## Social Comps Example Questions

## Stats, Methods Philosophy of Science:

- -Write the following essay: Assume all contemporary social psychological researchers adhered to the principles of open science. Some have argued that open science would address issues related to the replication crisis. Make special note of the root causes of the replication crisis (i.e., the few most prominently cited causes), and discuss to what extent these issues would be mitigated by adhering to open science principles. Make sure to defend and justify your answer.
- -Explain the role of theory, auxiliary assumptions, and empirical hypotheses in applied research. Using these concepts, explain what distinguishes good applied research from bad applied research, and give an example of each.
- -Some argue that null hypothesis significance testing is a bad idea in science, but can be useful elsewhere. Explain how questions in scientific and non-scientific areas are different, and explain how NHST could answer questions of interest in non-scientific, but not in scientific, areas.
- -Identify and briefly describe three techniques (1 paragraph or so each) for the evaluation of hypotheses. Extensively compare and contrast the relative costs and benefits of these three techniques. Make sure you include what you gain and lose with each technique
- -Critique Bayesianism as a philosophy of science. Explain arguments in favor and against Bayesianism.

## **Content Questions:**

- -Choose two proximate theories that explain a gender role norm related behavior. Design an experiment to competitively test them against one another.
- -In much research, the theory of reasoned action does a good job of predicting behavior, but interventions based on it tend not to work. Briefly review the literature suggesting that theory of reasoned action-based interventions do not work, and discuss whether this is a problem for the theory itself, or a problem with how the theory has been applied?
- -Briefly describe 3 studies that have documented three different effects of jury instructions on juror behavior, and identify a principle or theory (either from the literature or your own creation) that unifies them.

Read the article "Evolving Cooperation" by Nowak (2012). Review the paper and critique Nowak's claims. Next, design an experimental study aimed at supporting or falsifying one of Nowak's claims. Again, provide a brief overview and a complete method section, including a justification of sample size, and expected analyses & results.

- -Describe an important unanswered research question in the area of morality. Write up three original experimental studies (either a series of three programmatic studies or three standalone studies) aimed at advancing our knowledge of the question. For each, write up a brief overview and a complete method section, including a justification of sample size, and expected analyses & results.
- -Many cross-cultural "theories" are really restatements of findings of a difference on something across cultures. Explain the characteristics that a good cross-cultural theory ought to have. Are there any cross-cultural theories that are "good" theories? If so, give an example. If not, defend why not.