the Department of Mathematics self-declaration form for reporting a missed assessment within 72 hours of the assessment date. The form is here: `https://www.math.ubc.ca/Ugrad/ugradForm/Student_Declaration_Academic_Concession_MATH.pdf`. This policy conforms with the UBC Vancouver Senate's Academic Concession Policy V-135 and students are advised to read this policy carefully: `http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,329,0,0`.

University policies: UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available on the UBC Senate website `https://senate.ubc.ca/policies-resources-support-student-success`.

Updated September 1, 2020.