ESM 269: Survey Design & Environmental Public Opinion

Spring 2026 | Wednesdays 5:00–6:15pm | Bren Hall 1424 | Office hours by appointment

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Course Overview

The primary objective of this course is to learn best practices in survey DESIGN (not analysis or administration), which overlaps with research design more broadly and applies to group project work, academic research, and future careers. Every student will workshop a survey instrument over the quarter.

Learning Objectives

- Recognize when surveys or polls are the appropriate tool for data collection
- Distinguish good from bad survey data and procedures
- Understand different question types and scales and when to use them
- Know the step-wise process for developing a questionnaire: literature review, question development, pre-testing, expert review, recruitment, and analysis prep

This is not a course on R script analysis. Resources for that are widely available online and are more useful once you have data in hand.

Course Format

Before each class, complete the week's Canvas readings/activities: watch a mini-lecture, read news articles or watch a video, find an article to share..

During class, we discuss prompts and activities in small breakout groups. I will occasionally cut lecture time to allow in-person workshopping of your survey instruments.

Assessment

All students will complete the same three assignments and final submission. Students who are working on an active survey will apply the assignments directly to their own project. Students without an active survey will be placed into small groups in Week 1 to develop a survey instrument for a hypothetical client scenario assigned by the instructor. Both tracks follow the same sequence and submission format.

- Assignment 1 (10 points) — Survey Brief: A one-page document justifying the use of a survey for your research question. Your brief should include: (1) a clear problem statement explaining what you want to learn and why a survey is the right method; (2) a rationale addressing who your target population is and why their opinions or behaviors are measurable via survey; and (3) a short paragraph addressing at least two alternative methods you considered (e.g., interviews, secondary data) and why you ruled them out. Students in the hypothetical client track will receive a client scenario in Week 1 and should frame their brief around that scenario. Aim for 400–600 words. Plain prose is fine; no special formatting required.
- Assignment 2 (20 points) — V1 Instrument: Your first draft questionnaire. Begin with a brief (3–5 sentence) introduction explaining the purpose of the survey as a respondent would see it. Then include: (1) your core thematic areas as section headers with 2–4 draft questions per section; (2) at least one citation to a validated instrument or peer-reviewed study that informed your question wording or scale selection; and (3) a short methods note (3–5 sentences) describing your intended sample and how you plan to recruit respondents for Version 2. At this stage, questions do not need to be finalized—focus on coverage and logical flow. Submit as a Google or Word doc.
- Assignment 3 (20 points) — V2 Instrument: A refined version of your questionnaire based on real pre-testing with at least 3 respondents (friends, housemates, classmates, or strangers). Your

submission should include: (1) the full revised questionnaire; (2) a 1-page testing memo summarizing who you tested with, what you asked them to think aloud about, and what you changed as a result; and (3) at least two specific examples of question revisions with a sentence explaining why each change was made. This version will be used in the in-class peer editing session—bring a printed or digital copy. Document what you did.

- Final (10 points) — Revision Plan: A structured memo (approximately 1–2 pages) summarizing the decisions you made in developing your survey from brief to final instrument. Address: (1) what changed between V1 and V2 and why; (2) at least one decision you are still uncertain about (e.g., a question that could be worded multiple ways) and how you resolved it or what you would do next with more time; and (3) if your survey were deployed, what is one methodological limitation you would flag for readers of the data? This is a reflective document, not a polished report—honest thinking is more valuable than polish here.
- In class participation (40 points) – Please attend weekly and demonstrate active participation (either through small group engagement or larger discussions).

Weekly Schedule & Readings

Readings are subject to change. Always check Canvas.

Week 1 (April 1) Setting up for a successful course

REVIEW Syllabus & Assignments

COMPLETE a fun survey. As the taker, what did you like/not like and why?

In class: Review syllabus, complete assignment plans, practice writing survey questions.

Week 2 (April 8) *Why Surveys? Polling, Bias & Error*

Objectives: weigh pros and cons of polls; understand how polls missed 2016, 2020, and 2024 despite methodological improvements; identify sources of systematic polling error and bias, especially nonresponse and sampling issues.

READ Bialik, C. & Enten, Harry [The Polls Missed Trump. We Asked Pollsters Why.] FiveThirtyEight. November 9, 2016.

LISTEN The Daily Podcast [About those Polls...]. November 10, 2020 (35 minutes)

READ Vox [The Guy Who Got the Midterms Right…] November 27, 2022.

READ G. Elliott Morris. (Nov. 8, 2024). 2024 Polls Were Accurate but Still Underestimated Trump. ABC News / 538. (Accessible explainer on the distinction between statistical error and directional bias.)

LISTEN Domenico Montanaro (Nov. 13, 2024). The Polls Underestimated Trump's Support—Again. NPR All Things Considered. (synthesis of why polling errors have persisted across three election cycles.)

Weekly Reading Prompts

Week 3 (April 15) *Questionnaire Development: Goals & Hypotheses*

Objectives: explore different survey goals; practice Phase 1 questionnaire development.

READ Questionnaire design - Pew Research Center Methods | Pew Research Center

READ Writing Survey Questions | Pew Research Center

READ Rattray & Jones, Questionnaire Design and Development (canvas link)

READ Historic Shift in American's Happiness Amid Pandemic | NORC (see Weekly Reading Prompts)

Additional resources (not required):

NORC COVID Response Tracking Study: Survey 1

2nd COVID wave NORC assessment: Pandemic's Economic Impacts and Floyd's Death Both Weighing on Americans' Well-Being

3rd COVID wave NORC assessment: Rates of Mental Health Symptoms Unchanged since Early Summer, Health Disparities Persist

2021 General Social Survey Codebook

Week 4 (April 22) *Reading & Critiquing Surveys*

Reminder Assignment 1 due May 1.

READ Pew Research piece on Republican view on climate change

READ Californians and the environment(Public Policy Institute of California)

See Weekly Reading Prompts

Week 5 (April 29) *Measures, Scales & Bias*

READ Kahan et al. The Polarizing Impact of Science Literacy & Numeracy on Perceived Climate Change Risks. Nature Climate Change. (Read the supplementary methodology carefully.)

READ guest post on public opinion and climate change.

Week 6 (May 6) *Reliability, Validity, and Good Questions and Questionnaires*

READ Patten (2017). Questionnaire Research. (canvas)

READ Krosnick & Presser (2010) Question & Questionnaire Design. (canvas)

READ Lietz (2010) Research Into Questionnaire Design. (canvas)

READ Reliability and Validity of Measurement: Brief Overview. (canvas)

READ The Good Data Project: Why Survey Response Options Must Be Mutually Exclusive and Collectively Exhaustive.

Week 7 (May 13) *Focus Groups & Qualitative Methods*

Reminder Assignment 2 due May 15.

READ Krueger (2002). Designing and Conducting Focus Group Interviews. (canvas)

WATCH USC Political Climate Focus Group.

READ Creating an Interview Guide.

READ Taylor-Powell & Renner (2003). Analyzing Qualitative Data. (canvas)

READ Nassar-McMillan & Borders (2002). The Use of Focus Groups in Survey Item Development.

In class: Mock focus group

Week 8 (May 20) *Rewriting Questions Again, and Again, and Again*

PREP 2-3 of your own questions that need peer/group feedback

Week 9 (May 27) *Rewriting Questions Again, and Again, and Again*

Reminder Assignment 3 due May 29.

PREP 2-3 of your own questions that need peer/group feedback

Week 10 (June 3) *Telling a Story About Survey Results*

Reminder Assignment 4 due June 10.

No required readings. Come ready for a workshop on writing up survey results.

Course Policies

Intellectual Property

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Accommodations

Students requiring academic accommodations should contact the Disabled Students Program.