## **New Topic Lesson**

The purpose of this assignment is to have your group develop a lesson plan on a topic not covered in class but relevant to a data analyst. Some suggested topics are provided below. The requirements for this assignment are that you generate an Rmd file for the lesson and submit both the Rmd file and a compiled pdf. The Rmd file must have

- 1) Title and authors
- 2) Introduction
- 3) Objectives
- 4) Examples to illustrate the main ideas
- 5) There must either be a reading(s) or video(s) for the students to review prior to or during the lesson
- 6) At least three homework questions
- 7) References

## Ideas

Below are some suggestions for lesson topics. You can also go to the CRAN website and look under task views for more ideas, http://cran.r-project.org/web/views/.

- 1) Data manipulation: dplyr, reshape, plyr, and tidyr
- 2) Python: Ipython
- 3) Bayesian Statistics: LearnBayes
- 4) Text Analysis: tm, koRpus
- 5) Visualizations: ggplot2
- 6) Visulizations: ggvis
- 7) Visulizations: rCharts
- 8) Webscraping: XML, rvest, httr
- 9) Big Data:RHadoop MapReduce with R <a href="http://www.r-bloggers.com/mapreduce-with-r-on-hadoop-and-amazon-emr/">http://www.r-bloggers.com/mapreduce-with-r-on-hadoop-and-amazon-emr/</a>
- 10) API: twitteR
- 11) Predictive Analytics: caret

## Reviews

You must review the work of two other groups and submit an evaluation form for each review with your final lesson plan. These reviews will be 30% of your grade.