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Written by an expert on the topic and experienced lecturer, this textbook provides an elegant, self-contained introduction to functional analysis, including several advanced topics and applications to harmonic analysis. Starting from basic topics before proceeding to more advanced material, the book covers measure and integration theory, classical Banach and Hilbert space theory, spectral theory for bounded operators, fixed point theory, Schauder bases, the Riesz-Thorin interpolation theorem for operators, as well as topics in duality and convexity theory. Aimed at advanced undergraduate and graduate students, this book is suitable for both introductory and more advanced courses in functional analysis. Including over 1500 exercises of varying difficulty and various motivational and historical remarks, the book can be used for self-study and alongside lecture courses. What are the most effective methods for doing life-course research? In this volume, the field's founders and leaders answer this question, giving readers tips on: the art and method of the appropriate research design; the collection of life-history data; and the search for meaningful patterns to be found in the results. Consists of two separate but closely related parts. Originally published in 1966, the first section deals with elements of integration and has been updated and corrected. The latter half details the main concepts of Lebesgue measure and uses the abstract measure space approach of the Lebesgue integral because it strikes directly at the most important results—the convergence theorems. The three volumes of A Course in Mathematical Analysis provide a full and detailed account of all those elements of real and complex analysis that an undergraduate mathematics student can expect to encounter in the first two or three years of study. Containing hundreds of exercises, examples and applications, these books will become an invaluable resource for both students and instructors. Volume 1 focuses on the analysis of real-valued functions of a real variable. Volume 2 goes on to consider metric and topological spaces. This third volume develops the classical theory of functions of a complex variable. It carefully establishes the properties of the complex plane, including a proof of the Jordan curve theorem. Lebesgue measure

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is introduced, and is used as a model for other measure spaces, where the theory of integration is developed. The Radon-Nikodym theorem is proved, and the differentiation of measures discussed. This book aims at restructuring some fundamentals in measure and integration theory. It centers around the ubiquitous task to produce appropriate contents and measures from more primitive data like elementary contents and elementary integrals. It develops the new approach started around 1970 by Topsoe and others into a systematic theory. The theory is much more powerful than the traditional means and has striking implications all over measure theory and beyond. This classroom-tested text is intended for a one-semester course in Lebesgue's theory. With over 180 exercises, the text takes an elementary approach, making it easily accessible to both upper-undergraduate- and lower-graduate-level students. The three main topics presented are measure, integration, and differentiation, and the only prerequisite is a course in elementary real analysis. In order to keep the book self-contained, an introductory chapter is included with the intent to fill the gap between what the student may have learned before and what is required to fully understand the consequent text. Proofs of difficult results, such as the differentiability property of functions of bounded variations, are dissected into small steps in order to be accessible to students. With the exception of a few simple statements, all results are proven in the text. The presentation is elementary, where σ -algebras are not used in the text on measure theory and Dini's derivatives are not used in the chapter on differentiation. However, all the main results of Lebesgue's theory are found in the book. <http://online.sfsu.edu/sergei/MID.htm> Use your next three-day weekend to develop valuable Lean Six Sigma skills With the integration of Lean and Six Sigma, businesses have a potent tool in the never-ending drive to deliver top-quality service and products. But you don't need to be a Black Belt to build quality and efficiency into all areas of your operation; you just need The McGraw-Hill 36-Hour Course: Lean Six Sigma. Sheila Shaffie and Shahbaz Shahbazi, leading Six Sigma experts and trainers, put you on the fast track to Lean Six Sigma expertise. Featuring a detailed overview of Lean and Six Sigma methodologies and case studies that demonstrate how to incorporate these principles, this guide will teach you how to: Deliver consistent customer service Reduce operational cost and risk Build and sustain a culture of continuous improvement Complete with exercises, self-tests, and an online final exam, The McGraw-Hill 36-Hour Course: Lean Six Sigma lets you energize your organization with the power of today's biggest breakthrough in business process improvement. Probability and Measure Theory, Second Edition, is a text for a graduate-level course in probability that includes essential background topics in analysis. It provides extensive coverage of conditional probability and expectation, strong laws of large numbers, martingale theory, the central limit theorem, ergodic theory, and Brownian motion. Clear, readable style Solutions to many problems presented in text Solutions manual for instructors Material new to the second edition on ergodic theory, Brownian motion, and convergence theorems used in statistics No knowledge of general topology required, just basic analysis and metric spaces Efficient organization This new, third edition of Jack Phillips's classic Handbook of Training Evaluation and Measurement Methods shows the reader not only how to design, implement, and assess the effectiveness of HRD programs, but how to ultimately measure their return on investment (ROI). Each chapter has been revised and updated to include additional research, expanded coverage, and new examples of Dr. Phillips's case studies. Seven entirely new chapters have also been added, focusing largely on ROI. This concise text is intended as an introductory course in measure and integration. It covers essentials of the subject, providing ample motivation for new concepts and theorems in the form of discussion and remarks, and with many worked-out examples. The novelty of Measure and Integration: A First Course is in its style of exposition of the standard material in a student-friendly manner. New concepts are introduced progressively from less abstract to more abstract so that the subject is felt on solid footing. The book starts with a review of Riemann integration as a motivation for the necessity of introducing the concepts of measure and integration in a general setting. Then the text slowly evolves from the concept of an outer measure of subsets of the set of real line to the concept of Lebesgue measurable sets and Lebesgue measure, and then to the concept of a measure, measurable function, and integration in a more general setting. Again, integration is first

introduced with non-negative functions, and then progressively with real and complex-valued functions. A chapter on Fourier transform is introduced only to make the reader realize the importance of the subject to another area of analysis that is essential for the study of advanced courses on partial differential equations. Key Features Numerous examples are worked out in detail. Lebesgue measurability is introduced only after convincing the reader of its necessity. Integrals of a non-negative measurable function is defined after motivating its existence as limits of integrals of simple measurable functions. Several inquisitive questions and important conclusions are displayed prominently. A good number of problems with liberal hints is provided at the end of each chapter. The book is so designed that it can be used as a text for a one-semester course during the first year of a master's program in mathematics or at the senior undergraduate level. About the Author M. Thamban Nair is a professor of mathematics at the Indian Institute of Technology Madras, Chennai, India. He was a post-doctoral fellow at the University of Grenoble, France through a French government scholarship, and also held visiting positions at Australian National University, Canberra, University of Kaiserslautern, Germany, University of St-Etienne, France, and Sun Yat-sen University, Guangzhou, China. The broad area of Prof. Nair's research is in functional analysis and operator equations, more specifically, in the operator theoretic aspects of inverse and ill-posed problems. Prof. Nair has published more than 70 research papers in nationally and internationally reputed journals in the areas of spectral approximations, operator equations, and inverse and ill-posed problems. He is also the author of three books: Functional Analysis: A First Course (PHI-Learning, New Delhi), Linear Operator Equations: Approximation and Regularization (World Scientific, Singapore), and Calculus of One Variable (Ane Books Pvt. Ltd, New Delhi), and he is also co-author of Linear Algebra (Springer, New York). Intended as an introductory text on Functional Analysis for the postgraduate students of Mathematics, this compact and well-organized book covers all the topics considered essential to the subject. In so doing, it provides a very good understanding of the subject to the reader. The book begins with a review of linear algebra, and then it goes on to give the basic notion of a norm on linear space (proving thereby most of the basic results), progresses gradually, dealing with operators, and proves some of the basic theorems of Functional Analysis. Besides, the book analyzes more advanced topics like dual space considerations, compact operators, and spectral theory of Banach and Hilbert space operators. The text is so organized that it strives, particularly in the last chapter, to apply and relate the basic theorems to problems which arise while solving operator equations. The present edition is a thoroughly revised version of its first edition, which also includes a section on Hahn-Banach extension theorem for operators and discussions on Lax-Milgram theorem. This student-friendly text, with its clear exposition of concepts, should prove to be a boon to the beginner aspiring to have an insight into Functional Analysis. KEY FEATURES • Plenty of examples have been worked out in detail, which not only illustrate a particular result, but also point towards its limitations so that subsequent stronger results follow. • Exercises, which are designed to aid understanding and to promote mastery of the subject, are interspersed throughout the text. TARGET AUDIENCE • M.Sc. Mathematics This is an introductory course on the methods of computing asymptotics of probabilities of rare events: the theory of large deviations. The book combines large deviation theory with basic statistical mechanics, namely Gibbs measures with their variational characterization and the phase transition of the Ising model, in a text intended for a one semester or quarter course. The book begins with a straightforward approach to the key ideas and results of large deviation theory in the context of independent identically distributed random variables. This includes Cramér's theorem, relative entropy, Sanov's theorem, process level large deviations, convex duality, and change of measure arguments. Dependence is introduced through the interactions potentials of equilibrium statistical mechanics. The phase transition of the Ising model is proved in two different ways: first in the classical way with the Peierls argument, Dobrushin's uniqueness condition, and correlation inequalities and then a second time through the percolation approach. Beyond the large deviations of independent variables and Gibbs measures, later parts of the book treat large deviations of Markov chains, the Gärtner-Ellis theorem, and a large deviation theorem of Baxter and Jain that is then applied to a

nonstationary process and a random walk in a dynamical random environment. The book has been used with students from mathematics, statistics, engineering, and the sciences and has been written for a broad audience with advanced technical training. Appendixes review basic material from analysis and probability theory and also prove some of the technical results used in the text. Originating from the authors' own graduate course at the University of North Carolina, this material has been thoroughly tried and tested over many years, making the book perfect for a two-term course or for self-study. It provides a concise introduction that covers all of the measure theory and probability most useful for statisticians, including Lebesgue integration, limit theorems in probability, martingales, and some theory of stochastic processes. Readers can test their understanding of the material through the 300 exercises provided. The book is especially useful for graduate students in statistics and related fields of application (biostatistics, econometrics, finance, meteorology, machine learning, and so on) who want to shore up their mathematical foundation. The authors establish common ground for students of varied interests which will serve as a firm 'take-off point' for them as they specialize in areas that exploit mathematical machinery. This is a graduate level textbook on measure theory and probability theory. The book can be used as a text for a two semester sequence of courses in measure theory and probability theory, with an option to include supplemental material on stochastic processes and special topics. It is intended primarily for first year Ph.D. students in mathematics and statistics although mathematically advanced students from engineering and economics would also find the book useful. Prerequisites are kept to the minimal level of an understanding of basic real analysis concepts such as limits, continuity, differentiability, Riemann integration, and convergence of sequences and series. A review of this material is included in the appendix. The book starts with an informal introduction that provides some heuristics into the abstract concepts of measure and integration theory, which are then rigorously developed. The first part of the book can be used for a standard real analysis course for both mathematics and statistics Ph.D. students as it provides full coverage of topics such as the construction of Lebesgue-Stieltjes measures on real line and Euclidean spaces, the basic convergence theorems, L^p spaces, signed measures, Radon-Nikodym theorem, Lebesgue's decomposition theorem and the fundamental theorem of Lebesgue integration on \mathbb{R} , product spaces and product measures, and Fubini-Tonelli theorems. It also provides an elementary introduction to Banach and Hilbert spaces, convolutions, Fourier series and Fourier and Plancherel transforms. Thus part I would be particularly useful for students in a typical Statistics Ph.D. program if a separate course on real analysis is not a standard requirement. Part II (chapters 6-13) provides full coverage of standard graduate level probability theory. It starts with Kolmogorov's probability model and Kolmogorov's existence theorem. It then treats thoroughly the laws of large numbers including renewal theory and ergodic theorems with applications and then weak convergence of probability distributions, characteristic functions, the Levy-Cramer continuity theorem and the central limit theorem as well as stable laws. It ends with conditional expectations and conditional probability, and an introduction to the theory of discrete time martingales. Part III (chapters 14-18) provides a modest coverage of discrete time Markov chains with countable and general state spaces, MCMC, continuous time discrete space jump Markov processes, Brownian motion, mixing sequences, bootstrap methods, and branching processes. It could be used for a topics/seminar course or as an introduction to stochastic processes. Krishna B. Athreya is a professor at the departments of mathematics and statistics and a Distinguished Professor in the College of Liberal Arts and Sciences at the Iowa State University. He has been a faculty member at University of Wisconsin, Madison; Indian Institute of Science, Bangalore; Cornell University; and has held visiting appointments in Scandinavia and Australia. He is a fellow of the Institute of Mathematical Statistics USA; a fellow of the Indian Academy of Sciences, Bangalore; an elected member of the International Statistical Institute; and serves on the editorial board of several journals in probability and statistics. Soumendra N. Lahiri is a professor at the department of statistics at the Iowa State University. He is a fellow of the Institute of Mathematical Statistics, a fellow of the American Statistical Association, and an elected member of the International Statistical Institute. The Sage Handbook of Research on Classroom

Assessment provides scholars, professors, graduate students, and other researchers and policy makers in the organizations, agencies, testing companies, and school districts with a comprehensive source of research on all aspects of K-12 classroom assessment. The handbook emphasizes theory, conceptual frameworks, and all varieties of research (quantitative, qualitative, mixed methods) to provide an in-depth understanding of the knowledge base in each area of classroom assessment and how to conduct inquiry in the area. It presents classroom assessment research to convey, in depth, the state of knowledge and understanding that is represented by the research, with particular emphasis on how classroom assessment practices affect student achievement and teacher behavior. Editor James H. McMillan and five Associate Editors bring the best thinking and analysis from leading classroom assessment researchers on the nature of the research, making significant contributions to this prominent and hotly debated topic in education. Rigorous probabilistic arguments, built on the foundation of measure theory introduced eighty years ago by Kolmogorov, have invaded many fields. Students of statistics, biostatistics, econometrics, finance, and other changing disciplines now find themselves needing to absorb theory beyond what they might have learned in the typical undergraduate, calculus-based probability course. This 2002 book grew from a one-semester course offered for many years to a mixed audience of graduate and undergraduate students who have not had the luxury of taking a course in measure theory. The core of the book covers the basic topics of independence, conditioning, martingales, convergence in distribution, and Fourier transforms. In addition there are numerous sections treating topics traditionally thought of as more advanced, such as coupling and the KMT strong approximation, option pricing via the equivalent martingale measure, and the isoperimetric inequality for Gaussian processes. The book is not just a presentation of mathematical theory, but is also a discussion of why that theory takes its current form. It will be a secure starting point for anyone who needs to invoke rigorous probabilistic arguments and understand what they mean. In the spring of 2010, Harvard Business School's graduating class asked HBS professor Clay Christensen to address them—but not on how to apply his principles and thinking to their post-HBS careers. The students wanted to know how to apply his wisdom to their personal lives. He shared with them a set of guidelines that have helped him find meaning in his own life, which led to this now-classic article. Although Christensen's thinking is rooted in his deep religious faith, these are strategies anyone can use. Since 1922, Harvard Business Review has been a leading source of breakthrough ideas in management practice. The Harvard Business Review Classics series now offers you the opportunity to make these seminal pieces a part of your permanent management library. Each highly readable volume contains a groundbreaking idea that continues to shape best practices and inspire countless managers around the world. Government Publications: Key Papers is a compilation of papers that covers various topics related to government publications. The book presents materials drawn from a variety of sources, such as public domains, book chapters, and periodicals from different countries. The text contains 61 chapters organized into 15 parts; each part covers a specific area, such as sorting and labeling of publications, library systems, reference services, and municipal and state publications. The book dedicates several parts to British, Canadian, and Australian publications. This book will be of great value to individuals who have an interest in government information. A compilation of reports previously issued by the OECD. A superb text on the fundamentals of Lebesgue measure and integration. This book is designed to give the reader a solid understanding of Lebesgue measure and integration. It focuses on only the most fundamental concepts, namely Lebesgue measure for \mathbb{R} and Lebesgue integration for extended real-valued functions on \mathbb{R} . Starting with a thorough presentation of the preliminary concepts of undergraduate analysis, this book covers all the important topics, including measure theory, measurable functions, and integration. It offers an abundance of support materials, including helpful illustrations, examples, and problems. To further enhance the learning experience, the author provides a historical context that traces the struggle to define "area" and "area under a curve" that led eventually to Lebesgue measure and integration. Lebesgue Measure and Integration is the ideal text for an advanced undergraduate analysis course or for a first-year graduate course in mathematics, statistics, probability, and other applied areas. It will

also serve well as a supplement to courses in advanced measure theory and integration and as an invaluable reference long after course work has been completed. Seamlessly bridging academic accounting with real-life applications, *Crash Course in Accounting and Financial Statement Analysis, Second Edition* is the perfect guide to a complete understanding of accounting and financial statement analysis for those with no prior accounting background and those who seek a refresher. This book giving an exposition of the foundations of modern measure theory offers three levels of presentation: a standard university graduate course, an advanced study containing some complements to the basic course, and, finally, more specialized topics partly covered by more than 850 exercises with detailed hints and references. Bibliographical comments and an extensive bibliography with 2000 works covering more than a century are provided. #1 New York Times Bestseller Legendary venture capitalist John Doerr reveals how the goal-setting system of Objectives and Key Results (OKRs) has helped tech giants from Intel to Google achieve explosive growth—and how it can help any organization thrive. In the fall of 1999, John Doerr met with the founders of a start-up whom he'd just given \$12.5 million, the biggest investment of his career. Larry Page and Sergey Brin had amazing technology, entrepreneurial energy, and sky-high ambitions, but no real business plan. For Google to change the world (or even to survive), Page and Brin had to learn how to make tough choices on priorities while keeping their team on track. They'd have to know when to pull the plug on losing propositions, to fail fast. And they needed timely, relevant data to track their progress—to measure what mattered. Doerr taught them about a proven approach to operating excellence: Objectives and Key Results. He had first discovered OKRs in the 1970s as an engineer at Intel, where the legendary Andy Grove ("the greatest manager of his or any era") drove the best-run company Doerr had ever seen. Later, as a venture capitalist, Doerr shared Grove's brainchild with more than fifty companies. Wherever the process was faithfully practiced, it worked. In this goal-setting system, objectives define what we seek to achieve; key results are how those top-priority goals will be attained with specific, measurable actions within a set time frame. Everyone's goals, from entry level to CEO, are transparent to the entire organization. The benefits are profound. OKRs surface an organization's most important work. They focus effort and foster coordination. They keep employees on track. They link objectives across silos to unify and strengthen the entire company. Along the way, OKRs enhance workplace satisfaction and boost retention. In *Measure What Matters*, Doerr shares a broad range of first-person, behind-the-scenes case studies, with narrators including Bono and Bill Gates, to demonstrate the focus, agility, and explosive growth that OKRs have spurred at so many great organizations. This book will help a new generation of leaders capture the same magic. This book applies Rasch measurement theory to the fields of education, psychology, sociology, marketing and health outcomes in order to measure various social constructs. The chief focus is on first principles of both the theory and its applications. Because software is readily available to carry out analyses of real data, numerous small examples are provided in the book. The software used in these examples, and which is helpful in working through the text, is RUMM2030 (Rasch unidimensional models for measurement). The book's main goals are to equip researchers with the confidence they need in order to be in control of the analysis and interpretation of data, and to make professional rather than primarily statistical decisions mechanically. Because statistical principles are necessarily involved, reviews of the requisite statistics are provided in the Appendix. The content is based on courses that have been taught both online and in intensive form for over two decades. Although first principles are emphasised, much of the book is based on research conducted by the two authors and their colleagues. A concise introduction covering all of the measure theory and probability most useful for statisticians. This text develops the necessary background in probability theory underlying diverse treatments of stochastic processes and their wide-ranging applications. In this second edition, the text has been reorganized for didactic purposes, new exercises have been added and basic theory has been expanded. General Markov dependent sequences and their convergence to equilibrium is the subject of an entirely new chapter. The introduction of conditional expectation and conditional probability very early in the text maintains the pedagogic innovation of the first edition; conditional expectation is illustrated in detail in

the context of an expanded treatment of martingales, the Markov property, and the strong Markov property. Weak convergence of probabilities on metric spaces and Brownian motion are two topics to highlight. A selection of large deviation and/or concentration inequalities ranging from those of Chebyshev, Cramer-Chernoff, Bahadur-Rao, to Hoeffding have been added, with illustrative comparisons of their use in practice. This also includes a treatment of the Berry-Esseen error estimate in the central limit theorem. The authors assume mathematical maturity at a graduate level; otherwise the book is suitable for students with varying levels of background in analysis and measure theory. For the reader who needs refreshers, theorems from analysis and measure theory used in the main text are provided in comprehensive appendices, along with their proofs, for ease of reference. Rabi Bhattacharya is Professor of Mathematics at the University of Arizona. Edward Waymire is Professor of Mathematics at Oregon State University. Both authors have co-authored numerous books, including a series of four upcoming graduate textbooks in stochastic processes with applications. This book applies Rasch measurement theory to the fields of education, psychology, sociology, marketing and health outcomes in order to measure various social constructs. The chief focus is on first principles of both the theory and its applications. Because software is readily available to carry out analyses of real data, numerous small examples are provided in the book. The software used in these examples, and which is helpful in working through the text, is RUMM2030 (Rasch unidimensional models for measurement). The book's main goals are to equip researchers with the confidence they need in order to be in control of the analysis and interpretation of data, and to make professional rather than primarily statistical decisions mechanically. Because statistical principles are necessarily involved, reviews of the requisite statistics are provided in the Appendix. The content is based on courses that have been taught both online and in intensive form for over two decades. Although first principles are emphasised, much of the book is based on research conducted by the two authors and their colleagues.