Math 3146, Section 002

UCONN
UNIVERSITY OF CONNECTICUT

Intro to Complex Variables
Department of Mathematics

Syllabus – Fall 2020

Excluding materials for purchase, syllabus information may be subject to change. The most up-to-date syllabus is located within the course in HuskyCT.

Course and Instructor Information

Course Title: Intro to Complex Variables
Credits: 3
Format: Online Synchronous Lecture
Prerequisites: MATH 2110 and 2410, or MATH 2420 or MATH 2144. Not open for credit to students who have passed MATH 5046.

Course Meetings: Monday, Wednesday, and Friday, 11:15AM – 12:05PM, (Go to HuskyCT).

Professor: Maxim Derevyagin
Email: maksym.derevyagin@uconn.edu
Telephone: (860) 486-1288
Office Location: MONT 310
Office Hours/Availability: Monday and Wednesday, 3pm – 4pm or by appointment. This semester, office hours are only online (on HuskyCT). I can usually respond to an email within 48 hours.

Course Materials

Textbook: *Complex Variables and Applications*, Ninth Edition, by J. W. Brown and R. V. Churchil.

Course Description

Complex numbers, Functions of a complex variable, integration in the complex plane, conformal mappings.

Course Objectives

Upon successful completion of the course, students will understand how the general behavior of a function of a complex variable differs from the corresponding function of a real variable. They will also understand what is meant by an analytic function and how important this notion in complex analysis and in mathematics in general. Also, they should be able to employ concepts and theories learned in class in order to solve a variety of problems involving functions of a complex variable.

Tentative Course Outline

Module 1: *Analytic functions.* It will be based on Chapters 1, 2, 3, and 5 of the textbook (August 31st - October 2nd).

Module 2: *Integration*. It will be based on Chapters 4, 6, and 7 of the textbook (October 5th – November 6th).

Module 3: *Conformal mapping*. It will be based on Chapters 8 and 9 of the textbook (November 9th – 20th)

Module 4: *Course Review* (November 30th – December 7th)

Course Requirements and Grading

Summary of Course Grading:

Course Components	Weight
Homework	20%
Midterm Exam	20%
Presentation	20%
Final Exam	40%
Total	***100%***

Quizzes/Homework:
Homework will be assigned on HuskyCT at the end of most weeks. There will be 10 homework sets.

Presentation:
You'll need to work out a problem and present it to class.

Midterm Exam:
There will be 1 midterm exam and it'll be remotely proctored by the instructor. The midterm test score will be replaced by student's final exam score divided by 2 provided that it improves the grade.
Tentative test date is October 21st.

Final Exam:
The final exam is accumulative and it will be worth 200 points. It'll be remotely proctored by the instructor.
The final exam date is TBA

Grading Scale:

Grade	Letter Grade	GPA
93-100	A	4.0
90-92	A-	3.7
87-89	B+	3.3
83-86	B	3.0
80-82	B-	2.7
77-79	C+	2.3
73-76	C	2.0
70-72	C-	1.7
67-69	D+	1.3
63-66	D	1.0
60-62	D-	0.7
<60	F	0.0

Student Responsibilities and Resources

As a student enrolled in this class you must be aware that

- You should attend all class meetings and you are responsible for the material that you missed due to absences. So, it is always a good idea to know a couple of your classmates.
- Cell phones, laptops, and other electronic devices that might cause disruption should be turned off or silenced before class begins.
- Electronic devices including calculators will NOT be allowed during exams and quizzes.
- In order to be fair to everyone, there are no make-up tests. Just keep in mind that the grading system of this course is developed in a way that a student can miss a test and a quiz and still succeed in this course.

As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important standards, policies and resources, which include:

- The Student Code
  - Academic Integrity
  - Resources on Avoiding Cheating and Plagiarism
- Statement on Absences from Class Due to Religious Observances and Extra-Curricular Activities
- Policy Against Discrimination, Harassment and Related Interpersonal Violence

Technical requirenments

The software/technical requirements for this course include:

- **Computer with microphone, speaker, and camera for live video/audio interaction**
- **HuskyCT/Blackboard**
- **WebEx**
- **Apps and cameras for taking pictures of your work and uploading them to HuskyCT in the PDF format**
- **Dedicated access to high-speed internet with a minimum speed of 1.5 Mbps (4 Mbps or higher is recommended).**

Students with Disabilities

The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please let me know immediately so that we can discuss options. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, (860) 486-2020 or http://csd.uconn.edu/.