**Module 1 lingo sheet**

(What’s this all about? Here are some common terms that you should commit to memory. Memorizing them will make it easier for you to absorb and work with the concepts in this class, because you won’t have to spend mental energy remembering what the language is referring to.)

1. Terms from the potential outcomes framework
   * **Lingo 1**: In the potential outcomes framework, what are the names for the symbols and
   * **Answer:** Decision or treatment, realized outcome, potential outcome with treatment, potential outcome without treatment
   * **Lingo 2:** In the potential outcome framework, what is the causal effect of a decision?
   * **Answer**: , or the difference in potential outcomes
   * **Lingo 3:** What is the fundamental problem of causal inference?
   * **Answer:** We only observe one of and , not both
2. Prediction questions vs. causal questions
   * **Lingo 4**: What’s the difference between a prediction question and a causal question?
   * **Answer**: for a prediction question, we only need one potential outcome. For a causal question, we need both.
3. Confounding
   * **Lingo** **5**: What’s a confound?
   * **Answer**: A factor which is correlated with decision or treatment, correlated with outcome, and not caused by decision/ treatment
   * **Lingo 6**: What’s Simpson’s paradox?
   * **Answer**: A statistical phenomenon in which a relationship that appears in several groups of data disappears or reverses when the groups are combined.
   * **Lingo 7**: What’s an intermediate outcome?
   * **Answer**: A factor which is correlated with decision or treatment, correlated with outcome, and caused by decision/ treatment. (note difference vs. confound)