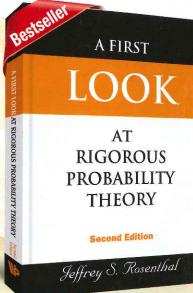




Textbook Highlights in Probability & Statistics



FREE download of solutions manual at http://goo.gl/uyH94C

A FIRST LOOK AT RIGOROUS PROBABILITY THEORY (2nd Edition)

by Jeffrey S Rosenthal (University of Toronto, Canada)

This textbook is designed for graduate students in a variety of fields (mathematics, statistics, economics, management, finance, computer science, and engineering) who require a working knowledge of probability theory that is mathematically precise, but without excessive technicalities. It is an introduction to probability theory using measure theory. The text strikes an appropriate balance, rigorously developing probability theory while avoiding unnecessary detail.

Recommended text at Northwestern University, University of Alberta, University of Toronto, and more.

Contents: The Need for Measure Theory; Probability Triples; Further Probabilistic Foundations; Expected Values; Inequalities and Convergence; Distributions of Random Variables; Stochastic Processes and Gambling Games; Discrete Markov Chains; More Probability Theorems; Weak Convergence; Characteristic Functions; Decomposition of Probability Laws; Conditional Probability and Expectation; Martingales; General Stochastic Processes.

Probability Theory Nikolai DOKUCHAEV World Scientific

- Problems and solutions to cover weekly tutorials.
- Supplementary PDF files of presentation slides for lecturers who adopt.

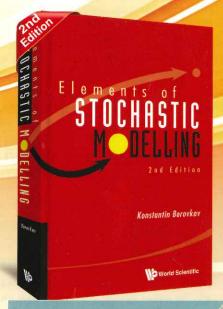
PROBABILITY THEORY

A Complete One-Semester Course by Nikolai Dokuchaev

(Curtin University, Australia)

This book provides a systematic, self-sufficient and yet short presentation of the mainstream topics on introductory Probability Theory with some selected topics from Mathematical Statistics. It is suitable for a 10- to 14-week course for second- or third-year undergraduate students in Science, Mathematics, Statistics, Finance, or Economics, who have completed some introductory course in Calculus.

Contents: Probability; Random Variables; Joint Distributions; Transformations of the Distributions; Expectation of Random Variables; Variance and Covariance; Conditional Expectations; Moment Generating Functions; Analysis of Some Important Distributions; Limit Theorems; Statistical Inference: Point Estimation; Statistical Inference: Interval Estimation; Appendices: Solutions for the Problems for Weeks 1 – 12; Sample Problems for Final Exams; Some Bonus Challenging Problems; Statistical Tables.



Broad introduction to important areas of stochastic modelling

ELEMENTS OF STOCHASTIC MODELLING

(2nd Edition)

by Konstantin Borovkov

(The University of Melbourne, Australia)

"This is a very well-written brief introduction to stochastic modeling and related topics. This is a text that every professional in the field might want to consider adding to his bookshelf. For those instructors who like the choice of topics covered, it is also a nice candidate for a very advanced undergraduate or beginning graduate course in stochastic processes for students in various fields who have very good mathematical backgrounds and previous courses in probability theory."

The American Statistician

The book reviewed the basics of probability theory and then covered the following topics: Markov chains, Markov decision processes, jump Markov processes, elements of queueing theory, basic renewal theory, elements of time series and simulation.

Readership: Advanced undergraduates, graduate students, lecturers and researchers in mathematics, statistics, actuarial sciences and economics.