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The nature of demography; Rates and rations; Accuracy and error; The life table; The study of mortality; Working activities.

Techniques of Population Analysis - George W. Barclay - 1958
The nature of demography; Rates and rations; Accuracy and error; The life table; The study of mortality; Measurement of fertility; Growth of population; Migration and the distribution of population; Manpower and working activities.

Analysis of Change - Uwe Engel - 1996
By making both causal and process analyses possible, panel data has enjoyed increasing popularity in empirical science. In this compilation, several statistical techniques are presented in the face of a growing need to analyze panel data. Measurement error, missing data, heterogeneous populations and particular requirements for causal interference make the analysis of change more difficult. Readers will find up-to-date approaches covering a wide range of topics. Among these are loglinear and probit models, state space models, and structural equation and multilevel growth curve models of panel data.

Advanced Techniques for Modelling Maternal and Child Health in Africa - Ngianga-Bakwin Kandala - 2013-09-06
This book presents both theoretical contributions and empirical applications of advanced statistical techniques including geo-additive models that link individual measures with area variables to account for spatial correlation; multilevel models that address the issue of clustering within family and household; multi-process models that account for interdependencies over life-course events and non-random utilization of health services; and flexible parametric alternatives to existing intensity models. These analytical techniques are illustrated mainly through modeling maternal and child health in the African context, using data from demographic and health surveys. In the past, the estimation of levels, trends and differentials in demographic and health outcomes in developing countries was heavily reliant on indirect methods that were devised to suit limited or deficient data. In recent decades, world-wide surveys such as the World Fertility Survey and its successor, the Demographic and Health Survey have played an important role in filling the gap in survey data from developing countries. Such modern demographic and health surveys enable investigators to make in-depth analyses that guide policy intervention strategies, and such analyses require the modern and advanced statistical techniques covered in this book. The text is ideally suited for academics, professionals, and decision makers in the social and health sciences, as well as others with an interest in statistical modelling, demographic and health surveys. Scientists and students in applied statistics, epidemiology, medicine, social and behavioural sciences will find it of value.
comprehensive text on this subject now available. Drawing on a wide range of sciences in addition to demography, 

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Statistical Training Programs by the U.S. Bureau of the Census - International Statistical Programs Center (U.S.) - Population statistics and demographic analysis, sampling and survey methods, agricultural surveys and censuses, economic surveys and censuses, computer data systems. 

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The Demography and Epidemiology of Human Health and Aging - Jacob S. Siegel - 2011-09-30

With this book, Siegel, an internationally known demographer and gerontologist, has made a unique contribution to the fledging fields of health demography, and the demography and epidemiology of aging. The book represents a felicitous union of epidemiology, gerontology, and demography, and appears to be the first and only comprehensive text on this subject now available. Drawing on a wide range of sciences in addition to demography, gerontology, and epidemiology, including medical sociology, biostatistics, public policy, biometrics, and molecular biology, the author treats theoretical and applied issues, links methods and findings, covers the material internationally, nationally, and locally, and while focusing on the elderly, treats the entire life course. The methods, materials, and perspectives of demography and epidemiology are brought to bear on such topics as the prospects for future increases in human longevity, the relative contribution of life style, environment, genetics, and chance in human longevity, the measurement of the share of healthy years in total life expectancy, the role of population growth in the rising costs of health care, and the applications of health demography in serving the health needs of local communities. The separate chapters systematically develop the topics of the sources and quality of health data; mortality, life tables, and the measurement of health status; the interrelationships of health, on the one hand, and mortality, fertility, migration, and age structure, on the other; health conditions in the less developed countries; the concepts and theories of aging and projections of the aged population; and local health applications, public health policy, and biocultural issues in health demography. Given its comprehensiveness, clarity, interdisciplinary scope, and authenticity, this book appeals to a wide range of users, from students and teachers of medical sociology, the demography of aging, and public health studies to practitioners in these areas, both as a text in health demography and the demography/epidemiology of aging, and as a reference work in these fields.

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The Population of Modern China - Dudley L. Poston Jr. - 2013-11-11

Student-- interested in world populations and demography inevitably need to know China. As the most populous country of the world, China occupies a unique position in the world population system. How its population is shaped by the intricate interplays among factors such as its political ideology and institutions, economic reality, government policies, sociocultural traditions, and ethnic divergence represents at once a fascinating and challenging arena for investigation and analysis. Yet, for most of the 20th century, while population studies have developed into a mature science, precise information and sophisticated analysis about the Chinese population had largely remained either lacking or inaccessible, first because of the absence of systematic databases due to almost uninterrupted strife and wars, and later because the society was closed to the outside observers for about three decades since 1949. Since the end of the Cultural Revolution, things have dramatically changed. China has embarked on an ambitious reform program where modernization became the utmost goal of societal mobilization. China's census or imprecise census and other population-related surveys and policy planning, nor to remaining closed to the outside world. Both the gathering of more precise information and access to such information have dramatically increased in the 1980s. Systematic observations, analyses and reporting about the Chinese population have surfaced in the population literature around the globe.

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Advanced Classification Techniques for Healthcare Analysis - Chakraborty, Chinmay - 2019-02-22

Medical and information communication technology professionals are working to develop robust classification techniques, especially in healthcare data/image analysis, to ensure quick diagnoses and treatments to patients. Without fast and immediate access to healthcare databases and information, medical professionals' success rates and treatment options become limited and fail to disastrous levels. Advanced Classification Techniques for
to answer questions critical to older people worldwide. These include: is the period of disability compressing or affordable healthcare, while also discussing the impact health data has on medical treatments. Featuring coverage on a broad range of topics such as early diagnosis, brain-computer interface, metabolomic algorithms, clustering techniques, learning schemes, and mobile telemedicine, this book is ideal for medical professionals, healthcare administrators, engineers, researchers, academicians, and technology developers seeking current research on furthering information and communication technology that improves patient care.

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**A Primer of Population Dynamics** - Krishnan Namboodiri - 1996-08-31
A Primer of Population Dynamics introduces to the basics of population studies. Author Krishnan Namboodiri utilizes a question-and-answer format that explores topics such as population theories and conceptual schemes, demographic data, mortality, fertility, migration, family and household, food production, and the environment and much more. Questions are accompanied by detailed explanations as well as references for additional information. An extensive index and glossary allow for easy retrieval of information. This introductory textbook is written for students studying demography, population, sociology, and public health.

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**But in My Case** - Andrei Rogers - 2018-05-21
This book tells the eighty-year story of the authors life in America and abroad. He attended local schools in Berkeley and, upon graduation from Berkeley High School in 1955, enrolled at the University of California, graduating with a degree in architecture in 1966. He then obtained a PhD in architecture at the University of North Carolina, Chapel Hill, and returned to Berkeley in 1964 to join the faculty of its department of that name. After an academic career of some fifty years in departments of planning, engineering, and geography, he retired from teaching in 2008 at the University of Colorado in Boulder, and became a senior research scholar in the Population Program, which he directed for twenty years at the university's Institute of Behavioral Science.

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**Healthy Longevity in China** - Yi Zeng - 2008-01-10
Key research in the world's largest aging population – in China – has fed into this important new work, which aims expanding with increasing life expectancy and what factors are associated with these trends in the recent decades? And is it possible to realize morbidity compression with a prolongation of the life span in the future? Essential reading for gerontologists.

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**Optical Imaging for Biomedical and Clinical Applications** - Ahmad Fadzil Mohamad Hani - 2017-10-30
Optical imaging is a rapidly emerging imaging technique that has been successfully translated into biomedical applications ranging from clinical diagnosis to molecular biology. This book includes an introductory section to explore various optical imaging devices and their functionality and roles for biomedical applications such as dermatology and ophthalmology. Recent developments as exemplified with the authors research are explored in detail. In depth discussion of other disease conditions and their diagnosis with optical imaging techniques are also covered.

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**Advanced Techniques in Diagnostic Microbiology** - Yi-Wei Tang - 2018-11-09
In recent years, advanced molecular techniques in diagnostic microbiology have been revolutionizing the practice of clinical microbiology in the hospital setting. Molecular diagnostic testing in general and nucleic acid-based amplification methods in particular have been heralded as diagnostic tools for the new millennium. This third edition covers not only the most recent updates and advances, but details newly invented omic techniques, such as next generation sequencing. It is divided into two distinct volumes, with Volume 1 describing the techniques, and Volume 2 addressing their applications in the field. In addition, both volumes focus more so on the clinical relevance of the test results generated by these techniques than previous editions.

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**A Handbook for the Study of Mental Health** - Teresa L. Scheid - 2017-06-08
With chapters written by leading scholars and researchers, the third edition of A Handbook for the Study of Mental Health provides an updated, comprehensive review of the sociology of mental health. The volume presents an overview of the historical, social, and institutional frameworks for understanding mental health and illness. Part I examines the social factors that shape psychiatric diagnosis and the measurement of mental health and illness, the theories that explain the definition and treatment of mental disorders, and cultural variability in mental health. The section addresses the DSM-5 and its potential influence on diagnosis and research on mental health outcomes. Part II investigates the effects of social context on mental health and illness. Part III focuses on the organization, delivery, and social context of mental health treatment. The chapters in Part III address the
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Statistical Reporter - 1950

Understanding Advanced Statistical Methods - Peter Westfall - 2013-04-09
Providing a much-needed bridge between elementary statistics courses and advanced research methods courses, Understanding Advanced Statistical Methods helps students grasp the fundamental assumptions and machinery behind sophisticated statistical topics, such as logistic regression, maximum likelihood, bootstrapping, nonparametrics, and Bayesian methods. The book teaches students how to properly model, think critically, and design their own studies to avoid common errors. It leads them to think differently not only about math and statistics but also about general research and the scientific method. With a focus on statistical models as producers of data, the book enables students to more easily understand the machinery of advanced statistics. It also downplays the “population” interpretation of statistical models and presents Bayesian methods before frequentist ones. Requiring no prior calculus experience, the text employs a “just-in-time” approach that introduces mathematical topics, including calculus, where needed. Formulas throughout the text are used to explain why calculus and probability are essential in statistical modeling. The authors also intuitively explain the theory and logic behind real data analysis, incorporating a range of application examples from the social, economic, biological, medical, physical, and engineering sciences. Enabling your students to answer the why behind statistical methods, this text teaches them how to successfully draw conclusions when the premises are flawed. It empowers them to use advanced statistical methods with confidence and develop their own statistical recipes. Ancillary materials are available on the book’s website.

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Advanced Statistical Methods for the Analysis of Large Data-Sets - Agostino Di Ciaccio - 2013-03-05
The theme of the meeting was “Statistical Methods for the Analysis of Large Data-Sets”. In recent years there has been increasing interest in this subject; in fact a huge quantity of information is often available but standard statistical techniques are usually not well suited to managing this kind of data. The conference serves as an important meeting point for European researchers working on this topic and a number of European statistical societies participated in the organization of the event. The book includes 45 papers from a selection of the 136 papers accepted for presentation and discussed at the conference on “Advanced Statistical Methods for the Analysis of Large Data-sets.”

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Statistical Training Programs - United States. Bureau of the Census - 1971

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Practical Methods for Design and Analysis of Complex Surveys - Risto Lehtonen - 2004-03-05
Large surveys are becoming increasingly available for public use, and researchers are often faced with the need to analyse complex survey data to address key scientific issues. For proper analysis it is also important to be aware of the different aspects of the design of complex surveys. Practical Methods for Design and Analysis of Complex Surveys features intermediate and advanced statistical techniques for use in designing and analysing complex surveys. This extensively updated edition features much new material, and detailed practical exercises with links to a Web site, helping instructors and enabling use for distance learning. * Provides a comprehensive introduction to sampling and estimation in descriptive surveys, including design effect statistic and use of auxiliary data. * Includes detailed coverage of complex survey analysis, including design-based ANOVA and logistic regression with GEE estimation. * Contains much new material, including handling of non-sampling errors, and model-assisted estimation for domains. * Features detailed real-life case studies, such as multilevel modeling in a multinational educational survey. * Supported by a Web site containing software codes, real data sets, computerized exercises with solutions, and online training materials. Practical Methods for Design and Analysis of Complex Surveys provides a useful practical resource for researchers and practitioners working in the planning, implementation or analysis of complex surveys and opinion polls, including business, educational, health, social, and socio-economic surveys and official statistics. In addition, the book is well suited for use on intermediate and advanced courses in survey sampling.

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because the American student is most concerned with materials about his own country. However, no effort has been spared to assemble comparable information from other portions of the world so that the situation in the United States may be compared with, or contrasted to, that in other great world regions. Naturally the reports of the various censuses taken in this country, from the first to the sixteenth, are the sources of many of the facts. Together these reports form the world’s greatest repository of demographic information. Any student of the social sciences would be well paid for taking a semester’s work in population even though the course did no more than familiarize him with the reports of the decennial census and the annual publications on vital statistics. The value of the primary materials gathered by the Bureau of the Census has been greatly enhanced by the excellent analytical efforts on the part of demographers during the last quarter of a century. It can rightfully be said that population study is among the most rapidly advancing parts of social science”—Preface. (PsycINFO Database Record (c) 2007 APA, all rights reserved).
Exploration of Cortical Function - M. Stetter - 2002-01-31

Exploration of Cortical Function summarizes recent research efforts aiming at the revelation of cortical population coding and signal processing strategies. Topics include optical detection techniques of population activity in the sub-millimeter range, advanced methods for the statistical analysis of these data, and biologically inspired neuronal modeling techniques for population activities in the frameworks of optimal coding, statistical learning theory, and mean-field recurrent networks. Exploration of Cortical Function is unique in that it covers one complete branch of population-based brain research ranging from techniques for data acquisition over data analysis up to modeling techniques for the quantification of functional principles. The volume covers an area which is of great current interest to researchers working on cerebral cortex. The combination of models and image analysis techniques to examine the activity of large cohorts of neurons is especially intriguing and prone to considerable error and debate. The intended readership is students and researchers from many disciplines, including neuroscience, biology, physics, and computer science, interested in how an interdisciplinary framework from biology advanced statistics and computational neuroscience can be used to gather a quantitative understanding of cortical function. Experimentalists may gain insight into statistical and neuronal modeling techniques, whereas theoreticians will find an introductory treatment of neuroanatomy, neurophysiology, and measurement techniques.

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There are few books available that provide a good introduction to methods and techniques for ecological research. This book will be invaluable to lecturers teaching field courses and students undertaking project work in ecology. Each chapter will focus on an ecological technique. It will have introductory section that describes the ecological principles and theory. This will then be followed by example applications. These will focus on three most common habitats where teachers take students for fieldwork; the seashore, ponds and lakes, fields and woodland. Only introductory text specifically focused on fieldtechniques. Great ‘how-to’ guide that will show students exactly how to carry out each method. Only text to emphasise the principles behind the techniques - taking a methods based approach rather than a taxonomic approach (eg chapters split into population measures, biodiversity measures, species richness measures rather than methods for invertebrates, methods for mammals, methods for birds etc). Greater emphasis on the equipment involved - how to make it, where to buy it. Good references to further reading and advanced techniques.

Advanced Methods in Molecular Biology and Biotechnology - Khalid Z. Masoodi - 2020-11-10

Advanced Methods in Molecular Biology and Biotechnology: A Practical Lab Manual is a concise reference on common protocols and techniques for advanced molecular biology and biotechnology experimentation. Each chapter focuses on a different method, providing an overview before delving deeper into the procedure in a step-by-step approach. Techniques covered include genomic DNA extraction using cetyltrimethylammonium bromide (CTAB) and chloroform extraction, chromatographic techniques, ELISA, hybridization, gel electrophoresis, dot blot analysis and methods for studying polymerase chain reactions. Laboratory protocols and standard operating procedures for key equipment are also discussed, providing an instructive overview for lab work. This practical guide focuses on the latest advances and innovations in methods for molecular biology and biotechnology investigation, helping researchers and practitioners enhance and advance their own methodologies and take their work to the next level. Explores a wide range of advanced methods that can be applied by researchers in molecular biology and biotechnology Clear, step-by-step instruction for applying the techniques covered. Offers an introduction to laboratory protocols and recommendations for best practice when conducting experimental work, including standard operating procedures for key equipment.

The Wildlife Techniques Manual - Nova J. Silvy - 2012-03

A standard text in a variety of courses, the Techniques Manual, as it is commonly called, covers every aspect of modern wildlife management and provides practical information for applying the hundreds of methods described in its pages. To effectively incorporate the explosion of new information in the wildlife profession, this latest edition is logically organized into a two-volume set: Volume 1 is devoted to research techniques and Volume 2 focuses on management methodologies.

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Discovering Statistics Using SPSS for Windows - Andy P. Field - 2000
Andy Field draws on his experience of teaching advanced statistics to extend existing SPSS windows texts to a higher level. He covers ANOVA, MANOVA, logistic regression, comparing means tests and factor analysis.

Population Analysis in Geography - Robert Woods - 1979

Population Analysis in Geography - Robert Woods - 1979

General Register - University of Michigan - 1952
Announcements for the following year included in some vols.

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Analysis of Health Surveys - Edward L. Korn - 2011-01-25
How to apply statistical methods to survey data—a guide to effective analysis of health surveys. With large health surveys becoming increasingly available for public use, researchers with little experience in survey methods are often faced with analyzing data from surveys to address scientific and programmatic questions. This practical book provides statistical techniques for use in survey analysis, making health surveys accessible to statisticians, biostatisticians, epidemiologists, and health researchers. The authors clearly explain the theory and methods of survey analysis along with real-world applications. They draw on their work at the National Institutes of Health as well as up-to-date information from across the literature to present: * The sampling background necessary to understand health surveys. * The application of such techniques as t-tests, linear regression, logistic regression, and survival analysis to survey data. * The use of sample weights in survey data analysis. * Dealing with complications in variance estimation in large health surveys. * Applications involving cross-sectional, longitudinal, and multiple cross-sectional surveys, and the use of surveys to perform population-based case-control analyses. * Guidance on the correct use of statistical methods found in software packages. * Extensive bibliography.

Analysis of Health Surveys - Edward L. Korn - 2011-01-25
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Advanced Techniques in Knowledge Discovery and Data Mining - Nikhil Pal - 2007-12-31
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Rediscovering Geography - Rediscovering Geography Committee - 1997-04-11
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