

Math 185 Lecture 4 Syllabus

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Lectures: TuTh 11:00 - 12:30 am at 229 Dwinelle Hall

Office hours: Th 1:00-3:30 pm or by appointment

Textbook Title: Complex Analysis by Stein & Shakarchi.

Grading: 20% from Homework, 10% from Attendance, 30% from Midterm, 40% from Final.

Homework: Weekly homework assignments are posted to the course website, and your solutions are due at the beginning of Tuesday's class. No late homework will be collected.

Typically your homework will be returned to you in a week from the due date with some of the problems graded by our reader.

Academic Honesty Policy:

All exams are closed books / closed notes. In homework, while it is recommended that you work on your own, no form of collaboration is prohibited. So, one can discuss problems with others, read books, use electronic sources, hire tutors, etc. However, any use of outer sources must be acknowledged in the submitted solution. Failure to acknowledge the use of someone else's ideas is commonly known as academic plagiarism. Also, the homework that you hand in should reflect your own understanding of the material. You are NOT allowed to simply copy solutions from other students or other sources even you acknowledge the resources. For the exams, complete academic honesty is expected during exams. Cheating on an exam will result in an automatic failing grade (F) for the course.

Midterm Exam: Tue, Oct, 15. In class. (First two chapters.)

Final Exam: Wed, Dec, 18, 8:00 - 11:00 a.m.

No make-up exams are given. In the case that you miss the midterm exam with a valid excuse (i.e. a documented sudden medical emergency or documented family emergency), your final exam grade will replace the missing midterm grade. Notice that weddings, graduations, cheap flights, lack of sleep, and a busy schedule are not valid excuses for missing exams. In particular, it is your responsibility to arrange your travel schedule so that you are present for the final exam. (Time for finals is available from schedule.berkeley.edu)

Tentative Syllabus

Date	Content
8/29 Thu	Chapter 1. Complex numbers and complex plane
9/3 Tue	Cont.
9/5 Thu	Chapter 1. Functions on complex plane
9/10 Tue	Cont.
9/12 Thu	Chapter 1. Integration along curves
9/17 Tue	Chapter 2. Cauchy's theorem in a disc
9/19 Thu	Chapter 2. Caclulation
9/24 Tue	Cont.
9/26 Thu	Chapter 2. Cauchy integration formula
10/1 Tue	Chapter 2. Further Applications
10/3 Thu	Cont.
10/8Tue	Cont.
10/10 Thu	Cont.
10/15 Tue	Midterm Exam
10/17 Thu	Chapter 3. Zeros and poles
10/22 Tue	Chapter 3. The residue formula
10/24 Thu	Chapter 3. Meromorphic functions
10/29 Tue	Chapter 3. Argument principle
10/31 Thu	Chapter 3. Complex logarithm
11/5 Tue	Cont.
11/7 Thu	Chapter 3. Fourier series and harmonic functions
11/12 Tue	Chapter 4. The Fourier transformation
11/14 Thu	Chapter 5. Entire functions
11/19 Tue	Cont.
11/21 Thu	Chapter 6. Gamma function
11/26 Tue	Chapter 6. Zeta function
11/28 Thu	Chapter 7. Conformal mapping

Date	Content
12/3 Tue	Cont.
12/5 Thu	Cont.
12/9 —12/13	RRR week