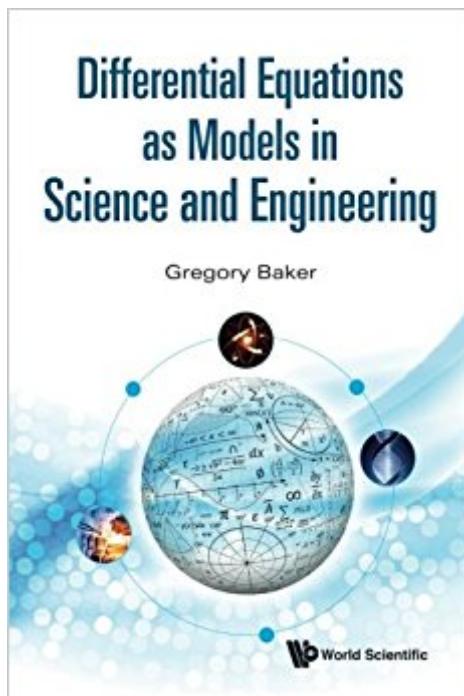


The book was found

Differential Equations As Models In Science And Engineering



Synopsis

This textbook develops a coherent view of differential equations by progressing through a series of typical examples in science and engineering that arise as mathematical models. All steps of the modeling process are covered: formulation of a mathematical model; the development and use of mathematical concepts that lead to constructive solutions; validation of the solutions; and consideration of the consequences. The volume engages students in thinking mathematically, while emphasizing the power and relevance of mathematics in science and engineering. There are just a few guidelines that bring coherence to the construction of solutions as the book progresses through ordinary to partial differential equations using examples from mixing, electric circuits, chemical reactions and transport processes, among others. The development of differential equations as mathematical models and the construction of their solution is placed center stage in this volume.

Book Information

Paperback: 300 pages

Publisher: World Scientific Publishing Co; 1 edition (February 29, 2016)

Language: English

ISBN-10: 9814656976

ISBN-13: 978-9814656979

Product Dimensions: 6.5 x 0.9 x 9.8 inches

Shipping Weight: 1.5 pounds (View shipping rates and policies)

Average Customer Review: 1.0 out of 5 stars 1 customer review

Best Sellers Rank: #361,996 in Books (See Top 100 in Books) #205 in Books > Science & Math > Mathematics > Applied > Differential Equations #2367 in Books > Textbooks > Engineering #4532 in Books > Textbooks > Science & Mathematics > Mathematics

Customer Reviews

This textbook develops a coherent view of differential equations by progressing through a series of typical examples in science and engineering that can be modeled by differential equations. All steps of the modeling process are covered: formulation of a mathematical model; mathematical concepts that lead to constructive solutions; validation of the solutions; and consideration of the consequences. The volume engages students in thinking mathematically and appreciating its relevance in science and engineering. It shows students how to solve the typical differential equations that arise in science and engineering based on just a few guiding principles. The development of mathematical models is placed center-stage in this volume.

This is the worst textbook I have used in my two years at university and by far the worst math book I've ever used. The problems are needlessly hard and expect you to do about an hour of algebra for each one. Instead of teaching you how to do the math and then considering the applications, it does the opposite and makes everything harder to understand in the process.

[Download to continue reading...](#)

Differential Equations and Boundary Value Problems: Computing and Modeling (5th Edition) (Edwards/Penney/Calvis Differential Equations) [Differential Equations, Dynamical Systems, and an Introduction to Chaos [DIFFERENTIAL EQUATIONS, DYNAMICAL SYSTEMS, AND AN INTRODUCTION TO CHAOS BY Hirsch, Morris W. (Author) Mar-26-2012] By Hirsch, Morris W. (Author) [2012) [Paperback] Student's Solutions Manual for Fundamentals of Differential Equations 8e and Fundamentals of Differential Equations and Boundary Value Problems 6e Differential Equations: Computing and Modeling (5th Edition) (Edwards/Penney/Calvis Differential Equations) Applied Partial Differential Equations with Fourier Series and Boundary Value Problems (5th Edition) (Featured Titles for Partial Differential Equations) Fundamentals of Differential Equations (8th Edition) (Featured Titles for Differential Equations) Student Solutions Manual to accompany Boyce Elementary Differential Equations 10e & Elementary Differential Equations with Boundary Value Problems 10e Differential Equations as Models in Science and Engineering Numerical Partial Differential Equations: Conservation Laws and Elliptic Equations (Texts in Applied Mathematics) (v. 33) Partial Differential Equations of Mathematical Physics and Integral Equations (Dover Books on Mathematics) Numerical Partial Differential Equations in Finance Explained: An Introduction to Computational Finance (Financial Engineering Explained) Numerical Solution of Partial Differential Equations: Finite Difference Methods (Oxford Applied Mathematics and Computing Science Series) Freezing Colloids: Observations, Principles, Control, and Use: Applications in Materials Science, Life Science, Earth Science, Food Science, and Engineering (Engineering Materials and Processes) Transformations Of Coordinates, Vectors, Matrices And Tensors Part I: LAGRANGE'S EQUATIONS, HAMILTON'S EQUATIONS, SPECIAL THEORY OF RELATIVITY AND CALCULUS ... Mathematics From 0 And 1 Book 16) How Einstein gives Dirac, Klein-Gordon and Schrödinger: Deriving the Schrödinger, Dirac and Klein-Gordon Equations from the Einstein-Field-Equations via an Intelligent Zero Calculus, Vol. 2: Multi-Variable Calculus and Linear Algebra with Applications to Differential Equations and Probability Differential Equations and Boundary Value Problems: Computing and Modeling (4th Edition) Finite Difference Methods for Ordinary and Partial Differential Equations: Steady-State and

Time-Dependent Problems (Classics in Applied Mathematics) Monotone Operators in Banach Space and Nonlinear Partial Differential Equations (Mathematical Surveys and Monographs) Differential Equations, Dynamical Systems, and an Introduction to Chaos, Second Edition (Pure and Applied Mathematics)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)