Statistical Methods for the Analysis of Biomedical Data, 2nd Edition

Robert F. Woolson, William R. Clarke
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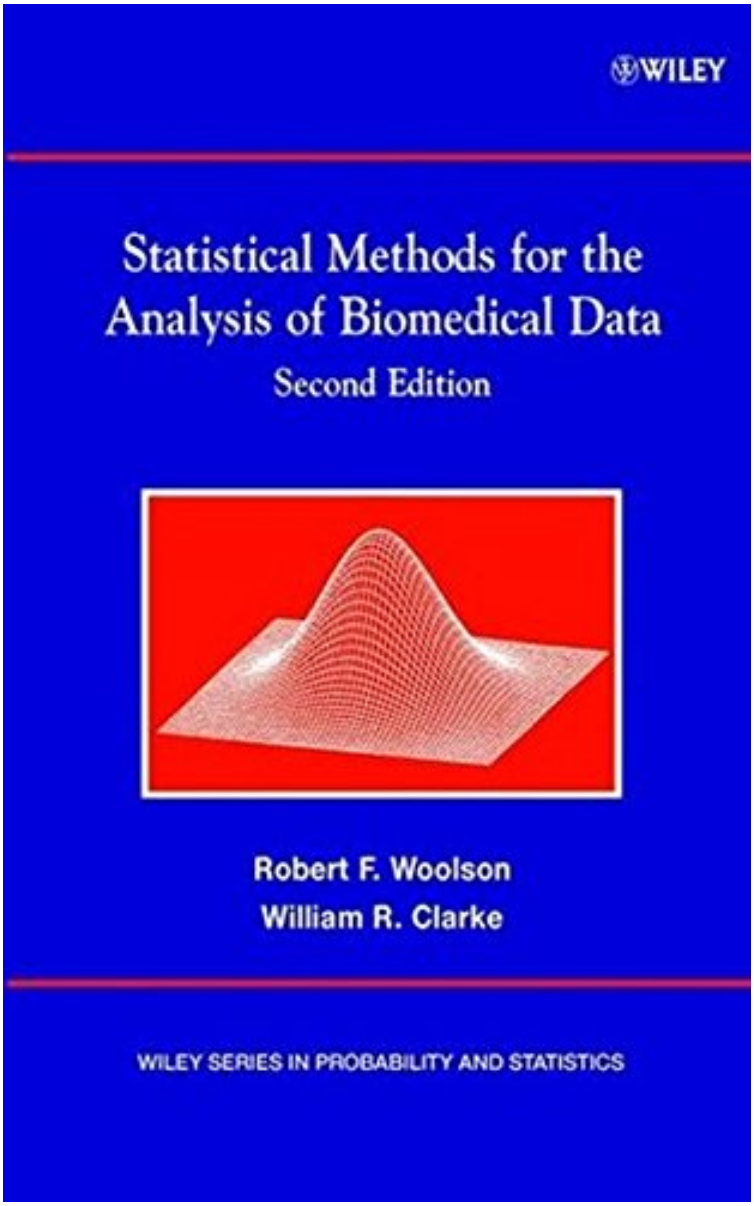

#1592109 in Books 2002-06-05Ingredients: Example IngredientsOriginal language:EnglishPDF # 1 9.33 x 1.48 x 6.34l, 2.40 #File Name: 047139405X608 pages | File size: 35.Mb

Robert F. Woolson, William R. Clarke : Statistical Methods for the Analysis of Biomedical Data, 2nd Edition before purchasing it in order to gage whether or not it would be worth my time, and all praised Statistical Methods for the Analysis of Biomedical Data, 2nd Edition:

0 of 0 people found the following review helpful. Fulfills the authors' stated purposeBy Aran Joseph CanesThe authors

of this text write in the introduction that the book is intended to train medical professionals in the statistical methods they will encounter in their practice or as a reference for those actually performing these techniques.I use these techniques on a daily basis and can say that the authors have succeeded in providing a reference work for healthcare data analytics. Each test or method is clearly described with ample examples to make the theory more concrete. There are helpful suggestions on how a particular test may be misapplied and advice on how to avoid such mistakes. Additionally helpful is the end of each chapter which has the SAS code to implement the previously discussed methods.I can easily imagine myself pulling this text out to make certain I'm applying, say, the Kruskal-Wallis text correctly.One drawback to this text is its price ($200+) when a lot of this material is covered in less expensive sources such as SAS Statistics training manuals. I was able to purchase a new copy from an online used book dealer for $40. In my opinion, the book was certainly worth $40 but the content is not original enough to pay $200. Potential readers can come to their own conclusions about prices in between.0 of 0 people found the following review helpful. Five StarsBy gerardo i. hurtadothank you!...29 of 29 people found the following review helpful. great comprehensive and rigorous treatment of biostatisticsBy Michael R. ChernickThis is the second edition of a highly acclaimed text. Like the first edition this book gives an excellent overview of statistical problems in the medical field and provides illustrations of a variety of parametric and nonparametric statistical techniques for solving these problems. It is aimed at the intermediate level rather than as an introductory course. So medical professionals, with a first course in biostatistics under their belt, will find this useful. It is also a good text for graduate students in statistics or biostatistics. Examples are illustrated throughout the text using SAS software. This is a key addition to this edition of the book. Also added in this edition is a chapter on multiple regression where various model selection procedures are nicely covered.A nice feature of the book is its coverage of epidemiologic methods and data. This was also a strength of the first edition.I was a little disappointed that the authors did not take the opportunity to significantly update the bibliography. Only a few references are given in the latter chapters to books and articles that appeared after the publication of the first edition in 1987. Also, the authors missed an opportunity to discuss the advances in computing that have led to new methods including Markov Chain Monte Carlo and resampling, both of which have found many applciations in medical research. Bioinformatics and advances in genetics are also playing a major role in medical research, having blossomed since the publication of the first edition of the book. Although I would not expect these topics to necessarily get much coverage, I think they are important enough to at least be mentioned and discussed and have key articles and books referenced.This is an excellent text for a second course in biostatistics for health care professionals. For a first course the book I am writing with Bob Friis will be useful and it is up to date and even provides some coverage of resampling methods. Wiley published the second edition in 2003.

The new edition adds a chapter on multiple linear regression in biomedical research, with sections including the multiple linear regressions model and least squares; the ANOVA table, parameter estimates, and confidence intervals; partial f-tests; polynomial regression; and analysis of covariance. * Organized by problem rather than method, so it guides readers to the correct technique for solving the problem at hand.

"useful in a course in biostatistics." (Journal of Statistical Computation and Simulation, September 2005) "...a nice overview of statistical topics...an excellent book to have...highly recommend this book for students and researchers..." (Statistical Methods in Medical Research, Vol 13, 2004) "interesting and usefulI recommend it as an addition to your statistical library, and if you already own the first edition, it would be worthwhile to update it." (The American Statistician, Vol. 58, No. 2, May 2004)From the PublisherDescribes and compares a variety of statistical methods for the analysis of biomedical data. Statistical procedures are described by presenting worked examples for each type of procedure. Coverage includes: methods for comparing two groups, methods for evaluating the association between two variables, techniques for epidemiological analysis of 2x2 tables and procedures for estimation and comparison of survival curves. Presents both parametric and non-parametric procedures throughout the text. Additional topics detailed include observer agreement, standardization of rates and methods for analysis of odds ratio.From the Back CoverPraise for the First Edition "This text is a very welcome addition to the field, both as a reference and classroom text." -Publication of the International Statistical Institute "This book is a perfectly organized source of reference for elementary statistical procedures used in clinical trials." -Biomedical Journal "I would recommend this book as an introductory biostatistics text for its clear presentation and worked examples, particularly in the chapters on the comparison of groups." -Statistics in Medicine Statistical Methods for the Analysis of Biomedical Data surveys a number of statistical topics commonly used in the analysis of biological and medical data, as well as several other topics such as observer agreement, standardization of rates, and methods for analysis of odds ratio. Applied in its approach, the book describes statistical procedures through the introduction of worked examples for each procedure. The Second Edition includes a new chapter on multiple linear regression methods, new sections in each chapter on using SAS for computations, and revised and expanded problems. This authoritative volume also: * Is organized by problem rather than method, guiding readers to the correct technique for solving the problem at hand * Compares, in cases where more than one technique is applicable, the advantages and disadvantages of each option * Develops, in

detail, solutions to practical problems of design and analysis through worked examples * Demonstrates how SAS output illustrates the results of analyses of true-to-life applications, such as predicting systolic blood pressure as a function of age, height, weight, and gender from data taken on Muscatine teenagers * Includes methods for comparing two or more groups and evaluating the association between two variables, techniques for epidemiological analysis of 2x2 tables, and procedures for estimation and comparing survival curves Statistical Methods for the Analysis of Biomedical Data makes an ideal reference for analysts and researchers in biostatistics, medicine, and other health-related fields, as well as a textbook for graduate courses in biostatistics.