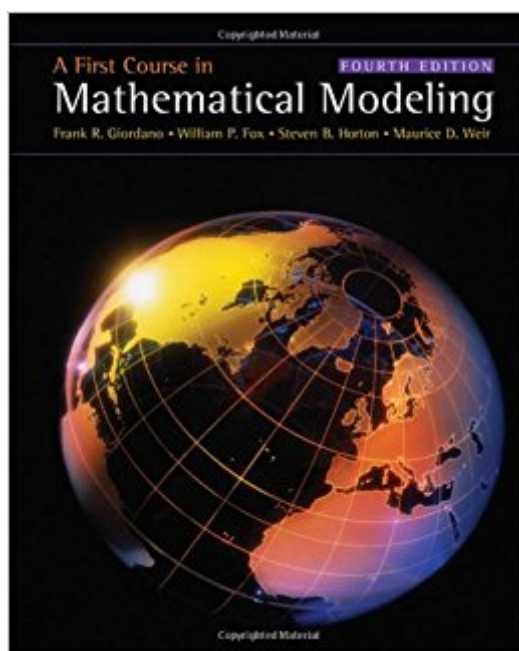The book was found

A First Course In Mathematical Modeling

Synopsis

Offering a solid introduction to the entire modeling process, A FIRST COURSE IN MATHEMATICAL MODELING, 4th Edition delivers an excellent balance of theory and practice, and gives you relevant, hands-on experience developing and sharpening your modeling skills. Throughout, the book emphasizes key facets of modeling, including creative and empirical model construction, model analysis, and model research, and provides myriad opportunities for practice. The authors apply a proven six-step problem-solving process to enhance your problem-solving capabilities -- whatever your level. In addition, rather than simply emphasizing the calculation step, the authors first help you learn how to identify problems, construct or select models, and figure out what data needs to be collected. By involving you in the mathematical process as early as possible -- beginning with short projects -- this text facilitates your progressive development and confidence in mathematics and modeling.

Book Information

Hardcover: 640 pages

Publisher: Cengage Learning; 4 edition (June 2, 2008)

Language: English

ISBN-10: 0495011592

ISBN-13: 978-0495011590

Product Dimensions: 9.3 x 7.6 x 1.2 inches

Shipping Weight: 2.6 pounds

Average Customer Review: 4.4 out of 5 stars   8 customer reviews

Best Sellers Rank: #178,215 in Books (See Top 100 in Books)   #114 inÃ Â Books > Science & Math > Mathematics > Mathematical Analysis   #1721 inÃ Â Books > Science & Math > Mathematics > Applied   #2590 inÃ Â Books > Textbooks > Science & Mathematics > Mathematics

Customer Reviews

"The authors keep a good balance of theory and practice, maintaining fidelity to the ideal of developing experience and skills in the modeling process, rather than overconcentrating on the mathematics of modeling. The revisions are thoughtful and strengthen the text, tying together more effectively the good selection of methods and applications contained in previous editions." Charles Landraitis, Boston College."The approach to modeling is very solid, and corresponds with what I have seen as useful in teaching modeling at all levels for 25 years." Stephen J. Merrill, Marquette University."The examples, projects, and exercises are excellent. Very varied and interesting, with a

good mix of topics. It is great to be able to pick and choose from among the topics and examples. At the same time, there is nothing superfluous about the coverage." Libby Krussel, The University of Montana.

Frank R. Giordano began his teaching career at the United States Military Academy, West Point, New York, where he served for 21 years, including seven years as professor and head of the Department of Mathematical Sciences. He currently is a Professor of Defense Analysis and Operations Research at the Naval Postgraduate School, Monterey, CA. He has served as project director for several major National Science Foundation grants devoted to modeling, including one to initiate a high school modeling contest (the HiMCM). For the past 15 years, he has served as the director of the Mathematical Contest in Modeling. Frank R. Giordano began his teaching career at the United States Military Academy, West Point, New York, where he served for 21 years, including seven years as professor and head of the Department of Mathematical Sciences. He currently is a Professor of Defense Analysis and Operations Research at the Naval Postgraduate School, Monterey, CA. He has served as project director for several major National Science Foundation grants devoted to modeling, including one to initiate a high school modeling contest (the HiMCM). For the past 15 years, he has served as the director of the Mathematical Contest in Modeling.William P. Fox is a professor in the Department of Defense Analysis at the Naval Postgraduate School in Monterey, CA. Previously; he was an instructor, assistant professor, associate professor, and professor of operations research while serving in the Department of Mathematical Sciences at the United States Military Academy (USMA) for more than 12 years. He also served as the Chair of Mathematics at Francis Marion University for eight years before coming to the Naval Postgraduate School. Dr. Fox has taught a variety of mathematics courses in his career, and his areas of interest include mathematical modeling, optimization, statistics, and simulations. He holds his undergraduate degree from USMA, a master's degree from the Naval Postgraduate School, and a Ph.D. from Clemson University.Steven B. Horton is professor of operations research and acting deputy head in the Department of Mathematical Sciences at the United States Military Academy (USMA), West Point. He has taught a variety of mathematics courses at West Point since joining the faculty in 1991. Dr. Horton holds his undergraduate degree from USMA, master's degrees from Georgia Tech and the National Defense University, and a Ph.D. from Georgia Tech.Maurice D. Weir is professor emeritus at the Naval Postgraduate School. He began his teaching career at Whitman College, and then in 1969 became a professor of mathematics at the Naval Postgraduate School, where he also served as associate provost for

instruction. Dr. Weir's research and teaching interests include combat systems modeling and simulation, mathematics education, mathematical modeling, and differential equations. Professor Weir won the Outstanding Civilian Service Medal from the United States Military Academy in 1986 and the Schieffelin Award for Excellence in Teaching at the Naval Postgraduate School in 1983. Professor Weir retired from teaching in 1999 but is still actively engaged in writing mathematics textbooks. He received his M.S. and D.A. degrees from Carnegie-Mellon.

this is a standard on modelling, covers the basics and is very helpful. would recommend for anyone looking to learn modelling in a straightforward manner.

I wanted to find a book that could teach me how to use math to model problems better. This book covers many different ways to make mathematical models. This book isn't going to overwhelm you with math, it shows you the pitfalls with different ways of modelling things. I recommend this book to anyone who wants to learn how to apply math to real world problems.

Solid book for good examples

It was as stated in the descriptionThank you

the book came right on time and everything was great. the best part was also the included cd rom which makes studying the various sections really nice.

I'm definitely satisfied with the quality of the book, as well as the expediancy with which it was delivered. I bought it brand new though... so I certainly would have been pretty irate if it wasn't in perfect condition.

From discrete to continuous modelling, with many proyects and examples, I like very spacially this book for the undergraduate level. The presentation is very clear, but rigurous, making experience the reader through the models. It focuses on the interpretation and ends with some tools for modelbuilding. For a start of mathematical model understanding of reality this book is specially good, clear and completely well written. Good job Mr. Giordano and Weir! See also: Mesterton-Gibbons:An aproach to Mathematical Modelling, Fowler: Mathematical Models in the Sciences, Beltrami: Mathematics for Dynamical Modeling, Morrison: The Art of Modeling Dynamical

Systams and Giordano: Differential Equations a Modeling Aproach.

Well, I was undecided about pure or applied mathematics.I was more thinking of applied mathematics.I took a course that uses this book.Two weeks after the class began, I dropped the course, and I knew I am a pure mathematics guy!(so the stars are for letting me know about what field I like, not the material presented in the book).I am not saying anyone who starts reading this book is going to switch to pure mathematics.. it should not be the case, however, I think it has the essence of applied mathematics, so if u really like applied mathematics, ur going to very much appreciate this book.

A Course in Mathematical Modeling (Mathematical Association of America Textbooks) A First Course in Mathematical Modeling The Model's Bible & Global Modeling Agency Contact List - An Insider's Guide on How to Break into the Fashion Modeling Industry Modeling Agency Tips: Get Listed with Fashion Modeling Agencies and Find Your Dream Job 3ds Max Modeling for Games: Insider's Guide to Game Character, Vehicle, and Environment Modeling: Volume I Atmospheric and Space Flight Dynamics: Modeling and Simulation with MATLABÃ Â® and SimulinkÃ Â® (Modeling and Simulation in Science, Engineering and Technology) Introduction to the Numerical Modeling of Groundwater and Geothermal Systems: Fundamentals of Mass, Energy and Solute Transport in Poroelastic Rocks (Multiphysics Modeling) Modeling Dynamic Biological Systems (Modeling Dynamic Systems) Dynamic Modeling in the Health Sciences (Modeling Dynamic Systems) 3ds Max Modeling for Games: Insider's Guide to Game Character, Vehicle, and Environment Modeling: 1 A First Course in Differential Equations with Modeling Applications A First Course in Scientific Computing: Symbolic, Graphic, and Numeric Modeling Using Maple, Java, Mathematica, and Fortran90 by Rubin H. Landau (2005-05-01) Holt Literature & Language Arts Warriner's Handbook California: Student Edition Grade 7 First Course CA First Course 2010 Holt Traditions Warriner's Handbook: Language and Sentence Skills Practice First Course Grade 7 First Course A Biologist's Guide to Mathematical Modeling in Ecology and Evolution Newton to Aristotle: Toward a Theory of Models for Living Systems (Mathematical Modeling) AMPL: A Modeling Language for Mathematical Programming Mathematical Modeling, Fourth Edition Introduction to Mathematical Modeling of Crop Growth: How the Equations are Derived and Assembled into a Computer Program Theoretical Neuroscience: Computational and Mathematical Modeling of Neural Systems (Computational Neuroscience Series)

Contact Us

DMCA

Privacy

FAQ & Help