Lecture: MWF 12:30–1:20pm

Classroom: Keller 313

Instructor: Pierre-Olivier Parisé (email: parisepo@hawaii.edu)

Office: Physical Science Building (PSB) 302

Office hours: TBA

Course description

Analytic functions, complex integration, introduction to conformal mapping.

Course objectives

Upon successful completion of MATH 444, the student will

- (1) have an understanding of the algebraic and geometric properties of the complex plane and the basic properties of analytic functions;
- (2) understand the main theorems of the course and be able to apply them in computation;
- (3) be able to independently construct rigorous arguments concerning the material.

Prerequisites: Math 244 (or concurrent) or 253A (or concurrent); recommended 321 or 331.

REQUIRED COURSE MATERIAL

Course website: https://mathopo.ca/courses-website/MATH-444/MATH-444.html. All the information about the course (like the schedule, important dates) is posted on the course website. Assignments will be posted on the Laulima website.

Discord channel (optional): https://discord.gg/s8BKEtSh. For mindful, respectful and interessing conversations with your classmates and me on complex analysis.

IMPORTANT DATES

Refer to the schedule on the course website.

- Midterms:
 - Midterm 1 on January 29th.
 - Midterm 2 on February 26th.
 - Midterm 3 on April 8th.
- Final:
 - May, 10th, 12:00-2:00pm (classroom unknown yet).
- Non-instructional day(s):
 - Martin Luther King, Jr. Day, January 15th.
 - President's Day, February 19th.
 - Spring Recess, March 18th-22th.
 - Good Friday, March 29th.

Grading components

Your final grade will be calculated based on a weighted average of the following components.

- (1) **Homework (40%):** There will be homework assigned at the beginning of each chapter and due a week after the chapter is finished. The problems will be posted on the course website in the homework webpage. Your homework should be submitted in my mailbox in Keller 418. Your best five scores will be used to compute your average.
- (2) Midterms (40%): There will be 3 midterms. The best two scores will be used to compute your average.
- (3) **Final exam (20%):** There will be a final comprehensive exam as scheduled by the university on December, 15th, 12:00–2:00pm.

LECTURES

If you miss a lecture, you are responsible for any assignments, announcements made, and lecture notes missed. Unavoidable absences should be explained to the instructor. Office hours will not be utilized to present a previous lecture missed.

MISSED ASSIGNMENT POLICIES

Policies for exams: The final exam cannot be taken before the scheduled time for any reason. Policies for homework: Late homework won't be accepted and will result of a mark of zero(0).

Academic integrity: All students are expected to abide by the university's Conduct Code. Academic sanctions for dishonesty may include receiving an F in the assignment or receiving an F in the class. There may be additional administrative sanctions.

CLASSROOM POLICIES

Tablets can be used for note-taking only. During lectures, to respect the lecturer and your classmates, refrain from using electronic items, cell phones, music players, tablets, and laptops for any other purposes than note-taking.

Please arrive, be seated and ready to start each class on time. If you have a valid reason to leave early, please advise me before the class and try to sit near the exit to minimize disruption.

Sources of help

KOKUA: I am happy to work with you and the KOKUA Program (Office for Students with Disabilities), if you need course accommodations due to a disability. KOKUA can be reached at (808) 956-7511 or (808) 956-7612 (voice/text) in room 013 of the Queen Lili'uokalani Center for Student Services. All course modifications must be arranged through KOKUA. You are encouraged to start this process as early as possible.

Concerns

If at any time during the semester you have any questions or concerns about the class, please contact me during regularly scheduled office hours or via email to make an appointment. You may also contact the following people:

• Director of Undergraduate Studies
Mirjana Jovovic
Email: undergrad-dir@math.hawaii.edu

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• Associate Chair Bjørn Kjos-Hanssen

Email: assoc-chair@math.hawaii.edu