

MATH 4680: Introduction to Complex Analysis

Fall 2022

Instructor: Tony Shaheen

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Office Hours:

Monday, in my office ST 317, 3:15 - 4:15

Tuesday, on zoom (see the zoom link on the canvas page), 12:30 – 2:00

Course Website: Follow the link from <http://www.calstatela.edu/research/ashahee/>

Lectures: Monday and Wednesday, 12:15pm—1:30pm in ET A332.

Optional Textbook: There is no required textbook for the course. If you would like to get a textbook, two that I recommend are (1) Basic Complex Analysis by Marsden and Hoffman, or (2) Complex Variables and Applications by Brown and Churchill.

Prerequisite: Math 4650.

Description: Complex numbers, elementary functions, limits, continuity, differentiability, Cauchy-Riemann equations, integration, Cauchy's theorem, Cauchy integral formula, Fundamental Theorem of Algebra, Max Modulus Theorems, harmonic functions, homotopy of curves and generalized Cauchy theorems.

Student learning outcomes: Students who successfully complete this course will: understand the definitions, calculations, and theorems presented in the course; be able to prove theorems about the objects presented in the course; be able to make calculations using the objects presented in the course.

Grading: Your grade will be based on two tests and a cumulative final. Each exam will be worth 1/3 of your grade.

Homework: Homework will be assigned, but not collected. The homework problems and solutions will be posted on the course website.

Exams: There are two tests and a final. The tentative dates and times of the exams are as follows.

Test 1: Monday, October 3.

Test 2: Monday, November 14.

Tentative Final date: Monday, December 12, 12pm—2pm.

ADA statement: Reasonable accommodation will be provided to any student who is registered with the Office of Students with Disabilities and requests needed accommodation. All tests will be taken at home this semester. If you get time and a half or double time with ODD, then you will be allowed to use the same amount of time as with OSD for your exams at home.

Academic honesty statement: Students are expected to do their own work. Copying the work of others, cheating on exams, and similar violations will be reported to the University Discipline Officer, who has the authority to take disciplinary actions against students who violate the standards of academic honesty.

Student responsibilities: Students are responsible for being aware of all announcements that are made in class, such as changes in exam dates, due dates of homework and papers, and cancellation of class due to instructor's absence. Students are responsible for announcements made on days that they are absent.

Students must check their CSULA email account regularly for information from the instructor and the Department. Failure to do so may result in missed deadlines or other consequences that might adversely affect students. Note that you can forward this email account to any other account of your choosing.