

### A First Course in Statistical Methods (with CD-ROM) (Duxbury)

By Lyman Ott, Micheal T. Longnecker



A First Course in Statistical Methods (with CD-ROM) (Duxbury) By Lyman Ott, Micheal T. Longnecker

A FIRST COURSE IN STATISTICAL METHODS addresses a pressing need in the methods course-a shorter text designed for a one-term course. By selecting and revising material from their best-selling two-semester text, AN INTRODUCTION TO STATISTICAL METHODS AND DATA ANALYSIS, Fifth Edition, the authors created an ideal book for a one-term course in statistical methods. Based on the belief that statistics is a thought process tied to the scientific method, the text utilizes a 5-step approach: 1) defining the problem, 2) collecting data, 3) summarizing data, 4) analyzing and interpreting the data, and 5) communicating the results of the analysis.



**Download** A First Course in Statistical Methods (with CD-ROM ...pdf



Read Online A First Course in Statistical Methods (with CD-R ...pdf

# A First Course in Statistical Methods (with CD-ROM) (Duxbury)

By Lyman Ott, Micheal T. Longnecker

**A First Course in Statistical Methods (with CD-ROM) (Duxbury)** By Lyman Ott, Micheal T. Longnecker

A FIRST COURSE IN STATISTICAL METHODS addresses a pressing need in the methods course-a shorter text designed for a one-term course. By selecting and revising material from their best-selling two-semester text, AN INTRODUCTION TO STATISTICAL METHODS AND DATA ANALYSIS, Fifth Edition, the authors created an ideal book for a one-term course in statistical methods. Based on the belief that statistics is a thought process tied to the scientific method, the text utilizes a 5-step approach: 1) defining the problem, 2) collecting data, 3) summarizing data, 4) analyzing and interpreting the data, and 5) communicating the results of the analysis.

### A First Course in Statistical Methods (with CD-ROM) (Duxbury) By Lyman Ott, Micheal T. Longnecker Bibliography

• Rank: #29494 in Books

• Brand: Brand: Cengage Learning

• Published on: 2004

• Original language: English

• Number of items: 1

• Dimensions: 10.86" h x 1.34" w x 7.54" l, 3.40 pounds

• Binding: Hardcover

• 768 pages



Read Online A First Course in Statistical Methods (with CD-R ...pdf

Download and Read Free Online A First Course in Statistical Methods (with CD-ROM) (Duxbury) By Lyman Ott, Micheal T. Longnecker

#### **Editorial Review**

#### Review

Step 1: DEFINING THE PROBLEM. 1. Statistics and the Scientific Method. Introduction. Why Study Statistics? Some Current Applications of Statistics. A Note to the Student. Staying Focused. Step 2: COLLECTING DATA. 2. Collecting Data Using Surveys and Scientific Studies. Introduction. Surveys. Sampling Designs for Surveys. Scientific Studies. Experimental Designs for Scientific Studies. Observational Studies. Data Management: Preparing Data for Summarization and Analysis (Optional). Staying Focused. Step 3: SUMMARIZING DATA. 3. Summarizing Data. Introduction. Calculators, Computers, and Software Systems. Summarizing Data on a Single Variable: Graphical Methods. Summarizing Data on a Single Variable: Measures of Central Tendency. Summarizing Data on a Single Variable: Measures of Variability. The Boxplot. Summarizing Data from More than One Variable. Encounters with Real Data. Staying Focused. 4. Probability and Probability Distributions. How Probability Can Be Used in Making Inferences. Finding the Probability of an Event. Basic Event Relations and Probability Laws. Conditional Probability and Independence. Bayes? Formula. Variables: Discrete and Continuous. Probability Distributions for Discrete Random Variables. A Useful Discrete Random Variable: The Binomial. Probability Distributions for Continuous Random Variables. A Useful Continuous Random Variable: The Normal Distribution. Random Sampling. Sampling Distributions. Normal Approximation to the Binomial. MINITAB Instructions (Optional). Staying Focused. Step 4: ANALYZING DATA, INTERPRETING THE ANALYSES, AND COMMUNICATING THE RESULTS. 5. Inferences About Population Central Values. Introduction. Estimation of i. Choosing the Sample Size for Estimating i. A Statistical Test for i. Choosing the Sample Size for Testing i. The Level of Significance of a Statistical Test. Inferences about i for Normal Population, o Unknown. Inferences about Median. Encounters with Real Data. Staying Focused. 6. Inferences Comparing Two Population Central Values. Introduction. Inferences about i1?i2: Independent Samples. A Nonparametric Alternative: The Wilcoxon Rank Sum Test. Inferences about i1?i2: Paired Data. A Nonparametric Alternative: The Wilcoxon Signed-Rank Test. Choosing Sample Sizes for Inferences about i1?i2. Encounters with Real Data. Staying Focused. 7. Inferences About Population Variances. Introduction. Estimation and Tests for a Population Variance. Estimation and Tests for Comparing Two Population Variances. Tests for Comparing t > 2 Population Variances. Encounters with Real Data. Staying Focused. 8. The Completely Randomized Design. Introduction. The Model for Observations in a Completely Randomized Design. Analyzing Data from a Completely Randomized Design: An Analysis of Variances. Checking on the AOV Conditions. A Nonparametric Alternative: The Kruskal?Wallis Test. Multiple Comparisons. Encounters with Real Data. Staying Focused. 9. More Complicated Experimental Designs. Introduction. Randomized Complete Block Design. Latin Square Design. Factorial Treatment Structure in a Completely Randomized Design. Factorial Treatment Structure in a Randomized Complete Block Design. Estimation of Treatment Differences and Comparisons of Treatment Means. Encounters with Real Data. Staying Focused. 10. Categorical Data. Introduction. Inferences About a Population Proportion d.Inferences About the Difference Between Two Population Proportions d1? d2. Inferences About Several Proportions: Chi-Square Goodness-of-Fit Test. Contingency Tables: Tests for Independence and Homogeneity. Odds and Odds Ratios. Encounters with Real Data. Staying Focused. 11. Linear Regression and Correlation. Introduction. Estimating Model Parameters. Inferences about Regression Parameters. Predicting New y Values Using Regression. Examining Lack of Fit in Linear Regression. The Inverse Regression Problem (Calibration). Correlation. Encounters with Real Data. Staying Focused. 12. Multiple Regression. Introduction. Estimating Multiple Regression Coefficients. Inferences in Multiple Regression. Testing a Subset of Regression Coefficients. Comparing the Slopes of Several Regression Lines. Logistic Regression. Encounters with Real Data. Staying Focused. 13. Communicating and Documenting the Results of Analyses. Introduction. The Difficulty of Good Communication. Communication Hurdles: Graphical Distortions. Communication Hurdles: Biased Samples. Communication Hurdles: Sample Size. Preparing Data for Statistical Analysis. Guideline for a Statistical Analysis and Report. Documentation and Storage of Results. Staying Focused. Appendix. References. Selected Answers. Index.

#### About the Author

Michael Longnecker currently serves as Professor and Associate Department Head at Texas A&M University. He received his B.S. at Michigan Technological University, his first M.S. at Western Michigan University, his second M.S. at Florida State University, and his Ph.D. at Florida State University. He is interested in Nonparametrics, Statistical Process Control, and Statistical Consulting.

#### **Users Review**

#### From reader reviews:

#### **Charles Carter:**

Reading a e-book tends to be new life style within this era globalization. With looking at you can get a lot of information that may give you benefit in your life. Together with book everyone in this world can easily share their idea. Ebooks can also inspire a lot of people. A lot of author can inspire their very own reader with their story or maybe their experience. Not only situation that share in the ebooks. But also they write about the knowledge about something that you need example of this. How to get the good score toefl, or how to teach children, there are many kinds of book which exist now. The authors in this world always try to improve their ability in writing, they also doing some exploration before they write to their book. One of them is this A First Course in Statistical Methods (with CD-ROM) (Duxbury).

#### **Frances Oberlin:**

Do you have something that you like such as book? The reserve lovers usually prefer to opt for book like comic, small story and the biggest one is novel. Now, why not striving A First Course in Statistical Methods (with CD-ROM) (Duxbury) that give your fun preference will be satisfied simply by reading this book. Reading addiction all over the world can be said as the method for people to know world much better then how they react in the direction of the world. It can't be mentioned constantly that reading habit only for the geeky man or woman but for all of you who wants to possibly be success person. So, for every you who want to start reading as your good habit, you could pick A First Course in Statistical Methods (with CD-ROM) (Duxbury) become your own starter.

#### Michael Ramsey:

Is it anyone who having spare time then spend it whole day by watching television programs or just lying down on the bed? Do you need something totally new? This A First Course in Statistical Methods (with CD-ROM) (Duxbury) can be the answer, oh how comes? The new book you know. You are consequently out of date, spending your extra time by reading in this brand-new era is common not a geek activity. So what these textbooks have than the others?

#### **Lewis Farnsworth:**

You will get this A First Course in Statistical Methods (with CD-ROM) (Duxbury) by check out the bookstore or Mall. Simply viewing or reviewing it can to be your solve issue if you get difficulties on your knowledge. Kinds of this book are various. Not only simply by written or printed but additionally can you enjoy this book simply by e-book. In the modern era similar to now, you just looking by your mobile phone and searching what your problem. Right now, choose your own personal ways to get more information about your reserve. It is most important to arrange you to ultimately make your knowledge are still up-date. Let's try to choose right ways for you.

Download and Read Online A First Course in Statistical Methods (with CD-ROM) (Duxbury) By Lyman Ott, Micheal T. Longnecker #IXN75FLBG04

## Read A First Course in Statistical Methods (with CD-ROM) (Duxbury) By Lyman Ott, Micheal T. Longnecker for online ebook

A First Course in Statistical Methods (with CD-ROM) (Duxbury) By Lyman Ott, Micheal T. Longnecker Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read A First Course in Statistical Methods (with CD-ROM) (Duxbury) By Lyman Ott, Micheal T. Longnecker books to read online.

## Online A First Course in Statistical Methods (with CD-ROM) (Duxbury) By Lyman Ott, Micheal T. Longnecker ebook PDF download

A First Course in Statistical Methods (with CD-ROM) (Duxbury) By Lyman Ott, Micheal T. Longnecker Doc

A First Course in Statistical Methods (with CD-ROM) (Duxbury) By Lyman Ott, Micheal T. Longnecker Mobipocket

A First Course in Statistical Methods (with CD-ROM) (Duxbury) By Lyman Ott, Micheal T. Longnecker EPub