

ISS 305:002 Fall 2017
Study Guide for Exam 4

Below is a list of terms/concepts that you should be familiar with for Exam 4 on Thursday 12/7/2017. **This list is not exhaustive.** You should be familiar with your lecture notes and the assigned readings. Some tips: Study hard – go over the notes carefully (most of the questions will be drawn from lecture material) and be familiar with all readings. Study smart – know key concepts. Get a good night's sleep before the exam.

Intro to ISS 305 (1 Questions on the Exam)

- Candide, Skeptic, skeptic

Empirical Statements and Arguments (1 Questions on the Exam)

- What makes a statement empirical?

Real vs. Illusory Effects (1 Question on the Exam)

- What does statistical significance mean? What's an effect size?

Establishing Causal Relationships (35 Questions on the Exam)

- When is there a causal relationship?
- Correlational vs. experimental research
- Why does correlation not imply causation?
- Correlation \neq Causation examples – What necessary conditions for a causal relationship are not met?
- More complex causal possibilities
 - Reciprocal relationships / Moderation / Multiple Causation
- Key components of experiments (i.e., random assignment, etc.)
- IV, DV, CV, and extraneous variables – can you determine each from reading about a study?
- Benefits and Limitations of experiments
- Internal and External validity
- Threats to Internal (you should know examples for each threat)
- External validity
 - Population – statistical and practical
 - Situational – setting, operationalization
- Other common threats to experiments
 - Treatment confounds / Demand characteristics / Experimenter effects (e.g., self-fulfilling prophecy; double blind experiments) / Weak or invalid manipulations
- What should you look for when the experiment produces null results?
- Research Report Summaries – On Exam 4 you will read four short descriptions of a “research report” and answer questions (14 in total) based on each report.

Evaluating Non-Experimental Evidence (12 Questions on the Exam)

- Random Sampling vs. Random Assignment
- Why is probability sampling important in survey research?
- Response Rate / Solutions for high non-response rates / Survey Sample Size
- Confidence Interval / Margin of Error
- Wording Problems on Surveys (e.g., Anchoring, Jargon, Double-Barreled Questions, Loaded/Leading Questions, Double-Negatives, Negative Wording)
- Question order problems – contrast and assimilation effects, and context effect