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Survival Analysis: Techniques for Censored and Truncated Data (Statistics for Biology and Health)

John P. Klein, Melvin L. Moeschberger
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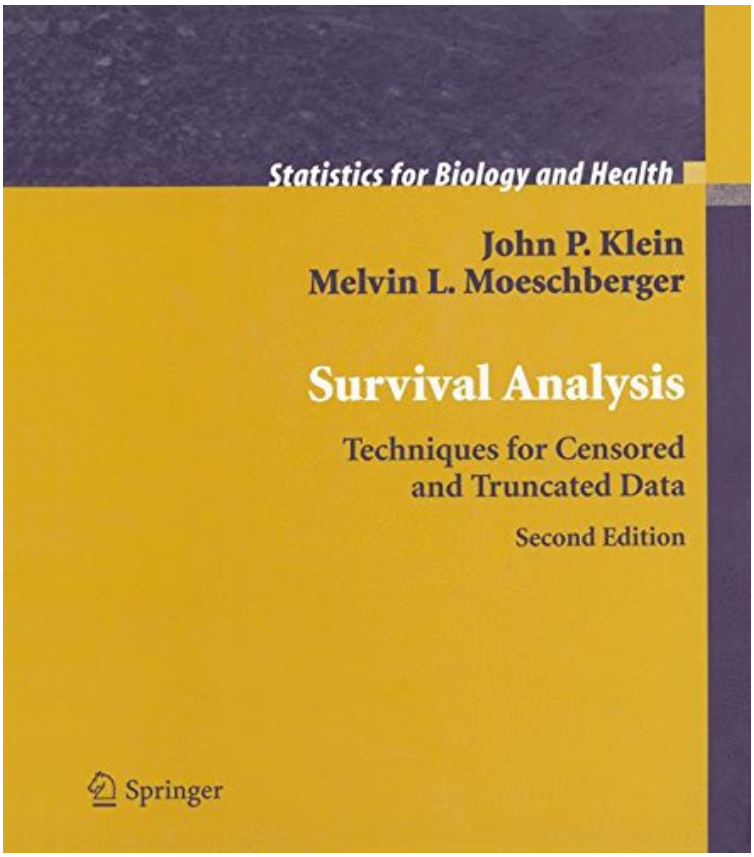

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John P. Klein, Melvin L. Moeschberger : Survival Analysis: Techniques for Censored and Truncated Data (Statistics for Biology and Health) before purchasing it in order to gage whether or not it would be worth my time, and all praised Survival Analysis: Techniques for Censored and Truncated Data (Statistics for Biology and Health):

8 of 8 people found the following review helpful. pretty good text but the examples/problems go downhill near the endBy DavidI used this book for a class in survival analysis (a graduate level biostats course) and I found it very useful. Much of the first several chapters are fairly quick relative to many graduate statistics texts and focuses on application with less emphasis on theory. Overall, I have no major qualms with the book. The author goes on a bit longer than necessary but I'd rather end up skimming text than be stuck deciphering terse material. This extra explanation also opens the book up to a wider audience.A solid understanding of basic statistics is necessary to get started in this book. To get more, 4+ semester-long statistics courses, at least one based in regression, would be ideal. A basic knowledge in mathematical analysis as it pertains to statistics (mainly dealing with convergence in law) will be beneficial to understanding some of the intricacies of the topics and answer many of the 'whys'.In conjunction with

the course and the book, I worked problems in R with the 'survival' package, which I found very useful. (R is a free statistical program. A basic understanding of R would be necessary before trying to use the survival package -- I would recommend Dalgaard's book for an intro to R if this is of interest.) I have a good understanding of R and found the survival package documentation supplemented by rseek . org searches (when I got stuck) sufficient to figure out how to implement the survival functions in R.On the example setup and problems...at the end of each chapter, this book is a bit hit-or-miss. Some problems are good. Many are not. There is a lot of confusion created by some of the problems, which leads into the part of the book I take the most issue with. The authors refer to scattered examples in problems (take for example, referring to example 8.3 in problem 9.5). The thing is, Example 8.3 starts on page 251 and then it continues randomly throughout the remainder of the chapter until page 274 (I had to page through the chapter to find those page numbers). The examples in mid-to-late chapters can be very scatter-brained and some of the problems start to become this way as well. The authors seem to forget that keeping track of the 15-20 studies they use in this text is no small task and that they've spent a lot more time looking at them than others. Self-contained examples where I don't need to flip back to chapter 1 or some other example to read about the study would be really nice. The examples and problems could have been much more user-friendly to accelerate the learning process.2 of 3 people found the following review helpful. Good BookBy WaseemI am a computer scientist and using this book for my research to address a problem. This book is well written but of course target audience are people with solid background in probability theory and parameteric estimation (pattern recognition). Therefore please do not expect that author will teach you basic probability theory. Contents are more applied in nature therefore natural audience are staticians and researchers.1 of 1 people found the following review helpful. Awesome book!By DanielleVery helpful and easy to read. Highly recommended.

Applied statisticians in many fields must frequently analyze time to event data. While the statistical tools presented in this book are applicable to data from medicine, biology, public health, epidemiology, engineering, economics, and demography, the focus here is on applications of the techniques to biology and medicine. The analysis of survival experiments is complicated by issues of censoring, where an individual's life length is known to occur only in a certain period of time, and by truncation, where individuals enter the study only if they survive a sufficient length of time or individuals are included in the study only if the event has occurred by a given date. The use of counting process methodology has allowed for substantial advances in the statistical theory to account for censoring and truncation in survival experiments. This book makes these complex methods more accessible to applied researchers without an advanced mathematical background. The authors present the essence of these techniques, as well as classical techniques not based on counting processes, and apply them to data. Practical suggestions for implementing the various methods are set off in a series of Practical Notes at the end of each section. Technical details of the derivation of the techniques are sketched in a series of Technical Notes. This book will be useful for investigators who need to analyze censored or truncated life time data, and as a textbook for a graduate course in survival analysis. The prerequisite is a standard course in statistical methodology.

...An excellent graduate-level text for a course in survival analysis. Students will definitely find the authors systematic treatment of topics, clear discussions and derivations, and numerous detailed examples useful. This book is also a good reference source for practicing statisticians, biostatisticians, and public health professionals with a basic statistics and applied statistics background. Although the examples are biomedical in nature, most methods described in the book for time-to-event data are applicable to other fields, including engineering and economics, and the book should be useful for researchers in these disciplines. The authors use semiparametric and nonparametric methods extensively, and also discusses parametric models. The "Practical Notes" and "Theoretical Notes" provided in many sections are very attractive and give readers information and citations beyond the material in the text." (Technometrics, February 2004) "...The second edition of this book represents a well-organized and thorough exploration of many of the key ideas underlying survival analysis. The 18 datasets stemming from real-life experiences illustrate the concepts well. The Practical Notes and Theoretical Notes enhance understanding and provide the reader with guidance for further exploration and learning. This book is recommended as an up-to-date reference for statisticians and scientists engaged in the analysis of time-to-event data subject to censoring and/or truncation." (Journal of Biopharmaceutical Statistics, 2004) "This book...offers an excellent course in survival analysis for Masters-level students or indeed for statisticians who wish to extend their knowledge of this subject...The authors treat the subject from a classical point of view and the mathematical level is compatible with that. A brief review of the alternative development of the subject through counting processes is given in Chapter 3 and further references and discussion are given in the theoretical notes that are part of each chapter. The subject is developed mathematically, but strong emphasis is placed on the practical implementation of the techniques. Included in each chapter are practical notes that extend the theoretical developments in the text and discuss relevant computer programs." (Short Book s) "The book's most significant and possibly controversial feature is that the materials are carefully presented with little technical difficulty involved...This is designed tofulfill the authors' goal of making complex methods accesesible to applied researchers without a strong

mathematical background. The authors obviously have a lot of experience in teaching at this level and in consulting wtih various investigators. This book has plenty to offer for a one-or two-semester course for nonstatistics majors." (Journal of the American Statistical Association, September 2004) From the reviews of the second edition: "For a statistician in the pharmaceutical industry, the new material in this second edition, such as the competing risks section, is directly relevant and in sufficient detail to be useful in practice. The examples used throughout the book are based on medical data . the data are well chosen and sufficiently complex to illustrate the methods very well." (Kim Hawkins, Pharmaceutical Statistics, Issue 4, 2004) "This is the second edition of a text whose first edition has already established a place for itself in the library of many applied statisticians, particularly biostatisticians. the book achieves a comprehensive coverage of the topic of survival analysis in a biomedical context, which serves the needs of students and researchers in a manner that is both interesting and mathematically satisfying. It deserves its place in the library of applied statisticians." (Gillian Z Heller, Statistics in Medicine, Vol. 23, 2004) "This book deals with the analysis of time to event data, focused on applications to biology and medicine. The book can be used as a text for a graduate level course on survival analysis and also for self study. Each new tool is presented through the treatment of a real example. More advanced topics are given in separate chapters or sections. The exposition is clear, the book is very well presented and makes pleasant reading." (Ricardo Maronna, Statistical Papers, Vol. 45 (3), 2004) "Comprising 13 chapters and 5 appendixes, with 97 illustrations and several exercises at the end of each chapter, this book is an excellent graduate-level text for a course in survival analysis. Students will definitely find the authors systematic treatment of topics, clear discussions and derivations, and numerous detailed examples useful. This book is also a good reference source for practicing statisticians, biostatisticians, and public health professionals with a basic statistics and applied statistics background." (Nalini Ravishanker, Technometrics, Vol. 46 (1), February, 2004) From the reviews: "Applied statisticians and researchers in medicine will find this book very useful. A basic level of statistical theory is necessary to understand the material of this well written book. In every chapter, there are challenging and easy problems. It is suited for a graduate level course in survival analysis. The statistical tables and reference contain recent material." (Ramalingam Shanmugam, Journal of Statistical Computation Simulation, Vol. 74 (5), May, 2004)