Our classes are in person.

The syllabus can be found on my <u>website</u>; check this syllabus every week for updates to reading assignments!

Nathan Cheng's Office Hours: 2pm-3pm EST on Tuesday in the Science Center 316.06 except for 3/12

Susan Murphy's Office Hours: 5pm-6pm EST on Thursday in 2.335 SEC except for 3/14

## Group assignments:

https://docs.google.com/spreadsheets/d/1WzLZqVHj0u39NvYHKutnOzDAOqiATOQUaqmLxTks90U/edit?usp=sharing

Causal Inference concerns the very difficult, challenging problem of addressing questions such as, "Would vaccinating children 16 and younger against COVID 19 lead to fewer deaths among public school teachers?" and "Would providing Harvard students access to a mobile health application designed to help them manage school stress, lead to improved school performance?" This class will include 4 modules. The first module introduces the nuanced world of causal inference along with a fundamental tool: the language of potential outcomes. The second module covers randomized experiments and how data from randomized experiments can be used to make causal statements. The third module introduces the rather tricky problem of using observational (non-randomized) data to attempt to make causal statements. The final module introduces a new and challenging area in which the goal is to make causal inference about the effect of sequences of treatments.

**Prerequisites**: Stat110, Stat111, Stat139. Probability and statistical inference are needed extensively, and statistical linear models are needed often.