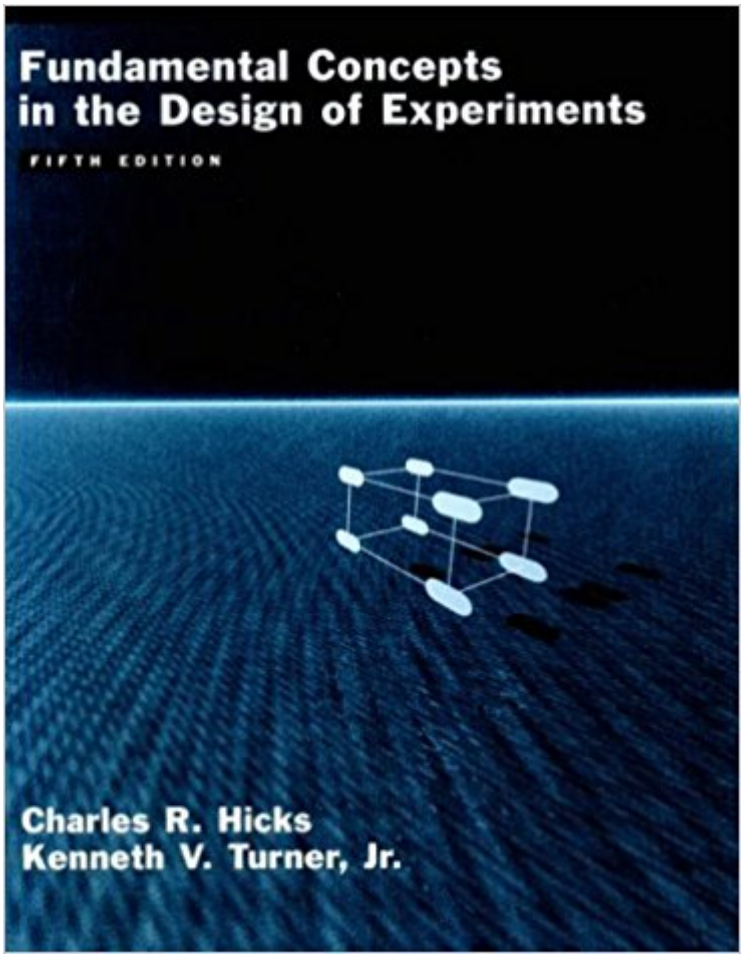
Fundamental Concepts In The Design Of Experiments



Synopsis

Fundamental Concepts in the Design of Experiments, 5/e offers comprehensive coverage of the key elements of experimental design used by applied researchers to solve problems in the field. Wide-ranging and accessible, it shows students how to use applied statistics for planning, running, and analyzing experiments. Featuring over 350 problems taken from the authors' actual industrial consulting experiences, the text gives students valuable practice with real data and problem solving. The problems emphasize the basic philosophy of design and are simple enough for students with limited mathematical backgrounds to understand. The authors provide extensive coverage of the analysis of residuals, the concept of resolution in fractional replications, Plackett-Burman designs, and Taguchi techniques. SAS (Statistical Analysis System) computer programs are incorporated to facilitate analysis. Thoroughly revised and updated, this new edition includes sixty new problems, focuses more on computer use (adding computer outputs from statistical packages like Minitab, SPSS, and JMP), and emphasizes graphical procedures including residual plots and normal quantile plots. Ideal for various advanced undergraduate and graduate experimental methods courses taught in statistics, engineering, and mathematics departments, this book will also appeal to professionals and researchers doing experimental work.

Book Information

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Customer Reviews

"An excellent presentation of the basic concepts of experimental design. It uses many numerical examples with 'real' data. It is clearly written and at the appropriate level for my students."--Noel

Artiles-Leon, University of Puerto Rico

Charles R. Hicks is at Purdue University. Kenneth V. Turner is at Anderson University.

This textbook is terrible. It may just be that it is not geared to my learning style but, most of the material in this book is poorly elaborated upon. If this is the book for your class, run.

Very happy with the purchase.

Great book. The examples were helpful, and the answers to selected problems are in the back.

Book is just OK. He explains things well, but the questions use different terminology that is not used in the text.

I think this book is more old than I image. But, it is just the hard cover of this book, the content have a good condition to read and no other draft in the paper.

This book is very valuable for those actively engaged in the conduct of experiments, either operational or developmental in nature. It does require someone with a background in statistical methods using analysis of variance. The user needs to have a good understanding of statistical inference. There are many good working models of various analytic procedures provided.

Environmental Facts and Experiments (Young Discoverers: Environmental Facts and Experiments) Environmental Experiments About Air (Science Experiments for Young People) Dad's Book of Awesome Science Experiments: From Boiling Ice and Exploding Soap to Erupting Volcanoes and Launching Rockets, 30 Inventive Experiments to Excite the Whole Family! (Dads Book of Awesome) Space and Astronomy Experiments (Facts on File Science Experiments) Simple Machine Experiments Using Seesaws, Wheels, Pulleys, and More: One Hour or Less Science Experiments (Last-Minute Science Projects) Genetics Experiments (Facts on File Science Experiments) Human Body Experiments (Facts on File Science Experiments) Rain Forest Experiments: 10 Science Experiments in One Hour or Less (Last Minute Science Projects with Biomes) Weather and Climate Experiments (Facts on File Science Experiments) Experiments for Future Forensic Scientists (Experiments for Future Stem Professionals) Physical Science Experiments (Facts on File Science Experiments)