Survey Research and Design - Spring 2008
Department of Educational Policy and Leadership Studies
Thursdays, 4:30-7:00, N221 Lindquist

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Appointments: Please schedule with me via email, phone, or in person after class

Purpose and Objectives

Surveys are ubiquitous in today’s society. Almost weekly, we are asked to complete a survey, and the popular press continually reports results from surveys. To what extent are these surveys and the reporting of survey results flawed because of errors in survey methods? If you want to become a player in the survey game, how can you design and implement a survey that has the least amount of error? This course seeks to answer these questions.

The field of survey methodology draws on theories and practices developed in several academic disciplines, including mathematics, statistics, psychology, sociology, computer science, and economics. To become an accomplished survey research professional, one must acquire a mastery of research literatures as well as experience in designing, conducting, and analyzing surveys. This course introduces students to a set of principles of survey design that are the basis of standard practices in the field. The course exposes the student to research literatures that use both observational and experimental methods to test key hypotheses about the nature of human behavior that affect the quality of survey data.

We use the concept of total survey error as a framework to discuss coverage properties of sampling frames, alternative sample designs and their impacts on standard errors of survey statistics, alternative modes of data collection, field administration operations, the role of the survey interviewer, impacts of nonresponse on survey statistics, the effect of question structure, wording and context on respondent behavior, models of measurement error, postsurvey processing, and estimation in surveys. The course is intended as an introduction to the field, taught at a graduate level.

In general, the major objectives of this course are to introduce students to the skills and resources needed to design and conduct a survey. The skills include identifying and developing specific survey objectives; designing survey studies, sampling respondents, developing reliable and valid self-administered questionnaires, and administering surveys. Specifically, students will learn via class readings, presentations, group projects, and practical experience:

1. How to design surveys
2. How to sample in surveys
3. How to develop, evaluate, and ask survey questions
4. How to measure survey reliability and validity
5. How to conduct self-administered mail surveys
6. How to decrease survey nonresponse
7. How to reduce error in survey research
8. How to do post-collection survey data processing
9. How to conduct survey research with integrity
**Valuing Diversity**

It is my belief that the diversity you bring to this class is a valuable resource because varied backgrounds and opinions enhance discussion. Research suggests that learning is improved by exposure to diversity in the classroom. It is my intent to present materials and activities that utilize and are respectful of diversity: gender, sexual orientation, disability, age, socio-economic status, ethnicity, race, culture, perspective, and other background characteristics. Your suggestions about how to improve the value of diversity in this course are encouraged and appreciated. Please let me know of ways to improve the effectiveness of the course for you or for other students or student groups.

I also understand that you may celebrate religious holidays that conflict with the class schedule and may have a disability that requires special accommodations. You will not be penalized because of observances of your religious beliefs. Whenever possible, you will be given reasonable time to make up any academic assignment that is missed due to participation in a religious observance. It is your responsibility to inform me as soon as possible of any intended absences for religious observances. If you have a documented disability that is relevant to the work that you will do in this course, please contact me as soon as possible so that appropriate accommodations can be made. Student Disability Services (3101 Burge Hall, 335-1426, [http://www.uiowa.edu/~sds/](http://www.uiowa.edu/~sds/)) also is available for consultation with students with disabilities.

**Academic Honesty**

You are expected to abide by the code of academic integrity throughout this course. I encourage you to collaborate with others as you think about, outline, and proofread your work. However, oral and written work must be your own, unless explicitly noted in the syllabus. You must acknowledge any scholars or classmates whose work you quote or refer to in any way. According to the College of Education’s Policy on Student Academic Misconduct, examples of plagiarizing or cheating include: presenting someone else’s written or spoken words or ideas as one’s own; using direct quotes with no quotation marks, paraphrasing without crediting the source or in some other way suggesting someone else’s work is one’s own; copying all or part of someone else’s paper; and knowingly allowing another student to copy one’s work or submit one’s work as his or her own. In addition, students must not turn in any written work for which they have already received credit in another course. Any sort of academic misconduct is a very serious offense, and may result in a grade reduction and/or other serious penalties. For more information see the University’s [Policy on Student Academic Misconduct](http://www.uiowa.edu/~coedean/policies/student_ac_misconduct/index.htm).

**Concerns**

If you have any suggestions or concerns, either positive or negative, about this class, please do not hesitate to see me during my office hours or make an appointment. It is my hope that I will be able to resolve the issue. In the event that I am unsuccessful, College policy suggests that you contact the EPLS department executive officer, Larry Bartlett (N491 Lindquist Center, 335-5307 or 335-5303). He will be able to help you and give further guidance. You also may wish to refer to the college policy on student complaints and dispute resolution. A copy of Student Complaint Procedures is available online at [http://www.uiowa.edu/~coedean/policies/student_complaint/index.htm](http://www.uiowa.edu/~coedean/policies/student_complaint/index.htm).

**Dropping the Course**

This course is given by the College of Education. This means that class policies on matters such as requirements, grading, and sanctions for academic dishonesty are governed by the College of Education. If you wish to add or drop this course after the official deadline, you must receive the
approval of the Dean of the College of Education. Prior to dropping the course, I encourage you to come speak with me. I will do whatever I can to find a solution that will allow you to remain in the course and continue your progress toward degree completion. Additional information on dropping the course and details of the University policy of cross enrollments may be found at http://www.uiowa.edu/~provost/deos/crossenroll.doc.

Textbooks and Additional Resources

**Required** (available at the bookstore, addall.com, or amazon.com; also on reserve at Main Library)

**Other Readings – Required and Supplemental**
In addition to the required texts listed above, you will read additional book chapters and articles. All have been placed on electronic reserve (noted with an * in course schedule) on ICON at http://icon.uiowa.edu/index.shtml. I have provided both required and supplemental readings. You DO NOT have to read the supplemental readings, but they are there for those who wish to read more about a particular topic.

**Lecture Presentations**
I will post all lecture slides on the ICON course website (http://icon.uiowa.edu/index.shtml) by noon on the day of class. You may find it useful to bring a printed copy of them to class.

**Additional resources** (on reserve at Main Library; required sections on ICON unless otherwise noted)


*Select journals that publish research on survey methods:*

- Annual Review of Sociology
- Educational and Psychological Measurement
- Journal of Applied Social Psychology
- Journal of Official Statistics
- Public Opinion Quarterly
- Social Science Computer Review
- Sociological Methods & Research
- Research in Higher Education

**Evaluation**

The course will employ a variety of approaches of instruction and will rely heavily on student participation and discussion. Course requirements include both written and oral assignments. You will be evaluated on the following items:

1. **Class participation (10%)**—This course is conducted as a lecture/seminar class; therefore, you are expected to ATTEND and to be INVOLVED actively in the class. I expect you to participate in class discussions in a manner that demonstrates thoughtful reflection and understanding of the subject matter, as well as respect for your colleagues in the class. To do so, you must complete the readings that are assigned for each session of the class prior to attending that class session. Active participation also means that each participant is willing to listen to other points of view and to change his or her mind. This means you must listen to others, respond thoughtfully, demonstrate an understanding of the issues, and show a willingness to learn and grow.

2. **Application exercises (30%)**—Five topic areas of the course will have a short exercise (approximately double-spaced 4-5 pages not including references and any appendices) that you will complete in order to further integrate the knowledge presented in lectures and reading. It is essential that you provide evidence that you understand the material of the course when doing these exercises by incorporating and citing your readings. Please rely on more than our primary texts. Below are the topics and due dates. Each exercise is worth 10% of your final grade. I will provide detailed information regarding each assignment in class two weeks prior to the day they are due.

   - February 21 - Coverage error
   - April 17 - Writing questions
   - May 1 - Evaluating questions

   You may not consult with others when doing these exercises. Keep in mind that these exercises are one of the primary ways I will be judging your individual effort in the course.

3. **Take-home midterm exam (30%)**—The purpose of the essay take-home exam will be to apply and integrate all of the information covered prior to spring break. It is easy to labor over take-home exams for days and even weeks. To avoid this, I want to set realistic expectations for the exam. If you were to take the exam in class, you would have approximately two and a half hours. While I hope you spend a little more time on your exam than that, I believe you should take no more than four or five hours to complete it. I will evaluate your exam with this in mind. For those who need a page number guideline, I expect that you will write approximately ten double-spaced pages. You may use your notes and assigned readings to do the assignments, but you may not consult with other people. As with your application exercises, please refer to and cite our readings when doing
these exercises. I will distribute the exam on March 13, and it will be due at the beginning of class on April 3.

4. **Group project (30%)**—Early in the semester, we will divide the class into groups of two or three according to research interests. You will work together on a survey research project that addresses a particular problem and answers a research question or research questions. As a group, you will develop a short survey and write a paper (no longer than twenty-five, double-spaced pages) that explains the research problem, lists the research question(s) you hope to answer, delineates your sample design, describes your survey (including ways you plan to evaluate it in prior to data collection), and outlines your implementation plan. You will not collect data for this project. You will present your project to the class on May 8, and I will award a portion of your group project grade based on your presentation. Additional information on the group project will be provided in class.

**General considerations:**

- You must submit all written assignments in the “dropbox” on the ICON course website prior to the class meeting when they are due. Please do not email them to me or submit paper copies, as I tend to lose things in the electronic and paper shuffle.
- Note: All assignments should be turned in on time unless other arrangements are made well in advance of deadlines. I do not accept late assignments.
- All formal written work should adhere to APA style as described in the Publication Manual of the American Psychological Association (5th Ed.).

**Grading**

Your final grade for this class will be based upon the following:

- Participation…………………..10 points
- Application Exercises…………..30 points
- Take-home Midterm……………30 points
- Group Project………………… 30 points

Your final grade will be calculated using the following scale:

- 92—100 points....................A
- 90—91 points.....................A-
- 88—89 points.....................B+
- 82—87 points.....................B
- 80—81 points.....................B-
- 78—79 points.....................C+
- 72—77 points.....................C
- 70—71 points.....................C-

I strongly discourage incomplete grades. I have seen numerous cases where students become overwhelmed trying to wrap-up incomplete grades. Given the nature of the group project, this complicates the assignment of incomplete grades. However, if it is absolutely necessary for you to take an incomplete, you must arrange it with me prior to April 17th.

**Instructor Responsibilities**

I have high expectations not only for you but also for myself. You should expect that I will:

- Be prepared for class, read and return your work in a timely manner, and be interested and engaged in your papers;
- remember that each of you brings a different background, experience, and perspective to this course;
- learn from you;
• meet with you individually or in groups upon request and be available in person, by telephone, and by e-mail;
• and work hard, have fun, and empower students to develop greater understandings of the topics that are covered in this course.

**Course Schedule**

I organized the course schedule around the main concepts of survey methodology. We proceed generally, considering concepts of error in survey research, sampling, nonresponse, and different modes of survey data collection. We then examine, in detail, writing and evaluating questions and constructing the survey instrument. We conclude with a discussion of post-collection data processing and integrity in survey research.

* Schedule key: * - can be accessed on ICON course website [http://icon.uiowa.edu/index.shtml](http://icon.uiowa.edu/index.shtml)
  + - available on the websites provided
  
  
  *Dillman* – Dillman text

**Week 1, January 24 - Introductions, expectations, and setting the stage**

**Week 2, January 31 - Introduction to survey methodology and the tailored design method**

* Required readings:
  
  *Groves et al.* - Chapters 1 & 2 (p. 1-62)
  *Dillman* - Chapter 1 (p. 3-31)
  

* Supplemental reading:
  

**Week 3, February 7 - Coverage error and introduction to sampling error**

* Required readings:
  
  *Groves et al.* - Chapter 3 (p. 67-91)
  *Dillman* – Chapter 5 (p. 194-216)
  

**Week 4, February 14 – Reading day – No class**
Week 5, February 21 – Sample design and sampling error

Required readings:
- Groves et al. - Chapter 4 (p. 93-132)

Supplemental reading:

Assignment Due: Application Exercise #1 (Coverage error)

Week 6, February 28 – Modes of collection and implementation

Required readings:
- Groves et al. - Chapter 5 (p. 137-165)
- Dillman - Chapter 4 (p. 149-193)

Week 7, March 6 – Mixed mode surveys and web surveys

Required readings:
- Dillman - Chapters 6, 11, and Appendix* (p. 217-244, 352-412, 447-497)

Select ONE of the following:

Week 8, March 13 – Response rates and nonresponse error

Required readings:
- Groves et al. - Chapter 6 (p. 169-196)
Supplemental readings:

Week 9, March 20 – Spring break

Week 10, March 27 – AERA – Use time to work on group projects

Week 11, April 3 – Writing questions
Required readings:
Groves et al. - Chapter 7 (p. 201-238)
Dillman – Chapter 2 (p. 32-79)

Supplemental readings:

Week 12, April 10 – Evaluating survey questions
Required readings:
Groves et al. - Chapter 8 (241-266)

Supplemental reading:

Week 13, April 17 – Constructing the questionnaire
Required readings:
Dillman – Chapter 3 (p. 79-148)
Assignment Due: Application Exercise #2 (Writing questions)

Week 14, April 24 – Survey interviewing, alternative questionnaire delivery, and ethical issues
Required readings:
  Groves et al. - Chapter 9 & 11 (p. 269-298, 345-373)
  Dillman – Chapter 7 (245-263)
+ AAPOR – Questions about IRBs 
  (http://www.aapor.org/default.asp?page=survey_methods/IRBS_faq)
Supplemental reading:

Week 15, May 1 - Post-collection processing of survey data
Required readings:
  Groves et al. - Chapter 10 (p. 303-340)
Supplemental readings:
Assignment Due: Application Exercise #3 (Evaluating survey questions)

Week 16, May 8 - Group presentations
Assignment due: Group projects
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<tr>
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<th>Week</th>
<th>Topic</th>
<th>Required readings</th>
<th>Supplemental readings</th>
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<td>1/24</td>
<td>1</td>
<td>Introductions &amp; expectations</td>
<td>Groves et al. – Ch. 1 &amp; 2&lt;br&gt;Dillman – Ch. 1&lt;br&gt;*Miller (1995)&lt;br&gt;*Squire (1988)</td>
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<td>1/31</td>
<td>2</td>
<td>Introduction to survey methodology &amp; the tailored design method</td>
<td>Groves et al. – Ch. 3&lt;br&gt;Dillman – Ch. 5&lt;br&gt;*Kaple et al. (1998)&lt;br&gt;*Keeter (2006)</td>
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<td>Groves (1989)</td>
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<td>2/7</td>
<td>3</td>
<td>Coverage error &amp; introduction to sampling error</td>
<td>Groves et al. – Ch. 3&lt;br&gt;Dillman – Ch. 5&lt;br&gt;*Kaple et al. (1998)&lt;br&gt;*Keeter (2006)</td>
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<td>2/14</td>
<td>4</td>
<td>No class (reading day)</td>
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<td>2/28</td>
<td>6</td>
<td>Modes of collection &amp; implementation</td>
<td>Groves et al. – Ch. 5&lt;br&gt;Dillman – Ch. 4&lt;br&gt;*Tourangeau, Rips, &amp; Rasinski, (2000)</td>
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<td>3/20</td>
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<td>No class (spring break)</td>
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<td>3/27</td>
<td>10</td>
<td>No class (AERA)</td>
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<td>4/24</td>
<td>14</td>
<td>Survey interviewing, alternative questionnaire delivery, &amp; ethical issues</td>
<td>Groves et al. – Ch. 9 &amp; 11&lt;br&gt;Dillman – Ch. 7&lt;br&gt;*Carpenter (2007)&lt;br&gt;+AAPOR – Questions about IRBs</td>
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<td>*Fischman (2000)</td>
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<td>5/8</td>
<td>16</td>
<td>Group presentations</td>
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<td>Group projects</td>
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Survey Research and Design (Umbach)
Department of Educational Policy and Leadership Studies
10
Group Project

On January 31, we will divide the class into groups of two or three according to research interests. Your group then will need to decide on a survey research project that addresses a particular problem and answers a specific research question(s). You will not implement the survey for this project, but each group will develop a short questionnaire and write a research proposal describing the survey. I expect that your research proposal will be approximately 20-25 double-spaced pages (12 pt. font, formatted using APA, 5th edition) not including the appendices or references. Your proposal should include the following:

1. **Introduction.** In this section, you will delineate the research problem, describe the purpose of your survey, provide a brief review of the literature, and list the research question(s) your project proposes to answer.

2. **Method.** Discuss, in detail, your methods.
   a. Describe your survey and the constructs you expect to measure.
   b. Describe your:
      i. Target population – who are you studying?
      ii. Sampling frame – how will you identify the people who have a chance to be included in the survey?
      iii. Sample design – how will you select members of your sample, and how many will you select?
      iv. Survey mode – how will you contact members of your sample, how will you ask your questions and collect your answers, and how much effort will be devoted to collecting data from those reluctant to respond?
   c. Explain how you plan to evaluate your instrument prior to data collection.
   d. Note any ethical issues and your approach to dealing with them.

3. **Postcollection processing of data.** Briefly describe how you plan to enter, code, and check your data after collection.

4. **Limitations.** No survey is free of error. Describe issues of error that your design is not able to overcome or areas where you expect error will be introduced.

5. **Cover letter/email/interviewer protocol.** Include a copy of the communication that will accompany your survey as an appendix. This should be no longer than one page; it can be single-spaced, 12 pt. font.

6. **Survey.** Include a copy of your instrument as an appendix. This should be no longer than four pages; it can be single-spaced, 12 pt. font.

I will provide some time in class throughout the semester for groups to meet. However, I expect that you will need to meet outside of class to work on the project. The research proposal is due at the beginning of class on May 8th. You also present your project to the class on May 8th. You should provide the class copies of a summary table for your survey (see Table 1.1-1.6 in Chapter 1 of Groves et al.) and your questionnaire. The class will discuss and critique your survey and offer suggestions for improvement.