

Math 562: Spring 2025
Complex Variables II

Instructor: Prof. Jens Lorenz

SMLC 208

jlorenz@unm.edu

office hours: MW 1:30-3:00

Time: MWF 10-10:50

Place: Dane Smith Hall, room 128

Text: Recommended:

Elias Stein, R. Sharkarchi, *Complex Analysis*, Princeton Lectures in Analysis II, Princeton University Press

Topics: The Riemann mapping theorem; Schwarz–Christoffel integrals; applications of complex variables to linear algebra; Riemann’s ζ -function and the prime number theorem; applications of complex variables to Fourier transformation; Paley–Wiener theorems; Hadamard’s factorization theorem.

Basis for grading: The grade will be determined by your homework.

Title IX: In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered responsible employees). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Compliance, Ethics, and Equal Opportunity. For more information on the campus policy regarding sexual misconduct, see:

<https://policy.unm.edu/university-policies/2000/2740.html>

Note: Qualified students with disabilities needing appropriate academic adjustments should contact me as soon as possible to ensure your needs are met in a timely manner.