



## A Course in Complex Analysis and Riemann Surfaces

By Wilhelm Schlag

American Mathematical Society. Hardback. Book Condition: new. BRAND NEW, A Course in Complex Analysis and Riemann Surfaces, Wilhelm Schlag, Complex analysis is a cornerstone of mathematics, making it an essential element of any area of study in graduate mathematics. Schlag's treatment of the subject emphasizes the intuitive geometric underpinnings of elementary complex analysis that naturally lead to the theory of Riemann surfaces. The book begins with an exposition of the basic theory of holomorphic functions of one complex variable. The first two chapters constitute a fairly rapid, but comprehensive course in complex analysis. The third chapter is devoted to the study of harmonic functions on the disk and the half-plane, with an emphasis on the Dirichlet problem. Starting with the fourth chapter, the theory of Riemann surfaces is developed in some detail and with complete rigor. From the beginning, the geometric aspects are emphasized and classical topics such as elliptic functions and elliptic integrals are presented as illustrations of the abstract theory. The special role of compact Riemann surfaces is explained, and their connection with algebraic equations is established. The book concludes with three chapters devoted to three major results: the Hodge decomposition theorem, the Riemann-Roch theorem, and the uniformization...



## Reviews

This ebook is definitely not effortless to start on studying but extremely enjoyable to read through. It can be loaded with knowledge and wisdom You will not feel monotony at whenever you want of your time (that's what catalogs are for concerning should you request me).

-- Vincenzo Collins

Extensive guideline for book fanatics. Sure, it is engage in, nonetheless an amazing and interesting literature. I am effortlessly can get a delight of studying a composed pdf.

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