Course title

Lecture title

Your name

University | Course code

Contents

Requirements and limitations

This R Markdown template has been tested on a TexLive distribution using XeLaTeX. I cannot guarantee that other LaTeX distributions or engines will work without some tinkering. (LaTeX fonts, in particular, may need to installed manually or changed back to their defaults.)

Template features

This template is aimed at people who want to knit their R Markdown documents to *both* HTML and PDF with as few surprises as possible. As the name suggests, I predominantly use it for my lecture notes. But I find that it works well for writing papers too.

I want to emphasise that while the template is tailored towards my personal needs and preferences (e.g. font choice), it also tries to provide out-of-the-box support for various things that are missing/annoying when are trying to ensure consistency across PDF and HTML formats. For instance, it recognises the "affiliation" field in the YAML when exporting to PDF. (This is not true of vanilla R Markdown.)

Here are some additional features that are not available in vanilla R Markdown.

PDF support for non-standard fonts

This is as easy one; simply a matter of adding `dev: cairo_pdf` to the YAML. But its nice not having to remember that all the time.

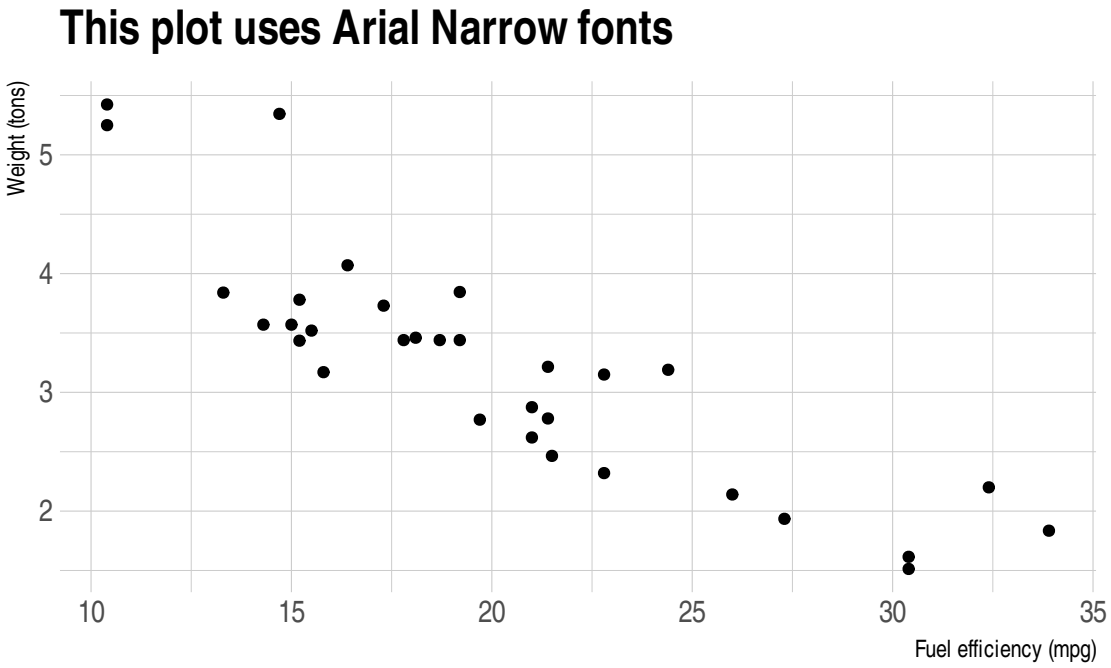
Note: As the figure caption suggests, to run this next chunk you'll need to add Arial Narrow to your font book if it's not installed on your system already.

```
if (!require("pacman")) install.packages("pacman")
```

```
## Loading required package: pacman
```

```
pacman::p_load(ggplot2, hrbrthemes)

ggplot(mtcars, aes(mpg, wt)) +
  geom_point() +
  labs(x="Fuel efficiency (mpg)", y="Weight (tons)",
       title="This plot uses Arial Narrow fonts",
       caption="Note: Fonts must be installed separately on your system.") +
  theme_ipsum()
```



Note: Fonts must be installed separately on your system.

Multi-column environments

Multi-column environments are supported via's Pandoc's fenced_divs syntax and some preamble sugar (bundled together with the template). For example, a two-column section would look like this.

Here is some example dplyr code.

```
pacman::p_load(dplyr)

mtcars %>%
  group_by(am) %>%
  summarise(mean(mpg))
```

```
## # A tibble: 2 x 2
##      am `mean(mpg)`
##   <dbl>       <dbl>
## 1     0        17.1
## 2     1        24.4
```

And the data.table equivalent.

```
pacman::p_load(data.table)
mtcars_dt = as.data.table(mtcars)

mtcars_dt[, mean(mpg), by = am]
```

```
##    am       V1
## 1:  1 24.39231
## 2:  0 17.14737
```

The same idea can be extended to additional columns and the individual column widths are also adjustable.

Ignore interactive content when exporting to PDF

In general, this template tries to do a good job of automatically handling (i.e. ignoring) interactive content when exporting to PDF. A notable exception is with embedded interactive content like external GIFs. In this case, rather than typing the usual, say, `![](mind-blown.gif)` directly in the Rmd file, you should include the figure with `knitr::include_graphics` in an R chunk. This will allow you to control whether it renders, conditional on output format. For example, the following chunk will render an actual GIF when the knit target is HTML format, and a (hopefully) helpful message when that target is PDF format.

```
## Sorry, this GIF only available in the the HTML version of the notes.
```