# Class 20 DATA1220-55, Fall 2024

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### Hypothesis Testing Framework

- $ightharpoonup \mathbf{H}_0$ : The "Null" Hypothesis
  - ▶ Represents a position of skepticism, *nothing* is happening here
  - "There is not an association between process A and B"

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  - Represents a position of skepticism, *nothing* is happening here
  - There is *not* an association between process A and B"
- ► H<sub>A</sub>: The "Alternative" Hypothesis
  - $\blacktriangleright$  The complement of  $H_0$ , something is happening here
  - ► "There *is* an association between process A and B"

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- If the probability is sufficiently low, we reject  $\mathbf{H}_0$  and accept  $\mathbf{H}_\mathbf{A}$