

Basic Statistics For The Health Sciences

Focusing on quantitative approaches to investigating problems, this title introduces the basic rules and principles of statistics, encouraging the reader to think critically about data analysis and research design, and how these factors can impact upon evidence-based practice.

A core statistics text that emphasizes logical inquiry, not math. Basic Statistics for Social Research teaches core general statistical concepts and methods that all social science majors must master to understand (and do) social research. Its use of mathematics and theory are deliberately limited, as the authors focus on the use of concepts and tools of statistics in the analysis of social science data, rather than on the mathematical and computational aspects. Research questions and applications are taken from a wide variety of subfields in sociology, and each chapter is organized around one or more general ideas that are explained at its beginning and then applied in increasing detail in the body of the text. Each chapter contains instructive features to aid students in understanding and mastering the various statistical approaches presented in the book, including: Learning objectives, Check quizzes after many sections and an answer key at the end of the chapter, Summary, Key terms, End-of-chapter exercises, SPSS exercises (in select chapters). Ancillary materials for both the student and the instructor are available and include a test bank for instructors and downloadable video tutorials for students.

Basic Biostatistics is a concise, introductory text that covers biostatistical principles and focuses on the common types of data encountered in public health and biomedical fields. The text puts equal emphasis on exploratory and confirmatory statistical methods. Sampling, exploratory data analysis, estimation, hypothesis testing, and power and precision are covered through detailed, illustrative examples. The book is organized into three parts: Part I addresses basic concepts and techniques; Part II covers analytic techniques for quantitative response variables; and Part III covers techniques for categorical responses. The Second Edition offers many new exercises as well as an all new chapter on "Poisson Random Variables and the Analysis of Rates." With language, examples, and exercises that are accessible to students with modest mathematical backgrounds, this is the perfect introductory biostatistics text for undergraduates and graduates in various fields of public health. Features: Illustrative, relevant examples and exercises incorporated throughout the book. Answers to odd-numbered exercises provided in the back of the book. (Instructors may request answers to even-numbered exercises from the publisher. Chapters are intentionally brief and limited in scope to allow for flexibility in the order of coverage. Equal attention is given to manual calculations as well as the use of statistical software such as StatTable, SPSS, and WinPepi. Comprehensive Companion Website with Student and Instructor's Resources.

Basic Statistics for the Health Sciences McGraw-Hill Humanities/Social Sciences/Languages

New Edition of a Classic Guide to Statistical Applications in the Biomedical Sciences In the last decade, there have been significant changes in the way statistics is incorporated into biostatistical, medical, and public health research. Addressing the need for a modernized treatment of these statistical applications, Basic Statistics, Fourth Edition presents relevant, up-to-date coverage of research methodology using careful explanations of basic statistics and how they are used to address practical problems that arise in the medical and public health settings. Through concise and easy-to-follow presentations, readers will learn to interpret and examine data by applying common statistical tools, such as sampling, random assignment, and survival analysis. Continuing the tradition of its predecessor, this new edition outlines a thorough discussion of different kinds of studies and guides readers through the important, related decision-making processes such as determining what information is needed and planning the collections process. The book equips readers with the knowledge to carry out these practices by explaining the various types of studies that are commonly conducted in the fields of medical and public health, and how the level of evidence varies depending on the area of research. Data screening and data entry into statistical programs is explained and accompanied by illustrations of statistical analyses and graphs. Additional features of the Fourth Edition include: A new chapter on data collection that outlines the initial steps in planning biomedical and public health studies. A new chapter on nonparametric statistics that includes a discussion and application of the Sign test, the Wilcoxon Signed Rank test, and the Wilcoxon Rank Sum test and its relationship to the Mann-Whitney U test. An updated introduction to survival analysis that includes the Kaplan Meier method for graphing the survival function and a brief introduction to tests for comparing survival functions. Incorporation of modern statistical software, such as SAS, Stata, SPSS, and Minitab into the presented discussion of data analysis. Updated references at the end of each chapter. Basic Statistics, Fourth Edition is an ideal book for courses on biostatistics, medicine, and public health at the upper-undergraduate and graduate levels. It is also appropriate as a reference for researchers and practitioners who would like to refresh their fundamental understanding of statistical techniques.

Assists nursing and health professionals in gaining a basic understanding of statistics. Appropriate for self-study or course use, this practical text trains the student to become a better consumer of research by identifying violations of statistical assumptions and interpreting results. Emphasizes a general understanding, rather than memorization, of formulas. Where possible, calculations are simplified to avoid "number crunching." Numerous practical examples taken from published research, exercises, objectives, and summaries to aid learning.

This straightforward primer in basic statistics emphasizes its practical use in epidemiology and public health, providing understanding of essential topics such as study design, data analysis and statistical methods used in the execution of medical research. This new edition is substantially revised and includes entirely new material on statistical power and sample size. Clearly worded and assuming no prior knowledge, it gives full step-by-step guidance on performing statistical calculations. It contains numerous examples and

exercises with detailed answers to help readers grasp the main points of these complex subjects with ease, providing doctors, nurses, health managers, researchers and students with a concise and practical guide

Students and researchers in the health sciences are faced with greater opportunity and challenge than ever before. The opportunity stems from the explosion in publicly available data that simultaneously informs and inspires new avenues of investigation. The challenge is that the analytic tools required go far beyond the standard methods and models of basic statistics. This textbook aims to equip health care researchers with the most important elements of a modern health analytics toolkit, drawing from the fields of statistics, health econometrics, and data science. This textbook is designed to overcome students' anxiety about data and statistics and to help them to become confident users of appropriate analytic methods for health care research studies. Methods are presented organically, with new material building naturally on what has come before. Each technique is motivated by a topical research question, explained in non-technical terms, and accompanied by engaging explanations and examples. In this way, the authors cultivate a deep ("organic") understanding of a range of analytic techniques, their assumptions and data requirements, and their advantages and limitations. They illustrate all lessons via analyses of real data from a variety of publicly available databases, addressing relevant research questions and comparing findings to those of published studies. Ultimately, this textbook is designed to cultivate health services researchers that are thoughtful and well informed about health data science, rather than data analysts. This textbook differs from the competition in its unique blend of methods and its determination to ensure that readers gain an understanding of how, when, and why to apply them. It provides the public health researcher with a way to think analytically about scientific questions, and it offers well-founded guidance for pairing data with methods for valid analysis. Readers should feel emboldened to tackle analysis of real public datasets using traditional statistical models, health econometrics methods, and even predictive algorithms. Accompanying code and data sets are provided in an author site: <https://roman-gulati.github.io/statistics-for-health-data-science/>

Understanding risk -- Putting risk in perspective -- Risk charts : a way to get perspective -- Judging the benefit of a health intervention -- Not all benefits are equal : understand the outcome -- Consider the downsides -- Do the benefits outweigh the downsides? -- Beware of exaggerated importance -- Beware of exaggerated certainty -- Who's behind the numbers?

This straightforward primer in basic statistics emphasises its practical use in epidemiology and public health, providing an understanding of essential topics such as study design, data analysis and statistical methods used in the execution of medical research.

Basic Statistics for Social Workers, now in a revised edition, was developed by Schneider after teaching statistics to undergraduate and graduate social work students for over ten years. The statistical concepts that are necessary for students to know are covered, ranging from simple descriptive statistics such as crosstabs and tabular data up to a limited discussion of multiple regression. The text is written simply for students who may not have a strong quantitative background. The text is simple enough that with the practice problems and perhaps a little consultation a motivated student could self-teach the content.

Building on its best-selling predecessors, Basic Statistics and Pharmaceutical Statistical Applications, Third Edition covers statistical topics most relevant to those in the pharmaceutical industry and pharmacy practice. It focuses on the fundamentals required to understand descriptive and inferential statistics for problem solving. Incorporating new material in virtually every chapter, this third edition now provides information on software applications to assist with evaluating data. New to the Third Edition Use of Excel® and Minitab® for performing statistical analysis Discussions of nonprobability sampling procedures, determining if data is normally distributed, evaluation of covariances, and testing for precision equivalence Expanded sections on regression analysis, chi square tests, tests for trends with ordinal data, and tests related to survival statistics Additional nonparametric procedures, including the one-sided sign test, Wilcoxon signed-ranks test, and Mood's median test With the help of flow charts and tables, the author dispels some of the anxiety associated with using basic statistical tests in the pharmacy profession and helps readers correctly interpret their results using statistical software. Through the text's worked-out examples, readers better understand how the mathematics works, the logic behind many of the equations, and the tests' outcomes.

This singular text provides nursing students as well as students in all other health-related disciplines with a solid foundation for understanding data and specific statistical techniques. In this newest edition, outstanding faculty contributors focus on the most current and most frequently used statistical methods in today's health care literature, covering essential material for a variety of program levels including in-depth courses beyond the basic statistics course. Well-organized and clear text discussions and great learning tools help you cut through the complexities and fully comprehend the concepts of this often intimidating area of study. Book jacket.

This work provides a foundation in the statistics portion of nursing. Topics expanded in this edition include reliability analysis, path analysis, measurement error, missing data, and survival analysis.

Statistics for the Health Sciences is a highly readable and accessible textbook on understanding statistics for the health sciences, both conceptually and via the SPSS programme. The authors give clear explanations of the concepts underlying statistical analyses and descriptions of how these analyses are applied in health science research without complex maths formulae. The textbook takes students from the basics of research design, hypothesis testing and descriptive statistical techniques through to more advanced inferential statistical tests that health science students are likely to encounter. The strengths and weaknesses of different techniques are critically appraised throughout, and the authors emphasise how they may be used both in research and to inform best practice care in health settings. Exercises and tips throughout the book allow students to practice using SPSS. The companion website provides further practical experience of conducting statistical analyses. Features include: • multiple choice questions for both student and lecturer use • full Powerpoint slides for lecturers • practical exercises using SPSS • additional practical exercises using SAS and R This is an essential textbook for students studying beginner and intermediate level statistics across the health sciences.

We are bombarded with statistical data each and every day, and healthcare professionals are no exception. All sectors of healthcare rely on data provided by insurance companies,

consultants, research firms, and government to help them make a host of decisions regarding the delivery of medical services. But while these health professionals rely on data, do they really make the best use of the information? Not if they fail to understand whether the assumptions behind the formulas generating the numbers make sense. Not if they don't understand that the world of healthcare is flooded with inaccurate, misleading, and even dangerous statistics. The purpose of this book is to provide members of medical and other professions, including scientists and engineers, with a basic understanding of statistics and probability together with an explanation and worked examples of the techniques. It does not seek to confuse the reader with in-depth mathematics but provides basic methods for interpreting data and making inferences. The worked examples are medically based, but the principles apply to the analysis of any numerical data.

This is the only introductory statistics text written specifically for health science students. Assuming no prerequisites other than high school algebra, the authors provide numerous examples from health settings, a wealth of helpful learning aids, as well as hundreds of exercises to help students succeed in the course.

The first introductory statistics text written specifically to make statistics accessible for health science students. Assuming no prerequisites other than high school algebra, the authors provide numerous examples from health settings, a wealth of helpful learning aids, as well as hundreds of exercises to help students succeed in the course.

A respected introduction to biostatistics, thoroughly updated and revised. The first edition of *Biostatistics: A Methodology for the Health Sciences* has served professionals and students alike as a leading resource for learning how to apply statistical methods to the biomedical sciences. This substantially revised Second Edition brings the book into the twenty-first century for today's aspiring and practicing medical scientist. This versatile reference provides a wide-ranging look at basic and advanced biostatistical concepts and methods in a format calibrated to individual interests and levels of proficiency. Written with an eye toward the use of computer applications, the book examines the design of medical studies, descriptive statistics, and introductory ideas of probability theory and statistical inference; explores more advanced statistical methods; and illustrates important current uses of biostatistics. New to this edition are discussions of Longitudinal data analysis Randomized clinical trials Bayesian statistics GEE The bootstrap method Enhanced by a companion Web site providing data sets, selected problems and solutions, and examples from such current topics as HIV/AIDS, this is a thoroughly current, comprehensive introduction to the field.

Blackwell Publishing is delighted to announce that this book has been Highly Commended in the 2004 BMA Medical Book Competition. Here is the judges' summary of this book: "This is a technical book on a technical subject but presented in a delightful way. There are many books on statistics for doctors but there are few that are excellent and this is certainly one of them. Statistics is not an easy subject to teach or write about. The authors have succeeded in producing a book that is as good as it can get. For the keen student who does not want a book for mathematicians, this is an excellent first book on medical statistics." *Essential Medical Statistics* is a classic amongst medical statisticians. An introductory textbook, it presents statistics with a clarity and logic that demystifies the subject, while providing a comprehensive coverage of advanced as well as basic methods. The second edition of *Essential Medical Statistics* has been comprehensively revised and updated to include modern statistical methods and modern approaches to statistical analysis, while retaining the approachable and non-mathematical style of the first edition. The book now includes full coverage of the most commonly used regression models, multiple linear regression, logistic regression, Poisson regression and Cox regression, as well as a chapter on general issues in regression modelling. In addition, new chapters introduce more advanced topics such as meta-analysis, likelihood, bootstrapping and robust standard errors, and analysis of clustered data. Aimed at students of medical statistics, medical researchers, public health practitioners and practising clinicians using statistics in their daily work, the book is designed as both a teaching and a reference text. The format of the book is clear with highlighted formulae and worked examples, so that all concepts are presented in a simple, practical and easy-to-understand way. This second edition enhances the emphasis on choice of appropriate methods with new chapters on strategies for analysis and measures of association and impact. *Essential Medical Statistics* is supported by a web site at www.blackwellpublishing.com/essentialmedstats. This useful online resource provides statistical datasets to download, as well as sample chapters and future updates.

Statistics can be an intimidating subject for many students and clinicians. This concise text introduces basic concepts that underpin medical statistics and, using everyday clinical examples, highlights the importance of statistical principles to understanding and implementing research findings in routine clinical care.

Interpreting Basic Statistics gives students valuable practice in interpreting statistical reporting as it actually appears in peer-reviewed journals. New to the eighth edition: A broader array of basic statistical concepts is covered, especially to better reflect the New Statistics. Journal excerpts have been updated to reflect current styles in statistical reporting. A stronger emphasis on data visualizations has been added. The statistical exercises have been re-organized into units to facilitate ease of use and understanding. About this book Each of the 64 exercises gives a brief excerpt of statistical reporting from a published research article, and begins with guidelines for interpreting the statistics in the excerpt. The questions on the excerpts promote learning by requiring students to interpret information in tables and figures, perform simple calculations to further their interpretations, critique data-reporting techniques, and evaluate procedures used to collect data. Each exercise covers a limited number of statistics, making it easy to coordinate the exercises with lectures and a main textbook. The questions in each exercise are divided into two parts: (1) Factual Questions and (2) Questions for Discussion. The factual questions require careful reading for details, while the discussion questions show that interpreting statistics is more than a mathematical exercise. These questions require students to apply good judgment as well as statistical reasoning in arriving at appropriate interpretations.

BASIC ALLIED HEALTH STATISTICS AND ANALYSIS, 4th Edition is the comprehensive resource for future health care professionals in a variety of Health Information Management careers. Designed to explain common statistical computations and their practical uses in health care settings, the book's hands-on approach requires students to think through problems and then apply the proper method of statistical analysis. Topics explore the current health care industry, basic math and statistical computations, vital statistics and mortality rates, census and occupancy rates, and more, all in accordance with CAHIIM curriculum standards and competencies. Chapter learning features include examples, tables and figures, and even a separate column for note-taking, along with a brand new chapter on the fundamentals of research. Plenty of case studies and self-assessment opportunities keep students engaged in the material, while ensuring a practical and discerning knowledge of key data and statistical concepts. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

This introductory statistics textbook for non-statisticians covers basic principles, concepts, and methods routinely used in applied research. What sets this text apart is the incorporation of the many advances and insights from the last half century when explaining basic principles. These advances provide a foundation for vastly improving our ability to detect and describe differences among groups and associations among variables and provide a deeper and more accurate sense of when basic methods perform well and when they fail. Assuming no prior training, Wilcox introduces students to basic principles and concepts in a simple manner that makes these advances and insights, as well as standard ideas and methods, easy to understand and appreciate.

Basic Biostatistics for Medical and Biomedical Practitioners, Second Edition makes it easier to plan experiments, with an emphasis on sample size. It also shows what choices are available when simple tests are unsuitable and offers investigators an overview of how the kinds of complex tests that they won't do on their own work. The second edition presents a new, revised and enhanced version of the chapters, taking into consideration new developments and tools available, discussing topics, such as the basic aspects of statistics, continuous distributions, hypothesis testing, discrete distributions, probability in epidemiology and medical diagnosis, comparing means, regression and correlation. This book is a valuable source for students and researchers looking to expand or refresh their understanding of statistics as it applies to the biomedical and research fields. Based on the author's 40+ years of teaching statistics to medical fellows and biomedical researchers across a wide range of fields, it is a valuable source for researchers who need to understand more about biostatistics to apply it to their work. Introduces procedures, such as multiple regression, Poisson distribution, binomial and multinomial distributions, variance analysis, and how to design and sample clinical trials Presents a new section on ANCOVA Gives references to free online tests Includes over 200 diagrams, enabling the reader to visualize the results Discusses NHST testing in detail, its disadvantages, and how to think about probability

The 5th edition of this popular introduction to statistics for the medical and health sciences has undergone a significant revision, with several new chapters added and examples refreshed throughout the book. Yet it retains its central philosophy to explain medical statistics with as little technical detail as possible, making it accessible to a wide audience. Helpful multi-choice exercises are included at the end of each chapter, with answers provided at the end of the book. Each analysis technique is carefully explained and the mathematics kept to minimum. Written in a style suitable for statisticians and clinicians alike, this edition features many real and original examples, taken from the authors' combined many years' experience of designing and analysing clinical trials and teaching statistics. Students of the health sciences, such as medicine, nursing, dentistry, physiotherapy, occupational therapy, and radiography should find the book useful, with examples relevant to their disciplines. The aim of training courses in medical statistics pertinent to these areas is not to turn the students into medical statisticians but rather to help them interpret the published scientific literature and appreciate how to design studies and analyse data arising from their own projects. However, the reader who is about to design their own study and collect, analyse and report on their own data will benefit from a clearly written book on the subject which provides practical guidance to such issues. The practical guidance provided by this book will be of use to professionals working in and/or managing clinical trials, in academic, public health, government and industry settings, particularly medical statisticians, clinicians, trial co-ordinators. Its practical approach will appeal to applied statisticians and biomedical researchers, in particular those in the biopharmaceutical industry, medical and public health organisations.

This accessible introduction to statistics using the program SPSS for Windows explains when to apply and how to calculate and interpret a wide range of statistical procedures commonly used in the social sciences. Keeping statistical symbols and formulae to a minimum and using simple examples, this book: * assumes no prior knowledge of statistics or computing * includes a concise introduction to the program SPSS for Windows * describes a wider range of tests than other introductory texts * contains a comprehensive range of exercises with answers Fundamental Statistics for Social Research covers SPSS Release 6 for Windows 3.1 and Release 7 for Windows 95. It will prove an invaluable introductory statistics text for students, and a useful resource for graduates and professionals engaged in research in the social sciences.

"This very informative book introduces classical and novel statistical methods that can be used by theoretical and applied biostatisticians to develop efficient solutions for real-world problems encountered in clinical trials and epidemiological studies. The authors provide a detailed discussion of methodological and applied issues in parametric, semi-parametric and nonparametric approaches, including computationally extensive data-driven techniques, such as empirical likelihood, sequential procedures, and bootstrap methods. Many of these techniques are implemented using popular software such as R and SAS."—Vlad Dragalin, Professor, Johnson and Johnson, Spring House, PA "It is always a pleasure to come across a new book that covers nearly all facets of a branch of science one thought was so broad, so diverse, and so dynamic that no single book could possibly hope to capture all of the fundamentals as well as directions of the field. The topics within the book's purview—fundamentals of measure-theoretic probability; parametric and non-parametric statistical inference; central limit theorems; basics of martingale theory; Monte Carlo methods; sequential analysis; sequential change-point detection—are all covered with inspiring clarity and precision. The authors are also very thorough and avail themselves of the most recent scholarship. They provide a detailed account of the state of the art, and bring together results that were previously scattered across disparate disciplines. This makes the book more than just a textbook: it is a panoramic companion to the field of Biostatistics. The book is self-contained, and the concise but careful exposition of material makes it accessible to a wide audience. This is appealing to graduate students interested in getting into the field, and also to professors looking to design a course on the subject." —Aleksey S. Polunchenko, Department of Mathematical Sciences, State University of New York at Binghamton This book should be appropriate for use both as a text and as a reference. This book delivers a "ready-to-go" well-structured product to be employed in developing advanced courses. In this book the readers can find classical and new theoretical methods, open problems and new procedures. The book presents biostatistical results that are novel to the current set of books on the market and results that are even new with respect to the modern scientific literature. Several of these results can be found only in this book.

Basic Statistics provides an accessible and comprehensive introduction to statistics using the free, state-of-the-art, powerful software program R. This book is designed to both introduce students to key concepts in statistics and to provide simple instructions for using R. This concise book: .Teaches essential concepts in statistics, assuming little background knowledge on the part of the reader .Introduces students to R with as few sub-commands as possible for ease of use .Provides practical examples from the educational, behavioral, and social sciences With clear explanations of statistical processes and step-by-step commands in R, Basic Statistics will appeal to students and professionals across the social and behavioral sciences."

Basic Statistics with R: Reaching Decisions with Data provides an understanding of the processes at work in using data for results. Sections cover data collection and discuss exploratory analyses, including visual graphs, numerical summaries, and relationships between variables - basic probability, and statistical inference - including hypothesis testing and confidence intervals. All topics are taught using real-data drawn from various fields, including economics, biology, political science and sports. Using this wide variety of motivating examples allows

students to directly connect and make statistics essential to their field of interest, rather than seeing it as a separate and ancillary knowledge area. In addition to introducing students to statistical topics using real data, the book provides a gentle introduction to coding, having the students use the statistical language and software R. Students learn to load data, calculate summary statistics, create graphs and do statistical inference using R with either Windows or Macintosh machines. Features real-data to give students an engaging practice to connect with their areas of interest Evolves from basic problems that can be worked by hand to the elementary use of opensource R software Offers a direct, clear approach highlighted by useful visuals and examples

The must-have statistics guide for students of health services Statistics for Health Care Management and Administration is a unique and invaluable resource for students of health care administration and public health. The book introduces students to statistics within the context of health care, focusing on the major data and analysis techniques used in the field. All hands-on instruction makes use of Excel, the most common spreadsheet software that is ubiquitous in the workplace. This new third edition has been completely retooled, with new content on proportions, ANOVA, linear regression, chi-squares, and more, Step-by-step instructions in the latest version of Excel and numerous annotated screen shots make examples easy to follow and understand. Familiarity with statistical methods is essential for health services professionals and researchers, who must understand how to acquire, handle, and analyze data. This book not only helps students develop the necessary data analysis skills, but it also boosts familiarity with important software that employers will be looking for. Learn the basics of statistics in the context of Excel Understand how to acquire data and display it for analysis Master various tests including probability, regression, and more Turn test results into usable information with proper analysis Statistics for Health Care Management and Administration gets students off to a great start by introducing statistics in the workplace context from the very beginning.

Statistical Methods: An Introduction to Basic Statistical Concepts and Analysis, Second Edition is a textbook designed for students with no prior training in statistics. It provides a solid background of the core statistical concepts taught in most introductory statistics textbooks. Mathematical proofs are deemphasized in favor of careful explanations of statistical constructs. The text begins with coverage of descriptive statistics such as measures of central tendency and variability, then moves on to inferential statistics. Transitional chapters on z-scores, probability, and sampling distributions pave the way to understanding the logic of hypothesis testing and the inferential tests that follow. Hypothesis testing is taught through a four-step process. These same four steps are used throughout the text for the other statistical tests presented including t tests, one- and two-way ANOVAs, chi-square, and correlation. A chapter on nonparametric tests is also provided as an alternative when the requirements cannot be met for parametric tests. Because the same logical framework and sequential steps are used throughout the text, a consistency is provided that allows students to gradually master the concepts. Their learning is enhanced further with the inclusion of "thought questions" and practice problems integrated throughout the chapters. New to the second edition: Chapters on factorial analysis of variance and non-parametric techniques for all data Additional and updated chapter exercises for students to test and demonstrate their learning Full instructor resources: test bank questions, Powerpoint slides, and an Instructor Manual

Introductory Statistics for the Health Sciences takes students on a journey to a wilderness where science explores the unknown, providing students with a strong, practical foundation in statistics. Using a color format throughout, the book contains engaging figures that illustrate real data sets from published research. Examples come from many areas of the health sciences, including medicine, nursing, pharmacy, dentistry, and physical therapy, but are understandable to students in any field. The book can be used in a first-semester course in a health sciences program or in a service course for undergraduate students who plan to enter a health sciences program. The book begins by explaining the research context for statistics in the health sciences, which provides students with a framework for understanding why they need statistics as well as a foundation for the remainder of the text. It emphasizes kinds of variables and their relationships throughout, giving a substantive context for descriptive statistics, graphs, probability, inferential statistics, and interval estimation. The final chapter organizes the statistical procedures in a decision tree and leads students through a process of assessing research scenarios. Web Resource The authors have partnered with William Howard Beasley, who created the illustrations in the book, to offer all of the data sets, graphs, and graphing code in an online data repository via GitHub. A dedicated website gives information about the data sets and the authors' electronic flashcards for iOS and Android devices. These flashcards help students learn new terms and concepts.

Using Basic Statistics in the Behavioral and Social Sciences, Fifth Edition, by Annabel Ness Evans, presents introductory statistics in a practical, conceptual, and humorous way, reducing the anxiety that many students experience in introductory courses. Avoiding complex notation and derivation, the book focuses on helping readers develop an understanding of the underlying logic of statistics. Practical Focus on Research boxes engage students with realistic applications of statistics, and end-of-chapter exercises ensure student comprehension. This exciting new edition includes a greater number of realistic and engaging global examples within the social and behavioral sciences, making it ideal for use within many departments or in interdisciplinary settings.

Packed with real-world illustrations and the latest data available, BASIC STATISTICS FOR THE BEHAVIORAL SCIENCES, 7e demystifies and fully explains statistics in a lively, reader-friendly format. The author's clear, patiently crafted explanations with an occasional touch of humor, teach readers not only how to compute an answer but also why they should perform the procedure or what their answer reveals about the data. Offering a conceptual-intuitive approach, this popular book presents statistics within an understandable research context, deals directly and positively with potential weaknesses in mathematics, and introduces new terms and concepts in an integrated way. Available with InfoTrac Student Collections <http://goengage.com/infotrac>. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Applied Statistics for the Social and Health Sciences provides graduate students in the social and health sciences with the basic skills that they need to estimate, interpret, present, and publish statistical models using contemporary standards. The book targets the social and health science branches such as human development, public health, sociology, psychology, education, and social work in which students bring a wide range of mathematical skills and have a wide range of methodological affinities. For these students, a successful course in statistics will not only offer statistical content but will also help them develop an appreciation for how statistical techniques might answer some of the research questions of interest to them. This book is for use in a two-semester graduate course sequence covering basic univariate and bivariate statistics and regression models for nominal and ordinal outcomes, in addition to covering ordinary least squares regression. Key features of the book include: interweaving the teaching of statistical concepts with examples developed for the course from publicly-available social science data or drawn from the literature thorough integration of teaching statistical theory with teaching data processing and analysis teaching of both SAS and Stata "side-by-side" and use of chapter exercises in which students practice programming and interpretation on the same data set and course exercises in which students can choose their own research questions and data set. This book is for a two-semester course. For a one-semester course, see <http://www.routledge.com/9780415991544/>

