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Titolo	Advanced Calculus for Economics and Finance : Theory and Methods / / by Giulio Bottazzi
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Descrizione fisica	1 online resource (320 pages)
Collana	Classroom Companion: Economics, , 2662-2890
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Soggetti	Econometrics Social sciences—Mathematics Statistics Quantitative Economics Mathematics in Business, Economics and Finance Statistics in Business, Management, Economics, Finance, Insurance
Lingua di pubblicazione	Inglese
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Nota di contenuto	Chapter 1. Preliminaries -- Chapter 2. Topology -- Chapter 3. Metric Spaces -- Chapter 4. Normed Spaces -- Chapter 5. Sequences and Series -- Chapter 6. Differential Calculus of functions of one variable -- Chapter 7. Functions of several variables -- Chapter 8. Integral Calculus -- Chapter 9. Measure Theory.
Sommario/riassunto	This textbook provides a comprehensive introduction to mathematical calculus. Written for advanced undergraduate and graduate students, it teaches the fundamental mathematical concepts, methods and tools required for various areas of economics and the social sciences, such as optimization and measure theory. The reader will be introduced to topological, metric and normed spaces, learning about numerical sequences, series, and differential and integral calculus. These concepts are introduced using the axiomatic approach as a tool for logical reasoning, consistency, and formalization of ideas. The book follows a theorem-proving approach, stressing the limitations of applying the different theorems, while providing thought-provoking counter-examples. Each chapter features exercises that facilitate

learning and allow students to apply and test important concepts and tools.
