

SOC 4015/5050: Lecture Prep 08 - knitr Basics

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Directions

Complete all of the following questions. A well-formatted R Notebook source (the .Rmd file) and word document output should be uploaded to your GitHub assignment repository by 4:15pm on Monday, October 15th, 2018.

knitr Basics

1. Create a new R notebook.
2. Edit the YAML heading so that it looks like this:

```
---
title: "Lecture Prep 07"
author: "your name"
date: '(\r format(Sys.time(), "%B %d, %Y"))'
output:
  word_document:
    toc: true
    toc_depth: 2
---
```

This will:

- (a) output a Word document instead of the .nb.html and .md formats we have used so far, and
 - (b) include a table of contents at the top of your document.
3. Add the following sections to your document:

```
## Introduction
```

```
This notebook illustrates some initial modifications to an R Markdown file.
```

```
## Dependencies
```

```
This notebook requires the 'ggplot2' package to be loaded:
```

```
```{r load-packages}
tidyverse packages
```

```
library(ggplot2)
'''
```

### ## Load Data

This notebook requires the 'mpg' data from 'ggplot2':

```
'''{r load-data}
auto <- mpg
'''
```

### ## A Quick Plot

We'll make a quick plot, but hide the syntax from our readers:

```
'''{r quick-plot, echo=FALSE}
ggplot(data = auto) +
 geom_point(mapping = aes(x = cty, y = hwy), position = "jitter")
'''
```

There are two things to pay attention to here:

- (a) The use of names in each code chunk, like "load-package" and "load-data" - these are useful for debugging R Markdown files when they are knit, and
  - (b) the use of echo=FALSE, which prevents the code for making the plot from being exported. The plot itself, however, will still be exported.
4. "Knit" this document, and inspect the resulting Word document. Note how the document itself is formatted and aligns with the syntax you wrote in your R Markdown file.