BISC-305: Statistics for the Life Sciences

Discussion # 01

Saket Choudhary September 4, 2019

Course Logistics

- · Professor Peter Calabrese
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 - Office hours Tuesdays 3:00 5:00 PM, or by appointment
- · Teaching Assistant Saket Choudhary
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 - Office hours Tuesdays 5:00 6:00 PM and Thursdays 9:00 -10:00 AM

Course Logistics

Textbook: Statistics for the Life Sciences by M.L. Samuels, J.A. Witmer and A. Schaffner. Prentice Hall, 5th Edition.

Available in USC Bookstore, Amazon (Renting is cheaper \$22).

Grading:

Exam/Quiz/Homework	% Weight	Due
Midterm 1	15	3 rd October
Midterm 2	15	14 th November
Final	35	17 th December
Homework Assignments	10	Every Tuesday (in class)
Quizzes	15	Every Thursday (in class)
Data Analysis Project 1 (R)	5	TBA
Data Analysis Project 2 (R)	5	TBA _{2/8}

Late Policies

- Homeworks are due in-class. Please contact me and Prof. Calabrese if you happen to miss a class due to some unavoidable emergency.
- Calculators would **not** be required for Quizzes. They might be required for exams. Detailed instructions for exams will be made available later.
- You are allowed to collaborate on Homeworks, but should be turned in individually. USC's academic policy applies (see Syllabus).

R/Rstudio: Installation

R is a programming language.

Rstudio is a development environment, more user-friendly than the vanilla R interface.

Install R: https://cloud.r-project.org

Install Rstudio: https://www.rstudio.com/products/

rstudio/download/#download

Rstudio: Getting Ready

- 1. File \longrightarrow New File \longrightarrow R notebook
- 2. Let it install the recommended packages

R: calculating mean/median/mode

```
y <- c(10.1, 12.4, 13, 15.1, 20.3, 23.1)
mean(y)
median(y)</pre>
```

<- is an assignment operator in R.

R: creating a histogram

```
y \leftarrow c(10.1, 12.4, 13, 15.1, 20.3, 23.1)
hist(y)
```

R: getting help

?hist
?mean