“An approximate answer to the right problem is worth a good deal more than an exact answer to an approximate problem.” —John Tukey
Learning Outcomes

By the end of section today, you should:

- Be able to identify which formula and test to use for various types of data and questions
- Feel comfortable with the main ideas from key readings
- Feel confident going into the final exam!
Name

What is one thing you have learned in this class?
Final Exam: March 23, 2018, 8am-10:59am
Price Center East Ballroom
Bring:
  - 3”×5” notecard with whatever notes and formulas you want written on it. You can write on both sides of the card.
  - Pen/pencil
  - Calculator **NO PHONES**
Format/Content:
  - Readings
  - Data and Data Interpretation (difference in means, difference in proportions, 95% confidence interval of a mean and proportion, chi square test, regression)
  - Study math and data interpretation portions of HW 2-4
Need Help? Sign up for office hours via Google Hangout (see link in email)
Study Tips

- Make your own notecards! The process of going through your notes to pull out important information will be very helpful.
- Start by making a practice notecard (maybe of a bigger size) and try doing the practice questions, homework problems, examples from class, etc. with just the information on your card.
- Add to / subtract from the card as needed and keep practicing until you can solve the problems with just a 3x5 card.
- Condense your notes on the readings to 1-3 sentences / bullet points
- Write practice questions with a partner and trade
What formula do I use?

- Get together in groups of 2-3
- Using the handout, read each question carefully. Write down the formula and null hypothesis (as appropriate) for each question.
- Do not solve the problems.
Let’s say that you did all the calculations for these problems and got the following answers. Write down your interpretation of each result.

1. Margin of Error = 0.632
2. Confidence Interval: (0.13, 0.17) or (13%, 17%)
3. Confidence Interval: (0.2, 0.32) or (20%, 32%)
4. Regression Output:
   - Intercept: 12.8; Confidence Interval (-13, 28.6)
   - Coefficient for Campaign Spending: 0.03; Confidence Interval: (0.0285, 0.0315)
   - R-Square: 0.273
5. Margin of Error: 0.002 (0.2%)
6. Confidence Interval: (2775.47, 3224.53)
7. Chi Square Statistic=47.14, Degrees of Freedom=3 (threshold=7.81)
Readings Review

- Wolfinger and Rosenstone (1980), Chapter 2, *Who Votes?*, Tables 2.4, 2.5, 2.6
- Dreze and Sen (1989), “China and India” from *Hunger and Public Action*
Fowler (2008), The Colbert Bump

- IV:
- DV:
- Method/Research Design:
- Key Finding:
Fowler (2008), The Colbert Bump

- IV: Went on the show/didn’t go on the show
- DV: Campaign contributions immediately after appearing on the show; Votes won in the election
- Method/Research Design: Matching
  - Try to rule out confounds by matching candidates who appeared on the show to those who did not appear on the show on confounds (party ID, incumbency, donations, etc.)
- Key Finding: Democrats who appeared on the show received a bump in campaign contributions compared to those who didn’t appear on the show. Republicans did not. No significant effect on votes.
Wolfinger and Rosenstone (1980)

- Great example of trying to deal with confounds using very simple methods
- What are the key variables of interest? What’s the confound?
- How do the authors deal with the confounds?
Great example of using multivariate regression to hold confounds constant

What was the research question?

What is the IV? DV? Possible confounds?

Key finding?
Is this article an example of quantitative or qualitative research?

What is the IV? DV?

What is their research design — how do the authors try to answer their question?
Thank you for a great quarter! Good luck on the exam!