

## MSDS 660

### Reading list

Note: Several of the readings listed below must be accessed through the Regis Library's account (for free). **For the "Safari Books Online"** readings, see below for instructions on how to access this Regis Library resource.

1. Go to the Regis Library website at <http://libguides.regis.edu/library>.
2. Select the link: A to Z Databases.
3. Select "S"
4. Select Safari Books Online. **Limited to 3 concurrent users. Therefore be sure to Sign Out when finished.**



5. If required, login using your RegisNet credentials.
6. You may copy and paste any of the following into the Search area of Safari Books online. The Search results will be the same.
  - a. Author(s)
  - b. Title of book
  - c. Title of assigned chapter provided.
7. Select the image or title of the text to navigate to the book.
8. Then select the respective assigned chapter as stated below.  
Note: You may email and/or print "pages" as needed.
9. **Be sure to Sign Out and Clear Session** by selecting the Regis University User, as in the image above. You will see a dropdown menu.
  - a. Select **Sign Out and Clear Session** so that others may access Safari Books Online.

For research assistance:



### ***Week1: Basic Concepts***

James, G., Witten, D., Hastie, T., and Tibshirani, R. (2013). An Introduction to Statistical Learning with Applications in R. Springer. (pp. 41-52). Retrieved from: <http://www-bcf.usc.edu/~garth/ISL/ISLR%20Fourth%20Printing.pdf>

Faraway, J.J (2002). Practical regression and ANOVA using R. Retrieved from: <http://cran.r-project.org/doc/contrib/Faraway-PRA.pdf>

Maindonald, J.H. (2008). Using R for Data Analysis and Graphics. Introduction, Code, and Commentary. Retrieved from: <http://cran.r-project.org/doc/contrib/usingR.pdf>

### ***Week2: Linear regression***

James, G., Witten, D., Hastie, T., and Tibshirani, R. (2013). An Introduction to Statistical Learning with Applications in R. Springer. (pp. 59-68, 109-110). Retrieved from: <http://www-bcf.usc.edu/~garth/ISL/ISLR%20Fourth%20Printing.pdf>

Stowell, S. (2014). Using R for Statistics. Apress Publication. (Safari Books Online via Regis library's Books).

- Chapter 11 titled, "[Regression and General Linear Models](#)."

Supplemental materials:

Faraway, J.J (2002). Practical regression and ANOVA using R. Retrieved from: <http://cran.r-project.org/doc/contrib/Faraway-PRA.pdf> (diagnostic: page 72-94)

Gupta, B. C. & Guttman, I. (2013) Applied Statistics and Probability for Engineers, 6<sup>th</sup> Edition (Eds.). Web-ISBN-10 1-118539-71-0. (Safari Books Online via Regis library's Books).

- Chapter 11 by Montgomery, C.D. and Runger, C.G. titled, "Statistical Quality Control–Phase I Control Charts."

Tarpey, T. (2009) STT 430/630/ES 760 Lecture notes: Chapter 8 Regression. Retrieved from: <http://www.wright.edu/~thaddeus.tarpey/stt630chap8.pdf> (page 1-16)

Trinity (2002). Department of Statistics, University of Oxford (2002). Introduction to Statistical Modelling. Retrieved from:

- <http://www.stats.ox.ac.uk/pub/bdr/IAUL/ModellingLecture1.pdf>
- <http://www.stats.ox.ac.uk/pub/bdr/IAUL/ModellingLecture2.pdf>
- <http://www.stats.ox.ac.uk/pub/bdr/IAUL/ModellingLecture3.pdf>

### ***Week3: Multiple linear regression***

James, G., Witten, D., Hastie, T., and Tibshirani, R. (2013). An Introduction to Statistical Learning with Applications in R. Springer. (pp. 71-102, 113-119). Retrieved from: <http://www-bcf.usc.edu/~garth/ISL/ISLR%20Fourth%20Printing.pdf>

Supplemental Materials:

Ferrari, D. (2009) Introduction to Regression in R Part II: Multivariate Linear Regression  
Retrieved from: [http://scc.stat.ucla.edu/page\\_attachments/0000/0140/reg\\_2.pdf](http://scc.stat.ucla.edu/page_attachments/0000/0140/reg_2.pdf)

Gupta, B. C. & Guttman, I. (2013). Applied Statistics and Probability for Engineers, 6<sup>th</sup> Edition (Eds). Web-ISBN-10 1-118539-71-0. (Safari Books Online via Regis library's Books).

- Chapter 12 by Montgomery, C.D. and Runger, C.G., titled, Statistical Quality Control—Phase II Control Charts.

Williams, R. (2015) Review of Multiple Regression. University of Notre Dame. Retrieved from: <http://www3.nd.edu/~rwilliam/stats2/102.pdf>

#### ***Week4: One-way ANOVA***

Faraway. J.J (2002). Practical regression and ANOVA using R. Retrieved from: <http://cran.r-project.org/doc/contrib/Faraway-PRA.pdf> (pp.168-179)

Supplemental Materials:

Gupta, B. C. & Guttman, I. (2013). (2013). Applied Statistics and Probability for Engineers, 6<sup>th</sup> Edition. (Eds.) Web-ISBN-10 1-118539-71-0. (Safari Books Online via Regis library's Books). Chapter 13 by Montgomery, C.D. and Runger, C.G., titled Analysis of Categorical Data.

Trinity (2002) Introduction to Statistical Modeling, University of Oxford. Retrieved from: <http://www.stats.ox.ac.uk/pub/bdr/IAUL/ModellingLecture4.pdf> (page 1-16)

#### ***Week5: Two-way ANOVA***

Faraway. J.J (2002). Practical regression and ANOVA using R. Retrieved from: <http://cran.r-project.org/doc/contrib/Faraway-PRA.pdf> (pp. 179-184)

Supplemental Materials:

Gupta, B. C. & Guttman, I. (2013). Applied Statistics and Probability for Engineers, 6<sup>th</sup> Edition (Eds). Web-ISBN-10 1-118539-71-0. (Safari Books Online via Regis library's Books).

- Chapter 14 by Montgomery, C.D. and Runger, C.G., titled, Nonparametric Tests.

Trinity (2002) Introduction to Statistical Modeling, University of Oxford. Retrieved from: <http://www.stats.ox.ac.uk/pub/bdr/IAUL/ModellingLecture4.pdf> (page 17-)

#### ***Week 6: Logistic Polynomial Multinomial***

Clinical Research Center, Vanderbilt Institute for Clinical and Translational Research (NA).

Introduction to Logistic Regression. Retrieved from:

[http://www.mc.vanderbilt.edu/crc/workshop\\_files/2004-11-12.pdf](http://www.mc.vanderbilt.edu/crc/workshop_files/2004-11-12.pdf)

Trinity (2002) Introduction to Statistical Modeling, Statistics Department, University of Oxford.  
Retrieved from:

- <http://www.stats.ox.ac.uk/pub/bdr/IAUL/ModellingLecture5.pdf>,  
And
- <http://www.stats.ox.ac.uk/pub/bdr/IAUL/ModellingLecture6.pdf>

### ***Week 7: Nonparametric***

Stowell, S. (2014). Using R for Statistics. Apress Publication. (Safari E-Book Online via Regis library's Books 24x7) Chapter 10 titled, "Hypothesis Testing."

Lim, KH. (2006) Statistics for Psychology and Human Science: Oxford University. Retrieved from:

- [http://www.stats.ox.ac.uk/~lim/Teaching\\_files/Lecture5/Lecture5%20-%20Non-Parametric%20Tests%201.pdf](http://www.stats.ox.ac.uk/~lim/Teaching_files/Lecture5/Lecture5%20-%20Non-Parametric%20Tests%201.pdf)  
And
- [http://www.stats.ox.ac.uk/~lim/Teaching\\_files/Lecture6/Lecture6%20-%20Non-Parametric%20Tests%202\(4up\).pdf](http://www.stats.ox.ac.uk/~lim/Teaching_files/Lecture6/Lecture6%20-%20Non-Parametric%20Tests%202(4up).pdf)

Faraway. J.J (2002). Practical regression and ANOVA using R. Retrieved from: <http://cran.r-project.org/doc/contrib/Faraway-PRA.pdf> (poly pp.100-105)

### ***Week 8: Statistics Communications***

Huff, D. (1954) How to Lie with Statistics. Retrieved from: <http://www.horace.org/blog/wp-content/uploads/2012/05/How-to-Lie-With-Statistics-1954-Huff.pdf>

### ***Suggested Paper:***

Kandel, S., Paepcke A., Hellerstein, J.M, and Heer, J. (2012). *Enterprise Data Analysis and Visualization: An Interview Study*. IEEE Visual Analytics Science & Technology (VAST). Retrieved from: <http://vis.stanford.edu/files/2012-EnterpriseAnalysisInterviews-VAST.pdf>