



## Chapter 3 Topic of Section

**Y**ou can write all your text in sections like this!

### 3.1 Subtopic

Here's a subheading and some text in this subsection!

#### 3.1.1 Code examples

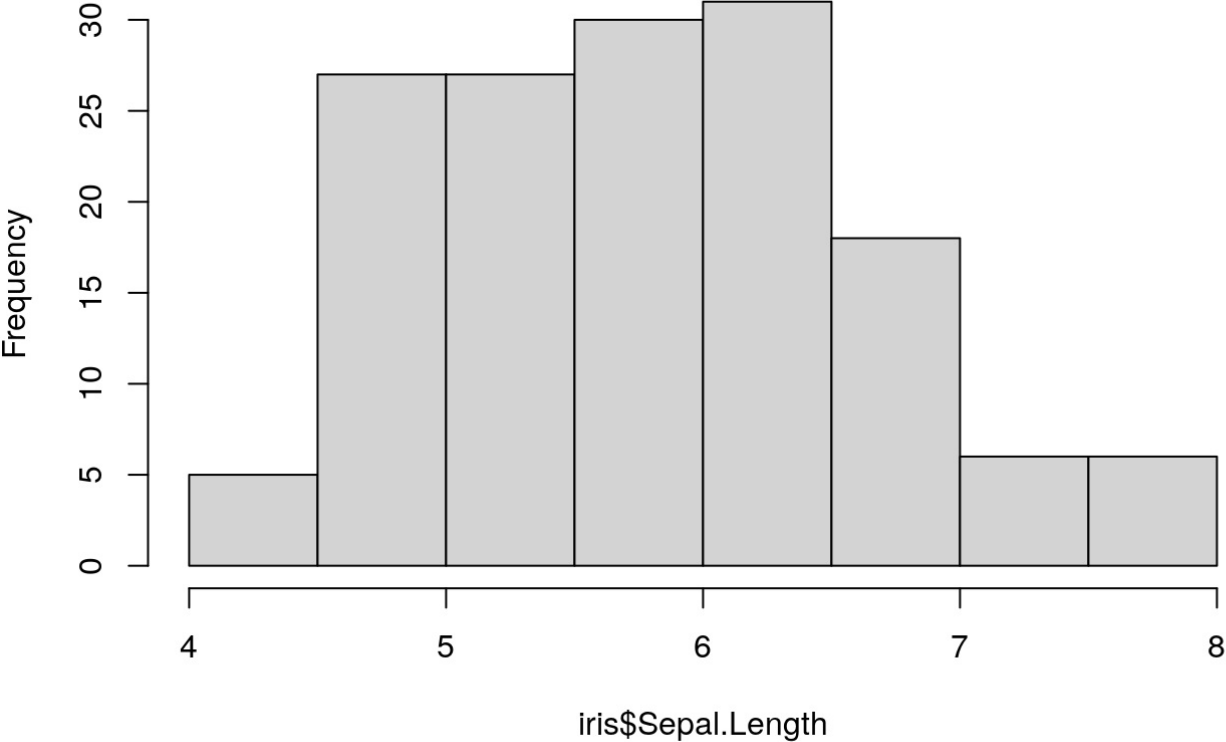
You can demonstrate code like this:

```
output_dir <- file.path("resources", "code_output")
if (!dir.exists(output_dir)) {
  dir.create(output_dir)
}
```

And make plots too:

```
hist_plot <- hist(iris$Sepal.Length)
```

Histogram of iris\$Sepal.Length



You can also save these plots to file:

```
png(file.path(output_dir, "test_plot.png"))  
hist_plot
```

```
## $breaks  
## [1] 4.0 4.5 5.0 5.5 6.0 6.5 7.0 7.5 8.0  
##  
## $counts  
## [1] 5 27 27 30 31 18 6 6  
##  
## $density  
## [1] 0.06666667 0.36000000 0.36000000 0.40000000 0.41333333 0.24000000 0.08000000  
## [8] 0.08000000  
##  
## $mids  
## [1] 4.25 4.75 5.25 5.75 6.25 6.75 7.25 7.75  
##  
## $xname  
## [1] "iris$Sepal.Length"  
##  
## $equidist  
## [1] TRUE  
##  
## attr(,"class")  
## [1] "histogram"
```

```
dev.off()
```

```
## png
```

```
## 2
```

### 3.1.2 Image example

How to include a Google slide. It's simplest to use the `ottr` package:



Major point!!

CC-by jhudatascience.org

But if you have the slide or some other image locally downloaded you can also use html like this:



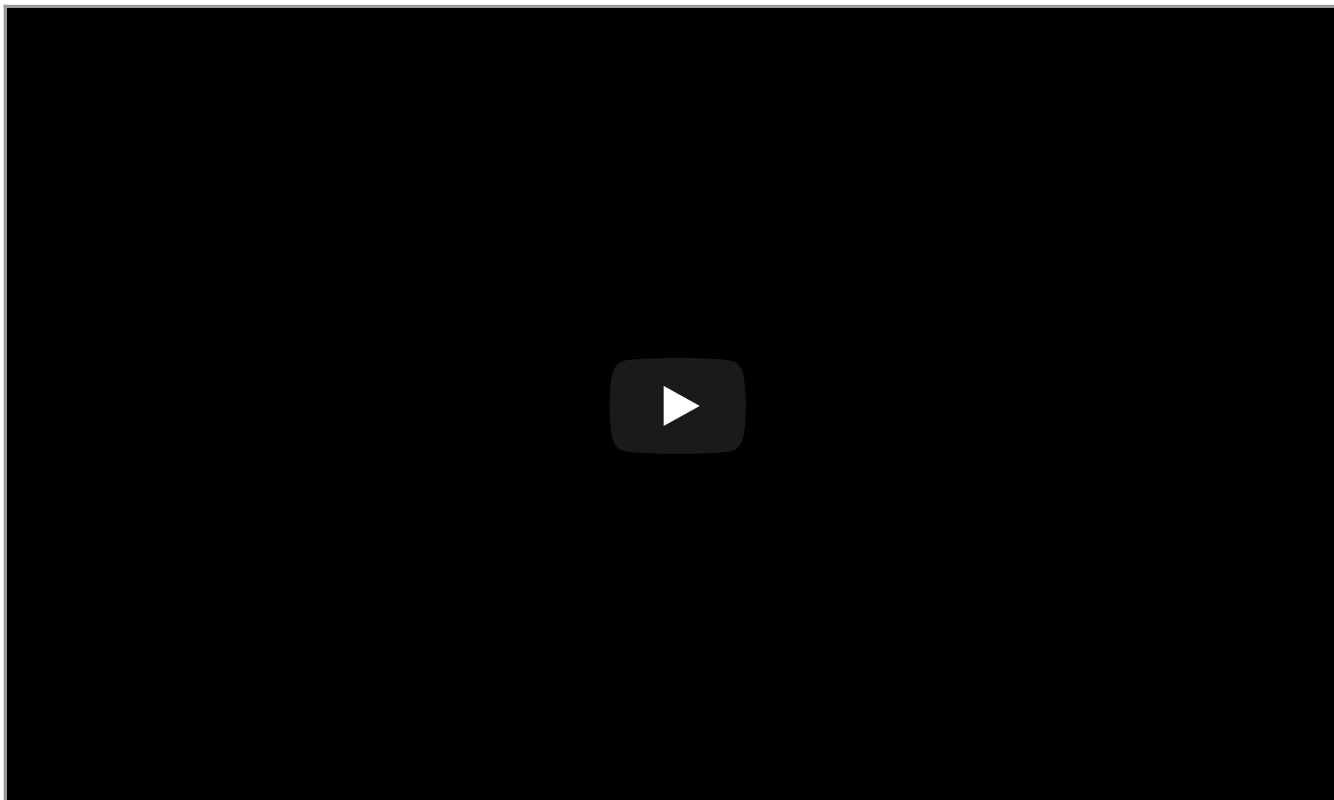
Major point!!

### 3.1.3 Video examples

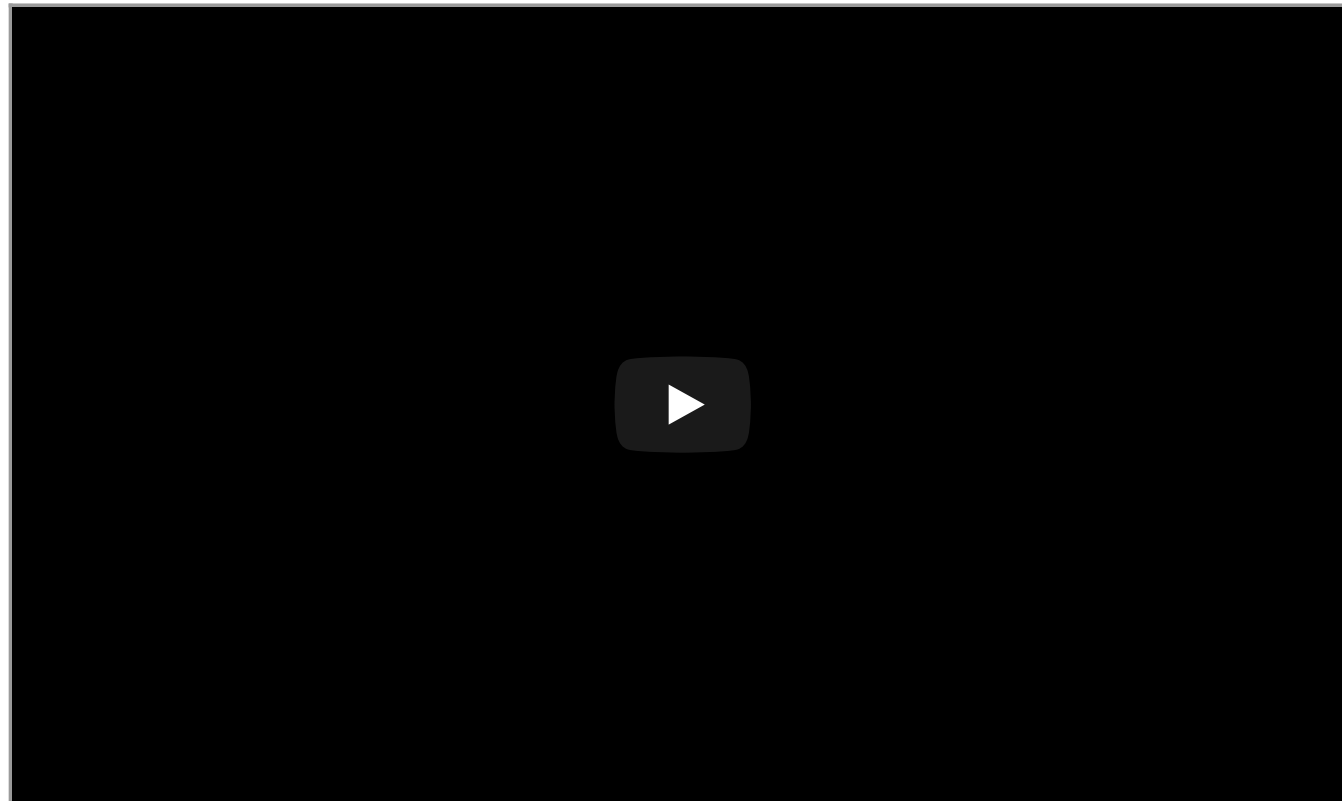
To show videos in your course, you can use markdown syntax like this:

[A video we want to show](#)

Alternatively, you can use `knitr::include_url()` like this: Note that we are using `echo=FALSE` in the code chunk because we don't want the code part of this to show up. If you are unfamiliar with [how R Markdown code chunks work, read this](#).



OR this works:



### 3.1.4 Links to files

This works:



- Faculty & Staff

APPLY

VISIT

REQUEST INFO

- Quicklinks

- COVID-19 Resources
- Campus Directory
- News
- Events
- Contact us

APPLY

VISIT

REQUEST INFO

- Give

MESSIAH UNIVERSITY

Home

Sorry, this download is no longer available

Or this:

[This works.](#)

Or this:

- Info
  - Future Students
  - Current Students
  - Visitors & Neighbors
  - Alumni & Parents
  - Faculty & Staff

APPLY

VISIT

REQUEST INFO

- Quicklinks
  - COVID-19 Resources
  - Campus Directory
  - News
  - Events
  - Contact us

APPLY

VISIT

REQUEST INFO

- Give

MESSIAH UNIVERSITY

Home



### 3.1.5 Links to websites

Examples of including a website link.

This works:

I'm a software engineer working at RStudio, PBC. I earned my PhD from the Department of Statistics, Iowa State University. My thesis was *Dynamic Graphics and Reporting for Statistics*, advised by Di Cook and Heike Hofmann. I have developed a few R packages either seriously or for fun (or both), such as knitr, animation, bookdown, blogdown, pagedown, xaringan, and tinytex. I founded a Chinese website called "Capital of Statistics" in 2006, which has grown into a large online community on statistics. I initiated the Chinese R conference in 2008. I'm a big fan of GitHub, LyX and Pandoc. I hate IE. I fall asleep when I see beamer slides, and I yell at people who use `\textbf{ }` to write `\title{ }`. I know I cannot eat code, so I cook almost every day to stay away from my computer for two hours.

这是谢益辉的个人主页。2013 年底我从 Ames 村办大学统计系 毕业，终于解决了人生前 30 年被问最多的问题：“你怎么还没毕业？”目前就职于 RStudio。我支持开源，喜欢折腾网站和代码，是一个高度自我驱动的人。打羽毛球爱勾对角，打乒乓球像太极，网球满场子捡球，篮球容易被撞飞，攀岩一次，腿软。宅，口重，嗜辣，屡教不改。智商中等偏下，对麻将和三国杀有不可逾越的认知障碍，实变函数课上曾被老师叫醒。略好读书，偶尔也在网上乱翻帖子，对诗词楹联比较感兴趣，目前比较中意的一联是：千秋邈矣独留我；百战归来再读书。最喜欢的一首词是：

深情似海，问相逢初度，是何年纪？依约而今还记取，不是前生夙世。放学花前，题诗石上，春水园亭里。逢君一笑，人间无此欢喜。

无奈苍狗看云，红羊数劫，惘惘休提起。客气渐多真气少，汨没心灵何已。千古声名，百年担负，事事违初意。心头阁住，儿时那种情味。

OR this:



Another link

OR this:

I'm a software engineer working at RStudio, PBC. I earned my PhD from the Department of Statistics, Iowa State University. My thesis was *Dynamic Graphics and Reporting for Statistics*, advised by Di Cook and Heike Hofmann. I have developed a few R packages either seriously or for fun (or both), such as knitr, animation, bookdown, blogdown, pagedown, xaringan, and tinytex. I founded a Chinese website called "Capital of Statistics" in 2006, which has grown into a large online community on statistics. I initiated the Chinese R conference in 2008. I'm a big fan of GitHub, LyX and Pandoc. I hate IE. I fall asleep when I see beamer slides, and I yell at people who use `\textbf{}` to write `\title{}`. I know I cannot eat code, so I cook almost every day to stay away from my computer for two hours.

这是谢益辉的个人主页。2013 年底我从 Ames 村办大学统计系 毕业，终于解决了人生前 30 年被问最多的问题：“你怎么还没毕业？”目前就职于 RStudio。我支持开源，喜欢折腾网站和代码，是一个高度自我驱动的人。打羽毛球爱勾对角，打乒乓球像太极，网球满场子捡球，篮球容易被撞飞，攀岩一次，腿软。宅，口重，嗜辣，屡教不改。智商中等偏下，对麻将和三国杀有不可逾越的认知障碍，实变函数课上曾被老师叫醒。略好读书，偶尔也在网上乱翻帖子，对诗词楹联比较感兴趣，目前比较中意的一联是：千秋邈矣独留我；百战归来再读书。最喜欢的一首词是：

深情似海，问相逢初度，是何年纪？依约而今还记取，不是前生夙世。放学花前，题诗石上，春水园亭里。逢君一笑，人间无此欢喜。

无奈苍狗看云，红羊数劫，惘惘休提起。客气渐多真气少，汨没心灵何已。千古声名，百年担负，事事违初意。心头阁住，儿时那种情味。

### 3.1.6 Citation examples

We can put citations at the end of a sentence like this (Allaire et al. 2021). Or multiple citations Xie, Allaire, and Grolemond (2018).

but they need a ; separator (Allaire et al. 2021; Xie, Allaire, and Grolemond 2018).

In text, we can put citations like this Allaire et al. (2021).

### 3.1.7 FYI boxes

Please click on the subsection headers in the left hand navigation bar (e.g., 2.1, 4.3) a second time to expand the table of contents and enable the `scroll_highlight` feature (see more).

### 3.1.8 Dropdown summaries

### 3.1.8 Dropdown summaries

- You can hide additional information in a dropdown menu

## 3.2 Print out session info

You should print out session info when you have code for [reproducibility purposes](#).

```
devtools::session_info()
```

```
## -- Session info -----
##   setting  value
##   version  R version 4.0.2 (2020-06-22)
##   os       Ubuntu 20.04.3 LTS
##   system   x86_64, linux-gnu
##   ui       X11
##   language (EN)
##   collate  en_US.UTF-8
##   ctype    en_US.UTF-8
##   tz       Etc/UTC
##   date     2022-02-04
##
## -- Packages -----
##   package      * version      date      lib source
##   assertthat    0.2.1        2019-03-21 [1] RSPM (R 4.0.3)
##   backports     1.1.10       2020-09-15 [1] RSPM (R 4.0.2)
##   bookdown      0.24         2022-02-04 [1] Github (rstudio/bookdown@88bc4ea)
##   callr         3.4.4        2020-09-07 [1] RSPM (R 4.0.2)
##   cli           2.0.2        2020-02-28 [1] RSPM (R 4.0.0)
##   crayon        1.3.4        2017-09-16 [1] RSPM (R 4.0.0)
##   curl          4.3          2019-12-02 [1] RSPM (R 4.0.3)
##   desc          1.2.0        2018-05-01 [1] RSPM (R 4.0.3)
##   devtools      2.3.2        2020-09-18 [1] RSPM (R 4.0.3)
```

```

## digest      0.6.25      2020-02-23 [1] RSPM (R 4.0.0)

## ellipsis    0.3.1      2020-05-15 [1] RSPM (R 4.0.3)
## evaluate    0.14       2019-05-28 [1] RSPM (R 4.0.3)
## fansi       0.4.1      2020-01-08 [1] RSPM (R 4.0.0)
## fs          1.5.0      2020-07-31 [1] RSPM (R 4.0.3)
## glue        1.6.1      2022-01-22 [1] CRAN (R 4.0.2)
## highr       0.8        2019-03-20 [1] RSPM (R 4.0.3)
## hms         0.5.3      2020-01-08 [1] RSPM (R 4.0.0)
## htmltools   0.5.0      2020-06-16 [1] RSPM (R 4.0.1)
## httr        1.4.2      2020-07-20 [1] RSPM (R 4.0.3)
## jquerylib   0.1.1      2020-04-30 [1] RSPM (R 4.0.0)
## knitr       1.33       2022-02-04 [1] Github (yihui/knitr@a1052d1)
## lifecycle   1.0.0      2021-02-15 [1] CRAN (R 4.0.2)
## magrittr    * 1.5       2014-11-22 [1] RSPM (R 4.0.0)
## memoise     1.1.0      2017-04-21 [1] RSPM (R 4.0.0)
## ottr        0.1.2      2022-02-04 [1] Github (jhudsl/ottr@b6da73c)
## pillar      1.4.6      2020-07-10 [1] RSPM (R 4.0.2)
## pkgbuild    1.1.0      2020-07-13 [1] RSPM (R 4.0.2)
## pkgconfig   2.0.3      2019-09-22 [1] RSPM (R 4.0.3)
## pkgload     1.1.0      2020-05-29 [1] RSPM (R 4.0.3)
## prettyunits 1.1.1      2020-01-24 [1] RSPM (R 4.0.3)
## processx    3.4.4      2020-09-03 [1] RSPM (R 4.0.2)
## ps          1.3.4      2020-08-11 [1] RSPM (R 4.0.2)
## purrr       0.3.4      2020-04-17 [1] RSPM (R 4.0.3)
## R6          2.4.1      2019-11-12 [1] RSPM (R 4.0.0)
## readr       1.4.0      2020-10-05 [1] RSPM (R 4.0.2)
## remotes     2.2.0      2020-07-21 [1] RSPM (R 4.0.3)
## rlang       0.4.10     2022-02-04 [1] Github (r-lib/rlang@f0c9be5)

## rmarkdown   2.10       2022-02-04 [1] Github (rstudio/rmarkdown@02d3c25)
## rprojroot    1.3-2      2018-01-03 [1] RSPM (R 4.0.0)
## sessioninfo 1.1.1      2018-11-05 [1] RSPM (R 4.0.3)
## stringi     1.5.3      2020-09-09 [1] RSPM (R 4.0.3)
## stringr     1.4.0      2019-02-10 [1] RSPM (R 4.0.3)
## testthat    3.0.1      2022-02-04 [1] Github (R-lib/testthat@e99155a)
## tibble      3.0.3      2020-07-10 [1] RSPM (R 4.0.2)
## usethis     2.1.5.9000 2022-02-04 [1] Github (r-lib/usethis@57b109a)

```

```
## vctr      0.3.4      2020-08-29 [1] RSPM (R 4.0.2)
## withr     2.3.0      2020-09-22 [1] RSPM (R 4.0.2)
## xfun      0.26       2022-02-04 [1] Github (yihui/xfun@74c2a66)
## yaml      2.2.1      2020-02-01 [1] RSPM (R 4.0.3)
##
## [1] /usr/local/lib/R/site-library
## [2] /usr/local/lib/R/library
```

## References

Allaire, JJ, Yihui Xie, Jonathan McPherson, Javier Luraschi, Kevin Ushey, Aron Atkins, Hadley Wickham, Joe Cheng, Winston Chang, and Richard Iannone. 2021. *Rmarkdown: Dynamic Documents for r*.

<https://github.com/rstudio/rmarkdown>.

Xie, Yihui, J. J. Allaire, and Garrett Grolmund. 2018. *R Markdown: The Definitive Guide*. Boca Raton, Florida: Chapman; Hall/CRC. <https://bookdown.org/yihui/rmarkdown>.

---

All illustrations [CC-BY](#).

All other materials [CC-BY](#) unless noted otherwise.