Updating an Introduction to Biostatistics course to better support Diversity, Equity, and Inclusion

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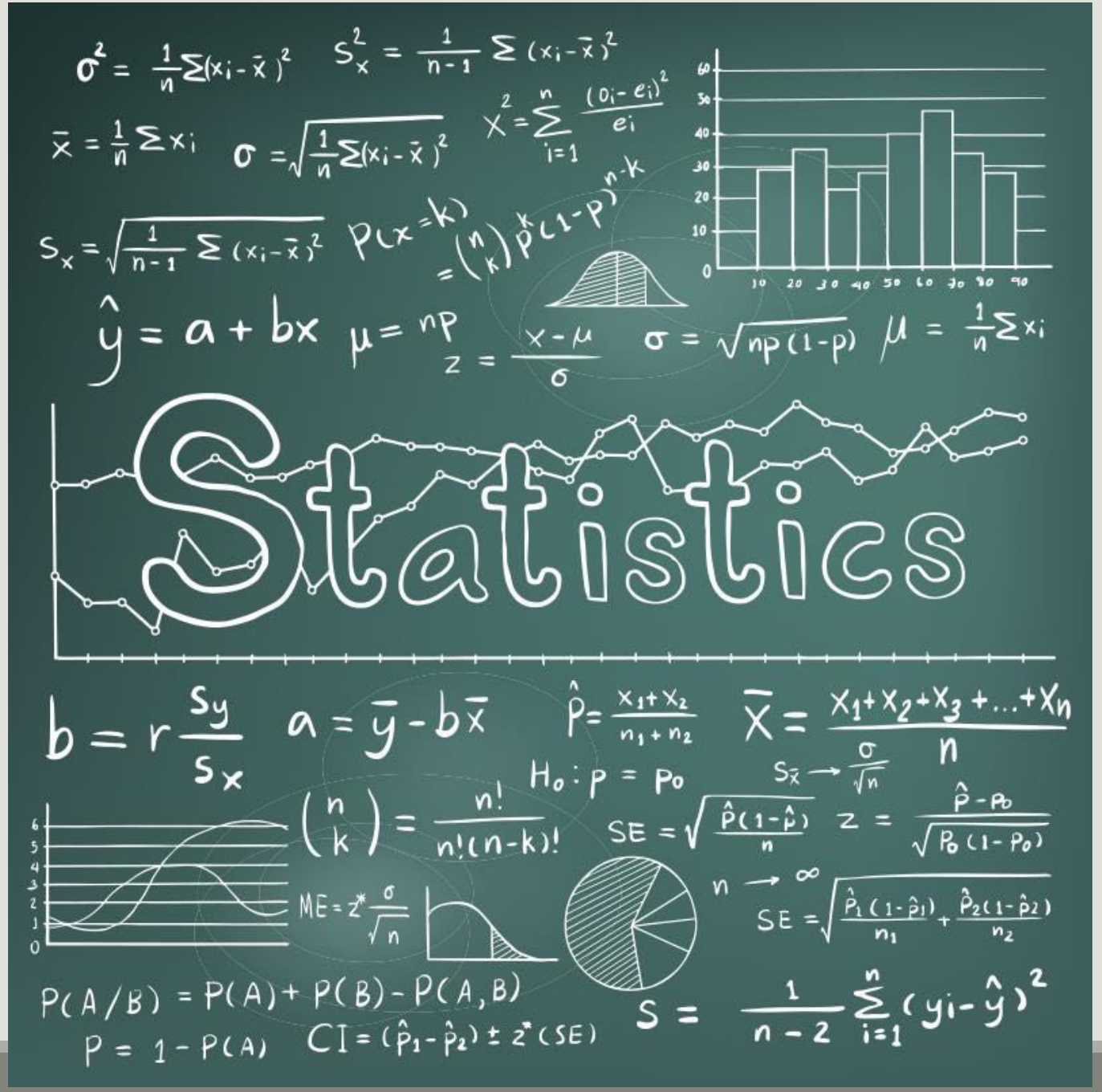
Statistics

Financial barriers

Textbooks

- Reserve physical texts in library
- EBooks through the library & open-source books

Software

- Location of labs with specific software
- Free software option (primarily, R)
- In progress: Access to virtual lab with necessary software
- During the pandemic: requesting free temporary licenses from the software company

Language and assumptions

Guiding principles

- Acknowledge I will make mistakes
- Remain open and curious

Read and contemplate inclusive language guides

Be deliberate when discussing gender, race, ethnicity, BMI, housing, HIV status, etc.

Discuss issues with current popular statistical methods (e.g. controlling for race)

Statistics in the world

- Fisher, the “father of statistics”
  - Calling out his association with eugenics & renaming of associated awards and methods
- First lecture highlights important work of BIPOC statisticians

Flexibility as an instructor

- Guiding principle
  - What's fair -> What will help students learn the material?
- After a failing grade
  - Reach out and offer 1-on-1 session
  - Repeat assignment & give better of the two grades
- Encouraging use of 4 "grace days"
- Be explicitly open to criticism, use multiple anonymous feedback tools

Connecting with students

Padlet.com for name pronunciation

Extra credit hidden in syllabus “email me a picture of something that makes you happy.”

Actively contact students after missed deadlines

Next steps?

Use more examples from oppressed populations, specifically those that which highlights strengths.

Gain more skill in fostering meaningful conversations with students.

Continue to gather ideas from students.

Share ideas regularly with other instructors.

Resources

Inclusive language guides

https://counseling.northwestern.edu/blog/inclusive-language-guide/

https://content-guide.18f.gov/our-style/inclusive-language/

https://consciousstyleguide.com/

Further reading

Fair MA, Johnson SB. Addressing racial inequities in medicine. Science. 2021 Apr 23;372(6540):348-349. doi: 10.1126/science.abf6738. PMID: 33888630.

Yancy CW, McNally E. Reporting Genetic Markers and the Social Determinants of Health in Clinical Cardiovascular Research—It Is Time to Recalibrate the Use of Race. JAMA Cardiol. 2021;6(4):400. doi:10.1001/jamacardio.2020.6576

Vyas DA, Eisenstein LG, Jones DS. Hidden in Plain Sight - Reconsidering the use of Race Correction in Clinical Algorithms. NEJM. 2020 Ayg 27l 383(9):875-882. doi:10.1056/NEJMms2004740

https://www.edweek.org/leadership/classroom-discussions-on-race-hear-what-5-black-students-say-they-need/2020/07

https://towardsdatascience.com/statistics-eugenics-and-me-29eaf43efac7