



The author's goal is a rigorous presentation of the fundamentals of analysis, starting from elementary level and moving to the advanced coursework. The curriculum of all mathematics (pure or applied) and physics programs include a compulsory course in mathematical analysis. This book will serve as can serve a main textbook of such (one semester) courses. The book can also serve as additional reading for such courses as real analysis, functional analysis, harmonic analysis etc. For non-math major students requiring math beyond calculus, this is a more friendly approach than many math-centric options.

- Friendly and well-rounded presentation of pre-analysis topics such as sets, proof techniques and systems of numbers
- Deeper discussion of the basic concept of convergence for the system of real numbers, pointing out its specific features, and for metric spaces
- Presentation of Riemann integration and its place in the whole integration theory for single variable, including the Kurzweil-Henstock integration
- Elements of multiplicative calculus aiming to demonstrate the non-absoluteness of Newtonian calculus