two books may be for you. The difficulty here is price. The Lander book is a paperback with a list price of about $40 and covers more methods. The present book is a hardback that has a list price of $99.99 and covers fewer methods than Lander (2014). This is a pretty steep difference for two books that I see as somewhat in competition with each other. Now, I am glad that I own both books. I find them complimentary and very useful for projects that I am working on. Again, if you want to get started with R and/or new statistical procedures have a look at this book. It can be quite helpful.

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REFERENCE

Lander, J.P. (2014), *R for Everyone: Advanced Analytics and Graphics*, New York: Addison Wesley. [278]

Design and Analysis of Experiments with R, by John Lawson. Boca Raton, FL: CRC Press, 2015, 596 pp. $99.95, ISBN: 978-14398-6813-3.

In my opinion, this is a very valuable book. It covers the topics that I judge should be in such a book including what might be called the standard designs and more. There is more material here than could be covered in a one semester course in DOE. The software used is R.

I said the book was valuable so what do I like about it? First, it emphasizes planning and design. I am sometimes asked a question that goes like this: I have some data now what experimental design do I use to analyze it? This is, of course, backwards. In the process of planning and design, the issue of Analysis should be taken up so that after data collection there is no reason to ask 'How do I analyze the data?" assuming that one chooses an appropriate design from this book. Further, of course, a statistician should be consulted early.

The book contains the following excellent chapters:

1. Introduction
2. Completely Randomized Designs with One Factor
3. Factorial Designs
4. Randomized Block Designs
5. Designs to Study Variances
6. Fractional Factorial Designs
7. Incomplete and Confounded Block Designs
8. Split–Plot Designs
9. Crossover and Repeated Measures Designs
10. Response Surface Designs
11. Mixture Experiments
12. Robust Parameter Design Experiments
13. Experimental Strategies for Increasing Knowledge

There are appendices that introduce R and have answers to selected exercises. All of the design creation and analysis methods discussed in the book have code available on a website and there is a website for the design of experiments packages illustrated in the text. Further both design creation as well as data examples are given in R.

Overall, I believe this is a very complete text and it has become my go to text on experimental design. I find this to be an excellent book. I mention in passing that this book is also available in an edition that uses SAS.

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Excel 2013 for Social Sciences Statistics, A Guide to Solving Practical Problems, by Thomas J. Quirk. New York: Springer, 2015, xv + 257 pp., $69.99, ISBN: 978-3-319-19176-8.

This book presents some important features of a powerful software known for its interesting features along with several statistical topics. Although it is known for its powerful tools, and less for its statistical power, Excel offers many interesting features useful to statisticians, and other disciplines. The author takes advantage of these features, selects numerous introductory topics in statistics

and goes through each topic step by step and demonstrate them in simple and straightforward ways. The target audience is primarily students majoring in disciplines other than statistics. As a standalone source, a prior exposure to introductory statistical topics is very helpful in understanding the topics covered in the book. It is also a good supplement to an introductory course in statistics for non-majors. The book is divided into 8 chapters and five appendices. Each chapter is followed by a good number of exercises very helpful to the students.

Chapter 1 covers a number of descriptive statistics such as sample size, mean and standard deviation along with some Excel functions such as STDEV, COUNT, etc. which are needed to complete each statistical function. The author goes through step by step showing how to get the worksheets ready and then perform the statistical functions and then saving the worksheets.

Chapter 2 is a short one focusing on creating frame numbers for generating and sorting random numbers and also shows how to fit the entire output on one page.

Additional statistical topics interesting to non-majors are presented in Chapter 3. The topics covered here include upper and lower confidence bounds for population mean. Non-majors generally need to be told where the components of confidence interval come from. The author clearly does a good job of showing how this is done. Excel provides a built-in function (TINV) for computing confidence interval. This function comes handy for non-majors and provides an easy way to compute the boundaries. Again, the book focuses on this issue as well. In this chapter the reader also learns about hypothesis testing about the population mean including the steps needed to conduct such a test. Alternative ways summarizing the results of such hypotheses and different ways of rejecting the null hypotheses are discussed. My first comment about the book is that the author uses the phrase "Accepting the null hypothesis." It is important to present the non-majors with the correct statistical terminologies as one should never say that the null hypothesis is accepted.

Chapter 4 extends the topic of hypothesis testing to the case of two independent population means. Two additional steps are added making it a 9-step process in testing a hypothesis. The book discusses the case(s) of large or small sample size(s). My second comment about the book is the lack of discussion on one-sided tests covered in this chapter and chapter 3. My third concern is the fact that the book does not offer any comments on one or two population proportions.

The next topic covered in Chapter 6 is the 9-steps for computing the correlation coefficient and drawing the regression line and showing how to manage to print the data and the chart on one page. Correlation coefficient is computed either using the related formula or the Excel built-in function CORREL. The author also shows how to plot data points and then fit a regression line to such data and make predictions. In addition, in this chapter the author shows step by step how to add Data Analysis ToolPak to the software which normally is not installed by default. Of course, this adds-in is needed to implement most of statistical features of Excel. One comment should be added here to remind the readers that the regression line can only be used to predict values for the response variable within the range of the independent variable (s).

Chapter 7 is an extension of the previous chapter to case of multivariate problems by introducing multiple correlation and multiple regression topics. Since the target audience is students majoring other than statistics, the book deploys the Excel capabilities to perform these tasks. The author takes advantage of using Analysis ToolPack capabilities of Excel to implement these topics.

The book concludes with the topic of interest to non-majors, namely, ANOVA and shows how to put pieces together to form the ANOVA table, and also how to test the difference between two group means using the t-table.

Appendix A contains answers to exercise appearing at the end of each chapter. Appendix B consists of some test problems dealing with the topics covered in the book and Appendix C provides answers to these questions. Appendix D presents the readers with some statistical formulas used in the text and finally, Appendix E includes a short form of the t-table.

In sum, this is a well-written short book on the subject of statistical features of Excel 2013 with many example and exercises. It is a great reference for those who need to use Excel for some introductory statistical concepts or as a supplement in an introductory course in statistics for non-majors. I raised a number of concerns above. To make this a complete textbook on the subject, a number of topics should be corrected or added to it. First, the phrase "Failing to reject the null hypothesis" should replace "Accepting the null hypothesis". Second, testing hypotheses on one or two population proportion(s) should be added to the book either as an independent chapter (s) or an addition to the