
title: 'RMarkdown Presentation Format'

author: "Cheng Peng"

date: "West Chester University"

output:

ioslides_presentation:

highlight: zenburn

slide_level: 3

smaller: yes

css: css/Custom.css

beamer_presentation:

highlight: zenburn

slidy_presentation:

highlight: zenburn

```
```\n setup, include=FALSE}
```

```
if (!require("knitr")) {
```

```
 install.packages("knitr")
```

```
 library(knitr)
```

```
}
```

```
if (!require("pander")) {
```

```
 install.packages("pander")
```

```
 library(pander)
```

```
}
```

```
if (!require("plotly")) {
```

```
 install.packages("plotly")
```

```
 library(plotly)
```

```
}
if (!require("ggplot2")) {
 install.packages("ggplot2")
 library(ggplot2)
}
knitr::opts_chunk$set(echo = FALSE)
...
```

## ## R Markdown Presentation Formats

### ### Four Formats

```
<div style="float: left; width: 40%;">
```

#### + Interactive Presentations

- **ioslides** (HTML),

- **slidy** (HTML),

#### + Static Presentations

- **beamer** (PDF, MikTeX is needed), and

#### + Semi-interactive Presentation

- **Power Point** (Our old friend!).

```
</div>
```

```
<div style="float: left; width: 60%;">
```

```
`` `{r}
```

```
knitr::include_graphics("img/PresentationFormats.jpg")
```

```
`` `
```

```
</div>
```

```
Interactive Web Presentations
```

```
Overlay Density Curves
```

```
`` `{r echo=FALSE}
```

```
define three densities
```

```
sepal.len.setosa <- iris[which(iris$Species == "setosa"),]
```

```
setosa <- density(sepal.len.setosa$Sepal.Length)
```

```
sepal.len.versicolor <- iris[which(iris$Species == "versicolor"),]
```

```
versicolor <- density(sepal.len.versicolor$Sepal.Length)
```

```
sepal.len.virginica <- iris[which(iris$Species == "virginica"),]
```

```
virginica <- density(sepal.len.virginica$Sepal.Length)
```

```
plot density curves
```

```
fig <- plot_ly(x = ~virginica$x, y = ~virginica$y,
```

```
 type = 'scatter', mode = 'lines',
```

```
 name = 'virginica',
```

```
 fill = 'tozeroy') %>%
adding more density curves
add_trace(x = ~versicolor$x, y = ~versicolor$y,
 name = 'versicolor', fill = 'tozeroy') %>%
add_trace(x = ~setosa$x, y = ~setosa$y,
 name = 'setosa', fill = 'tozeroy') %>%
layout(xaxis = list(title = 'Sepal Length'),
 yaxis = list(title = 'Density'))
fig
` ``
```

### ### Embedded Webpage

```
<div class='wrap'>
<iframe src="https://chpeng.shinyapps.io/LSE-Reg/" height="600" width="900" title="Iframe
Example"></iframe>
</div>
```

### ### Embedded Interactive Apps

```
<center><div class='wrap'>
<iframe src="https://wcu-peng.shinyapps.io/NormalCI4MeanProp/" height="500" width="700"
title="Iframe Example"></iframe>
</div></center>
```

### ### Searchable Data Table

```
` `{r eval=requireNamespace("DT", quietly=TRUE)}
DT::datatable(head(mtcars), fillContainer = FALSE, options = list(pageLength = 4))
` `
```

### ### Beamer and Beamer Themes

#### #### Beamer Built-in Themes

```
<center><div class='wrap'>
<iframe src="https://pengdsci.github.io/Beamer/" height="300px" width="80%" style="border:1px
solid black;"></iframe>
</div></center>
```

#### #### A Sample Beamer Presentation

```
<center><div class='wrap'>
<object data="https://pengdsci.github.io/sta553/w03-Ethics.pdf" type="application/pdf"
width="80%" height="430px">
 <p>Unable to display PDF file. <a href="https://pengdsci.github.io/sta553/w03-
Ethics.pdf">Download instead.</p>
 </object>
</div></center>
```

## Our Old Friend - PPT!

### PowerPoint from MS Suite

<h5> Many built-in designed layouts/templates, but many are not good for technical presentations!  
</h5>

```
`` `{r width="60%"}
```

```
knitr::include_graphics("img/MS-PPT.jpg")
```

```
`` `
```

### PowerPoint from RMarkdown

<h5> No template for R Markdown to generate diverse PPT. No interactive content allowed in PPT  
</h5>

```
<center><div class='wrap'>
```

```
<object data="https://pengdsci.github.io/Beamer/misc/RMD2PPT.pdf" type="application/pdf"
width="100%" height="450px">
```

```
 <p>Unable to display PDF file. Download instead.</p>
```

```
 </object>
```

```
</div></center>
```

### RMD Source for PPT

```
<iframe src="https://pengdsci.github.io/Beamer/misc/RMD2PPT.txt" height="300px" width="80%" style="border:1px solid black;"></iframe>
```

```
</div></center>
```