

# Lifescinces P1 Grade11 Nw October 2014

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## **Bayesian Data Analysis, Third Edition** - Andrew Gelman 2013-11-01

Now in its third edition, this classic book is widely considered the leading text on Bayesian methods, lauded for its accessible, practical approach to analyzing data and solving research problems. Bayesian Data Analysis, Third Edition continues to take an applied approach to analysis using up-to-date Bayesian methods. The authors—all leaders in the statistics community—introduce basic concepts from a data-analytic perspective before presenting advanced methods. Throughout the text, numerous worked examples drawn from real applications and research emphasize the use of Bayesian inference in practice. New to the Third Edition Four new chapters on nonparametric modeling Coverage of weakly informative priors and boundary-avoiding priors Updated discussion of cross-validation and predictive information criteria Improved convergence monitoring and effective sample size calculations for iterative simulation Presentations of Hamiltonian Monte Carlo, variational Bayes, and expectation propagation New and revised software code The book can be used in three different ways. For undergraduate students, it introduces Bayesian inference starting from first principles. For graduate students, the text presents effective current approaches to Bayesian modeling and computation in statistics and related fields. For researchers, it provides an assortment of Bayesian methods in applied statistics. Additional materials, including data sets used in the examples, solutions to selected exercises, and software instructions, are available on the book's web page.

## *Probability and Statistics for Computer Scientists* - Michael Baron 2013-08-05

Student-Friendly Coverage of Probability, Statistical Methods, Simulation, and Modeling Tools Incorporating feedback from instructors and researchers who used the previous edition, *Probability and Statistics for Computer Scientists, Second Edition* helps students understand general methods of stochastic modeling, simulation, and data analysis; make o

## *Gordis Epidemiology* - David D Celentano 2018-10-19

From the Department of Epidemiology at Johns Hopkins University and continuing in the tradition of award-winning educator and epidemiologist Dr. Leon Gordis, comes the fully revised 6th Edition of *Gordis Epidemiology*. This bestselling text provides a solid introduction to basic epidemiologic principles as well as practical applications in public health and clinical practice, highlighted by real-world examples throughout. New coverage includes expanded information on genetic epidemiology, epidemiology and public policy, and ethical and professional issues in epidemiology, providing a strong basis for understanding the role and importance of epidemiology in today's data-driven society. Covers the basic principles and concepts of epidemiology in a clear, uniquely memorable way, using a wealth of full-color figures, graphs, charts, and cartoons to help you understand and retain key information. Reflects how epidemiology is practiced today, with a new chapter organization progressing from observation and developing hypotheses to data collection and analyses. Features new end-of-chapter questions for quick self-assessment, and a glossary of genetic terminology. Provides more than 200 additional multiple-choice epidemiology self-assessment questions online. Evolve Instructor Resources, including a downloadable image and test bank, are available to instructors through their Elsevier sales rep or via request at: <https://evolve.elsevier.com>

## **Intermediate Microeconomics** - Hal R. Varian 2011

## *Clinical Practice Guidelines For Chronic Kidney Disease* - 2002

## *Environmental Life Cycle Assessment (Open Access)* - Olivier Jolliet 2015-11-18

*Environmental Life Cycle Assessment* is a pivotal guide to identifying environmental problems and reducing related impacts for companies and organizations in need of life cycle assessment (LCA). LCA, a unique sustainability tool, provides a framework that addresses a growing demand for practical technological solutions. Detailing each phase of the LCA methodology, this textbook covers the historical development of LCA, presents the general principles and characteristics of LCA, and outlines the corresponding standards for good practice determined by the International Organization for Standardization. It also explains how to identify the critical aspects of an LCA, provides detailed examples of LCA analysis and applications, and includes illustrated problems and solutions with concrete examples from water management, electronics, packaging, automotive, and other industries. In addition, readers will learn how to: Use consistent criteria to realize and evaluate an LCA independently of individual interests Understand the LCA methodology and become familiar with existing databases and methods based on the latest results of international research Analyze and critique a completed LCA Apply LCA methodology to simple case studies Geared toward graduate and undergraduate students studying environmental science and industrial ecology, as well as practicing environmental engineers, and sustainability professionals who want to teach themselves LCA good practices, *Environmental Life Cycle Assessment* demonstrates how to conduct environmental assessments for products throughout their life cycles. It presents existing methods and recent developments in the growing field of LCA and systematically covers goal and system definition, life cycle inventory, life cycle impact assessment, and interpretation.

## [How Tobacco Smoke Causes Disease](#) - 2010

This report considers the biological and behavioral mechanisms that may underlie the pathogenicity of tobacco smoke. Many Surgeon General's reports have considered research findings on mechanisms in assessing the biological plausibility of associations observed in epidemiologic studies. Mechanisms of disease are important because they may provide plausibility, which is one of the guideline criteria for assessing evidence on causation. This report specifically reviews the evidence on the potential mechanisms by which smoking causes diseases and considers whether a mechanism is likely to be operative in the production of human disease by tobacco smoke. This evidence is relevant to understanding how smoking causes disease, to identifying those who may be particularly susceptible, and to assessing the potential risks of tobacco products.

## *From Neurons to Neighborhoods* - National Research Council 2000-11-13

How we raise young children is one of today's most highly personalized and sharply politicized issues, in part because each of us can claim some level of "expertise." The debate has intensified as discoveries about our development-in the womb and in the first months and years-have reached the popular media. How can we use our burgeoning knowledge to assure the well-being of all young children, for their own sake as well as for the sake of our nation? Drawing from new findings, this book presents important conclusions about nature-versus-nurture, the impact of being born into a working family, the effect of politics on programs for children, the costs and benefits of intervention, and other issues. The committee issues a series of challenges to decision makers regarding the quality of child care, issues of racial and ethnic diversity, the integration of children's cognitive and emotional development, and more. Authoritative yet accessible, *From Neurons to Neighborhoods* presents the evidence about "brain wiring" and how kids learn to speak, think, and regulate their behavior. It examines the effect of the climate-family, child care, community-within

which the child grows.

*Study and Master Geography Grade 11 CAPS Study Guide* - Helen Collett 2014-08-21

Health Planning Reports Subject Index - United States. Health Resources Administration 1979

*Novel Psychoactive Substances* - Ornella Corazza 2017-08-09

In light of the recent emergence of Novel Psychoactive Substances (NPS) on a global scale, this book provides a timely analysis of the social and economic impact of the NPS phenomenon, and of the global policy and regulatory responses to it. It presents the first comprehensive overview of the international regulation, policy and market structure of the NPS phenomenon, offering a guide to inform legislative discussions and demonstrating from a comparative perspective the different approaches used to address the rise of NPS to date. It covers topics such as organized crime, drug markets, clinical evidence on NPS, and different regulatory approaches also in less explored settings such as prisons and sport environments. Overall, this highly informative and well-structured repository of different experiences with NPS policy, law and regulation offers an essential primary source of evidence for anyone interested in the area of drug and NPS policy, health economics and public health.

An Introduction to Stochastic Modeling - Howard M. Taylor 2014-05-10

An Introduction to Stochastic Modeling provides information pertinent to the standard concepts and methods of stochastic modeling. This book presents the rich diversity of applications of stochastic processes in the sciences. Organized into nine chapters, this book begins with an overview of diverse types of stochastic models, which predicts a set of possible outcomes weighed by their likelihoods or probabilities. This text then provides exercises in the applications of simple stochastic analysis to appropriate problems. Other chapters consider the study of general functions of independent, identically distributed, nonnegative random variables representing the successive intervals between renewals. This book discusses as well the numerous examples of Markov branching processes that arise naturally in various scientific disciplines. The final chapter deals with queueing models, which aid the design process by predicting system performance. This book is a valuable resource for students of engineering and management science. Engineers will also find this book useful.

**Number Patterns 1** - Nuffield Mathematics Project 1973

*Science Citation Index* - 1994

Vols. for 1964- have guides and journal lists.

*Weight Gain During Pregnancy* - National Research Council 2010-01-14

As women of childbearing age have become heavier, the trade-off between maternal and child health created by variation in gestational weight gain has become more difficult to reconcile. *Weight Gain During Pregnancy* responds to the need for a reexamination of the 1990 Institute of Medicine guidelines for weight gain during pregnancy. It builds on the conceptual framework that underscored the 1990 weight gain guidelines and addresses the need to update them through a comprehensive review of the literature and independent analyses of existing databases. The book explores relationships between weight gain during pregnancy and a variety of factors (e.g., the mother's weight and height before pregnancy) and places this in the context of the health of the infant and the mother, presenting specific, updated target ranges for weight gain during pregnancy and guidelines for proper measurement. New features of this book include a specific range of recommended gain for obese women. *Weight Gain During Pregnancy* is intended to assist practitioners who care for women of childbearing age, policy makers, educators, researchers, and the pregnant women themselves to understand the role of gestational weight gain and to provide them with the tools needed to promote optimal pregnancy outcomes.

**Subsystem and Transaction Monitoring and Tuning with DB2 11 for z/OS** - Paolo Bruni 2015-07-29

This IBM® Redbooks® publication discusses in detail the facilities of DB2® for z/OS®, which allow complete monitoring of a DB2 environment. It focuses on the use of the DB2 instrumentation facility component (IFC) to provide monitoring of DB2 data and events and includes suggestions for related tuning. We discuss the collection of statistics for the verification of performance of the various components of the

DB2 system and accounting for tracking the behavior of the applications. We have intentionally omitted considerations for query optimization; they are worth a separate document. Use this book to activate the right traces to help you monitor the performance of your DB2 system and to tune the various aspects of subsystem and application performance.

Mathematics for Computer Science - Eric Lehman 2017-03-08

This book covers elementary discrete mathematics for computer science and engineering. It emphasizes mathematical definitions and proofs as well as applicable methods. Topics include formal logic notation, proof methods; induction, well-ordering; sets, relations; elementary graph theory; integer congruences; asymptotic notation and growth of functions; permutations and combinations, counting principles; discrete probability. Further selected topics may also be covered, such as recursive definition and structural induction; state machines and invariants; recurrences; generating functions.

Fire and Emergency Services Company Officer - IFSTA 2014-11-14

This new IFSTA manual details the training required of Company Officers according to NFPA® 1021, Standard for Fire Officer Professional Qualifications, 2014 Edition. The manual is divided into two sections to make a clear distinction between the information needed for Fire Officer Level I and Fire Officer Level II. Both print and eBook formats are available. There is no shortage of issues that a company officer might face in the everyday operation of a fire company or unit. This manual addresses the wide range of topics and issues encountered by a company officer, from leadership and supervision to health and safety issues. Great attention was given to focus on the job performance requirements of NFPA® 1021. The fifth edition of Fire and Emergency Services Company Officer builds on the previous edition of the manual while presenting the material in a more concise manner to make it easier for students to read and instructors to teach. By merging related topics, the number of chapters was reduced from 32 in the fourth edition to 17 in the new manual while preserving the material related to the NFPA® standard. The number of appendices was reduced from 20 to 4 by removing information that can be found in other media. Along with reducing the volume of material from the fourth edition, the fifth edition of Fire and Emergency Services Company Officer offers several new features. The manual features a new look with IFSTA's single-column format and upgraded and updated curriculum components. Learning activities are included to help instructors present the material to their students. Case Histories open each chapter to illustrate important lessons learned in the real world. Photographs, illustrations, and tables are included throughout the manual to illustrate key points and improve the overall instructional value of the material.

**The Value Line Convertibles Survey** - 2000

**Arts & Humanities Citation Index** - 1987

A multidisciplinary index covering the journal literature of the arts and humanities. It fully covers 1,144 of the world's leading arts and humanities journals, and it indexes individually selected, relevant items from over 6,800 major science and social science journals.

**Coal Geology** - Larry Thomas 2020-07-13

A global exploration of coal geology, from production and use to chemical properties and coal petrology. *Coal Geology*, 3rd Edition, offers a revised and updated edition of this popular book which provides a comprehensive overview of the field of coal geology including coal geophysics, hydrogeology and mining. Also covered in this volume are fully revised coverage of resource and reserve definitions, equipment and recording techniques together with the use of coal as an alternative energy source as well as environmental implications. This third edition provides a textbook ideally suited to anyone studying, researching or working in the field of coal geology, geotechnical engineering and environmental science. Fills the gap between academic aspects of coal geology and the practical role of geology in the coal industry. Examines sedimentological and stratigraphical geology, together with mining, geophysics, hydrogeology, environmental issues and coal marketing. Defines global coal resource classifications and methods of calculation. Addresses the alternative uses of coal as a source of energy. Covers a global approach to coal producers and consumers.

*World Development Indicators 2014* - World Bank 2014-05-12

World Development Indicators (WDI) is the World Bank's premier annual compilation of data about

development. This year's print edition and e-book have been redesigned to allow users the convenience of easily linking to the latest data on-line.

**Atkins' Physical Chemistry 11e** - Peter Atkins 2019-08-20

Atkins' Physical Chemistry: Molecular Thermodynamics and Kinetics is designed for use on the second semester of a quantum-first physical chemistry course. Based on the hugely popular Atkins' Physical Chemistry, this volume approaches molecular thermodynamics with the assumption that students will have studied quantum mechanics in their first semester. The exceptional quality of previous editions has been built upon to make this new edition of Atkins' Physical Chemistry even more closely suited to the needs of both lecturers and students. Re-organised into discrete 'topics', the text is more flexible to teach from and more readable for students. Now in its eleventh edition, the text has been enhanced with additional learning features and maths support to demonstrate the absolute centrality of mathematics to physical chemistry. Increasing the digestibility of the text in this new approach, the reader is brought to a question, then the math is used to show how it can be answered and progress made. The expanded and redistributed maths support also includes new 'Chemist's toolkits' which provide students with succinct reminders of mathematical concepts and techniques right where they need them. Checklists of key concepts at the end of each topic add to the extensive learning support provided throughout the book, to reinforce the main take-home messages in each section. The coupling of the broad coverage of the subject with a structure and use of pedagogy that is even more innovative will ensure Atkins' Physical Chemistry remains the textbook of choice for studying physical chemistry.

Tourism and Hospitality Studies - Irfan Yazicioglu 2020-12-16

This book discusses "tourism and hospitality" from different perspectives and disciplines. In addition, this book, considering the tourism and hotel management terminology, is expected to be a source book for the theoretical and practical scientific studies in the fields which is in close relationship such as gastronomy, recreation and marketing.

ABC of Prehospital Emergency Medicine - Tim Nutbeam 2013-09-23

Prehospital Emergency Medicine (PHEM) is a new and evolving field within Prehospital Care and involves the delivery of safe prehospital critical care to seriously ill or injured patients, and safe transfer to or between hospitals. It covers a broad range of medical and traumatic conditions, interventions, clinical providers and physical environments. ABC of Prehospital Emergency Medicine is the first text to provide a comprehensive overview of this field and with an international team of expert authors is essential reading to anyone involved in the delivery of Prehospital Emergency Medicine and Prehospital Care. This title is also available as a mobile App from MedHand Mobile Libraries. Buy it now from iTunes, Google Play or the MedHand Store.

Freedom of Information Act Source Book: Legislative Materials, Cases, Articles ... - United States.

Congress. Senate. Committee on the Judiciary. Subcommittee on Administrative Practice and Procedure 1974

Life Sciences, Grade 10 - Annemarie Gebhardt 2012-01-05

Study & Master Life Sciences Grade 10 has been especially developed by an experienced author team for the Curriculum and Assessment Policy Statement (CAPS). This new and easy-to-use course helps learners to master essential content and skills in Life Sciences. The comprehensive Learner's Book includes: \* an expanded contents page indicating the CAPS coverage required for each strand \* a mind map at the beginning of each module that gives an overview of the contents of that module \* activities throughout that help develop learners' science knowledge and skills as well as Formal Assessment tasks to test their learning \* a review at the end of each unit that provides for consolidation of learning \* case studies that link science to real-life situations and present balanced views on sensitive issues. \* 'information' boxes providing interesting additional information and 'Note' boxes that bring important information to the learner's attention

**Climate Change 2014** - Groupe d'experts intergouvernemental sur l'évolution du climat 2015

**Mathematics for Machine Learning** - Marc Peter Deisenroth 2020-04-23

The fundamental mathematical tools needed to understand machine learning include linear algebra, analytic geometry, matrix decompositions, vector calculus, optimization, probability and statistics. These topics are traditionally taught in disparate courses, making it hard for data science or computer science students, or professionals, to efficiently learn the mathematics. This self-contained textbook bridges the gap between mathematical and machine learning texts, introducing the mathematical concepts with a minimum of prerequisites. It uses these concepts to derive four central machine learning methods: linear regression, principal component analysis, Gaussian mixture models and support vector machines. For students and others with a mathematical background, these derivations provide a starting point to machine learning texts. For those learning the mathematics for the first time, the methods help build intuition and practical experience with applying mathematical concepts. Every chapter includes worked examples and exercises to test understanding. Programming tutorials are offered on the book's web site.

**The Algorithmic Foundations of Differential Privacy** - Cynthia Dwork 2014

The problem of privacy-preserving data analysis has a long history spanning multiple disciplines. As electronic data about individuals becomes increasingly detailed, and as technology enables ever more powerful collection and curation of these data, the need increases for a robust, meaningful, and mathematically rigorous definition of privacy, together with a computationally rich class of algorithms that satisfy this definition. Differential Privacy is such a definition. The Algorithmic Foundations of Differential Privacy starts out by motivating and discussing the meaning of differential privacy, and proceeds to explore the fundamental techniques for achieving differential privacy, and the application of these techniques in creative combinations, using the query-release problem as an ongoing example. A key point is that, by rethinking the computational goal, one can often obtain far better results than would be achieved by methodically replacing each step of a non-private computation with a differentially private implementation. Despite some powerful computational results, there are still fundamental limitations. Virtually all the algorithms discussed herein maintain differential privacy against adversaries of arbitrary computational power -- certain algorithms are computationally intensive, others are efficient. Computational complexity for the adversary and the algorithm are both discussed. The monograph then turns from fundamentals to applications other than query-release, discussing differentially private methods for mechanism design and machine learning. The vast majority of the literature on differentially private algorithms considers a single, static, database that is subject to many analyses. Differential privacy in other models, including distributed databases and computations on data streams, is discussed. The Algorithmic Foundations of Differential Privacy is meant as a thorough introduction to the problems and techniques of differential privacy, and is an invaluable reference for anyone with an interest in the topic.

Wastebook 2014 - United States Government US Senate 2014-10-24

Gambling monkeys, dancing zombies and mountain lions on treadmills are just a few projects exposed in Wastebook 2014 - highlighting \$25 billion in Washington's worst spending of the year. Wastebook 2014 — the report Washington doesn't want you to read — reveals the 100 most outlandish government expenditures this year, costing taxpayers billions of dollars. "With no one watching over the vast bureaucracy, the problem is not just what Washington isn't doing, but what it is doing." Dr. Coburn said. "Only someone with too much of someone else's money and not enough accountability for how it was being spent could come up some of these projects." "I have learned from these experiences that Washington will never change itself. But even if the politicians won't stop stupid spending, taxpayers always have the last word." Congress actually forced federal agencies to waste billions of dollars for purely parochial, political purposes. For example, lawmakers attached a rider to a larger bill requiring NASA to build a \$350 million launch pad tower, which was mothballed as soon as it was completed because the rockets it was designed to test were scrapped years ago. Similarly, when USDA attempted to close an unneeded sheep research station costing nearly \$2 million every year to operate, politicians in the region stepped in to keep it open. Examples of wasteful spending highlighted in "Wastebook 2014" include: • Coast guard party patrols - \$100,000 • Watching grass grow - \$10,000 • State department tweets @ terrorists - \$3 million • Swedish massages for rabbits - \$387,000 • Paid vacations for bureaucrats gone wild - \$20 million • Mountain lions on a treadmill - \$856,000 • Synchronized swimming for sea monkeys - \$50,000 • Pentagon to destroy \$16 billion in unused ammunition -- \$1 billion • Scientists hope monkey gambling unlocks secrets of free will

-\$171,000 • Rich and famous rent out their luxury pads tax free - \$10 million • Studying “hangry” spouses stabbing voodoo dolls - \$331,000 • Promoting U.S. culture around the globe with nose flutists - \$90 million  
**Introduction to Probability Models** - Sheldon M. Ross 2006-12-11

Introduction to Probability Models, Tenth Edition, provides an introduction to elementary probability theory and stochastic processes. There are two approaches to the study of probability theory. One is heuristic and nonrigorous, and attempts to develop in students an intuitive feel for the subject that enables him or her to think probabilistically. The other approach attempts a rigorous development of probability by using the tools of measure theory. The first approach is employed in this text. The book begins by introducing basic concepts of probability theory, such as the random variable, conditional probability, and conditional expectation. This is followed by discussions of stochastic processes, including Markov chains and Poisson processes. The remaining chapters cover queuing, reliability theory, Brownian motion, and simulation. Many examples are worked out throughout the text, along with exercises to be solved by students. This book will be particularly useful to those interested in learning how probability theory can be applied to the study of phenomena in fields such as engineering, computer science, management science, the physical and social sciences, and operations research. Ideally, this text would be used in a one-year course in probability models, or a one-semester course in introductory probability theory or a course in elementary stochastic processes. New to this Edition: 65% new chapter material including coverage of finite capacity queues, insurance risk models and Markov chains Contains compulsory material for new Exam 3 of the Society of Actuaries containing several sections in the new exams Updated data, and a list of commonly used notations and equations, a robust ancillary package, including a ISM, SSM, and test bank Includes SPSS PASW Modeler and SAS JMP software packages which are widely used in the field Hallmark features: Superior writing style Excellent exercises and examples covering the wide breadth of coverage of probability topics Real-world applications in engineering, science, business and economics

**The Publishers' Circular and Booksellers' Record** - 1914

How People Learn II - National Academies of Sciences, Engineering, and Medicine 2018-09-27

There are many reasons to be curious about the way people learn, and the past several decades have seen an explosion of research that has important implications for individual learning, schooling, workforce training, and policy. In 2000, *How People Learn: Brain, Mind, Experience, and School: Expanded Edition* was published and its influence has been wide and deep. The report summarized insights on the nature of learning in school-aged children; described principles for the design of effective learning environments; and provided examples of how that could be implemented in the classroom. Since then, researchers have continued to investigate the nature of learning and have generated new findings related to the neurological processes involved in learning, individual and cultural variability related to learning, and educational technologies. In addition to expanding scientific understanding of the mechanisms of learning and how the brain adapts throughout the lifespan, there have been important discoveries about influences on learning, particularly sociocultural factors and the structure of learning environments. *How People Learn II: Learners, Contexts, and Cultures* provides a much-needed update incorporating insights gained from this research over the past decade. The book expands on the foundation laid out in the 2000 report and takes an in-depth look at the constellation of influences that affect individual learning. *How People Learn II* will become an indispensable resource to understand learning throughout the lifespan for educators of students and adults.

**Math in Society** - David Lippman 2012-09-07

Math in Society is a survey of contemporary mathematical topics, appropriate for a college-level topics course for liberal arts major, or as a general quantitative reasoning course. This book is an open textbook; it can be read free online at <http://www.opentextbookstore.com/mathinsociety/>. Editable versions of the chapters are available as well.

**The ELL Teacher's Toolbox** - Larry Ferlazzo 2018-04-03

Practical strategies to support your English language learners The ELL Teacher's Toolbox is a practical, valuable resource to be used by teachers of English Language Learners, in teacher education credential programs, and by staff development professionals and coaches. It provides hundreds of innovative and

research-based instructional strategies you can use to support all levels of English Language Learners. Written by proven authors in the field, the book is divided into two main sections: Reading/Writing and Speaking/Listening. Each of those sections includes “Top Ten” favorites and between 40 and 70 strategies that can be used as part of multiple lessons and across content areas. Contains 60% new strategies Features ready-to-use lesson plans Includes reproducible handouts Offers technology integration ideas The percentage of public school students in the U.S. who are English language learners grows each year—and with this book, you'll get a ton of fresh, innovative strategies to add to your teaching arsenal.

Study and Master Life Sciences Grade 11 CAPS Study Guide - Gonasagaren S. Pillay 2014-08-21

*The Central Intelligence Agency and Overhead Reconnaissance* - Gregory Pedlow 2016-03-15

This volume presents the complete CIA document revealing newly declassified information on the U-2 and Oxcart programs—plus new photos and supporting text. The Central Intelligence Agency and Overhead Reconnaissance 1954-1974 is a fascinating and important historical document. It contains a significant amount of newly declassified material with respect to the U-2 and Oxcart programs, including names of pilots; codenames and cryptonyms; locations, funding, and cover arrangements; electronic countermeasures equipment; cooperation with foreign governments; and overflights of the Soviet Union, Cuba, China, and other countries. Originally published with a Secret/No Foreign Dissemination classification, this detailed study describes not only the program's technological and bureaucratic aspects, but also its political and international context, including the difficult choices faced by President Eisenhower in authorizing overflights of the Soviet Union and the controversy surrounding the shoot down of U-2 pilot Francis Gary Powers in 1960. The authors discuss the origins of the U-2, its top-secret testing, its specially designed high-altitude cameras and complex life-support systems, and even the possible use of poison capsules by its pilots, if captured. Finally, they discuss the CIA's development of a successor to the U-2, the Oxcart, which became the world's most technologically advanced aircraft. For the first time, the more complete 2013 release of this historical text is available in a professionally typeset format, supplemented with higher quality photographs, a new preface by author Gregory W. Pedlow, and a foreword by Chris Pocock.

*Networks, Crowds, and Markets* - David Easley 2010-07-19

Are all film stars linked to Kevin Bacon? Why do the stock markets rise and fall sharply on the strength of a vague rumour? How does gossip spread so quickly? Are we all related through six degrees of separation? There is a growing awareness of the complex networks that pervade modern society. We see them in the rapid growth of the Internet, the ease of global communication, the swift spread of news and information, and in the way epidemics and financial crises develop with startling speed and intensity. This introductory book on the new science of networks takes an interdisciplinary approach, using economics, sociology, computing, information science and applied mathematics to address fundamental questions about the links that connect us, and the ways that our decisions can have consequences for others.

**Attribution of Extreme Weather Events in the Context of Climate Change** - National Academies of Sciences, Engineering, and Medicine 2016-07-28

As climate has warmed over recent years, a new pattern of more frequent and more intense weather events has unfolded across the globe. Climate models simulate such changes in extreme events, and some of the reasons for the changes are well understood. Warming increases the likelihood of extremely hot days and nights, favors increased atmospheric moisture that may result in more frequent heavy rainfall and snowfall, and leads to evaporation that can exacerbate droughts. Even with evidence of these broad trends, scientists cautioned in the past that individual weather events couldn't be attributed to climate change. Now, with advances in understanding the climate science behind extreme events and the science of extreme event attribution, such blanket statements may not be accurate. The relatively young science of extreme event attribution seeks to tease out the influence of human-cause climate change from other factors, such as natural sources of variability like El Niño, as contributors to individual extreme events. Event attribution can answer questions about how much climate change influenced the probability or intensity of a specific type of weather event. As event attribution capabilities improve, they could help inform choices about assessing and managing risk, and in guiding climate adaptation strategies. This report examines the

current state of science of extreme weather attribution, and identifies ways to move the science forward to improve attribution capabilities.