1. Record Nr. UNINA9910254083103321 Autore Heumann Christian Titolo Introduction to Statistics and Data Analysis: With Exercises, Solutions and Applications in R / / by Christian Heumann, Michael Schomaker, Shalabh Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2016 ISBN 3-319-46162-1 Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (XIII, 456 p. 89 illus.) Disciplina 519.5 Soggetti Statistics **Econometrics** Macroeconomics Statistical Theory and Methods Statistics in Business, Management, Economics, Finance, Insurance Macroeconomics and Monetary Economics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Part I Descriptive Statistics: Introduction and Framework -- Frequency Measures and Graphical Representation of Data -- Measures of Central Tendency and Dispersion -- Association of Two Variables -- Part I Probability Calculus: Combinatorics -- Elements of Probability Theory -- Random Variables -- Probability Distributions -- Part III Inductive Statistics: Inference -- Hypothesis Testing -- Linear Regression -- Part IV Appendices: Introduction to R -- Solutions to Exercises -- Technical Appendix -- Visual Summaries. This introductory statistics textbook conveys the essential concepts Sommario/riassunto and tools needed to develop and nurture statistical thinking. It presents descriptive, inductive and explorative statistical methods and guides the reader through the process of quantitative data analysis. In the experimental sciences and interdisciplinary research, data analysis has become an integral part of any scientific study. Issues such as judging the credibility of data, analyzing the data, evaluating the reliability of

the obtained results and finally drawing the correct and appropriate

conclusions from the results are vital. The text is primarily intended for undergraduate students in disciplines like business administration, the social sciences, medicine, politics, macroeconomics, etc. It features a wealth of examples, exercises and solutions with computer code in the statistical programming language R as well as supplementary material that will enable the reader to quickly adapt all methodsto their own applications.