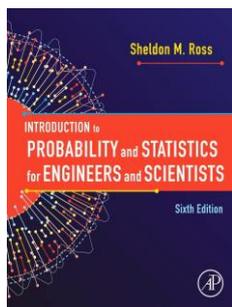# Introduction to Probability and Statistics for Engineers and Scientists
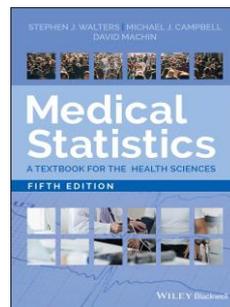
v pevné vazbě, 704 stran
vyd. Academic Press, 6.vydání, II/2021
ISBN 9780128243466

katalog.cena cca 3.200 Kč vč.DPH
v této nabídce **2.700 Kč** vč.DPH

Introduction to Probability and Statistics for Engineers and Scientists, Sixth Edition, uniquely emphasizes how probability informs statistical problems, thus helping readers develop an intuitive understanding of the statistical procedures commonly used by practicing engineers and scientists. Utilizing real data from actual studies across life science, engineering, computing and business, this useful introduction supports reader comprehension through a wide variety of exercises and examples. End-of-chapter reviews of materials highlight key ideas, also discussing the risks associated with the practical application of each material.

In the new edition, coverage includes information on Big Data and the use of R. This book is intended for upper level undergraduate and graduate students taking a probability and statistics course in engineering programs as well as those across the biological, physical and computer science departments. It is also appropriate for scientists, engineers and other professionals seeking a reference of foundational content and application to these fields.

Medical Statistics: Textbook for Health Sciences

v měkké vazbě, 448 stran
vyd. Wiley-Blackwell, 5.vydání, II/2021
ISBN 9781119423645

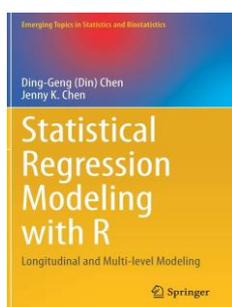katalog.cena cca 1.160 Kč vč.DPH
v této nabídce **980 Kč** vč.DPH

The 5th edition of this popular introduction to statistics for the medical and health sciences has undergone a significant revision, with several new chapters added and examples refreshed throughout the book. Yet it retains its central philosophy to explain medical statistics with as little technical detail as possible, making it accessible to a wide audience. Helpful multi-choice exercises are included at the end of each chapter, with answers provided at the end of the book.
Each analysis technique is carefully explained and the mathematics kept to minimum. Written in a style suitable for statisticians and clinicians alike, this edition features many real and original examples, taken from the authors' combined many years' experience of designing and analysing clinical trials and teaching statistics. Students of the health sciences, such as medicine, nursing, dentistry, physiotherapy, occupational therapy, and radiography should find the book useful, with examples relevant to their disciplines. The aim of training courses in medical statistics pertinent to these areas is not to turn the students into medical statisticians but rather to help them interpret the published scientific literature and appreciate how to design studies and analyse data arising from their own projects. However, the reader who is about to design their own study and collect, analyse and report on their own data will benefit from a clearly written book on the subject which provides practical guidance to such issues.

Statistical Regression Modeling with R

v pevné vazbě, 228 stran
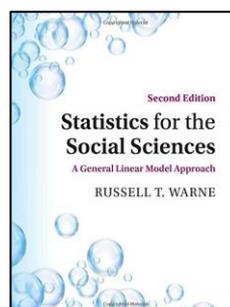vyd. Springer Nature, IV/2021
ISBN 9783030675820

katalog.cena cca 2.820 Kč vč.DPH
v této nabídce **2.260 Kč** vč.DPH

This book provides a concise point of reference for the most commonly used regression methods. It begins with linear and nonlinear regression for normally distributed data, logistic regression for binomially distributed data, and Poisson regression and negative-binomial regression for count data. It then progresses to these regression models that work with longitudinal and multi-level data structures.

The volume is designed to guide the transition from classical to more advanced regression modeling, as well as to contribute to the rapid development of statistics and data science. With data and computing programs available to facilitate readers' learning experience, Statistical Regression Modeling promotes the applications of R in linear, nonlinear, longitudinal and multi-level regression. All included datasets, as well as the associated R program in packages nlme and lme4 for multi-level regression, are detailed in Appendix A.

This book will be valuable in graduate courses on applied regression, as well as for practitioners and researchers in the fields of data science, statistical analytics, public health, and related fields.
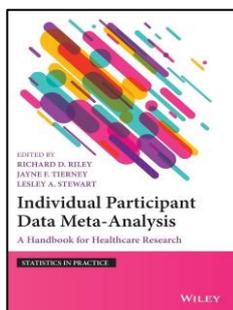
Statistics for Social Sciences

v měkké vazbě, 606 stran
vyd. Cambridge University Press, 2.vydání, XII/2020
ISBN 9781108814508

katalog.cena cca 1.920 Kč vč.DPH
v této nabídce **1.640 Kč** vč.DPH

The second edition of Statistics for the Social Sciences prepares students from a wide range of disciplines to interpret and learn the statistical methods critical to their field of study. By using the General Linear Model (GLM), the author builds a foundation that enables students to see how statistical methods are interrelated enabling them to build on the basic skills. The author makes statistics relevant to students' varying majors by using fascinating real-life examples from the social sciences.

Students who use this edition will benefit from clear explanations, warnings against common erroneous beliefs about statistics, and the latest developments in the philosophy, reporting, and practice of statistics in the social sciences. The textbook is packed with helpful pedagogical features including learning goals, guided practice, and reflection questions.
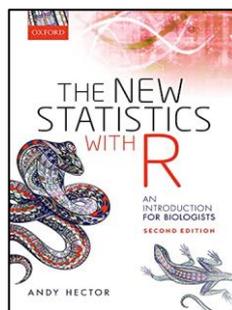
Individual Participant Data Meta-Analysis

v pevné vazbě, 560 stran
vvd. Wiley-Blackwell, VI/2021
ISBN 9781119333722

katalog.cena cca 2.000 Kč vč.DPH
v této nabídce **1.680 Kč** vč.DPH

Individual Participant Data Meta-Analysis: A Handbook for Healthcare Research provides a comprehensive introduction to the fundamental principles and methods that healthcare researchers need when considering, conducting or using individual participant data (IPD) meta-analysis projects. Written and edited by researchers with substantial experience in the field, the book details key concepts and practical guidance for each stage of an IPD meta-analysis project, alongside illustrated examples and summary learning points. Split into five parts, the book chapters take the reader through the journey from initiating and planning IPD projects to obtaining, checking, and meta-analysing IPD, and appraising and reporting findings.
The book initially focuses on the synthesis of IPD from randomised trials to evaluate treatment effects, including the evaluation of participant-level effect modifiers (treatment-covariate interactions). Detailed extension is then made to specialist topics such as diagnostic test accuracy, prognostic factors, risk prediction models, and advanced statistical topics such as multivariate and network meta-analysis, power calculations, and missing data. Intended for a broad audience, the book will enable the reader to: *Understand the advantages of the IPD approach and decide when it is needed over a conventional systematic review *Recognise the scope, resources and challenges of IPD meta-analysis projects *Appreciate the importance of a multi-disciplinary project team and close collaboration with the original study investigators and more…

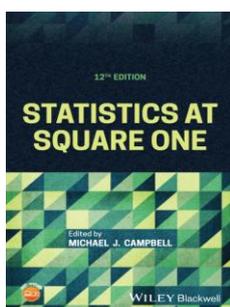# New Statistics with R: Introduction for Biologists

v měkké vazbě, 288 stran
vyd. Oxford University Press,
2.vydání, VI/2021
ISBN 9780198798187

katalog.cena cca 1.160 Kč vč.DPH
v této nabídce **980 Kč** vč.DPH

Statistical methods are a key tool for all scientists working with data, but learning the basics continues to challenge successive generations of students. This accessible textbook provides an up-to-date introduction to the classical techniques and modern extensions of linear model analysis-one of the most useful approaches for investigating scientific data in the life and environmental sciences. While some of the foundational analyses (e.g.t tests, regression,ANOVA) are as useful now as ever, best practice moves on and there are many new general developments that offer great potential. The book emphasizes an estimation-based approach that takes account of recent criticisms of over-use of probability values and introduces the alternative approach that usesinformation criteria. This new edition includes the latest advances in R and related software and has been thoroughly "road-tested" over the last decade to create a proven textbook that teaches linear and generalized linear model analysis to students of ecology, evolution, and environmental studies (including worked analyses of data sets relevant to all three disciplines).

While R is used throughout, the focus remains firmly on statistical analysis. The New Statistics with R is suitable for senior undergraduate and graduate students, professional researchers, and practitioners in the fields of ecology, evolution and environmental studies.
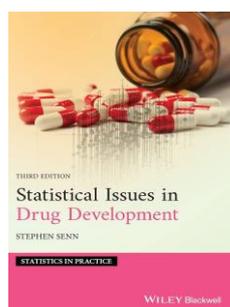
Statistics at Square One

v měkké vazbě, 304 stran
vyd. Wiley-Blackwell, 12.vydání,
VII/2021
ISBN 9781119401308

katalog.cena cca 840 Kč vč.DPH
v této nabídce **700 Kč** vč.DPH

The new edition of the popular introduction to the world of statistics for health care professionals and medical studentsFirst published nearly three decades ago, Statistics at Square One remains one of the most popular introductions to medical statistics. Now in its twelfth edition, this international bestseller continues to be a must-have resource for anyone in need of a thorough introduction to statistics in the health sciences. Clear and accessible chapters help students with no previous background in the subject understand fundamental topics including summary statistics for quantitative and binary data, diagnostic and screening tests, populations and samples, survival analysis, correlation and regression, study design, computer modeling, and more.

This edition reflects contemporary understanding of medical statistics and emphasizes the importance of statistics in public health, including extensively updated coverage of diagnostic tests and new COVID-related examples. All figures and examples now include code to reproduce them in the R statistical software. New chapters cover the basics for understanding numbers and introduce the use of models in medical statistical analysis.

Statistical Issues in Drug Development

v pevné vazbě, 640 stran
vyd. Wiley-Blackwell, 3.vydání,
VI/2021
ISBN 9781119238577

katalog.cena cca 2.500 Kč vč.DPH
v této nabídce **2.100 Kč** vč.DPH

Statistical Issues in Drug DevelopmentThe revised third edition of Statistical Issues in Drug Development delivers an insightful treatment of the intersection between statistics and the life sciences. The book offers readers new discussions of crucial topics, including cluster randomization, historical controls, responder analysis, studies in children, post-hoc tests, estimands, publication bias, the replication crisis, and many more.This work presents the major statistical issues in drug development in a way that is accessible and comprehensible to life scientists working in the field, and takes pains not to gloss over significant disagreements in the field of statistics, while encouraging communication between the statistical and life sciences disciplines. In addition to new material on topics like invalid inversion, severity, random effects in network meta-analysis, and explained variation, readers will benefit from the inclusion of: *A thorough introduction to basic topics in drug development and statistics, including the role played by statistics in drug development *An exploration of the four views of statistics in drug development, including the historical, methodological, technical, and professional *An examination of debatable and controversial topics in drug development, including the allocation of treatments to patients in clinical trials, baselines and covariate information, and the measurement of treatment effects *Perfect for life scientists and other professionals working in the field of drug development.
Statistical Issues in Drug Development is the ideal resource for anyone seeking a one-stop reference to enhance their understanding of the use of statistics during drug development.