

Math 300 Complex Analysis 2022 Semester 1

Seckin Demirbas

Department of Mathematics

Math Building room 235

s.demirbas@math.ubc.ca

Office hours: 11 am to 12:30 pm on Tuesday (online, over Zoom), 12:00 pm to 1:30 pm on Wednesday (in person, at my office).

Website: <https://canvas.ubc.ca/courses/103711>

About the course

This course is an introductory course to complex analysis in which we are going to study topics such as:

- complex numbers,
- complex derivatives and analytic functions,
- elementary functions,
- contour integration,
- Cauchy's theorem,
- Cauchy's Integral Formula,
- Taylor series,
- Laurent series, singularities and residues.

Please note that this course is going to have lots of theory and will be fast-ish paced once we start differentiability. It means that if you are missing a couple of lectures, you may fall behind. In such occasion I highly suggest you come to office hours and we can catch you up with the material.

Book

We are not going to follow a specific resource. But for reference, you can check out the open education resource (OER):

<https://matthbeck.github.io/complex.html>

Grading Scheme

Homeworks	Not to be graded.	
Assessments	There are going to be 3 in-class tests (September 28, October 19, and November 16). At least 40% of the points will be from the homework sets.	20% each
Final Exam	Single comprehensive exam, not necessarily from the homework sets.	40%

Course Resources

I will be posting the lecture notes online on Canvas. I also have an open-door policy which means that if you see me in my office, you are welcome to come and ask your questions.

Course Policies

Homework: Weekly assignments will be released on Canvas. You can (but don't have to) turn in your homeworks for feedback on the indicated questions, but they will not be given a grade. This is to help you improve yourself and your mathematical thinking/writing without the concern for the grade. But, please keep in mind that 40% of the points in the tests during the semester will be from the homeworks. So, turning in your homework for feedback will also help you improve your grade.

Assessments: There will be 3 tests in the semester and a final exam at the end. Tests are going to be given on September 28, October 19, and November 16. They are going to be in-class and 50 minutes long. They will contain questions picked from the homework sets (at least 40% of the total points). Please keep in mind that these tests are a substantial part of your course grade and a good portion of them are going to be from the homework sets.

Missed Tests: If you miss one test and have medical documentation to support your absence, the weight of that missed test may be transferred to the final exam. If you miss more than one tests, please make an appointment to discuss the situation with me.

Final Exam: The final exam will be a comprehensive exam covering the full course.

Centre for Accessibility: If you are registered with the Centre and require academic accommodations for test writing, it is your responsibility to register the quiz dates with the Centre with sufficient notice for them to accommodate your needs. The course instructors are unable to provide custom accommodations for students during the published quiz times.

Lecture Recordings

The lectures will be streamed and recorded on Panopto(link is on Canvas). Please keep in mind that the streaming is one way. So there will not be a chat option for you to ask questions if you have some if you stream the lecture. In addition to the live stream, the recordings will be available for you to watch after class on the same link.

I will also provide written notes after each lecture.

Covid Safety

For our in-person meetings in this class, it is important that all of us feel as comfortable as possible engaging in class activities while sharing an indoor space. Non-medical masks that cover our noses and mouths are a primary tool to make it harder for Covid-19 to find a new host. Though not mandatory, please wear a mask during our class meetings, for your own protection, and the safety and comfort of everyone else in the class. If you have not yet had a chance to get vaccinated against Covid-19, vaccines are available to you, free. The higher the rate of vaccination in our community overall, the lower the chance of spreading this virus. You are an important part of the UBC community. Please arrange to get vaccinated if you have not already done so.

Attendance in case of sickness

If you feel ill, you should not attend class in person. Stay home and use the self-assessment tool at <https://bc.thrive.health/> for guidance. This includes exams as well.

There will be class recordings that you can watch and I will also be available to answer your follow up questions during office hours.

If I feel ill, as long as I don't feel too ill, I will move that day's lecture online. I will try to let you know as soon as I can through Canvas announcements, and you should be notified via email or Canvas apps notification immediately, so please check your emails and Canvas regularly. If you end up being in the classroom and I won't be able to make it to the class, you can just take a seat in the classroom and login to the lecture. Using a pair of headphones may be considerate in such situation. If I get sick enough that I cannot teach, I will try to find a replacement for the lecture(s), or provide recordings and lecture notes.

Academic Integrity

UBC Academic Calendar entry: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,286,0,0>

“The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred to the President's Advisory Committee on Student Discipline. Careful records are kept in order to monitor and prevent recurrences.”