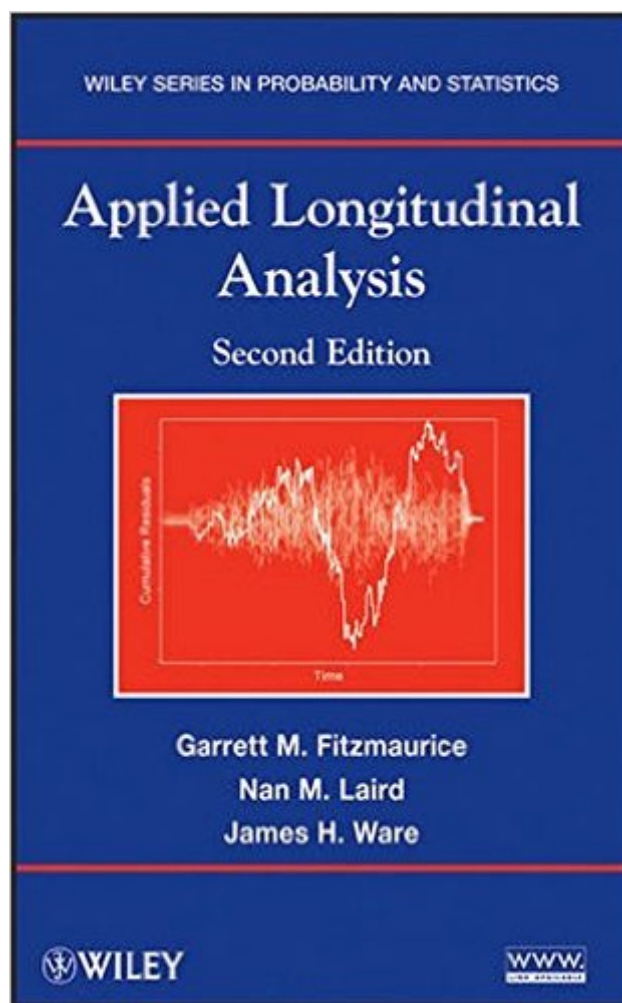The book was found

Applied Longitudinal Analysis

Synopsis

Praise for the First Edition ". . . [this book] should be on the shelf of everyone interested in . . . longitudinal data analysis." â "Journal of the American Statistical Association Features newly developed topics and applications of the analysis of longitudinal data Applied Longitudinal Analysis, Second Edition presents modern methods for analyzing data from longitudinal studies and now features the latest state-of-the-art techniques. The book emphasizes practical, rather than theoretical, aspects of methods for the analysis of diverse types of longitudinal data that can be applied across various fields of study, from the health and medical sciences to the social and behavioral sciences. The authors incorporate their extensive academic and research experience along with various updates that have been made in response to reader feedback. The Second Edition features six newly added chapters that explore topics currently evolving in the field, including: Fixed effects and mixed effects models Marginal models and generalized estimating equations Approximate methods for generalized linear mixed effects models Multiple imputation and inverse probability weighted methods Smoothing methods for longitudinal data Sample size and power Each chapter presents methods in the setting of applications to data sets drawn from the health sciences. New problem sets have been added to many chapters, and a related website features sample programs and computer output using SAS, Stata, and R, as well as data sets and supplemental slides to facilitate a complete understanding of the material. With its strong emphasis on multidisciplinary applications and the interpretation of results, Applied Longitudinal Analysis, Second Edition is an excellent book for courses on statistics in the health and medical sciences at the upper-undergraduate and graduate levels. The book also serves as a valuable reference for researchers and professionals in the medical, public health, and pharmaceutical fields as well as those in social and behavioral sciences who would like to learn more about analyzing longitudinal data.

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Customer Reviews

While the text by Diggle, Heagerty, Liang and Zeger now in its second edition is the first and in my opinion still the best book to cover the theory and methods of longitudinal data analysis, the subject has such great importance in biostatistics and clinical trial research that a number of excellent competitors have now come. This text is certainly one.Nan Laird and James Ware are Harvard Professors of Biostatistics with a great deal of experience studying and publishing research on longitudinal data. Along with Fitzmaurice they have put together a book that provides a strong foundation in the methodology and a wealth of applications based on their experience.

If you need to do longitudinal analyses, and have a moderate mathermatical background, this is a book you should get, particularly if you use SAS. The authors present a wide variety of models clearly, describe their advantages and disadvantages, and illustrate how to use SAS to fit them. They keep the technical level modest (a little use of matrix algebra, but no calculus; not in theorem-proof style) while not sacrificing needed detail. In addition, they provide, at the end of each chapter, two sets of references: One at a similar level to this book, and one with more advanced material for those who wish (and are able) to explore it.

The authors have done a masterful job. They've created a book that is accessable to those without a strong mathematics background, but still interesting to those with such a background. The scope is broad, yet one does not feel "shortchanged" on any topic covered. They cover both linear and generalized linear models, with and without mixed effects. Part IV contains what the authors call advanced topics such as missing data and multilevel models and their lucidity, given such brief treatment is astonishing.

This textbook is an excellent introduction or review of methods for analysis of longitudinal data, for applied researchers with all levels of statistical background.Strengths* Intuitive explanations for technical details* Practical hints for approaching analysis* Guidance on how to interpret results* Good graphics and SAS tipsWeaknesses* It's fine to gloss over technical details, but it would be

useful to add a reference for where the details may be found. (Singer & Willett's Applied Longitudinal Data Analysis does this very well.) A glaring example is the relationship between marginal mean parameters and GLMM mean parameters in logistic regression with a random intercept (p. 363)* Naturally the authors emphasize their own contributions to the field, but other approaches are either ignored (Bayesian solutions to likelihood-based models) or obliquely insulted without direct attribution (see the swipe at marginalized models on p. 364).* Examples use only SAS sofware. The Singer & Willett ALDA website hosted by UCLA shows code for SAS, R, Stata, MPlus, MLwin, SPSS, and HLM!

Used in a longitudinal analysis course, and I have to say this book presents the concepts in clear and structured manners. Very useful for learning the material alongside lectures, and could likely even be used alone to help improve skill and understanding of longitudinal analysis. I would highly recommend!

Detailed enough, not mathematically overwhelming. Recommended for the ones who have an understanding of ANOVA and linear regression. Also, some basic calculus (mostly derivatives) knowledge is helpful, but not crucial to grasp the materials.

It can be hard to find stats textbooks that strike the right balance between being clearly written and technically concise. This is one such book. Based on my personal experience, it has been very readable and accessible. The language is precise but not overloaded with jargon.I recommend it.

The binding of this book is absolutely unacceptable for one being sold for more than $100. Inside a hardcover, SEPARATELY CUTTED pages (no 64-page blocks!) are united by some sort of glue. This book will start to disintagrate to a pile of leafs after few days of reading. That is not the book for which one pays >$100.

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