

This is a useful collection of papers and a clear indicator of the areas of topology at present attracting most interest.

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PACKEL, E. W., *Functional analysis, A short course* (International Textbook Co., 1974), xvii + 172 pp., £4.50.

This book covers the standard introductory topics of functional analysis, and the chapter headings provide a general outline : Topological linear spaces, Locally convex spaces, Banach space, Integration and measure theory, Hilbert space, Commutative Banach algebras and a spectral theorem. The spectral theorem referred to is that a normal operator and its adjoint generate a unital Banach algebra isometrically isomorphic to the algebra of continuous functions on the spectrum of the operator. The book has sufficient detail and examples to be suitable as a text for students who have a good background in linear algebra and point set topology. The background required is carefully stated in a preliminary chapter. There are a couple of results that are assumed to be known, for example, the Stone-Weierstrass theorem, that if proved in the book would have made the book more accessible to students, with only a slight increase in length. The book progresses from the general to the specific. Those who like this approach and have the necessary background will find it a good textbook.

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FOWLER, D. H., *Introducing Real Analysis* (Transworld Student Library, 1974), 127 pp., 80p.

This excellent little book is an introduction to elementary real analysis up to the Heine-Borel and Taylor's Theorems in one real variable. The author assumes that the graphical representation of a real valued function and the derivatives of some elementary functions are known. The algebraic and order properties of the rational and real numbers are discussed, and the upper bound property is defined for the reals. Continuity is developed in terms of neighbourhoods, and standard elementary results on continuity and differentiability are carefully proved. It is not suitable as the sole analysis text for a student continuing with mathematics but could assist students understanding the basic ideas in the less compromising books and lecture courses on real analysis.

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