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Titolo	A First Course in Statistical Inference [[electronic resource] /] / by Jonathan Gillard
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Descrizione fisica	1 online resource (X, 164 p. 24 illus., 7 illus. in color.)
Collana	Springer Undergraduate Mathematics Series, , 1615-2085
Disciplina	519.5
Soggetti	Statistics Statistical Theory and Methods Statistics and Computing/Statistics Programs
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	1 Recap of Probability Fundamentals -- 2 Sampling and Sampling Distributions -- 3 Towards Estimation -- 4 Confidence Intervals -- 5 Hypothesis Testing -- 6 One-way Analysis of Variance (ANOVA) -- 7 Regression: Fitting a Straight Line -- A brief introduction to R -- Solutions to Exercises -- Statistical Tables -- Index.
Sommario/riassunto	This book offers a modern and accessible introduction to Statistical Inference, the science of inferring key information from data. Aimed at beginning undergraduate students in mathematics, it presents the concepts underpinning frequentist statistical theory. Written in a conversational and informal style, this concise text concentrates on ideas and concepts, with key theorems stated and proved. Detailed worked examples are included and each chapter ends with a set of exercises, with full solutions given at the back of the book. Examples using R are provided throughout the book, with a brief guide to the software included. Topics covered in the book include: sampling distributions, properties of estimators, confidence intervals, hypothesis testing, ANOVA, and fitting a straight line to paired data. Based on the author’s extensive teaching experience, the material of the book has been honed by student feedback for over a decade. Assuming only some familiarity with elementary probability, this textbook has been

devised for a one semester first course in statistics.