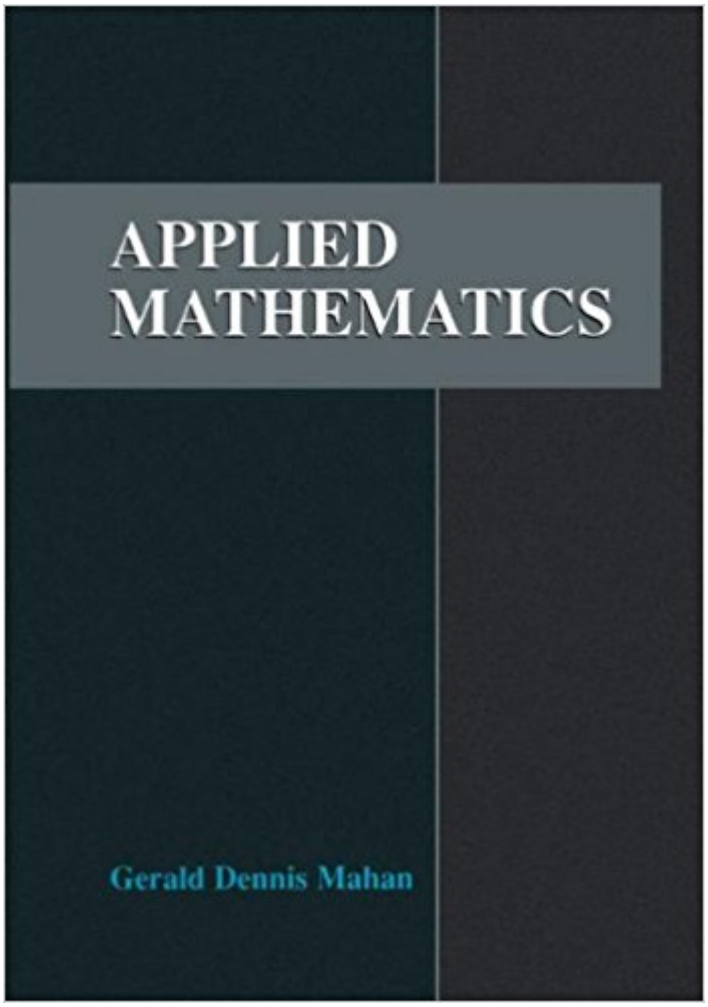
# Applied Mathematics



## Synopsis

This volume is a textbook for a year-long graduate level course in All research universities have applied mathematics for scientists and engineers. such a course, which could be taught in different departments, such as mathematics, physics, or engineering. I volunteered to teach this course when I realized that my own research students did not learn much in this course at my university. Then I learned that the available textbooks were too introducÂ- tory. While teaching this course without an assigned text, I wrote up my lecture notes and gave them to the students. This textbook is a result of that endeavor. When I took this course many, many, years ago, the primary references were the two volumes of P. M. Morse and H. Feshbach, Methods of Theoretical Physics (McGraw-Hill, 1953). The present text returns the contents to a similar level, although the syllabus is quite different than given in this venerable pair of books.

## Book Information

Hardcover: 368 pages

Publisher: Springer; 2002 edition (December 31, 2001)

Language: English

ISBN-10: 030646683X

ISBN-13: 978-0306466830

Product Dimensions: 7 x 0.9 x 10 inches

Shipping Weight: 2 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars 2 customer reviews

Best Sellers Rank: #1,373,418 in Books (See Top 100 in Books) #122 inÂ Books > Engineering & Transportation > Engineering > Materials & Material Science > Testing #359 inÂ Books > Engineering & Transportation > Engineering > Materials & Material Science > Polymers & Textiles #968 inÂ Books > Science & Math > Physics > Mathematical Physics

## Customer Reviews

`...the treatment is user-friendly. [...] The printing is excellent and the publishers are to be thanked for producing a hard back volume for what is, these days, a reasonable price. I have no hesitation giving a warm recommendation for this book.' Mathematical Reviews, 2003

Mahan's Text is an up to date exposition of applied mathematics that provides the theoretical foundations for each of the topics covered, followed by unique and insightful applications of the theory. Particularly rewarding are discussions and appications of Markov processes, Complex

analysis (including some edifying applications of conformal mapping), and Wavelet Transforms among the basic tools needed by the physicist, engineer or applied mathematician. Mahan's approach is strongly motivated by connecting physical principles with the appropriate mathematical description. It is a text which can be used in-class or for self-study thereby rewarding the reader with significant problem solving capabilities on completion of each selected topic. I highly recommend this book.

All Fine.