Lecture 0

Course Information

DSA 8070 Multivariate Analysis August 15-19, 2022

Whitney Huang Clemson University



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About the Instructor





About the Instructor

- Fouth-year Assistant Professor of Applied Statistics and Data Science
- Born in Laramie, WY, grew up in Taiwan





 Obtained a B.S. in Mechanical Engineering, switched to Statistics in graduate school





• Got a Ph.D. (Statistics) in 2017 at Purdue University.





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About the Instructor

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How to reach me?

- Email: wkhuang@clemson.edu
- Office: O-221 Martin Hall¹
- Office Hours: TBD. Please fill in your availability at

https:

//www.when2meet.com/?16411569-cxSc5

¹I will be visiting the Institute for Mathematical and Statistical Innovation 1155 East 60th Street Chicago, IL from Sept. 13 to Dec. 11



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Class Policies



Logistics

- There will be two projects. The due dates are:
 - Project I: Oct. 20, Thursday
 - Project II: Dec. 15, Thursday
- There will be weekly R Labs:
 - To be uploaded to Canvas by 11:59 pm ET on the due dates
 - Worst grade will be dropped
- No lectures during Thanksgiving week (Nov. 22-26)

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Course Materials at CANVAS

- Course syllabus / Announcements
- Lecture slides/notes/videos
- R Labs/Projects
- Data sets for lectures and labs

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Reference Books

- Modern Multivariate Statistical Techniques: Regression, Classification, and Manifold Learning, Alan Izenman, 2008, [Link]
- Applied Multivariate Statistics with R, Daniel Zelterman, 2015 [Link]
- ullet Methods of Multivariate Analysis, $\mathbf{3}_{rd}$ Edition, Alvin Rencher and William Christensen, 2012 [Link]
- Applied Multivariate Statistical Methods, 6th Edition, Richard Johnson and Dean Wichern, 2008 [Link]



Evaluation

Grades will be weighted as follows:

R Labs	20%
Project I	40%
Project II	40%

Final course grades will be assigned using the following grading scheme:

>= 90.00	Α
$88.00 \sim 89.99$	A-
85.00 ~ 87.99	B+
$80.00 \sim 84.99$	В
$78.00 \sim 79.99$	B-
$75.00 \sim 77.99$	C+
$70.00 \sim 74.99$	С
$68.00 \sim 69.99$	C-
<= 67.99	F

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Computing

We will use software to perform statistical analyses. Specifically, we will be using R/Rstudio \mathbb{R} Studio

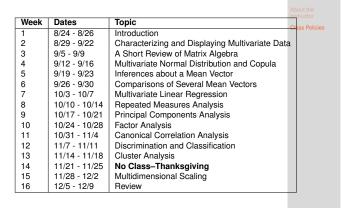
- a **free/open-source** programming language for statistical analysis
- available at https://www.r-project.org/(R); https://rstudio.com/(Rstudio)



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Topics



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