Introduction to Theoretical Ecology

Instructor: Po-Ju Ke Teaching Assistant: Gen-Chang Hsu

2021 Fall at National Taiwan University

Contents

Course description	5
Requirements	5
Objectives	5
Course information	7
Syllabus	9
Week 1	11
Equations	12
Week 2	15
Cross-reference	16

Course description

see the contents on ceiba

Requirements

see the contents on ceiba

Objectives

see the contents on ceiba

Course information

course schedule and location grading policy contact info office hours

Syllabus

Sepal.Length	Sepal.Width
5.1	3.5
4.9	3.0
4.7	3.2
4.6	3.1
5.0	3.6
5.4	3.9
4.6	3.4
5.0	3.4
4.4	2.9
4.9	3.1
5.4	3.7
4.8	3.4
4.8	3.0
4.3	3.0
5.8	4.0
5.7	4.4
$\phantom{00000000000000000000000000000000000$	3.9
5.1	3.5
5.7	3.8
5.1	3.8
5.4	3.4
5.1	3.7
4.6	3.6
5.1	3.3
4.8	3.4
5.0	3.0
5.0	3.4
5.2	3.5
5.2	3.4

Week 1

Figure with label and caption

```
par(mar = c(4, 4, .1, .1))
plot(pressure, type = 'b', pch = 19)
```

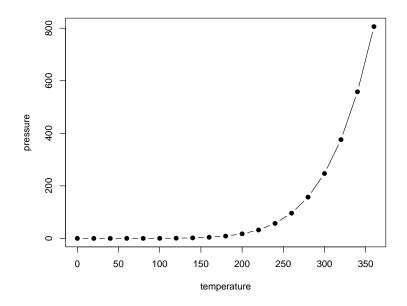


Figure 1: Here is a nice figure!

External image with label and caption

```
knitr::include_graphics("knit-logo.png")
```

Table with label and caption

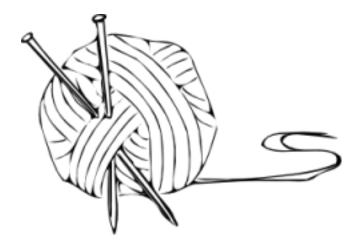


Figure 2: Here is a nice figure!

```
knitr::kable(
  head(iris, 20), caption = 'Here is a nice table!',
  booktabs = TRUE
)
```

Internal Link to anchor

Equations

$$f(k) = \binom{n}{k} p^k (1-p)^{n-k}$$

$$f(k) = \binom{n}{k} p^k (1-p)^{n-k}$$

$$\begin{vmatrix} a & b \\ c & d \end{vmatrix} = ad - bc$$

$$f(k) = \binom{n}{k} p^k (1-p)^{n-k}$$

$$\frac{d}{dx} \left(\int_a^x f(u) \, du \right) = f(x)$$
 (1)

Text references

Table 1: Here is a nice table!

Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
5.1	3.5	1.4	0.2	setosa
4.9	3.0	1.4	0.2	setosa
4.7	3.2	1.3	0.2	setosa
4.6	3.1	1.5	0.2	setosa
5.0	3.6	1.4	0.2	setosa
5.4	3.9	1.7	0.4	setosa
4.6	3.4	1.4	0.3	setosa
5.0	3.4	1.5	0.2	setosa
4.4	2.9	1.4	0.2	setosa
4.9	3.1	1.5	0.1	setosa
5.4	3.7	1.5	0.2	setosa
4.8	3.4	1.6	0.2	setosa
4.8	3.0	1.4	0.1	setosa
4.3	3.0	1.1	0.1	setosa
5.8	4.0	1.2	0.2	setosa
5.7	4.4	1.5	0.4	setosa
5.4	3.9	1.3	0.4	setosa
5.1	3.5	1.4	0.3	setosa
5.7	3.8	1.7	0.3	setosa
5.1	3.8	1.5	0.3	setosa

plot(cars) # a scatterplot

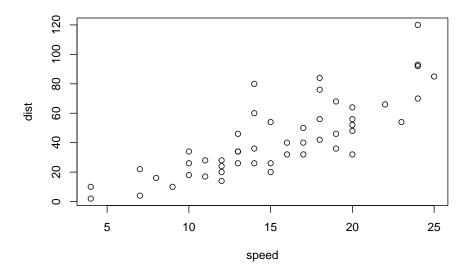


Figure 3: A scatterplot of the data cars using base R graphics.

see this!!!

Week 2

```
plot(cars) # a scatterplot
```

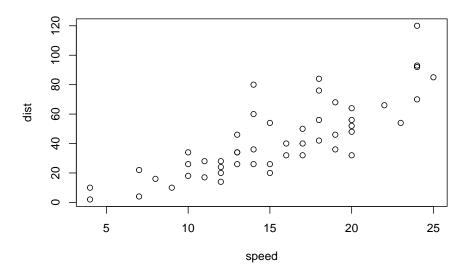


Figure 4: A scatterplot of the data cars using base R graphics.

Course information

non-English books

non-English books2

Figure 1

Figure 2

Figure 4

Equation (1)

Cross-reference

Reference a figure by its code chunk label with the fig: prefix, e.g., see Figure 1. Similarly, you can reference tables generated from knitr::kable(), e.g., see Table 1.

```
see R Core Team (2021) for details also Xie (2021) for details
```

Bibliography

R Core Team (2021). R: A Language and Environment for Statistical Computing. R Foundation for Statistical Computing, Vienna, Austria.

Xie, Y. (2021). bookdown: Authoring Books and Technical Documents with R Markdown. R package version 0.22.