MATHEMATICS 210B

COMPLEX ANALYSIS II

Text: *Complex Analysis, Third Edition*, by L. V. Ahlfors

This is the second course in a two quarters study of analytic functions of a complex variable. Topics covered in the second course include the theory of the power series, the Laurent series, the entire and meromorphic functions, normal families, the Riemann mapping theorem, and harmonic functions and the Dirichlet problem.

TOPICS	SUGGESTED NO. OF 50 MIN. CLASSES
Series and Product (Ch. 5, §§1–5)	15
Power series, Laurent series, infinite products, entire functions, Riemann Zeta function, normal families.	
Conformal Mapping, Harmonic Functions (Ch. 4, §§6; Ch. 6, §§1, 3, 4)	12
The Riemann mappings theorem, univalent functions, the Bieberbach–de Branges theorem; harmonic functions, Dirichlet problem.	