



Applied Mathematics

By J. David Logan



Applied Mathematics By J. David Logan

Praise for the *Third Edition*

“Future mathematicians, scientists, and engineers should find the book to be an excellent introductory text for coursework or self-study as well as worth its shelf space for reference.”

—MAA Reviews

Applied Mathematics, Fourth Edition is a thoroughly updated and revised edition on the applications of modeling and analyzing natural, social, and technological processes. The book covers a wide range of key topics in mathematical methods and modeling and highlights the connections between mathematics and the applied and natural sciences.

The *Fourth Edition* covers both standard and modern topics, including scaling and dimensional analysis; regular and singular perturbation; calculus of variations; Green’s functions and integral equations; nonlinear wave propagation; and stability and bifurcation. The book provides extended coverage of mathematical biology, including biochemical kinetics, epidemiology, viral dynamics, and parasitic disease. In addition, the new edition features:

- Expanded coverage on orthogonality, boundary value problems, and distributions, all of which are motivated by solvability and eigenvalue problems in elementary linear algebra
- Additional MATLAB® applications for computer algebra system calculations
- Over 300 exercises and 100 illustrations that demonstrate important concepts
- New examples of dimensional analysis and scaling along with new tables of dimensions and units for easy reference
- Review material, theory, and examples of ordinary differential equations
- New material on applications to quantum mechanics, chemical kinetics, and modeling diseases and viruses

Written at an accessible level for readers in a wide range of scientific fields, *Applied Mathematics, Fourth Edition* is an ideal text for introducing modern and advanced techniques of applied mathematics to upper-undergraduate and graduate-level students in mathematics, science, and engineering. The book is

also a valuable reference for engineers and scientists in government and industry.

 [Download Applied Mathematics ...pdf](#)

 [Read Online Applied Mathematics ...pdf](#)

Applied Mathematics

By J. David Logan

Applied Mathematics By J. David Logan

Praise for the *Third Edition*

“Future mathematicians, scientists, and engineers should find the book to be an excellent introductory text for coursework or self-study as well as worth its shelf space for reference.”

—MAA Reviews

Applied Mathematics, Fourth Edition is a thoroughly updated and revised edition on the applications of modeling and analyzing natural, social, and technological processes. The book covers a wide range of key topics in mathematical methods and modeling and highlights the connections between mathematics and the applied and natural sciences.

The *Fourth Edition* covers both standard and modern topics, including scaling and dimensional analysis; regular and singular perturbation; calculus of variations; Green’s functions and integral equations; nonlinear wave propagation; and stability and bifurcation. The book provides extended coverage of mathematical biology, including biochemical kinetics, epidemiology, viral dynamics, and parasitic disease. In addition, the new edition features:

- Expanded coverage on orthogonality, boundary value problems, and distributions, all of which are motivated by solvability and eigenvalue problems in elementary linear algebra
- Additional MATLAB® applications for computer algebra system calculations
- Over 300 exercises and 100 illustrations that demonstrate important concepts
- New examples of dimensional analysis and scaling along with new tables of dimensions and units for easy reference
- Review material, theory, and examples of ordinary differential equations
- New material on applications to quantum mechanics, chemical kinetics, and modeling diseases and viruses

Written at an accessible level for readers in a wide range of scientific fields, *Applied Mathematics, Fourth Edition* is an ideal text for introducing modern and advanced techniques of applied mathematics to upper-undergraduate and graduate-level students in mathematics, science, and engineering. The book is also a valuable reference for engineers and scientists in government and industry.

Applied Mathematics By J. David Logan Bibliography

- Sales Rank: #457310 in Books
- Published on: 2013-05-28
- Original language: English
- Number of items: 1
- Dimensions: 9.55" h x 1.60" w x 6.50" l, 2.27 pounds

- Binding: Hardcover
- 680 pages

 [Download Applied Mathematics ...pdf](#)

 [Read Online Applied Mathematics ...pdf](#)

Editorial Review

From the Back Cover

Praise for the *Third Edition*

"Future mathematicians, scientists, and engineers should find the book to be an excellent introductory text for coursework or self-study as well as worth its shelf space for reference."

—*MAA Reviews*

Applied Mathematics, Fourth Edition is a thoroughly updated and revised edition on the applications of modeling and analyzing natural, social, and technological processes. The book covers a wide range of key topics in mathematical methods and modeling and highlights the connections between mathematics and the applied and natural sciences.

The *Fourth Edition* covers both standard and modern topics, including scaling and dimensional analysis; regular and singular perturbation; calculus of variations; Green's functions and integral equations; nonlinear wave propagation; and stability and bifurcation. The book provides extended coverage of mathematical biology, including biochemical kinetics, epidemiology, viral dynamics, and parasitic disease. In addition, the new edition features:

- Expanded coverage on orthogonality, boundary value problems, and distributions, all of which are motivated by solvability and eigenvalue problems in elementary linear algebra
- Additional MATLAB® applications for computer algebra system calculations
- Over 300 exercises and 100 illustrations that demonstrate important concepts
- New examples of dimensional analysis and scaling along with new tables of dimensions and units for easy reference
- Review material, theory, and examples of ordinary differential equations
- New material on applications to quantum mechanics, chemical kinetics, and modeling diseases and viruses

Written at an accessible level for readers in a wide range of scientific fields, *Applied Mathematics, Fourth Edition* is an ideal text for introducing modern and advanced techniques of applied mathematics to upper-undergraduate and graduate-level students in mathematics, science, and engineering. The book is also a valuable reference for engineers and scientists in government and industry.

About the Author

J. DAVID LOGAN, PhD, is Willa Cather Professor of Mathematics at the University of Nebraska, Lincoln. He is also the author of *An Introduction to Nonlinear Partial Differential Equations, Second Edition* and *Mathematical Methods in Biology*, both published by Wiley. Dr. Logan has served on the faculties at the University of Arizona, Kansas State University, and Rensselaer Polytechnic Institute, and he has been affiliated with Los Alamos Scientific Laboratory, Lawrence Livermore National Laboratory, and the Aerospace Research Laboratory.

Users Review

From reader reviews:

Ruth Haakenson:

As people who live in the particular modest era should be up-date about what going on or information even knowledge to make these keep up with the era which can be always change and move forward. Some of you maybe will probably update themselves by studying books. It is a good choice in your case but the problems coming to an individual is you don't know which you should start with. This Applied Mathematics is our recommendation so you keep up with the world. Why, as this book serves what you want and want in this era.

Robert Farley:

Hey guys, do you wants to finds a new book to study? May be the book with the name Applied Mathematics suitable to you? Often the book was written by famous writer in this era. The actual book untitled Applied Mathematics is the main one of several books which everyone read now. That book was inspired lots of people in the world. When you read this publication you will enter the new age that you ever know before. The author explained their plan in the simple way, thus all of people can easily to recognise the core of this e-book. This book will give you a wide range of information about this world now. To help you to see the represented of the world in this particular book.

Ines Patterson:

Reading a book for being new life style in this 12 months; every people loves to learn a book. When you study a book you can get a lot of benefit. When you read textbooks, you can improve your knowledge, because book has a lot of information into it. The information that you will get depend on what types of book that you have read. If you wish to get information about your review, you can read education books, but if you want to entertain yourself you are able to a fiction books, these kinds of us novel, comics, in addition to soon. The Applied Mathematics will give you a new experience in studying a book.

Yvette Barstow:

What is your hobby? Have you heard that will question when you got students? We believe that that issue was given by teacher to the students. Many kinds of hobby, Everyone has different hobby. And you also know that little person like reading or as examining become their hobby. You have to know that reading is very important as well as book as to be the issue. Book is important thing to incorporate you knowledge, except your teacher or lecturer. You see good news or update in relation to something by book. Many kinds of books that can you choose to adopt be your object. One of them is actually Applied Mathematics.

**Download and Read Online Applied Mathematics By J. David
Logan #6K8VM29AGJZ**

Read Applied Mathematics By J. David Logan for online ebook

Applied Mathematics By J. David Logan Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Applied Mathematics By J. David Logan books to read online.

Online Applied Mathematics By J. David Logan ebook PDF download

Applied Mathematics By J. David Logan Doc

Applied Mathematics By J. David Logan Mobipocket

Applied Mathematics By J. David Logan EPub

6K8VM29AGJZ: Applied Mathematics By J. David Logan