

basic statistics for the health sciences

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This resource provides foundational knowledge in basic statistics specifically adapted for the health sciences, covering essential concepts for understanding medical research, analyzing healthcare data, and making evidence-based decisions. It's ideal for students and professionals seeking to apply statistical methods in clinical, public health, and biomedical contexts.

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Basic Statistics for the Health Sciences

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.

Basic Statistics for the Health Sciences

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.

Basic Statistics for the Health Sciences with Powerweb

Provides students and practitioners with a clear, concise introduction to the statistics they will come across in their regular reading of clinical papers. Written by three experts with wide teaching and consulting experience, *Medical Statistics: A Textbook for the Health Sciences, Fourth Edition*: Assumes no prior knowledge of statistics. Covers all essential statistical methods. Completely revised, updated and expanded. Includes numerous examples and exercises on the interpretation of the statistics in papers published in medical journals. From the reviews of the previous edition: "The book has several excellent features: it is written by statisticians, is... well presented, is well referenced.... and is short." THE LANCET "Many statisticians are concerned at the generally poor standard of statistics in papers published in medical journals. Perhaps this could be remedied if more research workers would spare a few hours to read through Campbell and Machin's book." BRITISH MEDICAL JOURNAL "... a simple, interesting and insightful introduction to medical statistics... highly recommended." STATISTICAL METHODS IN MEDICAL RESEARCH "Campbell and Machin found the golden mean... this book can be recommended for all students and all medical researchers." ISCB NEWSLETTER

Basic Statistics for the Health Sciences with PowerWeb

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.

Basic Statistics for Health Science Students

Milton's Statistical Methods in the Biological and Health Sciences offers comprehensive coverage for the applied statistics course for health and bio-related majors. This course focuses primarily on developing basic statistical techniques and relevant applications within a framework that addresses the needs of these specific audiences.

Medical Statistics

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.

Statistics for the Health 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.

Statistical Methods in the Biological and Health Sciences

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 area

Basic Statistics

From the author of Statistical Applications for Health Information Management, this text provides a solid foundation of the fundamentals of statistics in health information technology in an accessible and reader-friendly format. A single case study is woven throughout the book to serve as an example for each statistical process covered. Attention is given to morbidity and mortality measures, graphical display of data, measurement, central tendency and variability, normal distribution and statistical inference, and inferential statistics. Written specifically for health information technology students who need a basic understanding of the topic, this text is ideal for those with a modest background in mathematics and no prior training in statistics. Features: • Introduces students to how statistical techniques can be used to describe and make inferences from healthcare data. • Includes traditional hospital statistics such as average length of stay and total inpatient service days. • Uses examples in both SPSS and Microsoft Excel.

Statistics in the Health Sciences

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.

Introductory Statistics for the Health Sciences

Accessible to medicine- and/or public policy-related audiences, as well as most statisticians. Emphasis on outliers is discussed by way of detection and treatment. Resampling statistics software is incorporated throughout. Motivating applications are presented in light of honest theory. Plentiful exercises are sprinkled throughout.

Essentials of Statistics in Health Information Technology

Covering basic univariate and bivariate statistics and regression models for nominal, ordinal, and interval outcomes, *Applied Statistics for the Social and Health Sciences* provides graduate students in the social and health sciences with fundamental skills to estimate, interpret, and publish quantitative research using contemporary standards. Reflecting the growing importance of "Big Data" in the social and health sciences, this thoroughly revised and streamlined new edition covers best practice in the use of statistics in social and health sciences, draws upon new literatures and empirical examples, and highlights the importance of statistical programming, including coding, reproducibility, transparency, and open science. Key features of the book include: interweaving the teaching of statistical concepts with examples from publicly available social and health science data and literature excerpts; thoroughly integrating the teaching of statistical theory with the teaching of data access, processing, and analysis in Stata; recognizing debates and critiques of the origins and uses of quantitative methods.

Biostatistics

For graduate students in the social and health sciences, featuring essential concepts and equations most often needed in scholarly publications. Uses excerpts from the scholarly literature in these fields to introduce new concepts. Uses publicly-available data that are regularly used in social and health science publications to introduce Stata code and illustrate concepts and interpretation. Thoroughly integrates the teaching of statistical theory with teaching data processing and analysis. Offers guidance about planning projects and organizing code for reproducibility. Shows how to recognize critiques of the constructions, terminology, and interpretations of statistics. New edition focuses on Stata, with code integrated into the chapters (rather than appendices, as in the first edition) includes Stata's factor variables and margins commands and Long and Freese's (2014) `spost13` commands, to simplify programming and facilitate interpretation.

Introductory Biostatistics for the Health Sciences

APPLIED BIOSTATISTICS FOR THE HEALTH SCIENCES In this newly revised edition of *Applied Biostatistics for the Health Sciences*, accomplished statistician Dr. Richard Rossi delivers a robust and easy-to-understand exploration of statistics in the context of applied health science and biostatistics. The book covers sample design, logistic regression, experimental design, survival analysis, basic statistical computation, and many more topics with a strong focus on the correct use and interpretation of statistics. The author also explains how to assess the quality of observed data, how to collect quality data, and the use of confidence intervals in conjunction with hypothesis and significance tests. A thorough introduction to biostatistics, including explanations of fundamental concepts like populations, samples, statistics, biomedical studies, and data set examples. A comprehensive exploration of population descriptions, including qualitative and quantitative variables, multivariate data, measures of dispersion, and probability. Practical discussions of random sampling, summarizing random samples, and the measurement of the reliability of statistics. In-depth examinations of confidence intervals, statistical hypothesis testing, simple and multiple linear regression, and experimental design. Perfect for health science and biostatistics students and professors at the upper undergraduate and graduate levels, *Applied Biostatistics for the Health Sciences* is also a must-read reference for practitioners and professionals in the fields of pharmacy, biochemistry, nursing, health care informatics, and the applied health sciences.

Applied Statistics for the Social and Health Sciences

Maintaining the same accessible and hands-on presentation, *Introductory Biostatistics, Second Edition* continues to provide an organized introduction to basic statistical concepts commonly applied in research across the health sciences. With plenty of real-world examples, the new edition provides a practical, modern approach to the statistical topics found in the biomedical and public health fields. Beginning with an overview of descriptive statistics in the health sciences, the book delivers topical coverage of probability models, parameter estimation, and hypothesis testing. Subsequently, the book focuses on more advanced topics with coverage of regression analysis, logistic regression, methods for count data, analysis of survival data, and designs for clinical trials. This extensive update of *Introductory Biostatistics, Second Edition* includes:

- A new chapter on the use of higher order Analysis of Variance (ANOVA) in factorial and block designs
- A new chapter on testing and inference methods for repeatedly measured outcomes including continuous, binary, and count outcomes
- R incorporated throughout along with SAS®, allowing readers to replicate results from presented examples with either software

Multiple additional exercises, with partial solutions available to aid comprehension of crucial concepts • Notes on Computations sections to provide further guidance on the use of software • A related website that hosts the large data sets presented throughout the book Introductory Biostatistics, Second Edition is an excellent textbook for upper-undergraduate and graduate students in introductory biostatistics courses. The book is also an ideal reference for applied statisticians working in the fields of public health, nursing, dentistry, and medicine.

Applied Statistics for the Social and Health Sciences

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.

Applied Biostatistics for the Health Sciences

Fundamental Statistics for the Social, Behavioral, and Health Sciences presents students with instructional material in a clear, concise manner and features exercises that get students thinking about how to use statistics in applied settings. The text opens with coverage of foundational concepts in descriptive statistics, including frequency distribution, central tendency, and variability. Additional chapters guide students through their first journey into inferential statistics. The book is highly accessible, features clear examples and graphs, and challenges students to apply what they learn to a variety of situations. It includes step-by-step instructions on using IBM SPSS Statistics. The revised second edition includes new tables that illustrate effect sizes for t-tests. Additionally, the second edition includes small text corrections throughout and updated interior design to increase readability. Fundamental Statistics for the Social, Behavioral, and Health Sciences is an ideal resource for foundational courses in statistics.

Introductory Biostatistics

Statistical methods have become an increasingly important and integral part of research in the health sciences. Many sophisticated methodologies have been developed for specific applications and problems. This self-contained comprehensive volume covers a wide range of topics pertaining to new statistical methods in the health sciences, including epidemiology, pharmacovigilance, quality of life, survival analysis, and genomics. The book will serve the health science community as well as practitioners, researchers, and graduate students in applied probability, statistics, and biostatistics.

Basic Skills in Statistics

In this fully updated edition of Using Basic Statistics in the Behavioral and Social Sciences, 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 derivations, the book focuses on helping readers develop an understanding of the underlying logic of statistics, rather than rote memorization. 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.

Fundamental Statistics for the Social, Behavioral, and Health Sciences

Vital Statistics: an introduction to health science statistics e-book is a new Australian publication. This textbook draws on real world, health-related and local examples, with a broad appeal to the Health Sciences student. It demonstrates how an understanding of statistics is useful in the real world, as well as in statistics exams. Vital Statistics: an introduction to health science statistics e-book is a relatively easy-to-read book that will painlessly introduce or re-introduce you to the statistical basics before guiding you through more demanding statistical challenges. Written in recognition of Health Sciences courses which require knowledge of statistical literacy, this book guides the reader to an understanding of why, as well as how and when to use statistics. It explores: How data relates to information, and how information relates to knowledge How to use statistics to distinguish information from disinformation The importance of probability, in statistics and in life That inferential statistics allow us to infer from samples to populations, and how useful such inferences can be How to appropriately apply and interpret statistical measures of difference and association How qualitative and quantitative methods

differ, and when it's appropriate to use each The special statistical needs of the health sciences, and some especially health science relevant statistics The vital importance of computers in the statistical analysis of data, and gives an overview of the most commonly used analyses Real-life local examples of health statistics are presented, e.g. A study conducted at the Department of Obstetrics and Gynecology, University of Utah School of Medicine, explored whether there might be a systematic bias affecting the results of genetic specimen tests, which could affect their generalizability. Reader-friendly writing style t-tests/ ANOVA family of inferential statistics all use variants of the same basic formula Learning Objectives at the start of each chapter and Quick Reference Summaries at the end of each chapter provide the reader with a scope of the content within each chapter.

Advances in Statistical Methods for the Health Sciences

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/>

Using Basic Statistics in the Behavioral and Social Sciences

A guide in basic statistics emphasises its practical use in epidemiology and public health, providing understanding of topics such as study design, data analysis and statistical methods used in the execution of medical research. This title includes sections on Correlation and Linear Regression, as well as exercises reflecting working life.

Vital statistics - E-Book

The Basic Biostatistics for Public Health and Allied Medical Science Students is a text made statistics easy in Health Sciences. This book is developed based on complains derived from Health students, finding difficult with Biostatistics Courses. This piece, in a nutshell, is described as 'teach yourself Biostatistics'. It will interest readers to note that Basic Biostatistics makes every step clear for prompt understanding. Many examples are given which help students and all users to be self-reliant. The text is made up of fifteen chapters. Chapter 1 to 10 deals with Basic descriptive statistics, chapter 11-14 treats biostatistics ranging from concept, application of health statistical indices to data collection schedules while chapter 15 presents some problems and solutions which enables students to learn on their own. However, this book could not treat inferential statistics.

Statistics for Health Data Science

Dive into the most common statistical tests and software packages used for scientific data analysis and interpretation In Essential Statistics For Bioscientists, experienced university and bioscientist Dr Mohammed Meah delivers easy access to statistical analysis and data presentation. It is a great resource for students in the field of life and health sciences to conceptualize, analyze, and present data. This book uses three popular and commonly used statistics softwares—Microsoft Excel, Graphpad

Prism, and SPSS—and offers clear, step-by-step instructions for essential data analysis and graphical/tabular display of data. Beginning with fundamental statistics terminology and concepts, including data types, descriptive statistics (central and spread of data), exploratory statistics (graphical display) and inferential statistics (hypothesis testing and correlation), the content gradually builds in complexity, explaining which statistical test is best suited and how to perform it. A thorough introduction to basic statistical terms and building up to an advanced level of statistical application- ideal for those new to study of statistics Extensive application of three popular software packages- Microsoft Excel, Graphpad Prism and SPSS Numerous hands-on examples of performing data analysis using Microsoft Excel, Graphpad Prism, and SPSS Considers the limitations and errors of statistical analysis Essential reading for those designing and planning a research project in Biosciences Perfect for undergraduate students in the life and health sciences, Essential Statistics For Bioscientists will also earn a place in the libraries of anyone studying medicine, nursing, physiotherapy, pharmacy, and dentistry requiring a refresher or primer on statistical fundamentals.

Basic Statistics and Epidemiology

Statistics in Medicine, Fourth Edition, helps medical and biomedical investigators design and answer questions about analyzing and interpreting data and predicting the sample size required to achieve useful results. It makes medical statistics easy for the non-biostatistician by outlining common methods used in 90% of medical research. The text covers how to plan studies from conception to publication, what to do with data, and follows with step-by-step instructions for biostatistical methods from the simplest levels, to more sophisticated methods now used in medical articles. Examples from almost every medical specialty, and from dentistry, nursing, pharmacy and health care management are provided. This book does not require background knowledge of statistics or mathematics beyond high school algebra and provides abundant clinical examples and exercises to reinforce concepts. It is a valuable source for biomedical researchers, healthcare providers and anyone who conducts research or quality improvement projects. Expands and revises important topics, such as basic concepts behind descriptive statistics and testing, descriptive statistics in three dimensions, the relationship between statistical testing and confidence intervals, and more Presents an easy-to-follow format with medical examples, step-by-step methods and check-yourself exercises Explains statistics for users with little statistical and mathematical background Encompasses all research development stages, from conceiving a study, planning it in detail, carrying out the methods, putting obtained data in analyzable form, analyzing and interpreting the results, and publishing the study

Basic Biostatistics for Public Health and Allied Medical Science Students

Most healthcare professionals need to be able to read and understand clinical evidence, and make a judgment on what treatments are effective. To do this, they need a basic grounding in statistics and epidemiology. This book aims to help readers by stimulating their interest and helping them understand the basics quickly and simply.

Essential Statistics for Bioscientists

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.

Statistics in Medicine

This book deals with statistics in medicine in a simple way. The text is supported by abundant examples from medical data. This book aims to explain and simplify the process of data presentation. Further aspects addressed include how to design and conduct clinical trials, and how to write journal articles.

Basic Statistics and Epidemiology

Never HIGHLIGHT a Book Again! Virtually all of the testable terms, concepts, persons, places, and events from the textbook are included. Cram101 Just the FACTS101 studyguides give all of the outlines, highlights, notes, and quizzes for your textbook with optional online comprehensive practice tests. Only Cram101 is Textbook Specific. Accompany: 9780072844030 .

Medical Statistics

Most medical researchers, whether clinical or non-clinical, receive some background in statistics as undergraduates. However, it is most often brief, a long time ago, and largely forgotten by the time it is needed. Furthermore, many introductory texts fall short of adequately explaining the underlying concepts of statistics, and often are divorced from the reality of conducting and assessing medical research. Practical Statistics for Medical Research is a problem-based text for medical researchers, medical students, and others in the medical arena who need to use statistics but have no specialized mathematics background. The author draws on twenty years of experience as a consulting medical statistician to provide clear explanations to key statistical concepts, with a firm emphasis on practical aspects of designing and analyzing medical research. The text gives special attention to the presentation and interpretation of results and the many real problems that arise in medical research.

Basic Statistics for Health Care

"... this text takes a novel approach... The style... is not as dry as other statistics texts, and so should not be intimidating even to a relative newcomer to the subject... The layout is easy to navigate, there are chapter aims, summaries and "key point boxes" throughout." -The Pharmaceutical Journal, 2008 This text is a clear, accessible introduction to the key statistical techniques employed for the analysis of data within this subject area. Written in a concise and logical manner, the book explains why statistics are necessary and discusses the issues that experimentalists need to consider. The reader is carefully taken through the whole process, from planning an experiment to interpreting the results, avoiding unnecessary calculation methodology. The most commonly used statistical methods are described in terms of their purpose, when they should be used and what they mean once they have been performed. Numerous examples are provided throughout the text, all within a pharmaceutical context, with key points highlighted in summary boxes to aid student understanding. Essential Statistics for the Pharmaceutical Sciences takes a new and innovative approach to statistics with an informal style that will appeal to the reader who finds statistics a challenge! This book is an invaluable introduction to statistics for any science student. It is an essential text for students taking biomedical or pharmaceutical-based science degrees and also a useful guide for researchers.

Medical Statistics

Provides a step-by-step approach to statistical procedures to analyze data and conduct research, with detailed sections in each chapter explaining SPSS® and Excel® applications This book identifies connections between statistical applications and research design using cases, examples, and discussion of specific topics from the social and health sciences. Researched and class-tested to ensure an accessible presentation, the book combines clear, step-by-step explanations for both the novice and professional alike to understand the fundamental statistical practices for organizing, analyzing, and drawing conclusions from research data in their field. The book begins with an introduction to descriptive and inferential statistics and then acquaints readers with important features of statistical applications (SPSS and Excel) that support statistical analysis and decision making. Subsequent chapters treat the procedures commonly employed when working with data across various fields of social science research. Individual chapters are devoted to specific statistical procedures, each ending with lab application exercises that pose research questions, examine the questions through their application

in SPSS and Excel, and conclude with a brief research report that outlines key findings drawn from the results. Real-world examples and data from social and health sciences research are used throughout the book, allowing readers to reinforce their comprehension of the material. Using Statistics in the Social and Health Sciences with SPSS® and Excel® includes: Use of straightforward procedures and examples that help students focus on understanding of analysis and interpretation of findings Inclusion of a data lab section in each chapter that provides relevant, clear examples Introduction to advanced statistical procedures in chapter sections (e.g., regression diagnostics) and separate chapters (e.g., multiple linear regression) for greater relevance to real-world research needs Emphasizing applied statistical analyses, this book can serve as the primary text in undergraduate and graduate university courses within departments of sociology, psychology, urban studies, health sciences, and public health, as well as other related departments. It will also be useful to statistics practitioners through extended sections using SPSS® and Excel® for analyzing data.

Outlines and Highlights for Basic Statistics for Health Sciences by Jan Kuzma, ISBN

Allied health professionals rely on "Biostatistics" for its high standards of statistical accuracy. It helps them develop a set of statistical tools that are relevant to their field. Now in its ninth edition, the book integrates new applications from several biological science fields throughout the pages. Each chapter now opens with bulleted objectives that highlight the main ideas. Summary boxes of formulae and statistical rules are presented for easy reference and review. Support is also provided for multiple programs such as SPSS, SAS, and STATA, in addition to Minitab. This includes screen captures and technology boxes with step-by-step help. Health professionals will then gain the ability to use technology to analyze data.

Practical Statistics for Medical Research

Includes endnotes, answers to exercises, and an appendix dataset.

Essential Statistics for the Pharmaceutical Sciences

This introductory textbook explores the role of research in health care and focuses in particular on the importance of organizing and describing research data using basic statistics. The goal of the text is to teach students how to analyze data and present the results of evidence-based data analysis. Based on the commonly-used SPSS software, a comprehensive range of statistical techniques—both parametric and non-parametric—are presented and explained. Examples are given from nursing, health administration, and health professions, followed by an opportunity for students to immediately practice the technique.

Using Statistics in the Social and Health Sciences with SPSS and Excel

STATISTICS AT SQUARE ONE The new edition of the popular introduction to the world of statistics for health care professionals and medical students First published nearly three decades ago, Statistics at Square One remains one of the most popular introductions to medical statistics. Now in its twelfth edition, this international bestseller continues to be a must-have resource for anyone in need of a thorough introduction to statistics in the health sciences. Clear and accessible chapters help students with no previous background in the subject understand fundamental topics including summary statistics for quantitative and binary data, diagnostic and screening tests, populations and samples, survival analysis, correlation and regression, study design, computer modeling, and more. This edition reflects contemporary understanding of medical statistics and emphasizes the importance of statistics in public health, including extensively updated coverage of diagnostic tests and new COVID-related examples. All figures and examples now include code to reproduce them in the R statistical software. New chapters cover the basics for understanding numbers and introduce the use of models in medical statistical analysis. Based on the author's many years of experience teaching medical and health science students, the latest edition of this classic textbook: Highlights the connections between different medical statistics methods Emphasizes the proper use of p-values in testing Features practical examples from recent literature Contains end-of-chapter exercises with answers, some of which are based on the Royal College of General Practitioners (RCGP) Advanced Knowledge Test Statistics at Square One is required reading for all medical and health care practitioners and students wanting to understand the use and value of statistical analysis in the health sciences.

Biostatistics

