ESM: 269

Survey Design and Environmental Public Opinion

Bren School of Environmental Science and Management

Instructor: Aaron Sparks

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Lecture: Tuesday and Thursday from 1:00-2:15

Office: TBD

Office hours: Wednesdays 3:00-4:30 and by appointment

Course Description
This is a course designed to teach students the basics of survey design and a review of recent literature on environmental public opinion. Students will learn how to conduct research by doing hands-on original research. Students will also learn how to generate compelling research questions that lead to interesting scholarship. To get an understanding of what makes a good research question and how to design research to answer it, students will read selected journal articles that deal with public opinion surrounding environmental issues from climate change to clean energy policy. The last section of the course will develop the statistical tools required for basic quantitative analysis and hypothesis testing.

Course outcomes
1. Develop interesting and applicable research questions
2. Design survey research to answer a question
3. Run basic statistical analysis to test hypotheses
4. Formal written report and presentation of findings

Textbook:
Rea and Parker *Designing and Conducting Survey Research* (4th edition)

Software:
R, or STATA, or SPSS (data analysis software)

Course Policies
Students are expected and required to actively participate in class discussions. Attendance is mandatory and will be recorded. Assigned readings should be completed in advance of lecture and students will come prepared to discuss the concepts. Use of cellular phones or other electronic devices, unless otherwise stated, is highly frowned upon and may result in the deduction of participation points.

Assignments are submitted online via the course website as a Word document by the time and date on the syllabus. Late assignments will be deducted half a letter grade per day. Word documents are required because they allow for feedback and comments to be made using the track changes function. Please use 1 inch margins, 12 pt. font, and single-spacing.

Academic honesty is taken very seriously at UCSB. Cases of academic dis-honesty will be subject to the campus judicial committee.

Course Sections and schedule

Course Section	Class	Date	Topic
Survey Principles	1.1	April 4	Research questions, hypothesis testing
Survey Principles	1.2	April 6	Measurement
Developing Measures	2.1	April 11	Construct mapping
NO CLASS	2.2	April 13	
Developing Measures	3.1	April 18	Question wording, response types, survey format
Developing Measures	3.2	April 20	Question wording, response types, survey format
Sampling	4.1	April 25	Populations, samples
Sampling	4.2	April 27	Techniques, power analysis
Analysis & Writing	5.1	May 2	Quantitative analysis
Analysis & Writing	5.2	May 4	Formal writing and presentations
Presentations	6.1	May 9	Group Presentatiosn

Reading Assignments:

1.1 April 4 – Survey Principles

* Rea and Parker Ch. 1; skim Ch. 7

* Article: Riley and McCright (2016) The Political Divide on Climate Change

1.2 April 6 – Survey Principles

* Wilson Ch. 2

* Article: Hamilton (2017) On Renewable Energy and Climate, Trump Voters Stand Apart

2.1 April 11 – Developing Measures

* Wilson Ch. 3

* Article: Kahan et al (2012) The Polarizing impact of science literacy and numeracy on perceived climate change risks

2.2 April 13 – No Class

3.1 April 18 – Developing Measures

* Dillman Ch. 4 & 7

* Rea & Parker Ch. 2 & 3

* Article: Dunlap et al (2000) New Trends in Measuring Environmental Attitudes: Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale

3.2 April 20 – Developing Measures

* Dillman Ch. 4 & 7

* Rea & Parker Ch. 2 & 3

* Article: Stokes (2015) Electoral Backlash Against Climate Policy: A Natural Experiment on Retrospective Voting and Local Resistance to Public Policy

4.1 April 25 – Sampling

* Rea & Parker Ch. 6 & 7

* Article:

4.2 Sampling

* Rea & Parker Ch. 9

* Article:

5.1 May 2 – Analysis and Writing

* Rea & Parker Ch. 7

* Article:

5.2 May 4 – April 27 – Analysis and Writing

* Rea and Parker Ch. 13

* Article:

6.1 May 9 – Group Presentations

Assignment Deadlines & Grading

Date	Time	Assignment	Percent of grade
April 10	Midnight	Topic	5%
April 18	In-class	Presentation 1	10%
April 24	Midnight	Preliminary Report	15%
May 9	In-class	Final Presentation	25%
May 7	Noon	Final Report	25%
Daily	In-class	Participation	20%

Participation:
For each class, we will read, in addition to the textbook, one academic research article in environmental public opinion. For each article, one student will be the lead discussant. In this role, the student will lead a critical discussion of the article. Questions to be answered by this discussion are: What is the research question? What methods are used to answer this question? What is the sample? How are the most important variables operationalized? How could this research be improved? The discussant is expected to prepare a short summary of the article and several discussion questions to engage the class. All students are expected to have carefully read the article and be prepared for an in-depth discussion.

Research Project:
All the assignments are designed to build upon each other. Step-by-step you will be conducting original research to help you in your group project. By the end of the term, you should have a final report that is presentable to an organization.

1. **Topic of interest: Must be approved by the instructor. Topic should be something you are** interested in studying and be relevant to your group project.
    a. Due April 10
    b. Present in class on April 11
2. **Preliminary Report**
    a. Literature Review: short review of literature that makes a case for why your topic is interesting, and sets up your research question. Hypotheses should stem directly from the literature.
        i. Annotated bibliography for each source

ii. Derive a research question that that is currently un-answered and relevant to your group project
iii. Why is it important to study?
iv. How does each article address the question you are interested in?
v. Due April 24

b. Pre-Analysis Plan
i. What is your dependent variable?
ii. What are you independent variables?
iii. How will you test your hypothesis?

3. Final Report

a. Gather data
b. Run appropriate analyses
c. Write up results of analysis
d. Complete report on research findings
e. Incorporate Literature review and research design
f. Due at noon May 7

4. Professional Presentation

a. In class on May 9