The background of the cover is a chalkboard with green chalk writing. The writing is somewhat abstract and includes various letters and symbols. A purple marker is visible on the right side of the board, pointing towards the bottom right. The overall aesthetic is educational and creative.

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Textbook Catalogue Statistics 2022

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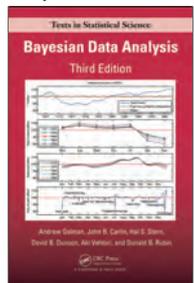
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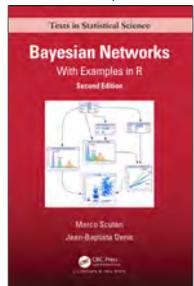
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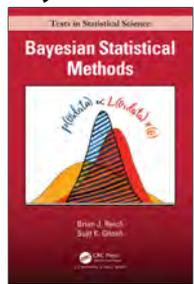
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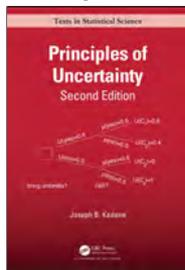
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Chapman and Hall/CRC

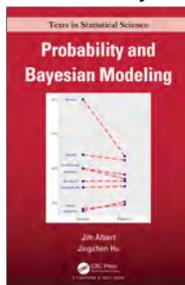
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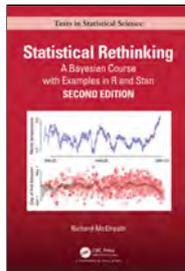
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Chapman and Hall/CRC

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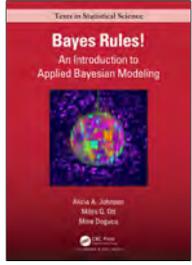
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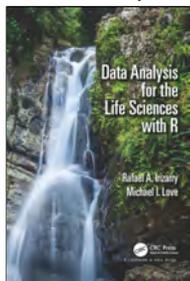
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Rafael A. Irizarry, Dept. of Biostatistics, Harvard School of Public Health, Boston, Massachusetts, USA and Michael I. Love, Dept. of Biostatistics, Harvard School of Public Health, Boston, Massachusetts, USA

This book covers several of the statistical concepts and data analytic skills needed to succeed in data-driven life science research. The authors proceed from relatively basic concepts related to computed p-values to advanced topics related to analyzing highthroughput data. They include the R code that performs this analysis and connect the lines of code to the statistical and mathematical concepts explained.

Chapman and Hall/CRC

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July 2016: 7 x 10: 376pp

Hb: 978-1-138-40720-6: £160.00

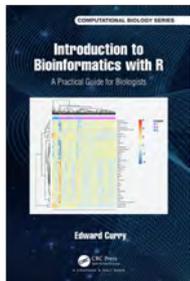
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Chapman and Hall/CRC

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November 2020: 6.14 x 9.21: 310pp

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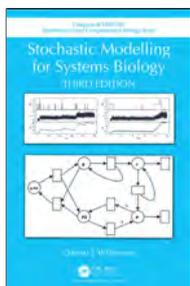
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Chapman and Hall/CRC

Market: Bioinformatics

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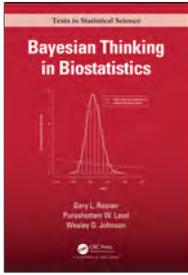
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Chapman and Hall/CRC

Market: Statistics

March 2021: 7 x 10: 621pp

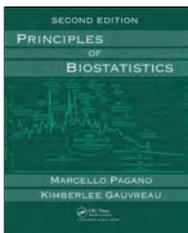
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Chapman and Hall/CRC

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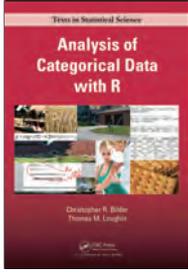
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A modern account of categorical data analysis using the popular R software, this text covers model building and assessment methods for binary, multcategory, and count response variables and discusses fundamentals, such as odds ratio and probability estimation. The authors give detailed advice and guidelines on which procedures to use and why to use them. The text

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Chapman and Hall/CRC

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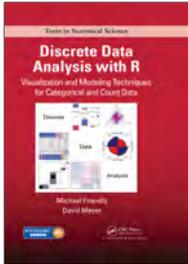
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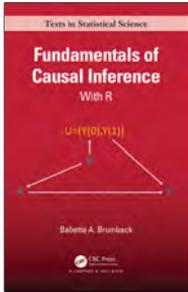
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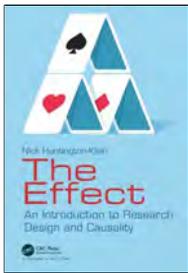
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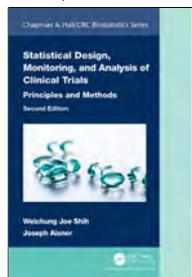
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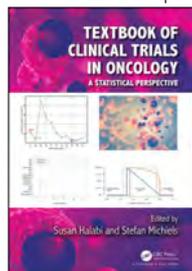
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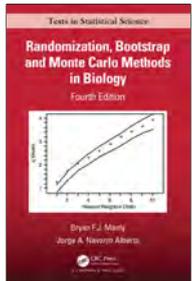
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Modern computer-intensive statistical methods play a key role in solving many problems across a wide range of scientific disciplines. Like its bestselling predecessors, the fourth edition of *Randomization, Bootstrap and Monte Carlo Methods in Biology* illustrates a large number of statistical methods with an emphasis on biological applications. The focus is now on the use of randomization, bootstrapping, and Monte Carlo methods in constructing confidence intervals and doing tests of significance. It provides comprehensive coverage of computer-intensive applications, with datasets available online.

Chapman and Hall/CRC

Market: Statistics

July 2020: 6.14 x 9.21: 358pp

Hb: 978-0-367-34994-3: **£89.99**

Pb: 978-0-367-51287-3: **£42.99**

eBook: 978-0-429-32920-3

Prev. Ed Hb: 978-1-584-88541-2

* For full contents and more information, visit: www.routledge.com/9780367349943

2nd Edition

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Data Science Methods and Tools for Research and Practice



Edited by **Ian Foster**, University of Chicago, Illinois, USA, **Rayid Ghani**, University of Chicago, Illinois, USA, **Ron S. Jarmin**, Frauke Kreuter, University of Maryland, USA; University of Mannheim, Germany; and Institute for Employment Research, Germany and **Julia Lane**, New York University; American Institutes for Research, USA
Series: Chapman & Hall/CRC Statistics in the Social and Behavioral Sciences

This classroom-tested book fills a major gap in graduate- and professional-level data science and social science education. It can be used to train a new generation of social data scientists to tackle real-world problems and improve the skills and

competencies of applied social scientists and public policy practitioners. It empowers you to use the massive and rapidly growing amounts of available data to interpret economic and social activities in a scientific and rigorous manner.

Chapman and Hall/CRC

Market: Statistics

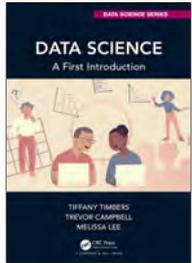
November 2020: 411pp

Hb: 978-0-367-34187-9: **£120.00**Pb: 978-0-367-56859-7: **£48.99**

eBook: 978-0-429-32438-3

* For full contents and more information, visit: www.routledge.com/9780367568597**Data Science**

A First Introduction



Tiffany Timbers, University of British Columbia, **Trevor Campbell** and **Melissa Lee**

Series: Chapman & Hall/CRC Data Science Series

Data Science: A First Introduction focuses on using the R programming language in Jupyter notebooks to perform data manipulation and cleaning, create effective visualizations, and extract insights from data using classification, regression, clustering, and inference.

The text emphasizes workflows that are clear, reproducible, and shareable, and includes coverage of the basics of version control. All source code is available online, demonstrating the use of good reproducible project workflows.

Chapman and Hall/CRC

Market: Statistics

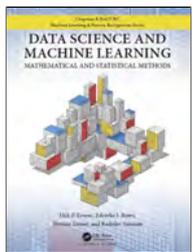
May 2022: 7 x 10: 456pp

Hb: 978-0-367-53217-8: **£112.00**Pb: 978-0-367-52468-5: **£44.99**

eBook: 978-1-003-08097-8

* For full contents and more information, visit: www.routledge.com/9780367524685**Data Science and Machine Learning**

Mathematical and Statistical Methods



Dirk P. Kroese, **Zdravko Botev**, University of New South Wales, **Thomas Taimre** and **Radislav Vaisman**

Series: Chapman & Hall/CRC Machine Learning & Pattern Recognition

The purpose of this book is to provide an accessible, comprehensive textbook in data science and machine learning. The book will provide a solid basis in linear algebra, optimization, probability, and statistics. The main body will discuss the major topics in machine learning and data science: data manipulation, supervised and unsupervised learning, modelling of data, linear models, regression, classification, principal component analysis,

deep learning, high dimensional data, regularization, kernel methods, support vector machines, etc.

Chapman and Hall/CRC

Market: Statistics

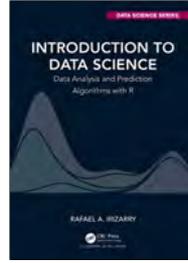
November 2019: 8.25 x 11: 532pp

Hb: 978-1-138-49253-0: **£79.99**

eBook: 978-0-367-81697-1

* For full contents and more information, visit: www.routledge.com/9781138492530**Introduction to Data Science**

Data Analysis and Prediction Algorithms with R

**Rafael A. Irizarry**

Series: Chapman & Hall/CRC Data Science Series

The book begins by going over the basics of R and the tidyverse. You learn R throughout the book, but in the first part we go over the building blocks needed to keep learning during the rest of the book.

Chapman and Hall/CRC

Market: Statistics

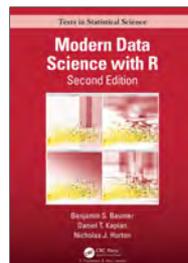
November 2019: 7 x 10: 743pp

Hb: 978-0-367-35798-6: **£74.99**

eBook: 978-0-429-34183-0

* For full contents and more information, visit: www.routledge.com/9780367357986

2nd Edition

Modern Data Science with R

Benjamin S. Baumer, Smith College, Northampton, MA, **Daniel T. Kaplan**, Macalester College, Saint Paul, Minnesota, USA and **Nicholas J. Horton**, Amherst College, Amherst, MA

Series: Chapman & Hall/CRC Texts in Statistical Science

New data technologies and database systems facilitate scraping data and merging information from different sources and formats and restructuring data into a form suitable for analysis. State-of-the-art workflow and tools foster well-documented and reproducible analysis. Modern statistical methods allow the analyst to fit and assess models as well as to undertake supervised or unsupervised learning to extract information. Contemporary data science requires tight integration of these

statistics, computing, data skills, mathematics, and communication. The text is intended for readers with some background in statistics and modest prior experience in scripting and programming.

Chapman and Hall/CRC

Market: Statistics

April 2021: 7 x 10: 650pp

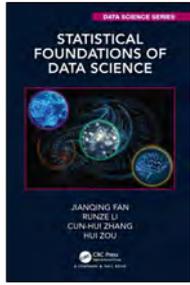
Hb: 978-0-367-19149-8: **£74.99**

eBook: 978-0-429-20071-7

Prev. Ed Hb: 978-1-498-72448-7

* For full contents and more information, visit: www.routledge.com/9780367191498

Statistical Foundations of Data Science



Jianqing Fan, Princeton University, New Jersey, USA, Runze Li, Pennsylvania State University, University Park, USA, Cun-Hui Zhang, Rutgers University, Piscataway, New Jersey, USA and Hui Zou

Series: Chapman & Hall/CRC Data Science Series

This book gives a comprehensive and systematic account of high-dimensional data analysis, including variable selection via regularization methods and sure independent feature screening methods. Offering more details on the topics than similar books, it is a valuable reference for researchers involved with model selection, variable selection, machine learning, and risk management. The book can also be used as a text for graduate and senior undergraduate students.

Chapman and Hall/CRC

Market: Statistics

August 2020: 6.14 x 9.21: 774pp

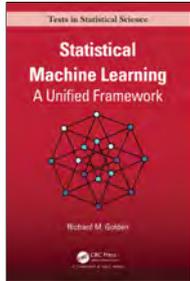
Hb: 978-1-466-51084-5: £99.99

eBook: 978-0-429-09628-0

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Statistical Machine Learning

A Unified Framework



Richard Golden

Series: Chapman & Hall/CRC Texts in Statistical Science

For advanced undergraduate students, graduate students, and professional. Presents a wide range of popular, disparate, and diverse machine learning algorithms within a unified theoretical framework, characterized by a collection of carefully chosen theorems from the fields of nonlinear optimization theory and mathematical statistics which respectively characterize both asymptotic behavior and generalization performance. The purpose is to teach students how to confidently apply these theorems in practice. The only required mathematical prerequisites are lower-division linear algebra, lower-division calculus, and an upper-division calculus-based course in

probability theory.

Chapman and Hall/CRC

Market: Statistics

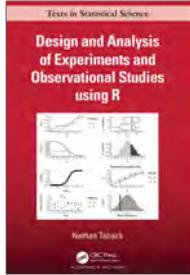
July 2020: 7 x 10: 524pp

Hb: 978-1-138-48469-6: £89.99

eBook: 978-1-351-05150-7

* For full contents and more information, visit: www.routledge.com/9781138484696

Design and Analysis of Experiments and Observational Studies using R



Nathan Taback, University of Toronto, Canada

Series: *Chapman & Hall/CRC Texts in Statistical Science*

Introduction to Design and Analysis of Scientific Studies exposes undergraduate and graduate students to the foundations of classical experimental design and observational studies through a modern framework - The Rubin Causal Model. A causal inference framework is important in design, data collection and analysis since it provides a framework for investigators to readily evaluate study limitations and draw appropriate conclusions. R is used to implement designs and analyse the data collected.

Chapman and Hall/CRC

Market: Statistics

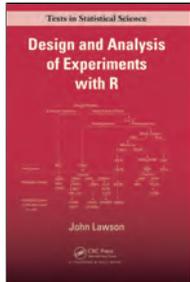
March 2021: 6.14 x 9.21: 292pp

Hb: 978-0-367-45685-6: £74.99

eBook: 978-1-003-03369-1

* For full contents and more information, visit: www.routledge.com/9780367456856

Design and Analysis of Experiments with R



John Lawson, Brigham Young University, Provo, Utah, USA

Series: *Chapman & Hall/CRC Texts in Statistical Science*

This text presents a unified treatment of experimental designs and design concepts commonly used in practice. It connects the objectives of research to the type of experimental design required, describes the process of creating the design and collecting the data, shows how to perform the proper analysis of the data, and illustrates the interpretation of results. R code is used to create and analyze all the example experiments, with the code examples available on the author's website.

Chapman and Hall/CRC

Market: Statistics

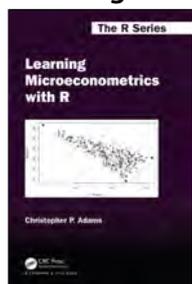
December 2014: 6.14 x 9.21: 620pp

Hb: 978-1-439-86813-3: £94.99

eBook: 978-0-429-15452-2

* For full contents and more information, visit: www.routledge.com/9781439868133

Learning Microeconometrics with R



Christopher P. Adams, Federal Trade Commission

Series: *Chapman & Hall/CRC The R Series*

This book provides an introduction to the field of microeconometrics through the use of R. The focus is on applying current learning from the field to real world problems. It uses R to both teach the concepts of the field and show the reader how the techniques can be used. It is aimed at the general reader with the equivalent of a bachelor's degree in economics, statistics or some more technical field. It covers the standard tools of microeconometrics, OLS, instrumental variables, Heckman selection and difference in difference. In addition, it introduces bounds, factor models, mixture models and empirical Bayesian analysis.

Chapman and Hall/CRC

Market: Statistics

December 2020: 6.14 x 9.21: 398pp

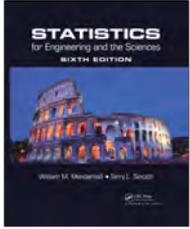
Hb: 978-0-367-25538-1: **£74.99**

eBook: 978-0-429-28833-3

* For full contents and more information, visit: www.routledge.com/9780367255381

6th Edition

Statistics for Engineering and the Sciences



William M. Mendenhall and Terry L. Sincich

Designed for a two-semester introductory course, this popular text continues to teach students the basic concepts of data description and statistical inference as well as the statistical methods necessary for real-world applications. Along with updated and reorganized material, this sixth edition includes many new and updated exercises based on contemporary engineering and scientific-related studies and real data. It also offers more statistical software printouts and corresponding instructions for use that reflect the latest versions of the SAS, SPSS, and MINITAB software.

Chapman and Hall/CRC

Market: Statistics

December 2015: 8 x 10: 1182pp

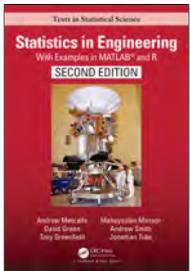
Hb: 978-1-498-72885-0: **£74.99**

* For full contents and more information, visit: www.routledge.com/9781498728850

2nd Edition

Statistics in Engineering

With Examples in MATLAB® and R



Andrew Metcalfe, University of Adelaide, Australia, David Green, Tony Greenfield, Greenfield Research, UK, Mayhayaudin Mansor, Andrew Smith and Jonathan Tuke
Series: Chapman & Hall/CRC Texts in Statistical Science

This is a textbook for an undergraduate course in statistics for engineers with a minimal calculus prerequisite. The second edition differs from existing books in three main aspects: it is the only introductory statistics textbook written for engineers that uses R throughout the text, there is an emphasis on statistical methods most relevant to engineers that are illustrated with practical applications, and there is an emphasis on random number generation and simulation, all very useful features in

engineering.

Chapman and Hall/CRC

January 2019: 7 x 10: 810pp

Hb: 978-1-439-89547-4: **£79.99**

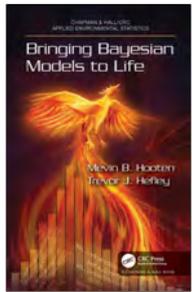
Pb: 978-0-367-57062-0: **£42.99**

eBook: 978-1-315-11723-2

Prev. Ed Hb: 978-0-412-49220-4

* For full contents and more information, visit: www.routledge.com/9781439895474

Bringing Bayesian Models to Life



Mevin B. Hooten, U.S. Geological Survey, Colorado Cooperative Fish and Wildlife Research Unit, Department of Fish, Wildlife, and Conservation Biology, Department of Statistics, Colorado State University, USA and Trevor J. Hefley
Series: Chapman & Hall/CRC Applied Environmental Statistics

Bringing Bayesian Models to Life contains a comprehensive treatment of models and associated algorithms for fitting the models to data. We provide detailed and annotated R code in each chapter and apply it to fit each model we present to either real or simulated data for instructional purposes. Our code shows how to create every result and figure in the book so that readers can use and modify it for their own analyses. We provide all code and data in an organized set of directories available at the

authors' websites.

CRC Press

Market: Agricultural Science

June 2019: 6.14 x 9.21: 590pp

Hb: 978-0-367-19848-0: £62.99

Pb: 978-1-032-09241-6: £42.99

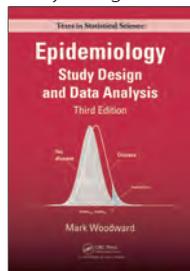
eBook: 978-0-429-24365-3

* For full contents and more information, visit: www.routledge.com/9780367198480

3rd Edition

Epidemiology

Study Design and Data Analysis



Mark Woodward, Mount Sinai Medical Centre, New York, USA

Series: Chapman & Hall/CRC Texts in Statistical Science

Updated and expanded, this popular text focuses on the quantitative aspects of epidemiological research. It shows students how statistical principles and techniques can help solve epidemiological problems. Along with more exercises and examples using both Stata and SAS, this third edition includes a new chapter on risk scores and clinical decision rules, a new chapter on computer-intensive methods, and new sections on binomial regression models, competing risk, information criteria, propensity scoring, and splines. Supporting materials are

available on the book's CRC Press web page.

Chapman and Hall/CRC

Market: Biostatistics and Epidemiology

December 2013: 7 x 10: 898pp

Hb: 978-1-439-83970-6: **£74.99**

eBook: 978-0-429-19626-3

Prev. Ed Hb: 978-1-584-88415-6

* For **full contents** and more information, visit: www.routledge.com/9781439839706

Statistics for Epidemiology

Nicholas P. Jewell, University of California, Berkeley, California, USA
University of California, Berkeley, USA
University of California, Berkeley, USA

Series edited by Martin A. Tanner

Series: Chapman & Hall/CRC Texts in Statistical Science

Written by one of the top biostatisticians in the field, *Statistics for Epidemiology* fills a substantial niche by explaining the ideas behind the analysis of epidemiological data without requiring

a high level of mathematics and without resorting to a 'cookbook' format. It covers the basic material for analyzing data that arise from simple epidemiological studies, including case-control and matched studies. Methodologically, it describes stratification techniques for handling confounding and interaction and the logistic regression model. The author uses a case-study approach, following a few simple examples through several method chapters rather than introducing a different example at each stage.

Chapman and Hall/CRC

August 2003: 6.14 x 9.21: 350pp

Hb: 978-1-584-88433-0: **£94.99**

eBook: 978-0-429-17602-9

* For **full contents** and more information, visit: www.routledge.com/9781584884330

Algorithmic Trading and Quantitative Strategies



Raja Velu, Maxence Hardy and Daniel Nehren

This book brings together the literature in main stream finance and the tools presented in quantitative finance with a focus on what is being practiced in industry. The author begins with the economic theory behind price formation and tests the model that results from the theory and suggests algorithms to detect and exploit the anomalies. The book provides a comprehensive description of the methodologies both published and unpublished, but being practiced. The strength of the book is the intuitive approach to developing algorithms – based on statistical techniques, machine learning ideas, and optimization methods.

Chapman and Hall/CRC

Market: Mathematics

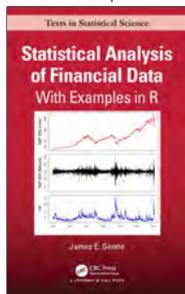
August 2020: 6.14 x 9.21: 450pp

Hb: 978-1-498-73716-6: **£89.99**

* For full contents and more information, visit: www.routledge.com/9781498737166

Statistical Analysis of Financial Data

With Examples In R



James Gentle, George Mason University

Series: *Chapman & Hall/CRC Texts in Statistical Science*

The book is about financial data, in particular, security prices and prices of derivatives, and the statistical methods for analyzing such data. It covers statistical models of branching processes, linear discrete time series models, and continuous-time stochastic models, all at an intermediate level (advanced undergraduate, or beginning graduate). The book provides a brief introduction to R and uses R extensively to get and analyze data. Actual financial datasets are discussed and analyzed.

CRC Press

Market: Statistics

March 2020: 6.14 x 9.21: 666pp

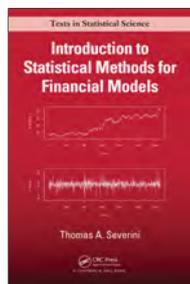
Hb: 978-1-138-59949-9: **£89.99**

Pb: 978-1-032-17346-7: **£42.99**

eBook: 978-0-429-48560-2

* For full contents and more information, visit: www.routledge.com/9781138599499

Introduction to Statistical Methods for Financial Models



Thomas A Severini, Department of Statistics, Northwestern University, USA

Series: *Chapman & Hall/CRC Texts in Statistical Science*

This book provides an introduction to the use of statistical concepts and methods to model and analyze financial data. Chapters 1 to 3 cover some basic concepts of finance, focusing on the properties of returns on an asset. Chapters 4 through 6 cover aspects of portfolio theory and the methods of estimation needed to implement that theory. The remainder of the book, Chapters 7 to 10, discusses several models for financial data, along with the implications of those models for portfolio theory and for understanding the properties of return data.

The audience for the book is students majoring in Statistics and Economics as well as in quantitative fields such as Mathematics and Engineering.

Chapman and Hall/CRC

Market: Statistics

July 2017: 6.14 x 9.21: 386pp

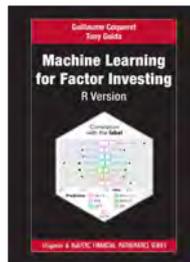
Hb: 978-1-138-19837-1: **£74.99**

Pb: 978-0-367-65787-1: **£42.99**

eBook: 978-1-315-27038-8

* For full contents and more information, visit: www.routledge.com/9781138198371

Machine Learning for Factor Investing: R Version



Guillaume Coqueret and Tony Guida

Series: *Chapman and Hall/CRC Financial Mathematics Series*

The aim of the book is to give an interpretation of ML tools through the lens of factor investing. Concepts illustrated with examples on the same (public) dataset throughout the book. Provides code samples and the corresponding results so that anybody can reproduce the steps.

Chapman and Hall/CRC

Market: Finance

September 2020: 7 x 10: 341pp

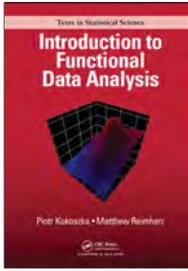
Hb: 978-0-367-47322-8: **£150.00**

Pb: 978-0-367-54586-4: **£59.99**

eBook: 978-1-003-03485-8

* For full contents and more information, visit: www.routledge.com/9780367473228

Introduction to Functional Data Analysis



Piotr Kokoszka and Matthew Reimherr

Series: *Chapman & Hall/CRC Texts in Statistical Science*

The book will provide an introduction to functional data analysis (FDA). This field of statistics has seen rapid development over the last two–three decades. At present, FDA has reached a certain maturity with its central ideas and methods crystalized; it is now generally viewed as a fundamental subfield of statistics. FDA methods have been applied to many fields of science, business and engineering. While new theoretical results, methodological tools, and novel applications are still being reported, the literature has become so vast that an introductory account will be useful to students and researchers seeking an

accessible and sufficiently comprehensive introduction to the subject.

Chapman and Hall/CRC

Market: Statistics

August 2017: 6.14 x 9.21: 302pp

Hb: 978-1-498-74634-2: **£74.99**

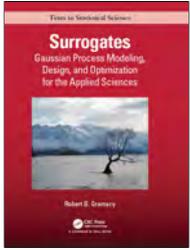
Pb: 978-1-032-09659-9: **£42.99**

eBook: 978-1-498-74662-5

* For full contents and more information, visit: www.routledge.com/9781498746342

Surrogates

Gaussian Process Modeling, Design, and Optimization for the Applied Sciences



Robert B. Gramacy, Virginia Tech Department of Statistics, USA

Series: Chapman & Hall/CRC Texts in Statistical Science

Surrogates: a graduate textbook, or professional handbook, on topics at the interface between machine learning, spatial statistics, computer simulation, meta-modeling (i.e., emulation), design of experiments, and optimization. Experimentation through simulation, "human out-of-the-loop" statistical support (focusing on the science), management of dynamic processes, online and real-time analysis, automation, and practical application are at the forefront.

Chapman and Hall/CRC

Market: Statistics

January 2020: 7 x 10: 559pp

Hb: 978-0-367-41542-6: **£89.99**

Pb: 978-1-032-24255-2: **£42.99**

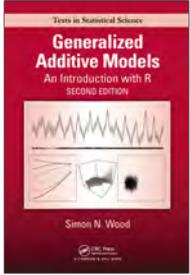
eBook: 978-0-367-81549-3

* For **full contents** and more information, visit: www.routledge.com/9780367415426

2nd Edition

Generalized Additive Models

An Introduction with R



Simon N. Wood

Series: *Chapman & Hall/CRC Texts in Statistical Science*

The first edition of this book has established itself as one of the leading references on generalized additive models (GAMs), and the only book on the topic to be introductory in nature with a wealth of practical examples and software implementation. It is self-contained, providing the necessary background in linear models, linear mixed models, and generalized linear models (GLMs), before presenting a balanced treatment of the theory and applications of GAMs and related models.

The author bases his approach on a framework of penalized regression splines, and while firmly focused on the practical aspects of GAMs, discussions include fairly full explanations of the theory underlying the methods. Use of R software helps explain the theory and illustrates the practical application of the methodology. Each chapter contains an extensive set of exercises, with solutions in an appendix or in the book's R data package gamair, to enable use as a course text or for self-study.

Chapman and Hall/CRC

Market: Statistics

May 2017: 6.14 x 9.21: 496pp

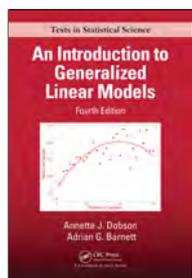
Hb: 978-1-498-72833-1: **£68.99**

eBook: 978-1-498-72836-2

Prev. Ed Hb: 978-1-584-88474-3

* For **full contents** and more information, visit: www.routledge.com/9781498728331

4th Edition

An Introduction to Generalized Linear Models

Annette J. Dobson, University of Queensland, Herston, Australia and Adrian G. Barnett, Queensland University of Technology, Kelvin Grove, Australia

Series: *Chapman & Hall/CRC Texts in Statistical Science*

This book provides a cohesive framework for statistical modelling, with an emphasis on numerical and graphical methods. This new edition of a bestseller has been updated with new sections on non-linear associations, strategies for model selection, and a Postface on good statistical practice.

Like its predecessor, it presents the theoretical background of generalized linear models (GLMs) before focusing on methods for analyzing particular kinds of data. It covers Normal, Poisson,

and Binomial distributions; linear regression models; classical estimation and model fitting methods; and frequentist methods of statistical inference. After forming this foundation, the authors explore multiple linear regression, analysis of variance (ANOVA), logistic regression, log-linear models, survival analysis, multilevel modeling, Bayesian models, and Markov chain Monte Carlo (MCMC) methods.

Chapman and Hall/CRC

Market: Statistics

April 2018: 6.14 x 9.21: 392pp

Hb: 978-1-138-74168-3: £140.00

Pb: 978-1-138-74151-5: £64.99

eBook: 978-1-315-18278-0

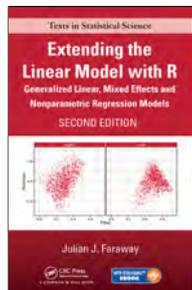
Prev. Ed Pb: 978-1-439-88919-0

* For full contents and more information, visit: www.routledge.com/9781138741515

2nd Edition

Extending the Linear Model with R

Generalized Linear, Mixed Effects and Nonparametric Regression Models



Julian J. Faraway, University of Bath, UK

Series: *Chapman & Hall/CRC Texts in Statistical Science*

This second edition of a bestseller takes advantage of the greater functionality now available in R and substantially revises and adds several topics. It expands coverage of binary and binomial responses, incorporates many new sections, and adds a chapter on the Bayesian analysis of mixed effect models. It also revamps the R code throughout and updates the exercises, with solutions now included. The text explains data analysis using real examples and includes all the R commands necessary to reproduce the analyses.

Chapman and Hall/CRC

Market: Statistics

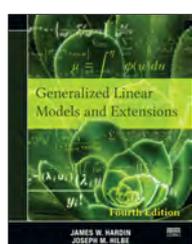
March 2016: 6.14 x 9.21: 413pp

Hb: 978-1-498-72096-0: £79.99

eBook: 978-1-498-72100-4

* For full contents and more information, visit: www.routledge.com/9781498720960

4th Edition

Generalized Linear Models and Extensions

James W. Hardin, University of South Carolina, Columbia, USA and Joseph M. Hilbe, California Institute of Technology, Pasadena, and Arizona State University, Tempe, USA

Generalized linear models (GLMs) extend linear regression to models with a non-Gaussian, or even discrete, response. In this text, Hardin and Hilbe thoroughly cover GLMs both theoretically and computationally. Theoretical discussions include properties of distributions, maximum likelihood and iteratively reweighted least-squares estimators, estimation of standard errors, and model diagnostics. The authors also demonstrate how to fit

models for continuous, binary, count, ordinal, and categorical outcomes using GLM and other Stata commands. New in the fourth edition are introductions to multivariate models and Bayesian analysis and examples of creating synthetic data for GLMs.

Stata Press

Market: Statistics

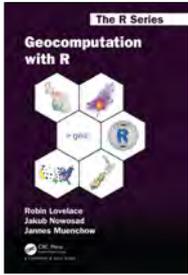
April 2018: 598pp

Pb: 978-1-597-18225-6: £65.99

Prev. Ed Pb: 978-1-597-18105-1

* For full contents and more information, visit: www.routledge.com/9781597182256

Geocomputation with R



Robin Lovelace, University of Leeds, UK, Jakub Nowosad and Jannes Muenchow, Friedrich Schiller University, Jena, Germany

Series: Chapman & Hall/CRC The R Series

This book presents a vision for an introductory and accessible textbook on geographic data analysis, modelling, and visualisation with R. The discipline of Geography captures each of these things, as well as content to get R beginners up-to-speed with R in general.

Chapman and Hall/CRC

Market: Statistics

March 2019: 6.14 x 9.21: 353pp

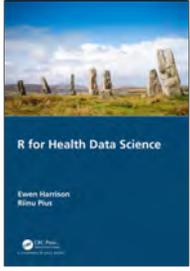
Hb: 978-1-138-30451-2: **£66.99**

Pb: 978-0-367-67057-3: **£42.99**

eBook: 978-0-203-73005-8

* For full contents and more information, visit: www.routledge.com/9781138304512

R for Health Data Science



Ewen Harrison and Riinu Pius

In this age of information, the manipulation, analysis, and interpretation of data has become a fundamental part of professional life. From the understanding of disease and the development of new treatments, to the diagnosis and management of individual patients, the use of data and technology is now an integral part of the business of healthcare. Those working in healthcare interact daily with data, often without realising it. The conversion of this avalanche of information to useful knowledge is essential for high quality patient care. R for Health Data Analysis includes everything a healthcare professional needs to go from R Novice to R Guru.

Chapman and Hall/CRC

Market: Statistics

November 2020: 7 x 10: 364pp

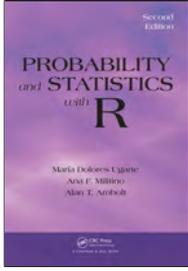
Hb: 978-0-367-42832-7: **£150.00**

Pb: 978-0-367-42819-8: **£59.99**

eBook: 978-0-367-85542-0

* For full contents and more information, visit: www.routledge.com/9780367428198

2nd Edition

Probability and Statistics with R

Maria Dolores Ugarte, Public University of Navarre, Pamplona, Spain, **Ana F. Militino**, Public University of Navarre, Pamplona, Spain and **Alan T. Arnholt**, Appalachian State University, Boone North Carolina, USA

Since the publication of the popular first edition, the contributed R packages on CRAN have increased from around 1,000 to over 6,000. This second edition explores how some of these new packages make analysis easier and more intuitive as well as create more visually pleasing graphs. Along with adding new examples and exercises, this edition improves the existing examples, problems, concepts, data, and functions. Data sets, R functions, and more are available online.

Chapman and Hall/CRC

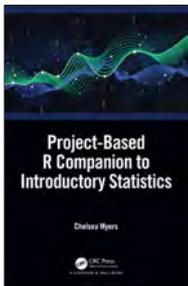
Market: Statistics

July 2015: 7 x 10: 984pp

Hb: 978-1-466-50439-4: **£84.99**

eBook: 978-0-429-09614-3

Prev. Ed Hb: 978-1-584-88891-8

* For full contents and more information, visit: www.routledge.com/9781466504394**Project-Based R Companion to Introductory Statistics****Chelsea Myers**

One of the most difficult transitions students face when beginning a first "real" job after college is moving beyond solving the well-designed problems found in textbooks to tackling the messy, complex problems they face in the real world. *Statistics: A Project-Based Approach Using R* is designed as a companion text for undergraduate students who wish to learn basic R programming and gain experience analyzing data from larger, real-world projects. Topics covered include working with R and RStudio, basic descriptive statistics, two-way tables, simple linear regression and hypothesis testing for means and proportions.

Chapman and Hall/CRC

Market: Statistics

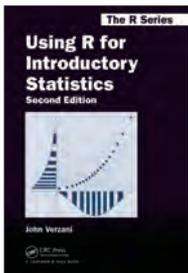
December 2020: 6 x 9: 183pp

Hb: 978-0-367-68734-2: **£115.00**Pb: 978-0-367-26208-2: **£44.99**

eBook: 978-0-429-29200-2

* For full contents and more information, visit: www.routledge.com/9780367262082

2nd Edition

Using R for Introductory Statistics

John Verzani, CUNY/College of Staten Island, New York, USA

Series: Chapman & Hall/CRC The R Series

The second edition of a bestselling textbook, *Using R for Introductory Statistics* guides students through the basics of R, helping them overcome the sometimes steep learning curve. The author does this by breaking the material down into small, task-oriented steps. The second edition maintains the features that made the first edition so popular, while updating data, examples, and changes to R in line with the current version.

Chapman and Hall/CRC

Market: Statistics

June 2014: 6.14 x 9.21: 518pp

Hb: 978-1-466-59073-1: **£54.99**

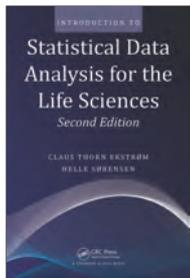
eBook: 978-1-315-37308-9

Prev. Ed Hb: 978-1-584-88450-7

* For full contents and more information, visit: www.routledge.com/9781466590731

2nd Edition

Introduction to Statistical Data Analysis for the Life Sciences



Claus Thorn Ekstrom, University of Copenhagen, Denmark and Helle Sørensen, University of Copenhagen, Denmark

Using R throughout, this popular textbook presents the right balance of data examples, statistical theory, and computing to teach introductory statistics to students in the life sciences. Expanded with over 100 more pages, this edition includes a new chapter on non-linear regression models and a new chapter that contains examples of complete data analyses. It also incorporates additional exercises in most chapters as well as a summary of statistical formulas related to the specific designs used to teach the statistical concepts.

Chapman and Hall/CRC

Market: Statistics

November 2014; 6.14 x 9.21; 528pp

Hb: 978-1-138-44574-1: **£170.00**

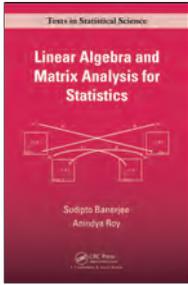
Pb: 978-1-482-23893-8: **£54.99**

eBook: 978-0-429-06942-0

Prev. Ed Pb: 978-1-439-82555-6

* For full contents and more information, visit: www.routledge.com/9781482238938

Linear Algebra and Matrix Analysis for Statistics



Sudipto Banerjee, University of California, Los Angeles, USA
and Anindya Roy, Department of Math and Statistics,
University of Maryland Baltimore County, USA

Series: *Chapman & Hall/CRC Texts in Statistical Science*

Assuming no prior knowledge of linear algebra, this self-contained text offers a gradual exposition to linear algebra without sacrificing the rigor of the subject. It presents both the vector space approach and the canonical forms in matrix theory. The book covers important topics in linear algebra that are useful for statisticians, including the concept of rank, the fundamental theorem of linear algebra, projectors, and quadratic forms. It also provides an extensive collection of exercises on theoretical concepts and numerical computations.

Chapman and Hall/CRC

Market: Statistics

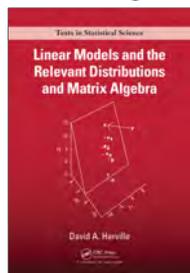
June 2014: 6 x 9: 582pp

Hb: 978-1-420-09538-8: **£74.99**

eBook: 978-0-429-17413-1

* For full contents and more information, visit: www.routledge.com/9781420095388

Linear Models and the Relevant Distributions and Matrix Algebra



David A. Harville, Iowa State (Emeritus)

Series: *Chapman & Hall/CRC Texts in Statistical Science*

The book describes the use of linear statistical models as a basis for statistical inference and the theoretical underpinnings of the resultant inferential procedures. It covers the relevant distributions and matrix algebra that is relatively complete and self-contained. Derivations or proofs are provided for almost all results; some of these are not readily available from other sources. The book includes coverage of some topics that are typically covered less extensively or not covered at all in other books on linear models; among these topics are prediction, multiple-comparison procedures for controlling the FDR, and

spherical/elliptical distributions.

Chapman and Hall/CRC

Market: Statistics

March 2018: 7 x 10: 538pp

Hb: 978-1-138-57833-3: **£120.00**

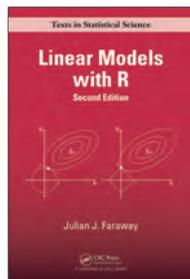
Pb: 978-0-367-57203-7: **£42.99**

eBook: 978-1-351-26468-6

* For full contents and more information, visit: www.routledge.com/9781138578333

2nd Edition

Linear Models with R



Julian J. Faraway, University of Bath, UK

Series: *Chapman & Hall/CRC Texts in Statistical Science*

Like its widely praised, best-selling predecessor, this second edition explains how to use linear models in physical science, engineering, social science, and business applications. The material on interpreting linear models now distinguishes the main applications of prediction and explanation and introduces elementary notions of causality. This edition also covers QR decomposition, splines, additive models, Lasso, multiple imputation, and false discovery rates. It extensively uses R's ggplot2 graphics package in addition to base graphics.

Chapman and Hall/CRC

Market: Statistics

July 2014: 6.14 x 9.21: 286pp

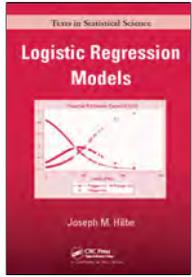
Hb: 978-1-439-88733-2: **£79.99**

eBook: 978-0-429-11171-6

Prev. Ed Hb: 978-1-584-88425-5

* For full contents and more information, visit: www.routledge.com/9781439887332

Logistic Regression Models



Joseph M. Hilbe, California Institute of Technology, Pasadena, and Arizona State University, Tempe, USA
Series: Chapman & Hall/CRC Texts in Statistical Science

Logistic regression is increasingly being taught in individual short courses or as a major component of a course on categorical data analysis. Based on a successful short course taught by the author, this text provides an overview of logistic regression models with a particular emphasis on their practical application. It covers the basic derivation of logistic models, their interpretation, various goodness-of-fit tests, overdispersion and how it can be handled, how models can be ill-fitted, and several extended models. Full of examples of real data taken from the medical and social sciences, the text implements the examples using Stata and R.

Chapman and Hall/CRC

May 2017: 6.14 x 9.21: 656pp

Hb: 978-1-420-07575-5: **£140.00**

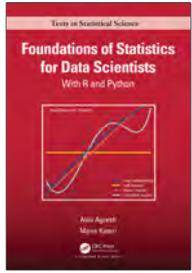
Pb: 978-1-138-10671-0: **£48.99**

eBook: 978-0-429-14913-9

* For full contents and more information, visit: www.routledge.com/9781138106710

Foundations of Statistics for Data Scientists

With R and Python



Alan Agresti and Maria Kateri

Series: *Chapman & Hall/CRC Texts in Statistical Science*

Designed as a textbook for a one or two-term introduction to mathematical statistics for students training to become data scientists, *Foundations of Statistics for Data Scientists: With R and Python* is an in-depth presentation of the topics in statistical science

Chapman and Hall/CRC

Market: Statistics

November 2021: 7 x 10: 486pp

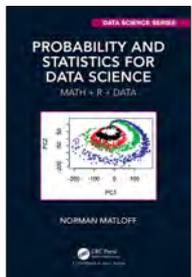
Hb: 978-0-367-74845-6: £74.99

eBook: 978-1-003-15983-4

* For full contents and more information, visit: www.routledge.com/9780367748456

Probability and Statistics for Data Science

Math + R + Data



Norman Matloff, Dept. of Computer Science, Univ. of California, Davis

Series: *Chapman & Hall/CRC Data Science Series*

This text is designed for a one-semester junior/senior/graduate-level calculus-based course on probability and statistics, aimed specifically at data science students (including computer science). In addition to calculus, the text assumes basic knowledge of matrix algebra and rudimentary computer programming. The key difference is the consistently applied approach, pervasive throughout the book. The overriding goal is to stay mathematically precise, yet emphasize intuition, modeling and applications.

Chapman and Hall/CRC

Market: Statistics

June 2019: 6 x 9: 444pp

Hb: 978-0-367-26093-4: £140.00

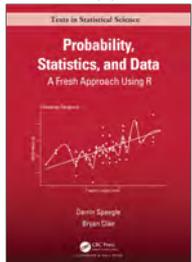
Pb: 978-1-138-39329-5: £52.99

eBook: 978-0-429-40186-2

* For full contents and more information, visit: www.routledge.com/9781138393295

Probability, Statistics, and Data

A Fresh Approach Using R



Darrin Speegle, Department of Mathematics and Statistics Saint Louis University, MO, USA and Bryan Clair, Saint Louis University, MO, USA

Series: *Chapman & Hall/CRC Texts in Statistical Science*

This book is a first course in probability and statistics using R. The book assumes a mathematical background of Calculus II, though much of the book can be read with a much lower level of mathematics. The book incorporates R throughout all sections via simulations, data wrangling and/or data visualization. Tidyverse and base R tools are interspersed, depending on which is better for a particular job. For most visualizations, ggplot is used, and for most data wrangling, dplyr is used.

Chapman and Hall/CRC

Market: Statistics

November 2021: 7 x 10: 512pp

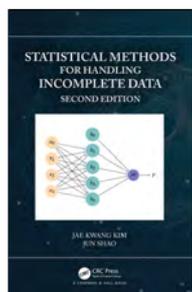
Hb: 978-0-367-43667-4: £74.99

eBook: 978-1-003-00489-9

* For full contents and more information, visit: www.routledge.com/9780367436674

2nd Edition

Statistical Methods for Handling Incomplete Data



Jae Kwang Kim and Jun Shao

Due to recent theoretical findings and advances in statistical computing, there has been a rapid development of techniques and applications in the area of missing data analysis. Statistical Methods for Handling Incomplete Data covers the most up-to-date statistical theories and computational methods for analyzing incomplete data.

The book is primarily aimed at researchers and graduate students from statistics, and could be used as a reference by applied researchers with a good quantitative background. It includes many real data examples and simulated examples to help readers understand the methodologies.

Chapman and Hall/CRC

Market: Statistics

November 2021: 6.14 x 9.21: 380pp

Hb: 978-0-367-28054-3: **£89.99**

eBook: 978-0-429-32174-0

Prev. Ed Hb: 978-1-439-84963-7

* For full contents and more information, visit: www.routledge.com/9780367280543

2nd Edition

Multivariate Analysis for the Behavioral Sciences

Kimmo Vehkalahti and Brian S. Everitt, King's College, University of London, England, UK

Series: *Chapman & Hall/CRC Statistics in the Social and Behavioral Sciences*

Multivariate Analysis for the Behavioral Sciences, Second Edition is designed to show how a variety of statistical methods can be used to analyse data collected by psychologists and other behavioral scientists. Assuming some familiarity with introductory statistics, the book begins by briefly describing a variety of study designs used in the behavioral sciences, and the concept of models for data analysis. The contentious issues of p-values and confidence intervals are also discussed in the introductory chapter.

CRC Press

Market: Statistics

January 2019: 6.14 x 9.21: 437pp

Hb: 978-0-815-38515-8: £69.99

Pb: 978-0-367-65675-1: £42.99

eBook: 978-1-351-20227-5

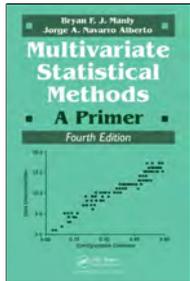
Prev. Ed Hb: 978-1-439-80769-9

* For full contents and more information, visit: www.routledge.com/9780815385158

4th Edition

Multivariate Statistical Methods

A Primer



Bryan F.J. Manly, University of Otago, Dunedin, New Zealand and Jorge A. Navarro Alberto

Multivariate Statistical Methods: A Primer provides an introductory overview of multivariate methods without getting too deep into the mathematical details. This fourth edition is a revised and updated version of this bestselling introductory textbook. It retains the clear and concise style of the previous editions of the book and focuses on examples from biological and environmental sciences. The major update with this edition is that R code has been included for each of the analyses described, although in practice any standard statistical package can be used.

Chapman and Hall/CRC

Market: Statistics

October 2016: 6.14 x 9.21: 269pp

Hb: 978-1-138-46942-6: £170.00

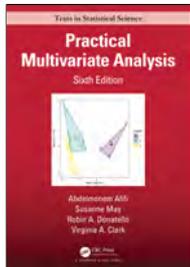
Pb: 978-1-498-72896-6: £46.99

eBook: 978-1-498-72898-0

Prev. Ed Pb: 978-1-584-88414-9

* For full contents and more information, visit: www.routledge.com/9781498728966

6th Edition

Practical Multivariate Analysis

Abdelmonem Afifi, University of California, Los Angeles, USA, Susanne May, University of Washington, Seattle, USA, Robin Donatello, UCLA and Virginia A. Clark, Consultant, Sequim, Washington, USA

Series: *Chapman & Hall/CRC Texts in Statistical Science*

This is the sixth edition of a popular textbook on multivariate analysis. Well-regarded for its practical and accessible approach, with excellent examples and good guidance on computing, the book is particularly popular for teaching outside statistics, i.e. in epidemiology, social science, business, etc. The sixth edition has been updated with a new chapter on data visualization, and many new updates and references throughout. This new edition

will enable the book to continue as one of the leading textbooks in the area, particularly for non-statisticians.

Chapman and Hall/CRC

Market: Statistics

October 2019: 7 x 10: 434pp

Hb: 978-1-138-70222-6: £79.99

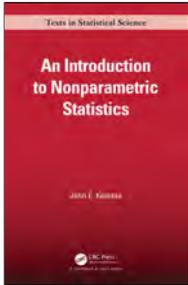
Pb: 978-1-032-08847-1: £42.99

eBook: 978-1-315-20373-7

Prev. Ed Hb: 978-1-439-81680-6

* For full contents and more information, visit: www.routledge.com/9781138702226

An Introduction to Nonparametric Statistics



John E. Kolassa

Series: *Chapman & Hall/CRC Texts in Statistical Science*

This book presents the theory and practice of non-parametric statistics, with an emphasis on motivating principals. The course is a combination of traditional rank based methods and more computationally-intensive topics like density estimation, kernel smoothers in regression, and robustness. The text is aimed at MS students.

Chapman and Hall/CRC

Market: Statistics

September 2020: 6.14 x 9.21: 224pp

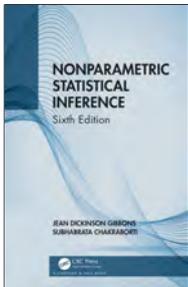
Hb: 978-0-367-19484-0: £79.99

eBook: 978-0-429-20275-9

* For full contents and more information, visit: www.routledge.com/9780367194840

6th Edition

Nonparametric Statistical Inference



Jean Dickinson Gibbons and Subhabrata Chakraborti

Since its first publication in 1971, Nonparametric Statistical Inference has been widely regarded as the source for learning about nonparametrics. The sixth edition carries on this tradition and incorporates computer solutions based on R and has been thoroughly revised and rewritten to make it more readable and reader-friendly. All of the R solutions are new and make this book much more useful for applications in the modern times. It has been updated throughout and contains 100 new citations, including some of the most recent, to make it more current and useful for researchers.

Chapman and Hall/CRC

Market: Statistics

December 2020: 6.14 x 9.21: 694pp

Hb: 978-1-138-08744-6: £89.99

eBook: 978-1-315-11047-9

Prev. Ed Hb: 978-1-420-07761-2

* For full contents and more information, visit: www.routledge.com/9781138087446

Nonparametric Statistical Methods Using R



John Kloke and Joseph McKean

Series: *Chapman & Hall/CRC Texts in Statistical Science*

This book covers traditional nonparametric methods and rank-based analyses, including estimation and inference for models ranging from simple location models to general linear and nonlinear models for uncorrelated and correlated responses. The authors emphasize applications and statistical computation. They illustrate the methods with many real and simulated data examples using R, including the packages Rfit and npsm, which are available on CRAN. Each chapter includes exercises, making the book suitable for an undergraduate or graduate course.

Chapman and Hall/CRC

Market: Statistics

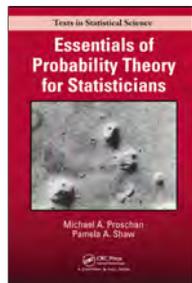
October 2014: 6.14 x 9.21: 287pp

Hb: 978-1-439-87343-4: £74.99

Pb: 978-0-367-73972-0: £42.99

* For full contents and more information, visit: www.routledge.com/9781439873434

Essentials of Probability Theory for Statisticians



Michael A. Proschan, National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), Bethesda, Maryland, USA and **Pamela A. Shaw**

Series: *Chapman & Hall/CRC Texts in Statistical Science*

This text provides graduate students with a rigorous treatment of probability theory, with an emphasis on results central to theoretical statistics. It presents classical probability theory motivated with illustrative examples in biostatistics, such as outlier tests, monitoring clinical trials, and using adaptive methods to make design changes based on accumulating data. In addition, counterexamples further clarify nuances in meaning and expose common fallacies in logic. The authors explain different methods of proofs and show how they are useful for

establishing classic probability results.

Chapman and Hall/CRC

Market: Statistics

March 2016: 344pp

Hb: 978-1-498-70419-9: **£79.99**

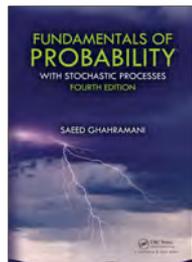
Pb: 978-0-367-87163-5: **£52.99**

* For full contents and more information, visit: www.routledge.com/9781498704199

4th Edition

Fundamentals of Probability

With Stochastic Processes



Saeed Ghahramani, Western New England University, Springfield, Massachusetts, USA

The book covers all topics that are used in a calculus-based junior-senior probability course plus some additional material. With the extensive chapters in Stochastic Processes, it can also be used as a text for a second course in probability. The historical roots and applications of many of the theorems and definitions are presented in detail, accompanied by suitable examples or counterexamples.

Chapman and Hall/CRC

Market: Statistics

September 2018: 7 x 10: 652pp

Hb: 978-1-498-75509-2: **£99.99**

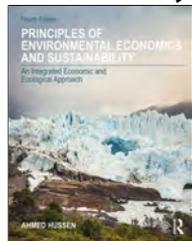
eBook: 978-0-429-45795-1

Prev. Ed Hb: 978-1-498-75501-6

* For full contents and more information, visit: www.routledge.com/9781498755092

4th Edition

Principles of Environmental Economics and Sustainability



Ahmed Hussen, Kalamazoo College, USA

Principles of Environmental Economics and Sustainability presents a unique integration of both mainstream and ecological approaches to environmental economics. It introduces relevant mainstream economic theories and methodologies while incorporating the idea that it is essential to focus on the links between economic, social, and ecological systems. The 4th edition of this student-friendly textbook contains a variety of study tools and is supported by a companion website. Updated throughout and with substantially revised material on climate change and ecosystem services, this is an ideal text for any

environmental and/or ecological economics class.

Routledge

Market: Economics, Environmental Studies and International Business

July 2018: 7.44 x 9.69: 440pp

Hb: 978-0-815-36353-8: **£120.00**

Pb: 978-0-815-36354-5: **£59.99**

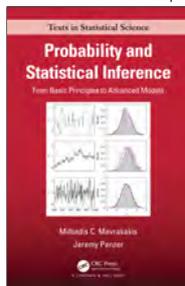
eBook: 978-1-351-10911-6

Prev. Ed Pb: 978-0-415-67691-5

* For full contents and more information, visit: www.routledge.com/9780815363545

Probability and Statistical Inference

From Basic Principles to Advanced Models



Miltiadis C. Mavroukakis, Imperial College London, United Kingdom and **Jeremy Penzer**, London School of Economics, UK

Series: *Chapman & Hall/CRC Texts in Statistical Science*

This book covers aspects of probability, distribution theory, and inference that are fundamental to a proper understanding of data analysis and statistical modelling. It presents these topics in an accessible manner without sacrificing mathematical rigour, bridging the gap between the many excellent introductory books and the more advanced, graduate-level texts. The book introduces and explores techniques that are relevant to modern practitioners, while being respectful to the history of statistical inference. It seeks to provide a thorough grounding in both the

theory and application of statistics, with even the more abstract parts placed in the context of a practical setting.

Chapman and Hall/CRC

Market: Statistics

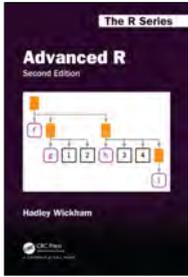
March 2021: 6.14 x 9.21: 444pp

Hb: 978-1-584-88939-7: **£74.99**

eBook: 978-1-584-88940-3

* For full contents and more information, visit: www.routledge.com/9781584889397

2nd Edition Advanced R



Hadley Wickham

Series: Chapman & Hall/CRC The R Series

Advanced R presents useful tools and techniques for attacking many types of R programming problems, helping you avoid mistakes and dead ends. With more than ten years of experience programming in R, the author illustrates the elegance, beauty, and flexibility at the heart of R. The book develops the necessary skills to produce quality code that can be used in a variety of circumstances. You will learn: The fundamentals of R, including standard data types and functions Functional programming as a useful framework for solving wide classes of problems The positives and negatives of metaprogramming How to write fast, memory-efficient code

Chapman and Hall/CRC

Market: Statistics

May 2019: 6.14 x 9.21: 604pp

Hb: 978-0-367-25537-4: **£150.00**

Pb: 978-0-815-38457-1: **£44.99**

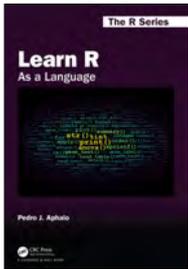
eBook: 978-1-351-20131-5

Prev. Ed Pb: 978-1-466-58696-3

* For full contents and more information, visit: www.routledge.com/9780815384571

Learn R

As a Language



Pedro J. Aphalo, University of Helsinki, Faculty of Biological and Environmental Sciences

Series: Chapman & Hall/CRC The R Series

This book teaches how to use the R for data analysis. However, it goes beyond a cookbook approach, and instead focuses on how to use R to flexibly explore and analyse data to efficiently and reliably extract information. Using this book, the reader will become confident and reasonably independent in the use of R when faced with new challenges. They will learn their way around in the R "ecosystem" and pick it up like a child would learn a language –explore, employ it, learn from mistakes, and recognise patterns and the coding philosophy behind R. The

book is for everyone who wants to use R for complex statistical analysis and who wants to gain more self-confidence in their use of R.

Chapman and Hall/CRC

Market: Statistics

July 2020: 7 x 10: 364pp

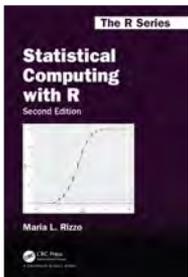
Hb: 978-0-367-18255-7: **£140.00**

Pb: 978-0-367-18253-3: **£52.99**

eBook: 978-0-429-06034-2

* For full contents and more information, visit: www.routledge.com/9780367182533

2nd Edition Statistical Computing with R



Maria L. Rizzo, Bowling Green State University, Ohio, USA

Series: Chapman & Hall/CRC The R Series

Computational statistics and statistical computing are two areas that employ computational, graphical, and numerical approaches to solve statistical problems, making the versatile R language an ideal computing environment for these fields. This second edition continues to encompass the traditional core material of computational statistics, with an emphasis on using the R language via an examples-based approach. It includes R code for all examples and R notes to help explain the R programming concepts. This edition also features a new chapter on nonparametric regression and smoothing.

Chapman and Hall/CRC

Market: Statistics

March 2019: 6.14 x 9.21: 490pp

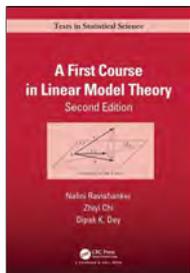
Hb: 978-1-466-55332-3: **£59.99**

eBook: 978-0-429-19276-0

Prev. Ed Hb: 978-1-584-88545-0

* For full contents and more information, visit: www.routledge.com/9781466553323

2nd Edition

A First Course in Linear Model Theory

Nalini Ravishanker, University of Connecticut, Storrs, USA,
Zhiyi Chi, University of Connecticut and Dipak K. Dey,
University of Connecticut, Storrs, USA

Series: *Chapman & Hall/CRC Texts in Statistical Science*

This book represents an entirely fresh approach for introducing to students the mathematical and statistical concepts and tools that form the backbone for the study of the theory and applications of linear models, both univariate and multivariate. This second edition features several new topics that are extremely relevant to the current research in statistical methodology. Revised or expanded topics include analysis of covariance, Bayesian linear and generalized linear model,

nonlinear regression, ridge regression, resistant and robust regression, generalized linear models, model selection, multiple comparisons, hierarchical linear models, random effects and variance components.

Chapman and Hall/CRC

Market: Statistics

October 2021: 7 x 10: 530pp

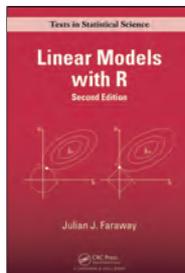
Hb: 978-1-439-85805-9: **£74.99**

eBook: 978-1-315-15665-1

Prev. Ed Hb: 978-1-584-88247-3

* For full contents and more information, visit: www.routledge.com/9781439858059

2nd Edition

Linear Models with R

Julian J. Faraway, University of Bath, UK

Series: *Chapman & Hall/CRC Texts in Statistical Science*

Like its widely praised, best-selling predecessor, this second edition explains how to use linear models in physical science, engineering, social science, and business applications. The material on interpreting linear models now distinguishes the main applications of prediction and explanation and introduces elementary notions of causality. This edition also covers QR decomposition, splines, additive models, Lasso, multiple imputation, and false discovery rates. It extensively uses R's ggplot2 graphics package in addition to base graphics.

Chapman and Hall/CRC

Market: Statistics

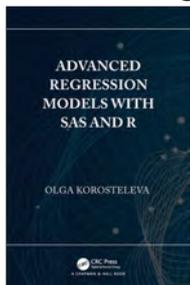
July 2014: 6.14 x 9.21: 286pp

Hb: 978-1-439-88733-2: **£79.99**

eBook: 978-0-429-11171-6

Prev. Ed Hb: 978-1-584-88425-5

* For full contents and more information, visit: www.routledge.com/9781439887332

Advanced Regression Models with SAS and R

Olga Korosteleva, California State University, Long Beach, USA

The material covered by this book consists of a collection of regression models beyond linear regression. The linear regression model is presented in the first chapter in order to refresh the reader's memory, emphasize certain points, and set the notation. The subsequent chapters talk about models for categorical data, count data, proportions, longitudinal data, hierarchical data, and others.

Chapman and Hall/CRC

Market: Statistics

December 2018: 7 x 10: 324pp

Hb: 978-1-138-04901-7: **£79.99**

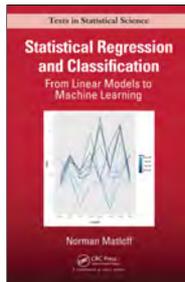
Pb: 978-0-367-73242-4: **£42.99**

eBook: 978-1-315-16982-8

* For full contents and more information, visit: www.routledge.com/9781138049017

Statistical Regression and Classification

From Linear Models to Machine Learning



Norman Matloff, Dept. of Computer Science, Univ. of California, Davis

Series: *Chapman & Hall/CRC Texts in Statistical Science*

This text provides a modern introduction to regression and classification with an emphasis on big data and R. Each chapter is partitioned into a main body section and an "extras" section. The main body uses math stat very sparingly and always in the context of something concrete, which means that readers can skip the math stat content entirely if they wish. The "extras" section is for those who feel comfortable with analysis using math stat.

Chapman and Hall/CRC

Market: Statistics

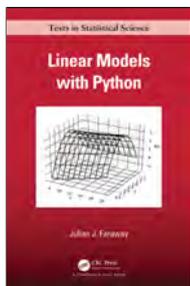
August 2017: 6.14 x 9.21: 528pp

Hb: 978-1-138-06646-5: **£130.00**

Pb: 978-1-498-71091-6: **£59.99**

eBook: 978-1-315-11958-8

* For full contents and more information, visit: www.routledge.com/9781498710916

Linear Models with Python

Julian J. Faraway

Series: *Chapman & Hall/CRC Texts in Statistical Science*

Like its widely praised, best-selling companion version, *Linear Models with R*, this book replaces R with Python to seamlessly give a coherent exposition of the practice of linear modeling. *Linear Models with Python* offers up-to-date insight on essential data analysis topics, from estimation, inference, and prediction to missing data, factorial models, and block designs. Numerous examples illustrate how to apply the different methods using Python. *Linear Models with Python* explains how to use linear models in physical science, engineering, social science, and business applications. It is ideal as a textbook for linear models or linear regression courses.

Chapman and Hall/CRC

Market: Statistics

December 2020: 6.14 x 9.21: 308pp

Hb: 978-1-138-48395-8: **£74.99**

eBook: 978-1-351-05341-9

* For full contents and more information, visit: www.routledge.com/9781138483958

SAS Programming for Elementary Statistics

Getting Started



Carla L. Goad, Oklahoma State University, Department of Statistics

This textbook provides an introduction to SAS Programming for elementary statistical methods. It does not require any previous experience of SAS, but the reader is assumed to have a basic understanding of statistics. It covers the basics of programming, including creation of datasets in SAS, debugging a program, and the overall construction of a SAS program. It covers all DATA Step operations, t-tests, confidence intervals, simple linear regression, and ANOVA. The book is full of examples and computer-based exercises, and has been developed from the vast experience of the author teaching from the material over

many years.

Chapman and Hall/CRC

Market: Statistics

December 2020: 7 x 10: 398pp

Hb: 978-1-138-58909-4: **£140.00**

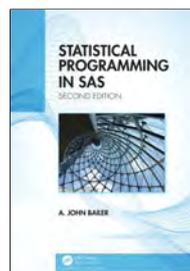
Pb: 978-1-138-58902-5: **£52.99**

eBook: 978-0-429-49190-0

* For **full contents** and more information, visit: www.routledge.com/9781138589025

2nd Edition

Statistical Programming in SAS



A. John Bailer

The book focuses on good programming and coding practice for producing data sets for later analyses, using simulation studies to explore statistical concepts and employing computationally intensive methods. Many of the topics included in the SAS Base Certification exam are included in this book along with topics such as SQL and Macros that are extensively considered in the SAS Advanced Certification Exam. Topics beyond either of these exams are also discussed such as high-quality graphical displays and text processing.

Chapman and Hall/CRC

Market: Statistics

December 2019: 7 x 10: 378pp

Hb: 978-0-367-35800-6: **£150.00**

Pb: 978-0-367-35797-9: **£62.99**

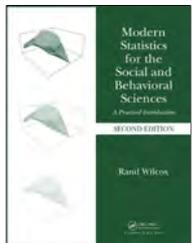
eBook: 978-0-429-34184-7

* For **full contents** and more information, visit: www.routledge.com/9780367357979

2nd Edition

Modern Statistics for the Social and Behavioral Sciences

A Practical Introduction

**Rand Wilcox**, University of Southern California, Los Angeles

Designed for a two-semester, introductory course for graduate students in the social sciences, this text illustrates how to use R to apply both standard and modern methods to correct known problems with classic techniques. Numerous illustrations provide a conceptual basis for understanding why practical problems with classic methods were missed for so many years, and why modern techniques have practical value. The second edition will add coverage of advances in regression, such as new insights regarding smoothers. New results on comparing medians would be included and quite a few improvements

relevant to ANCOVA will be added. In addition, new R functions will be described.

Chapman and Hall/CRC

Market: Statistics

August 2017; 8.25 x 11; 754pp

Hb: 978-1-498-79678-1: **£100.00**Pb: 978-0-367-73596-8: **£42.99**

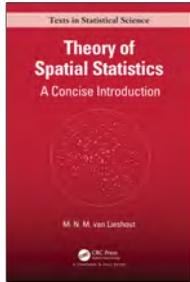
eBook: 978-1-498-79681-1

Prev. Ed Hb: 978-1-439-83456-5

* For full contents and more information, visit: www.routledge.com/9781498796781

Theory of Spatial Statistics

A Concise Introduction



M.N.M. van Lieshout, National Research Institute for Mathematics & Computer Science

Series: *Chapman & Hall/CRC Texts in Statistical Science*

Spatial data are collected in various ways, for example, weather maps, soil samples, incident patterns, microscopical slices, satellite, radar, or X-ray images. The statistical analysis of spatial data is treated as a separate topic, as it is different from classical statistical data in a number of ways. This book presents a concise introduction to the theory underlying the analysis of the main types of spatial data. It includes examples to illustrate the topics, including R code for their implementation, as well as exercises to support course teaching and self-study.

Chapman and Hall/CRC

Market: Statistics

March 2019; 6.14 x 9.21; 182pp

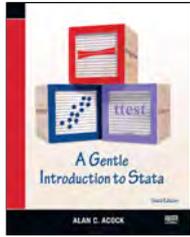
Hb: 978-0-367-14642-9; **£140.00**

Pb: 978-0-367-14639-9; **£52.99**

eBook: 978-0-429-05286-6

* For full contents and more information, visit: www.routledge.com/9780367146399

6th Edition

A Gentle Introduction to Stata

Alan C. Acock, Oregon State University, Corvallis, USA

This volume is aimed at new Stata users who want to become proficient in Stata. It assumes that the user is not familiar with any statistical software. It covers all aspects of using Stata, starting with the basics and including some more advanced topics. It includes notes that will help the reader develop good work habits, as well as exercises to reinforce the material. The sixth edition incorporates new features of Stata 15, with all material updated and new sections added.

Stata Press

Market: Statistics

April 2018: 7.44 x 9.69: 570pp

Pb: 978-1-597-18269-0: **£60.99**

Prev. Ed Pb: 978-1-597-18185-3

* For full contents and more information, visit: www.routledge.com/9781597182690

Computer Intensive Methods in Statistics



Silvelyn Zwanzig, Uppsala University, Sweden and Behrang Mahjani, Uppsala University, Sweden

This textbook gives an overview of statistical methods that have been developed during the last years due to increasing computer use, including random number generators, Monte Carlo methods, Markov Chain Monte Carlo (MCMC) methods, Bootstrap, EM algorithms, SIMEX, variable selection, density estimators, kernel estimators, orthogonal and local polynomial estimators, wavelet estimators, splines, and model assessment. *Computer Intensive Methods in Statistics* is written for students at graduate level, but can also be used by practitioners.

Chapman and Hall/CRC

Market: Statistics

December 2019: 6.14 x 9.21: 436pp

Hb: 978-0-367-19425-3: **£130.00**

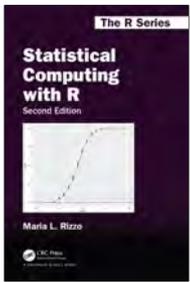
Pb: 978-0-367-19423-9: **£48.99**

eBook: 978-0-429-20232-2

* For full contents and more information, visit: www.routledge.com/9780367194239

2nd Edition

Statistical Computing with R



Maria L. Rizzo, Bowling Green State University, Ohio, USA

Series: Chapman & Hall/CRC The R Series

Computational statistics and statistical computing are two areas that employ computational, graphical, and numerical approaches to solve statistical problems, making the versatile R language an ideal computing environment for these fields. This second edition continues to encompass the traditional core material of computational statistics, with an emphasis on using the R language via an examples-based approach. It includes R code for all examples and R notes to help explain the R programming concepts. This edition also features a new chapter on nonparametric regression and smoothing.

Chapman and Hall/CRC

Market: Statistics

March 2019: 6.14 x 9.21: 490pp

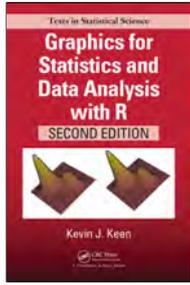
Hb: 978-1-466-55332-3: **£59.99**

eBook: 978-0-429-19276-0

Prev. Ed Hb: 978-1-584-88545-0

* For full contents and more information, visit: www.routledge.com/9781466553323

2nd Edition

Graphics for Statistics and Data Analysis with R

Kevin J. Keen, University of Northern British Columbia, Prince George, Canada

Series: Chapman & Hall/CRC Texts in Statistical Science

The book presents the basic principles of sound graphical design and applies these principles to engaging examples using the graphical functions available in R. It offers a wide variety of graphical displays for the presentation of data, including modern tools for data visualization and representation. The second edition will add examples with the R package ggplot2 in addition to examples with the base and lattice packages in the first edition.

Chapman and Hall/CRC

May 2018: 6.14 x 9.21: 610pp

Hb: 978-1-498-77983-8: **£69.99**

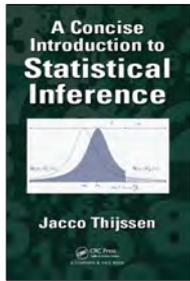
Pb: 978-0-367-73444-2: **£42.99**

eBook: 978-0-429-03106-9

Prev. Ed Hb: 978-1-584-88087-5

* For full contents and more information, visit: www.routledge.com/9781498779838

A Concise Introduction to Statistical Inference



Jacco Thijssen

This short book introduces the main ideas of statistical inference in a way that is both user friendly and mathematically sound. Particular emphasis is placed on the common foundation of many models used in practice. In addition, the book focuses on the formulation of appropriate statistical models to study problems in business, economics, and the social sciences, as well as on how to interpret the results from statistical analyses. The book will be useful to students who are interested in rigorous applications of statistics to problems in business, economics and the social sciences, as well as students who have studied statistics in the past, but need a more solid grounding in statistical techniques to further their careers.

Chapman and Hall/CRC

Market: Statistics

December 2016: 6.14 x 9.21: 228pp

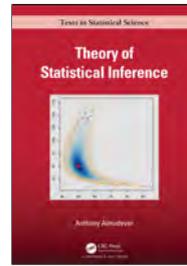
Hb: 978-1-138-46967-9: **£170.00**

Pb: 978-1-498-75577-1: **£52.99**

eBook: 978-1-315-38023-0

* For full contents and more information, visit: www.routledge.com/9781498755771

Theory of Statistical Inference



Anthony Almudevar, University of Rochester, Rochester, NY, USA

Series: Chapman & Hall/CRC Texts in Statistical Science

Theory of Statistical Inference is concerned with the development of a type of optimization theory which can be used to inform the choice of statistical methodology. Of course, this would be pointless without reference to such methods. We are simply noting that they are included in support of the larger goal. This book distinguishes itself from other graduate textbooks because it is written from the point of view that some degree of understanding of measure theory, as well as other branches of mathematics, which include topology, group theory and complex analysis, should be a part of the canon of statistical inference.

Chapman and Hall/CRC

Market: Statistics

December 2021: 7 x 10: 469pp

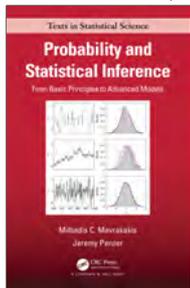
Hb: 978-0-367-48875-8: **£89.99**

eBook: 978-1-003-04934-0

* For full contents and more information, visit: www.routledge.com/9780367488758

Probability and Statistical Inference

From Basic Principles to Advanced Models



Miltiadis C. Mavroukakis, Imperial College London, United Kingdom and Jeremy Penzer, London School of Economics, UK

Series: Chapman & Hall/CRC Texts in Statistical Science

This book covers aspects of probability, distribution theory, and inference that are fundamental to a proper understanding of data analysis and statistical modelling. It presents these topics in an accessible manner without sacrificing mathematical rigour, bridging the gap between the many excellent introductory books and the more advanced, graduate-level texts. The book introduces and explores techniques that are relevant to modern practitioners, while being respectful to the history of statistical inference. It seeks to provide a thorough grounding in both the

theory and application of statistics, with even the more abstract parts placed in the context of a practical setting.

Chapman and Hall/CRC

Market: Statistics

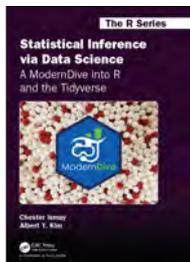
March 2021: 6.14 x 9.21: 444pp

Hb: 978-1-584-88939-7: **£74.99**

eBook: 978-1-584-88940-3

* For full contents and more information, visit: www.routledge.com/9781584889397

Statistical Inference via Data Science: A Modern Dive into R and the Tidyverse



Chester Ismay, DataCamp and Albert Y. Kim

Series: Chapman & Hall/CRC The R Series

This is a modern textbook in statistical inference, using the principles of data science through R and the Tidyverse. It assumes minimal background knowledge of the reader: there is no algebra, no calculus, and no prior programming/coding experience. It is designed to be a gentle introduction to the practice of analyzing data and answering questions using data the way data scientists, statisticians, data journalists, and other researchers would. This book is suitable for teaching a first course in statistical inference at undergraduate level.

Chapman and Hall/CRC

Market: Statistics

December 2019: 7 x 10: 460pp

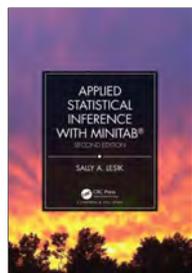
Hb: 978-0-367-40987-6: **£150.00**

Pb: 978-0-367-40982-1: **£59.99**

eBook: 978-0-367-40991-3

* For full contents and more information, visit: www.routledge.com/9780367409821

2nd Edition

Applied Statistical Inference with MINITAB®

Sally A. Lesik, Central Connecticut State University, New Britain, USA

This book covers material that is typically presented in an intermediate course in statistics at the undergraduate level and a first course in applied statistics at the graduate level. Topics include basic statistical inference, regression, and ANOVA. More advanced topics include non-parametric statistics, logistic regression, and goodness-of-fit tests. One key feature of this book is that it is written to provide readers with the foundation necessary to study more advanced topics in statistics.

Chapman and Hall/CRC

January 2019: 7 x 10: 496pp

Hb: 978-1-498-77998-2: £110.00

Pb: 978-0-367-78057-9: £42.99

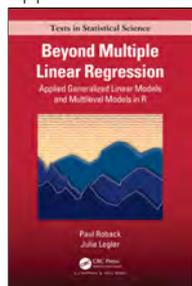
eBook: 978-0-429-44495-1

Prev. Ed Hb: 978-1-420-06583-1

* For full contents and more information, visit: www.routledge.com/9781498779982

Beyond Multiple Linear Regression

Applied Generalized Linear Models And Multilevel Models in R



Paul Roback, St. Olaf College, Northfield, Minnesota, USA and Julie Legler

Series: *Chapman & Hall/CRC Texts in Statistical Science*

Designed for advanced undergraduate or non-major graduate students in Advanced Statistical Modeling or Regression II as well as courses on Generalized Linear Models, Longitudinal Data Analysis, Correlated Data, or Multilevel Models, this text offers a unified discussion of generalized linear models and correlated data methods. It explores case studies involving real data and details material on R at the end of each chapter. A solutions manual is available for qualified instructors.

Chapman and Hall/CRC

Market: Statistics

December 2020: 6.14 x 9.21: 436pp

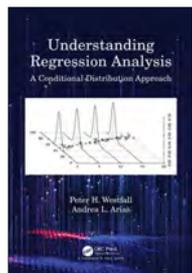
Hb: 978-1-439-88538-3: £74.99

eBook: 978-0-429-06666-5

* For full contents and more information, visit: www.routledge.com/9781439885383

Understanding Regression Analysis

A Conditional Distribution Approach



Peter H. Westfall, Texas Tech University, Lubbock, USA and Andrea L. Arias

This book unifies diverse regression applications including the classical model, ANOVA models, generalized models including Poisson, Negative binomial, logistic, and survival, neural networks and decision trees under a common umbrella; namely, the conditional distribution model. It explains why the conditional distribution model is the *correct* model, also explains why the assumptions of the classical regression model are *wrong*. This one takes a realistic approach from the outset that all models are just approximations. The emphasis is to model Nature's processes realistically, rather than to assume that Nature works in particular, constrained ways.

Chapman and Hall/CRC

Market: Statistics

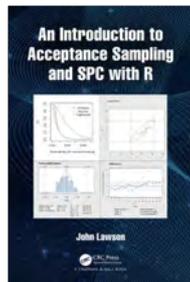
July 2020: 7 x 10: 514pp

Hb: 978-0-367-45852-2: £89.99

eBook: 978-1-003-02576-4

* For full contents and more information, visit: www.routledge.com/9780367458522

An Introduction to Acceptance Sampling and SPC with R



John Lawson, Brigham Young University, USA

In the modern, world sampling plans and the statistical calculations used in statistical quality control are done with the help of computers. To get more hands on experience in creating acceptance sampling plans and control charts necessarily involves the use of software. In industry, commercial software is often used. In this book we will focus on several R packages that can duplicate and in some cases exceed the functionality of these commercial programs. In addition to demonstrating how to use R for acceptance sampling and control charts, this book will focus on how the use of these specific tools can lead to quality improvements both within a company and within their supplier companies.

Chapman and Hall/CRC

Market: Statistics

February 2021: 6.14 x 9.21: 292pp

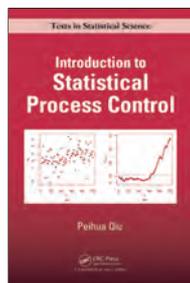
Hb: 978-0-367-56995-2: **£120.00**

Pb: 978-0-367-55576-4: **£44.99**

eBook: 978-1-003-10027-0

* For **full contents** and more information, visit: www.routledge.com/9780367555764

Introduction to Statistical Process Control



Peihua Qiu, University of Florida, Gainesville, USA

Series: Chapman & Hall/CRC Texts in Statistical Science

A major tool for quality control and management, statistical process control (SPC) monitors sequential processes, such as production lines and Internet traffic, to ensure that they work stably and satisfactorily. Along with covering traditional methods, this book describes many recent SPC methods that improve upon the more established techniques. The author—a leading researcher on SPC—shows how these methods can handle new applications. Pseudo codes are presented for important methods and all R functions and datasets are available on the author's website.

Chapman and Hall/CRC

Market: Statistics

October 2013: 6.14 x 9.21: 520pp

Hb: 978-1-439-84799-2: **£94.99**

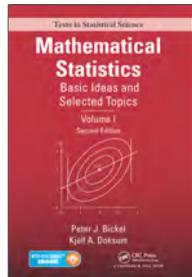
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Basic Ideas and Selected Topics, Volume I



Peter J. Bickel, University of California, Berkeley, USA and
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 Series: *Chapman & Hall/CRC Texts in Statistical Science*

This first volume presents fundamental, classical statistical concepts at the doctorate level without using measure theory. It covers estimation, prediction, testing, confidence sets, Bayesian analysis, and the general approach of decision theory. This edition gives careful proofs of major results and explains how the theory sheds light on the properties of practical methods. The book includes in-depth examples throughout as well as many exercises at the end of each chapter.

Chapman and Hall/CRC

Market: Statistics

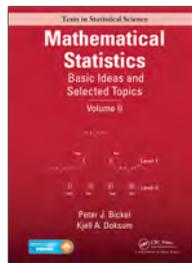
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eBook: 978-0-429-17478-0

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Basic Ideas and Selected Topics, Volume II



Peter J. Bickel, University of California, Berkeley, USA and
Kjell A. Doksum, University of Wisconsin, Madison, USA
 Series: *Chapman & Hall/CRC Texts in Statistical Science*

This second volume focuses on inference in non- and semiparametric models, including topics in machine learning. It not only reexamines the procedures introduced in the authors' first volume from a more sophisticated point of view but also addresses new problems originating from the analysis of estimation of functions and other complex decision procedures and large-scale data analysis. Numerous examples and problems illustrate statistical modeling and inference concepts. Measure theory is not required for understanding.

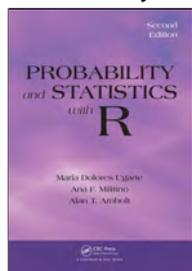
Chapman and Hall/CRC

Market: Statistics

November 2015: 7 x 10: 488pp

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2nd Edition

Probability and Statistics with R

Maria Dolores Ugarte, Public University of Navarre, Pamplona, Spain, **Ana F. Militino**, Public University of Navarre, Pamplona, Spain and **Alan T. Arnold**, Appalachian State University, Boone North Carolina, USA

Since the publication of the popular first edition, the contributed R packages on CRAN have increased from around 1,000 to over 6,000. This second edition explores how some of these new packages make analysis easier and more intuitive as well as create more visually pleasing graphs. Along with adding new examples and exercises, this edition improves the existing examples, problems, concepts, data, and functions. Data sets, R functions, and more are available online.

Chapman and Hall/CRC

Market: Statistics

July 2015: 7 x 10: 984pp

Hb: 978-1-466-50439-4: **£84.99**

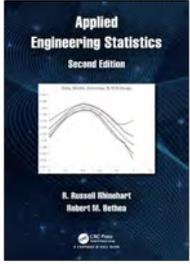
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Applied Engineering Statistics



R. Russell Rhinehart and Robert M. Bethea, Texas Tech University, Lubbock, USA

Thoroughly updated throughout, this second edition will continue to be about the practicable methods of statistical applications for engineers, and as well for scientists and people in business. Contrasting a mathematical and abstract orientation of many statistics texts, which expresses the science/math values of researchers, this book presents the fundamental concepts, provides supporting derivation, and focuses on the application to concrete examples and the interpretation of outcomes.

CRC Press

Market: Statistics

November 2021: 7 x 10: 500pp

Hb: 978-1-032-11948-9: £74.99

eBook: 978-1-003-22233-0

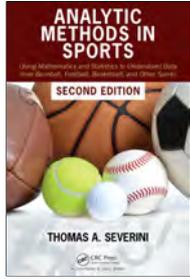
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Analytic Methods in Sports

Using Mathematics and Statistics to Understand Data from Baseball, Football, Basketball, and Other Sports

**Thomas A. Severini**, Northwestern University, USA

Analytic Methods in Sports: Using Mathematics and Statistics to Understand Data from Baseball, Football, Basketball, and Other Sports, 2nd Edition provides a concise yet thorough introduction to the analytic and statistical methods that are useful in studying sports. It explains how to apply the methods to sports data and interpret the results, demonstrating that the analysis of sports data is often different from standard statistical analyses. The book integrates a large number of motivating sports examples throughout and offers guidance on computation and suggestions for further reading in each chapter.

Chapman and Hall/CRC

Market: Statistics

March 2020: 6.14 x 9.21: 372pp

Hb: 978-0-367-25207-6: **£140.00**Pb: 978-0-367-46938-2: **£52.99**

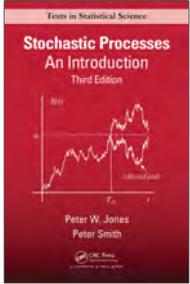
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3rd Edition

Stochastic Processes

An Introduction



Peter Watts Jones, Keele University, Staffordshire, UK and
Peter Smith, Keele University, Staffordshire, UK

Series: Chapman & Hall/CRC Texts in Statistical Science

Based on a well-established and popular course taught by the authors over many years, *Stochastic Processes: An Introduction, Third Edition*, discusses the modelling and analysis of random experiments, where processes evolve over time. The text begins with a review of relevant fundamental probability. It then covers gambling problems, random walks, and Markov chains. The authors go on to discuss random processes continuous in time, including Poisson, birth and death processes, and general population models, and present an extended discussion on the analysis of associated stationary processes in queues.

Chapman and Hall/CRC

Market: Statistics

October 2017: 6.14 x 9.21: 267pp

Hb: 978-1-498-77811-4: **£56.99**

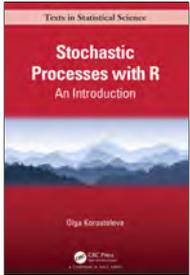
Pb: 978-0-367-65760-4: **£42.99**

eBook: 978-1-498-77812-1

* For full contents and more information, visit: www.routledge.com/9781498778114

Stochastic Processes with R

An Introduction



Olga Korosteleva, California State University, Long Beach, USA

Series: Chapman & Hall/CRC Texts in Statistical Science

Stochastic Processes with R: An Introduction cuts through the heavy theory that is present in most courses on random processes and serves as practical guide to simulated trajectories and real-life applications for stochastic processes. The light yet detailed text provides a solid foundation that is an ideal companion for undergraduate statistics students looking to familiarise themselves with stochastic processes before going onto more advanced courses.

Chapman and Hall/CRC

Market: Statistics

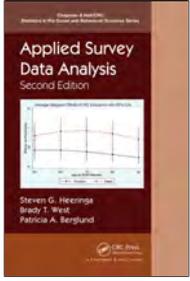
February 2022: 6.14 x 9.21: 200pp

Hb: 978-1-032-15373-5: **£74.99**

eBook: 978-1-003-24428-8

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2nd Edition

Applied Survey Data Analysis

Steven G. Heeringa, University of Michigan, Brady T. West, University of Michigan, Ann Arbor, USA and Patricia A. Berglund, University of Michigan

Series: Chapman & Hall/CRC Statistics in the Social and Behavioral Sciences

Highly recommended by the *Journal of Official Statistics*, *The American Statistician*, and other journals, *Applied Survey Data Analysis, Second Edition* provides an up-to-date overview of state-of-the-art approaches to the analysis of complex sample survey data. Building on the wealth of material on practical approaches to descriptive analysis and regression modeling from the first edition, this second edition expands the topics covered and presents more step-by-step examples of modern approaches to the analysis of survey data using the newest statistical software.

Chapman and Hall/CRC

Market: Statistics

June 2017: 6.14 x 9.21: 590pp

Hb: 978-1-498-76160-4: **£74.99**

Pb: 978-0-367-73611-8: **£42.99**

eBook: 978-1-315-15327-8

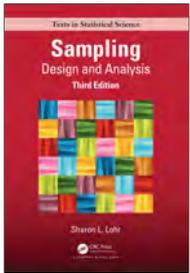
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Sampling

Design and Analysis



Sharon L. Lohr

Series: Chapman & Hall/CRC Texts in Statistical Science

The third edition of this authoritative text has been thoroughly updated to incorporate recent advances in survey sampling, with a new chapter on nonprobability sampling and more than 200 new examples and exercises. Two new supplementary books, available for purchase or free download, show how to use R and SAS® software to select and analyze the samples discussed in the text.

Chapman and Hall/CRC

Market: Statistics

November 2021: 7 x 10: 674pp

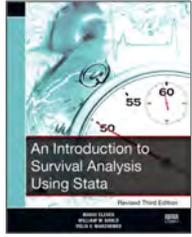
Hb: 978-0-367-27950-9: **£59.99**

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4th Edition

An Introduction to Survival Analysis Using Stata, Revised



Mario Cleves, University of Arkansas for Medical Sciences, Little Rock, USA, **William Gould**, StataCorp LP, College Station, Texas, USA and **Yulia Marchenko**, StataCorp LP, College Station, Texas, USA

An Introduction to Survival Analysis Using Stata, Revised Third Edition is the ideal tutorial for professional data analysts who want to learn survival analysis for the first time or who are well versed in survival analysis but are not as dexterous in using Stata to analyze survival data. This text also serves as a valuable reference to those readers who already have experience using Stata's survival analysis routines. This revised third edition has

been updated for Stata 14, and it includes a new section on predictive margins and marginal effects.

Stata Press

Market: Statistics

May 2016: 428pp

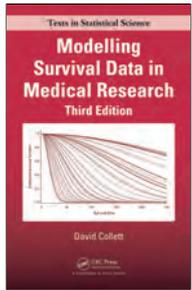
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3rd Edition

Modelling Survival Data in Medical Research



David Collett, NHS Blood and Transplant, UK

Series: Chapman & Hall/CRC Texts in Statistical Science

Well known for its nontechnical style, this popular survival analysis textbook presents modern statistical techniques for handling survival data. This edition contains new chapters on frailty models and their applications, competing risks, non-proportional hazards, and dependent censoring. It also describes techniques for modelling the occurrence of multiple events and event history analysis. Earlier chapters are now expanded to include new material on a number of topics, including measures of predictive ability and flexible parametric models. Many new data sets and examples illustrate how all these techniques are used in modelling survival data.

Chapman and Hall/CRC

Market: Statistics

December 2014: 6.14 x 9.21: 548pp

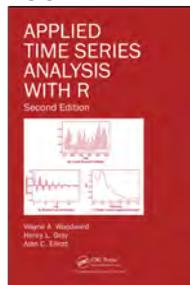
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2nd Edition

Applied Time Series Analysis with R

Wayne A. Woodward, Southern Methodist University, Dallas, Texas, USA, Henry L. Gray, Southern Methodist University, Dallas, Texas, USA and Alan C. Elliott, University of Texas Southwestern Medical Center at Dallas, USA

Virtually any random process that develops chronologically can be viewed as a time series. This textbook presents real-world examples from the fields of engineering, economics, medicine, biology, and chemistry to promote a solid understanding of the data and associated methods. The text explores many important new methodologies that have developed in time series, such as time series with long memory, time varying frequencies (TVF), ARCH and GARCH models, multivariate time series models, wavelets, and more. The authors also provide an R-based

software package available on CRAN.

CRC Press

Market: Statistics

December 2016: 6.14 x 9.21: 634pp

Hb: 978-1-498-73422-6: **£89.99**Pb: 978-1-032-09722-0: **£42.99**

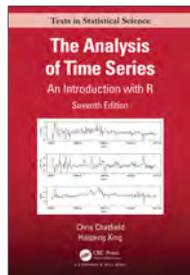
eBook: 978-1-498-73429-5

* For full contents and more information, visit: www.routledge.com/9781498734226

7th Edition

The Analysis of Time Series

An Introduction with R



Chris Chatfield, University of Bath, UK and Haipeng Xing, SUNY, Stony Brook, New York, USA

Series: Chapman & Hall/CRC Texts in Statistical Science

This new edition of this classic title, now in its seventh edition, presents a balanced and comprehensive introduction to the theory, implementation, and practice of time series analysis. The book covers a wide range of topics, including ARIMA models, forecasting methods, spectral analysis, linear systems, state-space models, the Kalman filters, nonlinear models, volatility models, and multivariate models.

Chapman and Hall/CRC

Market: Statistics

May 2019: 6.14 x 9.21: 414pp

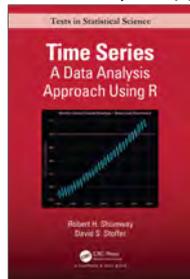
Hb: 978-1-138-06613-7: **£150.00**Pb: 978-1-498-79563-0: **£62.99**

eBook: 978-1-351-25944-6

Prev. Ed Pb: 978-1-584-88317-3

* For full contents and more information, visit: www.routledge.com/9781498795630**Time Series**

A Data Analysis Approach Using R



Robert Shumway and David Stoffer, University of Pittsburgh, Pennsylvania, USA

Series: Chapman & Hall/CRC Texts in Statistical Science

This textbook is designed for an introductory time series course where the prerequisites are an understanding of linear regression and some basic probability skills. All of the numerical examples were done using the R statistical package, and the code is typically listed at the end of an example.

Chapman and Hall/CRC

Market: Statistics

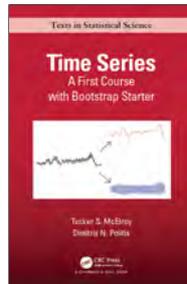
May 2019: 6.14 x 9.21: 271 pp

Hb: 978-0-367-22109-6: **£59.99**

eBook: 978-0-429-27328-5

* For full contents and more information, visit: www.routledge.com/9780367221096**Time Series**

A First Course with Bootstrap Starter



Tucker S. McElroy, U.S. Census Bureau, Washington, D.C., USA and Dimitris N. Politis, University of California, California, USA

Series: Chapman & Hall/CRC Texts in Statistical Science

The book provides the foundation of time series methods, including linear filters and a geometric approach to prediction. The important paradigm of ARMA models is studied in-depth, as well as frequency domain methods. Entropy and other information theoretic notions are introduced, with applications to time series modeling. The second half of the book focuses on statistical inference, the fitting of time series models, as well as computational facets of forecasting. Many time series of interest are nonlinear in which case classical inference methods

can fail, but bootstrap methods may come to the rescue

Chapman and Hall/CRC

December 2019: 6.14 x 9.21: 586pp

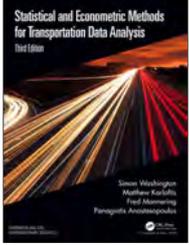
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3rd Edition

Statistical and Econometric Methods for Transportation Data Analysis



Simon Washington, Matthew G. Karlaftis, National Technical University of Athens, Greece, **Fred Mannering**, University of South Florida 4202 E. Fowler Ave. Tampa, FL 33620 and **Panagiotis Anastasopoulos**

Series: Chapman & Hall/CRC Interdisciplinary Statistics

The complexity, diversity, and random nature of transportation problems necessitates a broad analytical toolbox. Describing tools commonly used in the field, *Statistical and Econometric Methods for Transportation Data Analysis, Third Edition* provides an understanding of a broad range of analytical tools required to solve transportation problems. It includes a wide breadth of

examples and case studies covering applications in various aspects of transportation planning, engineering, safety, and economics.

Chapman and Hall/CRC

Market: Statistics

February 2020: 7 x 10: 496pp

Hb: 978-0-367-19902-9: **£89.99**

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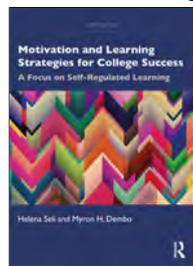
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Routledge

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Market: Education / Higher Education

April 2022: 6.14 x 9.21: 278pp

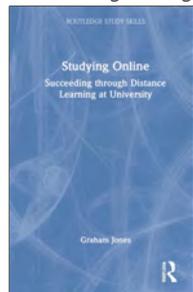
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July 2022: 5.5 x 8.5: 192pp

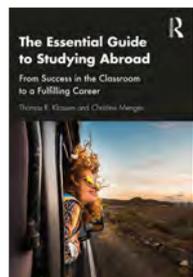
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Routledge

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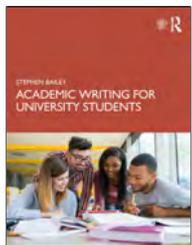
August 2019: 6.14 x 9.21: 238pp

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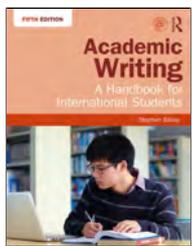
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Routledge

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eBook: 978-1-315-16999-6

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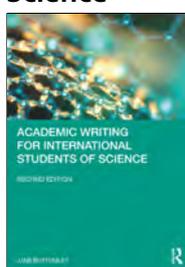
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Routledge

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October 2021: 7.44 x 9.69: 220pp

Hb: 978-0-367-63271-7: **£120.00**

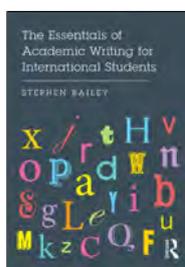
Pb: 978-0-367-63272-4: **£24.99**

eBook: 978-1-003-11857-2

Prev. Ed Pb: 978-0-415-83241-0

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June 2015: 5.83 x 8.27: 246pp

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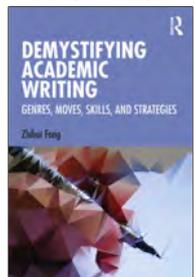
Pb: 978-1-138-88562-2: **£22.99**

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Routledge

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April 2021: 6.14 x 9.21: 286pp

Hb: 978-0-367-67508-0: £120.00

Pb: 978-0-367-65354-5: £36.99

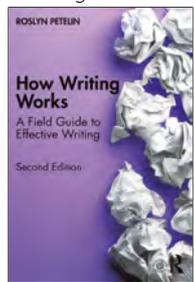
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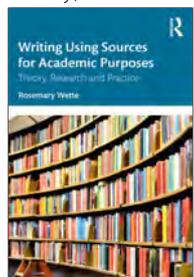
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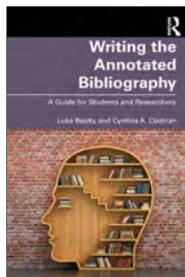
Pb: 978-0-367-17592-4: £34.99

eBook: 978-0-429-05751-9

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Routledge

Market: Research Skills

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Hb: 978-0-367-40887-9: £120.00

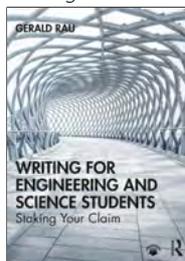
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August 2019: 6.85 x 9.69: 324pp

Hb: 978-1-138-38824-6: £120.00

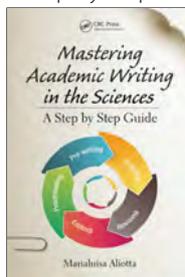
Pb: 978-1-138-38825-3: £32.99

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CRC Press

Market: Physics

April 2018: 6.14 x 9.21: 200pp

Hb: 978-1-138-74288-8: £110.00

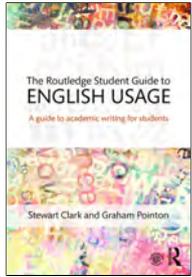
Pb: 978-1-498-70147-1: £42.99

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Routledge

Market: English Language and Linguistics/TESOL/ELT

May 2016: 6.14 x 9.21: 402pp

Hb: 978-1-138-93358-3: **£115.00**

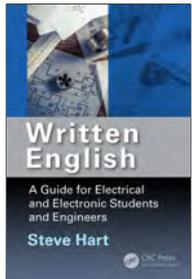
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CRC Press

Market: Engineering - Electrical

December 2015: 5.06 x 7.81: 216pp

Hb: 978-1-138-42241-4: **£160.00**

Pb: 978-1-498-73962-7: **£34.99**

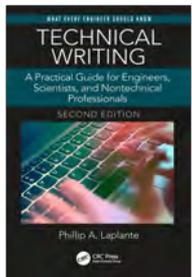
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August 2018: 6.14 x 9.21: 300pp

Hb: 978-1-138-60696-8: **£125.00**

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eBook: 978-0-429-46739-4

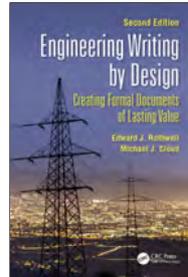
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CRC Press

Market: Engineering - General

January 2020: 6.14 x 9.21: 257pp

Hb: 978-0-367-89682-9: **£89.99**

Pb: 978-0-367-34754-3: **£44.99**

eBook: 978-0-429-32769-8

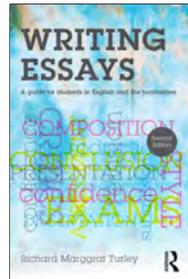
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Routledge

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Hb: 978-1-138-91668-5: **£115.00**

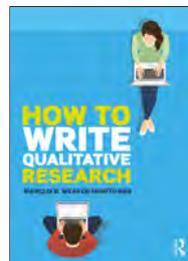
Pb: 978-1-138-91669-2: **£18.99**

eBook: 978-1-315-68944-9

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Routledge

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October 2018: 6.85 x 9.69: 282pp

Hb: 978-1-138-06630-4: **£120.00**

Pb: 978-1-138-06631-1: **£38.99**

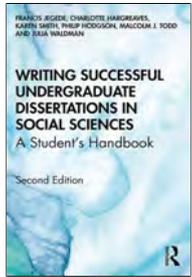
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A Student's Handbook



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Routledge

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February 2020: 5.5 x 8.5: 240pp

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Pb: 978-0-367-25525-1: £19.99

eBook: 978-0-429-28825-8

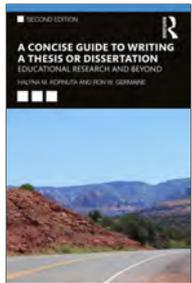
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Educational Research and Beyond



Halyna M. Kornuta and Ron W. Germaine

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Routledge

Market: Research Methods

May 2019: 5.06 x 7.81: 134pp

Hb: 978-0-367-17457-6: £110.00

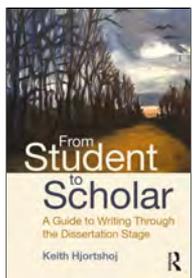
Pb: 978-0-367-17458-3: £14.99

eBook: 978-0-429-05688-8

* For full contents and more information, visit: www.routledge.com/9780367174583

From Student to Scholar

A Guide to Writing Through the Dissertation Stage



Keith Hjortshoj, John S. Knight Writing Program, Cornell University

From Student to Scholar guides graduate students through the "hidden" developmental transition required in writing a dissertation and moving beyond, to become a successful scholar. Identifying common rhetorical challenges across disciplines, author Hjortshoj explains how to accommodate evolving audiences, motivations, standards, writing processes, and timelines. One full chapter is devoted to "writing blocks," and another offers advice to international students who are non-native speakers of English. The text also offers advice for managing relations with advisors and preparing for the diverse careers that PhDs, trained primarily as research specialists,

actually enter.

Routledge

Market: Composition

August 2018: 6 x 9: 204pp

Hb: 978-1-138-56942-3: £120.00

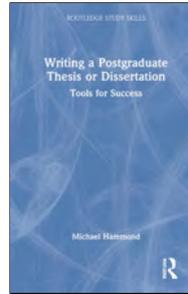
Pb: 978-1-138-56944-7: £42.99

eBook: 978-0-203-70426-4

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Tools for Success



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Routledge

Market: Education / Academic Writing

July 2022: 5.5 x 8.5: 160pp

Hb: 978-0-367-75281-1: £120.00

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eBook: 978-1-003-16182-0

* For full contents and more information, visit: www.routledge.com/9780367752828

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Thesis and Dissertation Writing in a Second Language

A Handbook for Students and their Supervisors



Brian Paltridge and Sue Starfield

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Routledge

Market: Education

August 2019: 6.14 x 9.21: 248pp

Hb: 978-1-138-04869-0: £110.00

Pb: 978-1-138-04870-6: £26.99

eBook: 978-1-315-17002-2

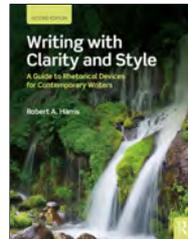
Prev. Ed Pb: 978-0-415-37173-5

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A Guide to Rhetorical Devices for Contemporary Writers



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Routledge

Market: Research Methods and Statistics

December 2017: 8.25 x 11: 232pp

Hb: 978-1-138-56010-9: £120.00

Pb: 978-1-138-56009-3: £34.99

eBook: 978-0-203-71204-7

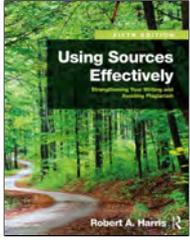
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5th Edition

Using Sources Effectively

Strengthening Your Writing and Avoiding Plagiarism



Robert A. Harris

Now in its fifth, expanded edition, *Using Sources Effectively, Fifth Edition* targets the two most prominent problems in current research-paper writing: the increase in unintentional plagiarism and the ineffective use of research source material. Designed as a supplementary textbook for both undergraduate and graduate courses, this book will help every student who uses research in writing. Included in this edition is coverage of research strategies and source selection (Chapter 2), a chapter on quoting sources effectively (Chapter 4), and a chapter on sentence patterns (Chapter 10). APA and MLA citation styles have been updated

throughout the text.

Routledge

Market: Research Methods and Statistics

January 2017: 8.25 x 11: 210pp

Hb: 978-1-138-28966-6: **£150.00**

Pb: 978-1-138-28968-0: **£48.99**

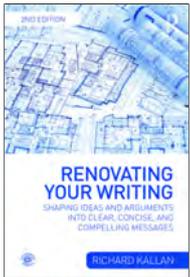
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Routledge

Market: Writing/Composition

July 2017: 6.14 x 9.21: 190pp

Hb: 978-1-138-72676-5: **£120.00**

Pb: 978-1-138-72677-2: **£24.99**

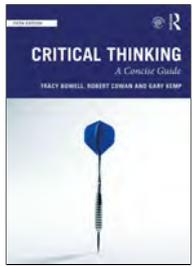
eBook: 978-1-315-18660-3

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5th Edition

Critical Thinking

A Concise Guide



Tracy Bowell, University of Waikato, New Zealand, Robert Cowan and Gary Kemp, University of Glasgow, UK

We are frequently confronted with *arguments*. *Critical Thinking* equips students with the concepts and techniques used in the analysis and assessment of arguments whatever the context. Through precise and accessible discussion, this book provides the tools to become a successful critical thinker, who can act and believe in accordance with good reasons, and who can articulate and make explicit those reasons.

This fifth edition has been revised and updated throughout, including an expanded range of 'complete examples', the introduction of Venn diagrams, and the discussion of fake news and related phenomena arising in the contemporary scene.

Routledge

Market: Philosophy

August 2019: 6.85 x 9.69: 348pp

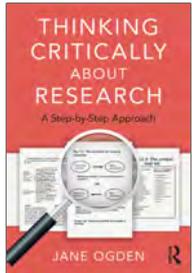
Hb: 978-0-815-37142-7: **£120.00**Pb: 978-0-815-37143-4: **£32.99**

eBook: 978-1-351-24373-5

Prev. Ed Pb: 978-0-415-82092-9

* For full contents and more information, visit: www.routledge.com/9780815371434**Thinking Critically about Research**

A Step by Step Approach



Jane Ogden

This book is designed to help readers develop a critical understanding of evidence and the ways in which evidence is presented, and to challenge the information they receive in both academic and non-academic sources. The author presents a step by step approach with a focus on knowing methods, culminating in a bespoke 'critical tool kit' which offers a practical checklist designed to be used when carrying out research. There are also learning features including tasks and worked examples, drawing on real research studies. This is an essential resource for students and researchers, and those putting research into practice, who want to have better critical thinking skills.

Routledge

Market: Critical Thinking

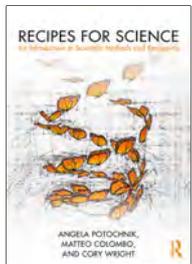
December 2018: 6.14 x 9.21: 176pp

Hb: 978-0-367-00019-6: **£120.00**Pb: 978-0-367-00020-2: **£32.99**

eBook: 978-0-429-44496-8

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Angela Potochnik, Matteo Colombo, Tilburg University, The Netherlands and Cory Wright

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essential for any college student's basic scientific education.

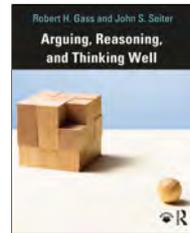
Routledge

Market: Philosophy / Critical Thinking

August 2018: 7 x 10: 348pp

Hb: 978-1-138-92072-9: **£120.00**Pb: 978-1-138-92073-6: **£39.99**

eBook: 978-1-315-68687-5

* For full contents and more information, visit: www.routledge.com/9781138920736**Arguing, Reasoning, and Thinking Well**

Robert Gass and John Seiter

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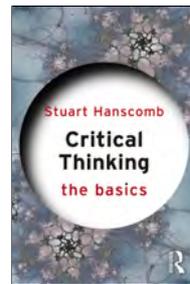
Routledge

Market: Communication

June 2019: 280pp

Hb: 978-0-815-37432-9: **£140.00**Pb: 978-0-815-37433-6: **£68.99**

eBook: 978-1-351-24249-3

* For full contents and more information, visit: www.routledge.com/9780815374336**Critical Thinking: The Basics**

Stuart Hanscomb, University of Glasgow, UK

Series: *The Basics*

Critical Thinking: The Basics is an accessible and engaging introduction to the field of critical thinking, drawing on philosophy, communication and psychology. Emphasising its relevance to decision making (in personal, professional and civic life), academic literacy and personal development, this book supports the reader in understanding and developing their knowledge and skills.

Routledge

Market: Philosophy

November 2016: 5.06 x 7.81: 260pp

Hb: 978-1-138-82623-6: **£84.99**Pb: 978-1-138-82624-3: **£18.99**

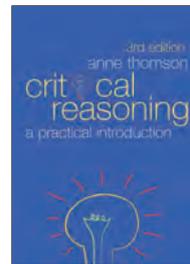
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Critical Reasoning

A Practical Introduction



Anne Thomson

We all engage in the process of reasoning, but we don't always pay attention to whether we are doing it well. This book offers the opportunity to practise reasoning in a clear-headed and critical way, with the aims of developing an awareness of the importance of reasoning well and of improving the reader's skill in analyzing and evaluating arguments. Anne Thomson has updated and revised the book to include fresh and topical examples, and new chapters on evaluating the credibility of evidence and decision making and dilemmas. By the end of the book students should be able to identify flaws in arguments, analyze the reasoning in newspaper articles, books and speeches,

assess the credibility of evidence and authorities and approach any topic with the ability to reason and think critically.

Routledge

Market: Philosophy, Critical Thinking

September 2008: 6.85 x 9.69: 256pp

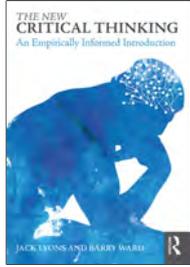
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The New Critical Thinking

An Empirically Informed Introduction



Jack Lyons and Barry Ward

Merely learning about logic and fallacious reasoning will not produce effective critical thinkers. Many intellectual errors derive from our reliance on intuitive heuristics. Also, properly assessing premises is crucial in the Internet age. This highly innovative textbook incorporates contemporary psychology, epistemology, and philosophy of science to address both problems, providing an experienced, but fresh, hands-on approach to traditional critical thinking material: assessing deductive and inductive arguments, reconstructing, identifying and diagramming arguments, and causal and probabilistic inference. It also treats real-world issues that are typically neglected.

Routledge

Market: Philosophy / Critical Thinking

August 2017: 7 x 10: 380pp

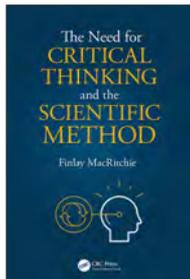
Hb: 978-1-138-68747-9: £120.00

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eBook: 978-1-315-54228-7

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The Need for Critical Thinking and the Scientific Method



Finlay MacRitchie, Kansas State University, Manhattan, USA

The book exposes many of the misunderstandings about the scientific method and its application to critical thinking. It argues for a better understanding of the scientific method and for nurturing critical thinking in the community. This knowledge helps the reader to analyze issues more objectively, and warns about the dangers of bias and propaganda. The principles are illustrated by considering several issues that are currently being debated. These include anthropogenic global warming (often loosely referred to as climate change), dangers to preservation of the Great Barrier Reef, and the expansion of the gluten-free food market and genetic engineering.

CRC Press

Market: Chemistry

May 2018: 6.14 x 9.21: 152pp

Hb: 978-0-815-36815-1: £125.00

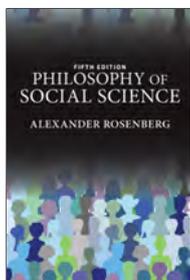
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Routledge

July 2015: 6 x 9: 360pp

Hb: 978-0-367-09807-0: £120.00

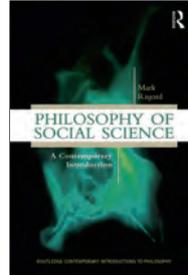
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Series: Routledge Contemporary Introductions to Philosophy
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Routledge

Market: Philosophy

May 2014: 6.14 x 9.21: 302pp

Hb: 978-0-415-89824-9: £120.00

Pb: 978-0-415-89825-6: £36.99

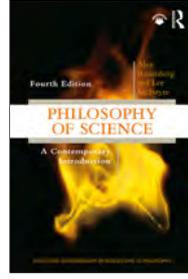
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Routledge

Market: Philosophy

November 2019: 6 x 9: 308pp

Hb: 978-1-138-33148-8: £120.00

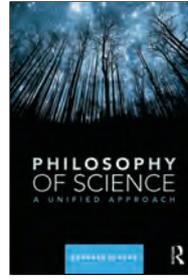
Pb: 978-1-138-33151-8: £39.99

eBook: 978-0-429-44726-6

* For full contents and more information, visit: www.routledge.com/9781138331518

Philosophy of Science

A Unified Approach



Gerhard Schurz, Dusseldorf University, Germany

Philosophy of Science: A Unified Approach combines an elementary introduction to philosophy of science with an integrated survey of all of its important subfields. Focusing on the methodological unity of the sciences, the book provides chapters with introductory sections, followed by complementary, advanced topics. By restricting the teaching materials to the introductory sections, one obtains the basis for a semester-long course. Covering all of the material contained in the book fills a year-long course.

Routledge

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November 2013: 6 x 9: 480pp

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eBook: 978-0-203-36627-1

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Doing Academic Research

A Practical Guide to Research Methods and Analysis



Ted Gourellos, Joshua R. Hammonds and Maridath A. Wilson

Doing Academic Research is a concise, accessible, and tightly organized overview of the research process in the humanities, social sciences, and business. Rather than a book about research, this is a practical guide to doing research, and guides budding researchers along the process of developing an effective workflow, where to go for help, and how to actually complete the project. It addresses diversity in abilities, interest, discipline, and ways of knowing by focusing not just on the process of conducting any one method in detail, but also the ways in which someone might choose a research method and conduct it successfully.

Routledge

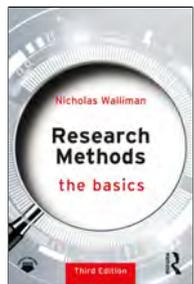
Market: Research Methods
May 2019: 5.06 x 7.81: 208pp
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Research Methods

The Basics



Nicholas Walliman, Oxford Brookes University, UK

Series: The Basics

Research Methods: The Basics is an accessible, user-friendly introduction to the different aspects of research theory, methods and practice. This third edition provides an expanded and fully updated resource suitable for students and practitioners in a wide range of disciplines including the natural sciences, social sciences and humanities.

It is structured in two parts - the first covers the nature of knowledge and the reasons for doing research, the second explains the specific methods used to conduct an effective research project and how to propose, plan, carry out and write up a research project.

Routledge

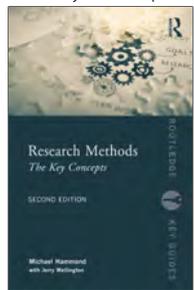
Market: Research Methods/Sociology
December 2021: 5.06 x 7.81: 280pp
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Prev. Ed Pb: 978-1-138-69399-9

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2nd Edition

Research Methods

The Key Concepts



Michael Hammond, University of Warwick, UK and Jerry Wellington, University of Sheffield, UK

Series: Routledge Key Guides

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Routledge

Market: Research Methods / Social Science
September 2020: 5.5 x 8.5: 232pp
Hb: 978-0-367-17873-4: **£84.99**
Pb: 978-0-367-17874-1: **£16.99**
eBook: 978-0-429-05816-5
Prev. Ed Pb: 978-0-415-59983-2

* For full contents and more information, visit: www.routledge.com/9780367178741

A-Z of Digital Research Methods



Catherine Dawson

This book provides a quick and easy, alphabetical reference guide for any student or researcher looking for an introduction to digital research methods. It provides a pathway through the often confusing digital research landscape, giving a concise introduction to each method.

Routledge

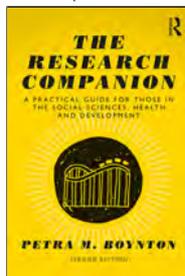
Market: Research Methods/Digital
July 2019: 6.85 x 9.69: 424pp
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2nd Edition

The Research Companion

A practical guide for those in the social sciences, health and development



Petra M. Boynton, University College London, UK

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Routledge

Market: Social Sciences/Psychology
September 2016: 6.14 x 9.21: 300pp
Hb: 978-1-138-91760-6: **£120.00**
Pb: 978-1-138-91761-3: **£42.99**
eBook: 978-1-315-68890-9
Prev. Ed Pb: 978-1-841-69305-7

* For full contents and more information, visit: www.routledge.com/9781138917613

Literature Review and Research Design

A Guide to Effective Research Practice



Dave Harris

Graduate students executing their first independent research project often struggle to use academic literature effectively in the process of designing, developing, executing, and presenting their work. This book gives an overview of how to develop an effective research practice supported by the academic literature. Particularly suitable for those pursuing professional doctorates in subjects such as education and psychology.

Routledge

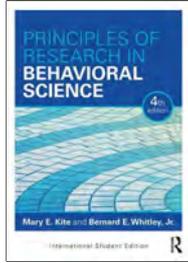
Market: Research Methods
December 2019: 6.14 x 9.21: 176pp
Hb: 978-0-367-25036-2: **£110.00**
Pb: 978-0-367-25037-9: **£22.99**
eBook: 978-0-429-28566-0

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4th Edition

Principles of Research in Behavioral Science

International Student Edition



Bernard E. Whitley, Jr., Ball State University and **Mary E. Kite**, Ball State University, USA

This book provides a comprehensive overview of research methods in the behavioral sciences, focusing primarily on the conceptual issues inherent in conducting research. It covers topics that are often omitted from other texts, including measurement issues, correlational research, qualitative research, and integrative literature reviews. The book also includes discussions of diversity issues as they related to behavioral science research. New to this edition are chapter boxes that focus on applied issues related to each chapter topic. Throughout the book, readable examples and informative tables

and figures are provided.

Routledge

Market: Research Methods

April 2020: 7 x 10: 852pp

Hb: 978-1-138-68787-5: **£120.00**

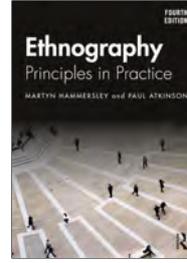
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4th Edition

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Principles in Practice



Martyn Hammersley, The Open University, UK and **Paul Atkinson**, Cardiff University, UK

This edition has been expertly updated to reflect the important developments in digital and mobile technologies and social media. The ease with which recordings, audio or video, as well as photographs, can be produced via the use of mobile devices has opened up new tools and foci for ethnographers.

Routledge

Market: Ethnography, Social Research Methods and Sociology

April 2019: 6.85 x 9.69: 292pp

Hb: 978-1-138-50445-5: **£130.00**Pb: 978-1-138-50446-2: **£36.99**

eBook: 978-1-315-14602-7

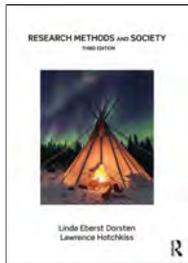
Prev. Ed Pb: 978-0-415-39605-9

* For full contents and more information, visit: www.routledge.com/9781138504462

3rd Edition

Research Methods and Society

Foundations of Social Inquiry



Linda Eberst Dorsten and **Lawrence Hotchkiss**

Research Methods and Society, Third Edition is designed to help undergraduate students acquire basic skills in methods of social science research. These skills provide a foundation for understanding research findings in the social sciences and for conducting social research. Just as important, such skills sets and principles can be applied to everyday situations to make sense of endless stream of claims and counterclaims confronted daily in print and electronic forms, including social media.

Routledge

Market: Research Methods/Sociology

December 2018: 7 x 10: 410pp

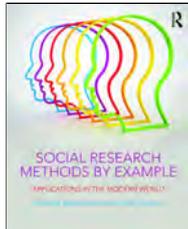
Hb: 978-0-815-36616-4: **£200.00**Pb: 978-0-815-36615-7: **£79.99**

eBook: 978-1-351-25981-1

Prev. Ed Pb: 978-0-205-87991-5

* For full contents and more information, visit: www.routledge.com/9780815366157**Social Research Methods by Example**

Applications in the Modern World



Yasemin Besen-Cassino and **Dan Cassino**, Fairleigh Dickson University

Social Research Methods by Example shows students how researchers carry out work on the cutting edge of social science. The authors illustrate every point through engaging, thought-provoking examples from real research. The language is jargon-free, making research methods less intimidating and more relatable. It not only introduces students to the principles of social science research, but gives them a toolbox to carry out their own. By the time they are finished with the book, students will be conversant with many of the most important studies in

the history of social science. They will understand not only how to conduct research, but also how the field has evolved over time.

Routledge

Market: Social Science / Research

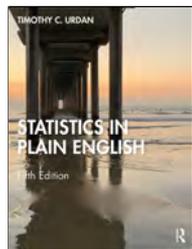
July 2017: 436pp

Hb: 978-0-415-79090-1: **£160.00**Pb: 978-0-415-79091-8: **£79.99**

eBook: 978-1-315-21279-1

* For full contents and more information, visit: www.routledge.com/9780415790918

5th Edition

Statistics in Plain English

Timothy C. Urdan, Santa Clara University

Statistics in Plain English is a straightforward, conversational introduction to statistics that delivers exactly what its title promises. Each chapter begins with a brief overview of a statistic that describes what the statistic does and when to use it, followed by a detailed step-by-step explanation of how the statistic works and exactly what information it provides. Chapters also include an example of the statistic (or statistics) in use in real-world research, "Worked Examples," "Writing It Up" sections that demonstrate how to write about each statistic, "Wrapping Up and Looking Forward" sections, and practice work problems.

Routledge

Market: Statistics

March 2022: 8.25 x 11: 322pp

Hb: 978-0-367-34282-1: **£150.00**Pb: 978-0-367-34283-8: **£32.99**

eBook: 978-1-003-00645-9

Prev. Ed Pb: 978-1-138-83834-5

* For full contents and more information, visit: www.routledge.com/9780367342838**Introduction to the New Statistics**

Estimation, Open Science, and Beyond



Geoff Cumming, La Trobe University, Australia and Robert Calin-Jageman

This accessible informal text is the first introductory statistics book to use an estimation approach from the get go to help readers better understand effect sizes, confidence intervals, and meta-analysis. In Chapter 6 the NHST approach is also introduced and the authors demonstrate how to translate back and forth between these two techniques. The Open Science framework which promotes data replication is integrated throughout. The book promotes critical thinking, comprehension, and retention. It can be used with or without the free ESCI software and videos which feature interactive simulations of key concepts. Exercises

with commentary allow readers to test their knowledge of the topic.

Routledge

Market: Statistics

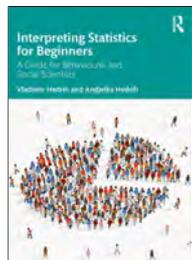
October 2016: 7 x 10: 594pp

Hb: 978-1-138-82551-2: **£160.00**Pb: 978-1-138-82552-9: **£56.99**

eBook: 978-1-315-70860-7

* For full contents and more information, visit: www.routledge.com/9781138825529**Interpreting Statistics for Beginners**

A Guide for Behavioural and Social Scientists



Vladimir Hedrih and Andjelka Hedrih

Interpreting Statistics for Beginners teaches readers to correctly read and interpret results of basic statistical procedures as they are presented in scientific literature, and to understand what they can and cannot infer from such results.

Written in an easy-to-read style and focusing on explaining concepts behind statistical calculations, the book is most helpful for readers with no previous training in statistics, and also those wishing to bridge the conceptual gap between doing the statistical calculations and interpreting the results.

Routledge

Market: Research Methods and Statistics

February 2022: 6.85 x 9.69: 204pp

Hb: 978-0-367-62051-6: **£120.00**Pb: 978-0-367-61852-0: **£32.99**

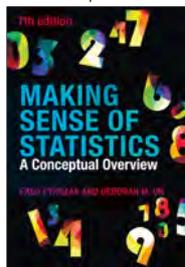
eBook: 978-1-003-10771-2

* For full contents and more information, visit: www.routledge.com/9780367618520

7th Edition

Making Sense of Statistics

A Conceptual Overview



Fred Pyrczak and Deborah M. Oh, California State University, USA

Making Sense of Statistics is the ideal introduction to the concepts of descriptive and inferential statistics for students undertaking their first research project. It presents each statistical concept in a series of short steps, then uses worked examples and exercises to enable students to apply their own learning. It focuses on presenting the why as well as the how of statistical concepts, rather than computations and formulae, so is suitable for students from all disciplines regardless of mathematical background. Only statistical techniques that are almost universally included in introductory statistics courses, and widely

reported in journals, have been included.

Routledge

Market: Research Methods and Statistics

June 2018: 8.25 x 11: 252pp

Hb: 978-1-138-89477-8: **£140.00**Pb: 978-1-138-89476-1: **£44.99**

eBook: 978-1-315-17980-3

Prev. Ed Pb: 978-1-936-52327-6

* For full contents and more information, visit: www.routledge.com/9781138894761

2nd Edition

Statistical Methods

An Introduction to Basic Statistical Concepts and Analysis



Cheryl Ann Willard

Statistical Methods explains core statistical concepts and basic analysis techniques for the beginning undergraduate student in statistics or quantitative research methods. Each chapter covers a core concept before guiding students through a series of exercises designed to apply and demonstrate their knowledge. Expanded coverage of the second edition includes two new chapters on essential topics such as factorial analysis of variance, additional chapter exercises, and a full suite of instructor resources – powerpoint slides, instructor manual and test bank questions.

Routledge

Market: Research Methods and Statistics

March 2020: 7 x 10: 364pp

Hb: 978-0-367-20351-1: **£150.00**Pb: 978-0-367-20352-8: **£49.99**

eBook: 978-0-429-26103-9

* For full contents and more information, visit: www.routledge.com/9780367203528

9th Edition

Interpreting Basic Statistics

A Workbook Based on Excerpts from Journal Articles



Keith S. Cox, University of North Carolina, USA and Zealure C. Holcomb

Interpreting Basic Statistics gives students valuable practice in interpreting statistical reporting as it actually appears in peer-reviewed journals. The questions in each exercise are divided into two parts: (1) Factual Questions and (2) Questions for Discussion. The factual questions require careful reading for details, while the discussion questions show that interpreting statistics is more than a mathematical exercise. Each exercise covers a limited number of topics, making it easy to coordinate the exercises with lectures or a traditional statistics textbook.

Routledge

Market: Research Methods and Statistics

September 2021: 7 x 10: 258pp

Hb: 978-0-367-56051-5: **£160.00**Pb: 978-0-367-56197-0: **£52.99**

eBook: 978-1-003-09676-4

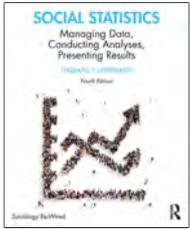
Prev. Ed Pb: 978-0-415-78793-2

* For full contents and more information, visit: www.routledge.com/9780367561970

4th Edition

Social Statistics

Managing Data, Conducting Analyses, Presenting Results



Thomas J. Linneman, The College of William and Mary, USA

Series: *Sociology Re-Wired*

With a clear, engaging writing style and fascinating examples using a variety of real data, this text covers the contemporary statistical techniques that students will encounter in the world of social research. It covers these techniques at an introductory level and carefully guides students through increasingly complex examples without intimidating them. Recurrent examples using four timely topics – health, immigration, income inequality, and everyday harassment – help students understand how the

techniques fit together, and how to use the techniques in combination with one another. Author created web resource accompanies the text.

Routledge

Market: Social Science / Statistics

December 2021: 678pp

Hb: 978-1-032-11623-5: **£160.00**Pb: 978-1-032-11528-3: **£84.99**

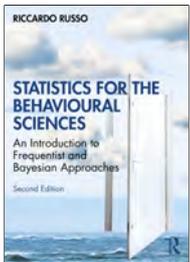
eBook: 978-1-003-22077-0

* For full contents and more information, visit: www.routledge.com/9781032115283

2nd Edition

Statistics for the Behavioural Sciences

An Introduction to Frequentist and Bayesian Approaches



Riccardo Russo

This accessible textbook is for those without a mathematical background (just some notions of basic algebra are sufficient) and provides a comprehensive introduction to all topics covered in introductory behavioural science statistics courses.

This timely and highly readable text will be invaluable to undergraduate students of psychology and research methods courses in related disciplines, as well as anyone with an interest in understanding and applying the basic concepts and inferential techniques associated with statistics in the behavioural sciences.

Routledge

Market: Research Methods

November 2020: 6.85 x 9.69: 330pp

Hb: 978-1-138-71148-8: **£120.00**Pb: 978-1-138-71150-1: **£32.99**

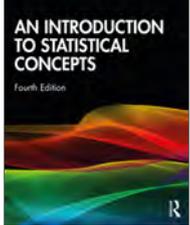
eBook: 978-1-315-20041-5

* For full contents and more information, visit: www.routledge.com/9781138711501

4th Edition

An Introduction to Statistical Concepts

Debbie L. Hahs-Vaughn, University of Central Florida, USA and Richard G. Lomax, Ohio State University



This comprehensive, flexible text is used in both one- and two-semester courses to review introductory through intermediate statistics. Instructors select the topics that are most appropriate for their course. Its conceptual approach helps students more easily understand the concepts and interpret SPSS and research results. Noted for its crystal clear explanations, key concepts are simply stated and occasionally reintroduced and related to one another for reinforcement. Numerous examples demonstrate their relevance. This edition features even more explanation to increase understanding of the concepts and has annotated script for using R.

Routledge

Market: Statistics

February 2020: 7 x 10: 1186pp

Hb: 978-1-138-65055-8: **£120.00**

eBook: 978-1-315-62435-8

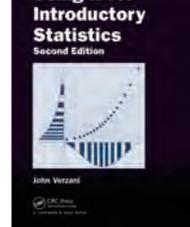
Prev. Ed Hb: 978-0-415-88005-3

* For full contents and more information, visit: www.routledge.com/9781138650558

2nd Edition

Using R for Introductory Statistics

John Verzani, CUNY/College of Staten Island, New York, USA

Series: *Chapman & Hall/CRC The R Series*

The second edition of a bestselling textbook, Using R for Introductory Statistics guides students through the basics of R, helping them overcome the sometimes steep learning curve. The author does this by breaking the material down into small, task-oriented steps. The second edition maintains the features that made the first edition so popular, while updating data, examples, and changes to R in line with the current version.

Chapman and Hall/CRC

Market: Statistics

June 2014: 6.14 x 9.21: 518pp

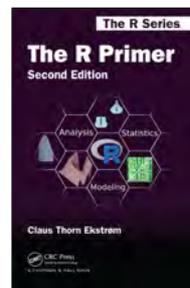
Hb: 978-1-466-59073-1: **£54.99**

eBook: 978-1-315-37308-9

Prev. Ed Hb: 978-1-584-88450-7

* For full contents and more information, visit: www.routledge.com/9781466590731

2nd Edition

R Primer

Claus Thorn Ekström, University of Copenhagen, Denmark

Series: *Chapman & Hall/CRC The R Series*

Newcomers to R are often intimidated by the command-line interface, the vast number of functions and packages, or the processes of importing data and performing a simple statistical analysis. The R Primer provides a collection of concise examples and solutions to R problems frequently encountered by new users of this statistical software. This new edition adds coverage of R Studio and reproducible research.

Chapman and Hall/CRC

Market: Statistics

March 2017: 5.5 x 8.5: 426pp

Hb: 978-1-498-77255-6: **£100.00**Pb: 978-1-138-63197-7: **£46.99**

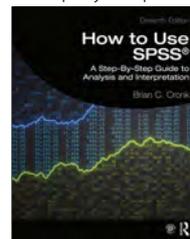
eBook: 978-1-315-15441-1

* For full contents and more information, visit: www.routledge.com/9781138631977

11th Edition

How to Use SPSS®

A Step-By-Step Guide to Analysis and Interpretation



Brian C. Cronk

How to Use SPSS is designed with the novice computer user in mind and for people who have no previous experience using SPSS. Each chapter is divided into short sections that describe the statistic being used, important underlying assumptions, and how to interpret the results and express them in a research report.

New to this edition:

Now in full color with additional screenshots; Fully updated to reflect SPSS version 26 (and prior versions); Changes in nonparametric tests; Model View incorporated Data and real

output are now available for all *Phrasing Results* sections.

Routledge

Market: Research Methods and Statistics

October 2019: 8.25 x 11: 228pp

Hb: 978-0-367-35567-8: **£170.00**Pb: 978-0-367-35569-2: **£52.99**

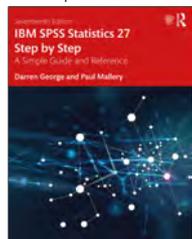
eBook: 978-0-429-34032-1

* For full contents and more information, visit: www.routledge.com/9780367355692

17th Edition

IBM SPSS Statistics 27 Step by Step

A Simple Guide and Reference



Darren George and Paul Mallery

IBM SPSS Statistics 27 Step by Step takes a straightforward, step-by-step approach that makes SPSS software clear to beginners and experienced researchers alike. Extensive use of four-color screen shots, clear writing, and step-by-step boxes guide readers through the program. Output for each procedure is explained and illustrated, and every output term is defined.

New to this edition:

Full coverage of the 11 new procedures for power analysis; Effect sizes included throughout; Bubble charts in chapter 5; Bayesian statistics

Routledge

Market: Multivariate Statistics/Statistics

December 2021: 8.25 x 11: 418pp

Hb: 978-1-032-07090-2: **£180.00**Pb: 978-1-032-07094-0: **£59.99**

eBook: 978-1-003-20533-3

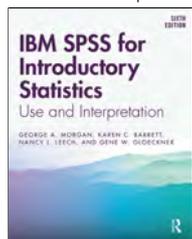
Prev. Ed Pb: 978-0-367-17435-4

* For full contents and more information, visit: www.routledge.com/9781032070940

6th Edition

IBM SPSS for Introductory Statistics

Use and Interpretation



George A. Morgan, Colorado State University, USA, Karen C. Barrett, Colorado State University, Nancy L. Leech, University of Colorado at Denver, USA and Gene W. Gloeckner, Colorado State University

Designed to help students analyze and interpret research data using IBM SPSS, this user-friendly book, written in easy-to-understand language, shows readers how to choose the appropriate statistic based on the design, and to interpret outputs appropriately. The sixth edition includes updated screenshots and instructions for IBM SPSS 24 and Windows 10, and adds helpful callouts to make the book even clearer and

easy to use.

Routledge

Market: Statistics

July 2019: 8.25 x 11: 266pp

Hb: 978-1-138-57822-7: **£140.00**Pb: 978-1-138-57821-0: **£38.99**

eBook: 978-0-429-28765-7

* For full contents and more information, visit: www.routledge.com/9781138578210**Data Analytics for the Social Sciences**

Applications in R



G. David Garson

This book presents a complete exploration of statistical data analysis in R for a wide variety of social science disciplines and quantitative methods courses. Covering all the bases including multilevel modeling and ANOVA / ANCOVA, the book also goes further by looking at topics such as: neural networks to implement deep learning, thus solving complex problems other algorithms cannot; how to deal with missing values in real world data; and the use of text analytics. R code input and output is included. Suitable for all advanced level undergraduate and postgraduate students learning statistical data analysis.

Routledge

Market: Research Methods

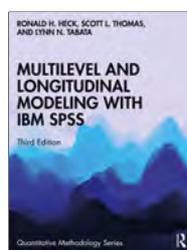
November 2021: 8.25 x 11: 704pp

Hb: 978-0-367-62429-3: **£210.00**Pb: 978-0-367-62427-9: **£74.99**

eBook: 978-1-003-10939-6

* For full contents and more information, visit: www.routledge.com/9780367624279

3rd Edition

Multilevel and Longitudinal Modeling with IBM SPSS

Ronald H. Heck, University of Hawaii, Manoa, Scott L. Thomas, University of Vermont, USA and Lynn N. Tabata, University of Hawaii, Manoa

Series: Quantitative Methodology Series

This text demonstrates how to use the multilevel- and longitudinal-modeling techniques available in IBM SPSS (Version 26). Adopting a workbook format, the text walks readers through setting up, running, and interpreting a variety of different types of multilevel and longitudinal models using the linear mixed-effects model (MIXED and GENLINUXMIXED) platforms in SPSS. This text is an essential resource for graduate students

taking courses on multilevel, longitudinal, and latent variable modeling, multivariate statistics, or advanced quantitative techniques.

Routledge

Market: Statistics

April 2022: 8.25 x 11: 494pp

Hb: 978-0-367-42460-2: **£150.00**Pb: 978-0-367-42461-9: **£42.99**

eBook: 978-0-367-82427-3

Prev. Ed Pb: 978-0-415-81711-0

* For full contents and more information, visit: www.routledge.com/9780367424619

7th Edition

Advanced and Multivariate Statistical Methods

Practical Application and Interpretation



Craig A. Mertler, Arizona State University, USA, Rachel A. Vannatta and Kristina N. LaVenía, Bowling Green State University

Ideal for non-math majors, *Advanced and Multivariate Statistical Methods* teaches students to interpret, present, and write up results for each statistical technique without overemphasizing advanced math. This highly applied approach covers the why, what, when and how of advanced and multivariate statistics in a way that is neither too technical nor too mathematical. Students also learn how to compute each technique using SPSS software.

New to the seventh edition: Updated to SPSS 26 All screenshots and images in full colour Fully updated ancillaries including how to videos for both statistical techniques and SPSS walkthroughs

Routledge

Market: Research Methods and Statistics

November 2021: 8.25 x 11: 350pp

Hb: 978-0-367-49720-0: **£300.00**Pb: 978-0-367-49747-7: **£120.00**

eBook: 978-1-003-04722-3

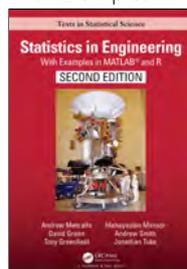
Prev. Ed Pb: 978-1-138-28973-4

* For full contents and more information, visit: www.routledge.com/9780367497477

2nd Edition

Statistics in Engineering

With Examples in MATLAB® and R



Andrew Metcalfe, University of Adelaide, Australia, David Green, Tony Greenfield, Greenfield Research, UK, Mayhayaudin Mansour, Andrew Smith and Jonathan Tuke
Series: Chapman & Hall/CRC Texts in Statistical Science

This is a textbook for an undergraduate course in statistics for engineers with a minimal calculus prerequisite. The second edition differs from existing books in three main aspects: it is the only introductory statistics textbook written for engineers that uses R throughout the text, there is an emphasis on statistical methods most relevant to engineers that are illustrated with practical applications, and there is an emphasis on random number generation and simulation, all very useful features in

engineering.

Chapman and Hall/CRC

January 2019: 7 x 10: 810pp

Hb: 978-1-439-89547-4: **£79.99**Pb: 978-0-367-57062-0: **£42.99**

eBook: 978-1-315-11723-2

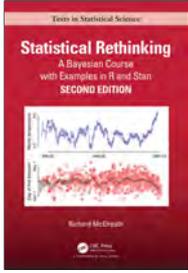
Prev. Ed Hb: 978-0-412-49220-4

* For full contents and more information, visit: www.routledge.com/9781439895474

2nd Edition

Statistical Rethinking

A Bayesian Course with Examples in R and Stan



Richard McElreath, Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany

Series: Chapman & Hall/CRC Texts in Statistical Science

The very popular *Statistical Rethinking: A Bayesian Course with Examples in R and Stan*, Second Edition builds readers' knowledge of and confidence in statistical modeling. Reflecting the need for even minor programming in today's model-based statistics, the book pushes readers to perform step-by-step calculations that are usually automated. This unique computational approach ensures that readers understand enough of the details to make reasonable choices and interpretations in their own modeling work.

Chapman and Hall/CRC

Market: Statistics

March 2020: 7 x 10: 612pp

Hb: 978-0-367-13991-9: **£74.99**

eBook: 978-0-429-02960-8

Prev. Ed Hb: 978-1-482-25344-3

* For full contents and more information, visit: www.routledge.com/9780367139919

Data Science

A First Introduction



Tiffany Timbers, University of British Columbia, Trevor Campbell and Melissa Lee

Series: *Chapman & Hall/CRC Data Science Series*

Data Science: A First Introduction focuses on using the R programming language in Jupyter notebooks to perform data manipulation and cleaning, create effective visualizations, and extract insights from data using classification, regression, clustering, and inference.

The text emphasizes workflows that are clear, reproducible, and shareable, and includes coverage of the basics of version control. All source code is available online, demonstrating the use of good reproducible project workflows.

Chapman and Hall/CRC

Market: Statistics

May 2022: 7 x 10: 456pp

Hb: 978-0-367-53217-8: £112.00

Pb: 978-0-367-52468-5: £44.99

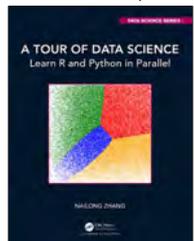
eBook: 978-1-003-08097-8

* For full contents and more information, visit: www.routledge.com/9780367524685



A Tour of Data Science

Learn R and Python in Parallel



Nailong Zhang

Series: *Chapman & Hall/CRC Data Science Series*

This book covers the fundamentals of data science, including programming, statistics, optimization, and machine learning in a single and short book. It does not cover everything, but instead, teaches the key concepts and topics. It also covers two of the most popular programming languages used in Data Science, R and Python, in one source.

Chapman and Hall/CRC

Market: Computer Science

November 2020: 7 x 10: 216pp

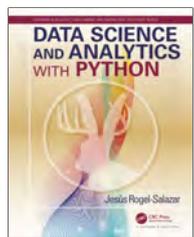
Hb: 978-0-367-89706-2: £115.00

Pb: 978-0-367-89586-0: £44.99

eBook: 978-1-003-02064-6

* For full contents and more information, visit: www.routledge.com/9780367895860

Data Science and Analytics with Python



Jesus Rogel-Salazar, Imperial College London, UK

Series: *Chapman & Hall/CRC Data Mining and Knowledge Discovery Series*

The book is designed for practitioners in data science and data analytics in both academic and business environments. The aim is to present the reader with the main concepts used in data analytics using tools developed in Python, such as SciKit Learn, Pandas, Numpy, etc. The use of Python is of particular benefit given its recent popularity in the data science community, and the book can be used by seasoned programmers and newcomers alike.

Chapman and Hall/CRC

Market: Computer Science & Engineering

August 2017: 6 x 9: 400pp

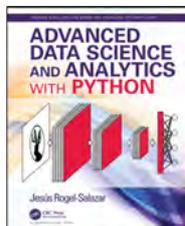
Hb: 978-1-138-04317-6: £105.00

Pb: 978-1-498-74209-2: £48.99

eBook: 978-1-498-74211-5

* For full contents and more information, visit: www.routledge.com/9781498742092

Advanced Data Science and Analytics with Python



Jesus Rogel-Salazar, Imperial College London, UK

Series: *Chapman & Hall/CRC Data Mining and Knowledge Discovery Series*

The book is intended for practitioners in data science and data analytics in both academic and business environments. It aims to present the reader with concepts in data science and analytics that were deemed to be more advanced or simply out of scope in the author's first book, and are used in data analytics using tools developed in Python such as SciKit Learn, Pandas, Numpy, etc. The use of Python is of particular benefit given its recent

popularity in the data science community. The book is therefore a reference to be used by seasoned programmers and newcomers alike and the key benefit is the practical approach presented throughout the book.

Chapman and Hall/CRC

Market: Computer Science and Engineering

May 2020: 420pp

Hb: 978-0-429-44661-0: £100.00

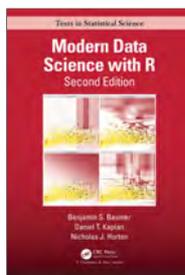
Pb: 978-1-138-31506-8: £44.99

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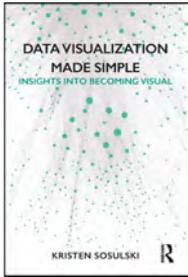
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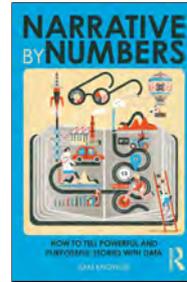
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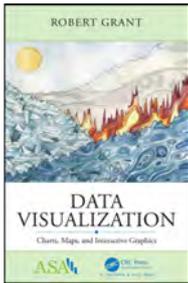
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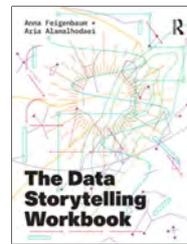
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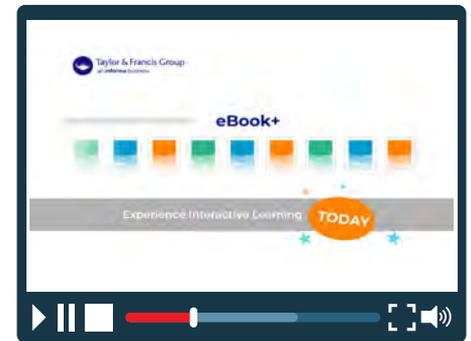
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