



Utrecht University

R markdown

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What is R Markdown?

- **R Markdown** is a package to turn your analyses into high quality documents, reports, presentations and dashboards.
- Developed for Reproducible Research
- R Markdown documents are fully reproducible.
- Simple syntax and easy to learn
- Intro video: <https://rmarkdown.rstudio.com/lesson-1.html>

A Pandoc Markdown Article Starter and Template*

A Pandoc Markdown template
Steven V. Miller *Clemson University*
This document provides an introduction to R Markdown, argues for its benefits, and presents a sample manuscript template intended for an academic audience. I include basic syntax to R Markdown and a minimal working example of how the analysis itself can be conducted within R Markdown.

Introduction

Introduction

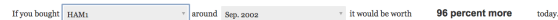
Academic workflow, certainly in political science, is at a crossroads. The *American Journal of Political Science* (AJPS) announced a (my words) “show your work” initiative in which authors who are tentatively accepted for publication at the journal must hand over the raw code and data that produced the results shown in the manuscript. The editorial team at AJPS then reproduces the code from the manuscript. Pending successful replication, the manuscript moves toward publication. The AJPS might be at the fore of this movement, and it could be the joint Data Access among political science journals, but other journals in our field have signed the joint Data Access & Research Transparency (DART) initiative. This, at a bare minimum, requires uploading code from quantitatively-oriented published articles to in-house directories hosted by the journal or from quantitatively-oriented publications to the Lacour controversy as well. Political science, for the services like Dataverse, in the wake with the extent of the data fraud perpetrated by Michael Lacour in Science, the general scientific community, with different sam-

[illegible]

*Replication files are available on the author's GitHub account (<http://github.com/svmiller>).
February 10, 2016; Corresponding author: svmiller@clmson.edu.

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R Data Cafe



Garrett Grolemond & Hadley Wickham



R and Markdown: What is Markdown? (1)

- **Markdown** is a lightweight markup language with plain text formatting syntax.
- **R and Markdown** is an extended version of markdown
- Google “Markdown cheatsheet” for more info

R and Markdown: What is Markdown? (2)

```
21
22 ▾ # H1
23 ▾ ## H2
24 ▾ ### H3
25 ▾ #### H4
26 ▾ ##### H5
27 ▾ ##### H6
28
29
```

H1

H2

H3

H4

H5

H6



R and Markdown: What is Markdown? (2)

```
28
29 ▾ ## Emphasis
30
31 Emphasis, aka italics, with asterisks or underscores.
32
33 Strong emphasis, aka bold, with asterisks or underscores.
34
35 Combined emphasis with asterisks and underscores.
36
37 Strikethrough uses two tildes. ~~Scratch this.~~
38
```

Emphasis

Emphasis, aka italics, with *asterisks* or *underscores*.

Strong emphasis, aka bold, with **asterisks** or **underscores**.

Combined emphasis with ***asterisks and underscores***.

Strikethrough uses two tildes. ~~Scratch this.~~

R and Markdown: What is Markdown? (3)

Lists

- Item 1
- Item 2
- Item 3

```
38
39 ▾ ## Lists
40
41 - Item 1
42 - Item 2
43 - Item 3
44
```



R and Markdown: What is Markdown? (4)

```
44
45 ▾ ## Code block
46
47 ▾ ```{r cars}
48   summary(cars)
49   ```
50
```



Code block

```
summary(cars)
```

```
##      speed      dist
## Min.   : 4.0    Min.   :  2.00
## 1st Qu.:12.0    1st Qu.: 26.00
## Median :15.0    Median : 36.00
## Mean   :15.4    Mean   : 42.98
## 3rd Qu.:19.0    3rd Qu.: 56.00
## Max.   :25.0    Max.   :120.00
```




R Markdown header (YAML)

```
1 ---  
2 title: "Example for R Data Cafe!"  
3 author: "Jonathan de Bruin"  
4 date: "4/11/2018"  
5 output: pdf_document  
6 ---  
7
```

Example for R Data Cafe!

Jonathan de Bruin

4/11/2018

Introduction R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:



Installation

- **`rmarkdown' package**
- **For pdf output, you need Pandoc (<https://pandoc.org/>)**

Demo