COMMUNITY HEALTH SCIENCES/EPIDEMIOLOGY M218
Questionnaire Design and Administration
Course web site: http://www.ccle.ucla.edu/ (Moodle server)

Day & Time: Mon & Wed 8-10 A.M.  Instructor: Linda B. Bourque
Room: CHS 41-235  Office: 41-230 CHS
ID#: 840 108 200 (CHS)  Office Hrs: Mon & Wed 10:00-11:30
844 110 200 (EPI)  Sign up for appointments on sheet outside office.

TEXTBOOKS:

A. Required books available for purchase in the Health Science Bookstore:

3. Materials available on course website and UCLA Biomedical Library Reserves.

B. Recommended books available for purchase in the Health Sciences Bookstore.


C. Recommended books available in the UCLA libraries:

D. Supplementary Materials

The course web site has links for these articles. http://www.ccle.ucla.edu/
You will need to use your UCLA BOL log-in to enter the UCLA Moodle site.
Only students registered for the class will be able to access course material.
Remember that the articles are under copyright.

Articles on the Web Site:


45. Scheuren F, American Statistical A. What is a Survey?: American Statistical Association; 2004..


Course Materials Available on Course Web Site http://www.ccce.ucla.edu/:

Consent form materials


2. Siegel, Judith, Linda Bourque, Example of Submission, Questions Raised by the IRB and Responses, 2002.

ISSR materials

Engelhart, Rita, “The Kish Selection Procedure”

Codebooks

Example of a Codebook, December 1, 2002.

Also on earthquake web site:
http://www.sscnet.ucla.edu/issr/da/earthquake/erthqkstudies2.index.htm

Scale & index construction


Materials related to the administration and analysis of survey data

1. Questionnaire for Assignment #1

2. Record for Non-respondents

3. Enlistment Letters

4. Call Record

5. Formatting Questionnaires
6. Income Questions

7. Calculating Response Rates

8. Examples of Grids

9. Codebook and Specifications

10. Constructing a Code Frame

11. Scale Construction Example


The books and articles listed above will give you a background on and an introduction to surveys and questionnaires. Each book has different strengths and weaknesses. They should be considered resources. The required books are available in the Health Sciences Bookstore. The Recommended books are available in the various UCLA libraries. The decision as to which books you buy and the order in which you read them is yours. I recommend reading all the material you buy or check out as soon as possible. It will then be available to you as a resource as we go through the quarter.

**COURSE REQUIREMENTS AND GRADING**

**Subjects and Site:**

Each student selects a topic on which s/he wants to design questionnaires, and the site(s) at which s/he will conduct the interviews needed in pretesting the questionnaire. You are free to select any site and any sample of persons with the following exceptions:

1. All respondents **MUST** be at least 18 years of age.

2. **DO NOT** collect information from respondents such as name, address, and phone number which would enable them to be identified.

3. **DO NOT** interview persons in the Center for Health Sciences or persons connected with the Center for Health Sciences.

4. **DO NOT** interview your fellow students, your roommates, your friends, your relatives, or persons with whom you interact within another role (e.g., employees, patients).

5. **DO NOT** ask about topics which would require the administration of a formal Human Consent Form.
Should you violate these requirements, the data collected will not fulfill the requirements for an assignment in this class. Only interviews, not self-administered questionnaires, can be used for pretesting the questionnaires developed in this class.

Course Objectives and Assignments:

The objective of this course is to learn how to design respectable questionnaires. Research data can be collected in many ways. Questionnaires represent one way data is collected. Although usually found in descriptive, cross-sectional surveys, questionnaires can be used in almost any kind of research setting. Questionnaires can be administered in different ways and the questions within a particular questionnaire can assume an infinite variety of formats.

As is true of any research endeavor, there are no absolutes in questionnaire design. There are no recipes and no cookbooks. The context of the research problem you set for yourself will determine the variety of questionnaire strategies that are appropriate in trying to reach your research objective; the context will not tell you the absolutely “right” way to do it.

The final “product” for the quarter is a questionnaire designed in segments and pretested at least three times. The questionnaire will be designed to collect data to test a research objective specified by you during the second week of the quarter. The final version of the questionnaire is due Wednesday, December 9th at 5:00 PM. All assignments must be typed; handwritten materials are not accepted. Every version of your questionnaire must be typed, but final versions should be as close to “picture-ready” copy as you can manage. For Assignment 5, due on December 9th, you will provide the final copy of your questionnaire, a full copy of Interviewer/Administrator Specifications, a Codebook and/or coding instructions, a summary of data collected in your last pretest, a tentative protocol that could be used to analyze data collected with your questionnaire, and what, if anything, further you would like to do if time allowed.

The following five assignments will move you toward the final product.

ASSIGNMENTS

Assignment 1: Practice Interviewing (5% of Final Grade) Due October 5

This assignment is designed to expose you to the process of interviewing. Questionnaires will be handed out on the first day of class (September 28th). You are to conduct 9 interviews. On October 5, turn in both the completed interviews and a brief write-up describing where you went, what happened and a brief description of the data you collected. These materials are also on the course web site http://www.ccle.ucla.edu/.

In selecting respondents, go to a central public location such as a shopping area, the beach, or a park. In conducting your interviews, try to obtain a range of ages, sexes, and ethnic groups. You will be given identification letters to carry in case anybody asks who you are.

DO NOT INTERVIEW ON PRIVATE PROPERTY UNLESS YOU HAVE PERMISSION.
THIS AFFECTS MANY SHOPPING CENTERS.

Keep track of the characteristics of refusals on the “Record for Non-respondents.” A refusal is a person you approach for an interview who turns you down.

**Assignment 2: Statement of Your Research Question (5% of Final Grade)**
**Due October 7th**

Questionnaires are designed to get data that can be used to answer a research question. To help you get started, state a research question. Remember it should be relevant to the interviewing sites available to this class. Is your research question, as written, testable? What concepts are included in or implied by your question? Can your concepts be operationalized into working definitions and variables for which a questionnaire is a viable data collection procedure?

**Assignment 3: “Mini-Questionnaire” #1. (25% of Final Grade) Due October 21th**

**Part 1**

Prepare and test “Mini-Questionnaire” #1. This represents your first attempt at designing a questionnaire to test your “Research Question.” The substantive content of the questionnaire should focus on current status, behaviors or knowledge. You can choose any topic that interests you, but since our focus is on “health,” you may want to consider asking about: 1) Current acute and chronic diseases, accidents, injuries, disabilities, and impairments; and 2) Knowledge and use of health services.

In addition to substantive content, all questionnaires must collect demographic information on such things as:

1. Respondent age
2. Respondent education
3. Individual, family or household income
4. Occupation
5. Respondent marital status

There is no limit to the number of questions you may include. However, you must provide a minimum of 6 questions in addition to the demographic questions discussed above. I expect your questionnaire to include a mixture of open-ended and closed-ended questions. Open-ended questions are particularly useful when you are in the process of exploring an area of research or in the initial stages of designing a questionnaire.

In preparing the questions in your questionnaire, keep in mind the problems of survey research design which have been discussed in class and in the readings. Pay particular attention to the following:

1. Respondent frame of reference--will it be the same as yours?
2. Level of concreteness/abstraction.
3. Question referent—is it clear, and is it what you intend?
4. Tone of question—will it stimulate yea-saying?
5. Balance—within the question and in the set of questions.
6. Problems of bias induced by wording—watch out for leading, loaded terms, etc.
7. Screening questions to reduce noise due to non-attitudes.

Indicate explicitly the format of the questions. How will it look? Present the questions in the order you want them to appear in the questionnaire. Pay particular attention to the following:

1. Problems of preservation due to fatigue.
2. Problems of bias induced by contamination of response due to ordering of questions.
3. Problems of threatening material/invasion of privacy.
4. Skip patterns to tailor questionnaire for various respondent types.

In sum, your questionnaire should look as much as possible like a finished product, ready to be fielded or at least pre-tested.

Part 2

In addition to your questionnaire you must provide a justification for each question. This is the beginning of writing Specifications. For each question or set of related questions there should be a brief statement as to why the question is included/necessary, and the rationale behind the format selected. IT IS NOT SUFFICIENT TO SAY “IT’S SELF-EVIDENT.” It is NEVER self-evident to someone else--like me! Specifications should also include the research question being tested and information about how your sample was selected and from where.

Part 3

Test your questionnaire by interviewing a convenience sample of at least five respondents.

Part 4

You must also complete two applications for Human Subjects Protection specific to an “Application for the Involvement of Human Participants in Social Behavioral and Educational Research (SBER) and Health Services Research (HSR).” The forms are new this year which may result in all of us being confused about how best to work with them. Go to http://www.oprs.ucla.edu/. Click on “Forms,”(http://www.oprs.ucla.edu/human/forms/). Click on Application for Social Behavioral & Educational Research (SBER) & Health Services Research (HSR). This gives you HS-1, Application for the involvement of Human Participants in Social Behavioral and Educational Research (SBER) and Health Services Research (HSR). This is the first form that you must complete; we sometimes call it the long form.

Now go to http://www.oprs.ucla.edu/human/forms/exempt-certifications. Click on Exempt Categories. Read through the categories so that you understand them. Then click on Certification of Exemption Form â€“ Categories 1, 2, 3, 5 and 6. This takes you to the second form that you must fill out “Application for Certification of Exemption from IRB Review for
Exemption Categories 1, 2, 3, 5, and 6.”

**Further Information About the Protection of Human Subjects**

If you are currently involved in any research activities, as a UCLA student you must be certified. That process is also new this year. If you were certified in the past and did NOT complete the new certification process by September 1, 2009, you cannot be involved in any UCLA research projects that involve human subjects until you are certified. To find out about and complete the certification process, go to [http://www.oprs.ucla.edu/human/certification](http://www.oprs.ucla.edu/human/certification).

**REMEMBER!**

All research that involves human subjects that is conducted by UCLA faculty, staff or students MUST be cleared by the Office for the Protection of Human Subjects (OPRS).

**On October 21**

1. All the completed interviews you did.
2. A copy of your Human Subjects materials: HS-1 which is required for the full consent process; and the Exemption Form as if you qualified for and were requesting an exemption.
3. A copy of your specifications.
4. One copy of the blank questionnaire for me.
5. Fifteen copies of the blank questionnaire; these are to share with your classmates.
6. A brief report (5-7 typed pages) describing the instrument you constructed, the data collected with it, the respondents from whom the data was collected, what you think worked well and what you think did not, and how you would change it.

**Assignment 4: “Mini-Questionnaire” #2. (25% of Final Grade) Due November 18**

Revise the questionnaire you designed in Assignment 3 in accordance with your accrued wisdom and the succinct observations from me and your classmates.

Add a new set of questions that collects at least one of the following: sensitive behaviors, retrospective data, or attitudes and opinions. For example, you might design questions that will elicit information about substance abuse (e.g., use of alcohol), the use of non-traditional health practices (e.g., faith healers, curanderos, over-the-counter drugs, other people's drugs, etc.), threatening behaviors (e.g., abortion, etc.). Retrospective data might be collected about past health care experienced by the respondent over his/her lifetime. Finally, you might find out the respondents' opinions of their current or past health care. If you have a good reason, you could adopt or adapt sets of questions from other studies if they help you get to your objective.

Explicitly indicate the format of the questions. Will there be a checklist? How should it look if presented to the respondent? Do you need a card to cue the respondent? What should be on the card? Are other visual aids needed?

Start designing a codebook that can be used with your questionnaire. The codebook should include information on how verbal answers are converted to numbers, where the variables
are located, and what the variables are named. I recommend using your questionnaire as the basis for your codebook.

Whenever you write a question, you should have in mind the probable responses--if you cannot think of the responses, then you have not thought about the question enough!! The process of setting up categories for expected (and finally actual) responses is called code construction. Closed-ended, pre-coded questions have already had codes constructed for them; the respondent is presented with a specified set of alternatives which are the codes used later in data analysis. The only additional coding problem presented by pre-codes is how to handle residuals. For the code construction assignment, you must consider each of your pre-coded questions, assign numbers to the alternatives following the procedures outlined in class discussions and readings, and solve the residual problem.

For open-ended questions, you have to consider all possible responses and list these along with code numbers. Include instructions for the coder to follow regarding how many responses are to be coded, any precedence rules to follow and any other problems you think might arise. Remember in this case also to provide a way of handling residual categories.

Remember to include codes for the required questions on age, education, income and marital status. Do not attempt to set up a code for occupation; do write a paragraph outlining your thoughts about how one would go about coding occupational data.

You do not have to write specifications for this assignment. You may want to start revising your old ones and writing new ones in anticipation of Assignment 5.

Test your questionnaire by interviewing at least five respondents.

**On November 18th, turn in:**

1. A report (7-10 typed pages) describing the development of the instrument--why items were selected, how and why they were revised; the data collected with this instrument; the sample of respondents from whom the data were collected.

2. Sixteen copies of the blank questionnaire; one for me and 15 to share with your classmates.

3. The codebook.
Assignment 5: Your Magnum Opus! (40% of the final grade) Due December 9th by 5:00 PM

This is the culmination of all your work! Revise your earlier questionnaires consistent with your vastly increased wisdom. Remember that you should have a “final product” that is as close to “picture-ready copy” as you can manage. This questionnaire should include variable names for coding. Turned in with the questionnaire are a final set of Specifications and a final Codebook, along with a write-up that summarizes your pretest interviews of this version of the questionnaire with 8-10 respondents, a proposed analysis plan, and discussion of any further changes that might be considered were you to actually use this instrument in a study.

On December 9th, turn in:

1. A 7-10 page report that summarizes your pretest interviews, a proposed analysis plan, and a discussion of any further changes that should be considered were you to actually use this instrument in a study.

2. One blank questionnaire.

3. One set of final specifications.

4. One final codebook.

GENERAL STATEMENTS ON GRADING AND PRESENTATION OF ASSIGNMENTS

When you enter M218, it is assumed that you will exit with a grade of “B.” A “B” is a good, respectable grade. I write lots of letters of recommendation for people who get “B’s” in M218. An “A” grade is earned by doing a really exceptional job. If you end up with a “C” grade, it probably will be because you did not make a serious effort in this class: you did not do the reading, you never came to class, you left all the assignments for the night before, etc. In other words, it is hard to get a “C” in this class, BUT if that is what you earn, then that is what you will get.

It is expected that all assignments will be turned in on the date due. There are no extensions. Incompletes are not given in this course.
## CLASS SCHEDULE

<table>
<thead>
<tr>
<th>WEEK/DATE, ASSIGNMENTS</th>
<th>TOPIC, RELEVANT READINGS</th>
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| WEEK 1: September 28   | CONTEXT OF THE QUESTIONNAIRE  
1. Study Objective  
2. Sample and Unit of Analysis  
3. Types of Data to be Collected  
4. Surveys  
5. Funding Services: Contracts and Grants  
Relevant Readings: Aday, Chapters 1-5, 6-7; Bourque & Fielder, Chapters 1, 5; Bourque in Lewis Beck, Bryman, Liao, pp. 229-230. |
| September 30           | STARTING A RESEARCH STUDY  
1. Study Objective  
2. Research Questions  
3. Hypotheses, Concepts, and Working Definitions  
4. Variables: Independent, dependent, control  
5. Levels of Measurement  
Relevant Readings: Aday, Chapters 1-5; Bourque & Fielder, Chapter 1. |
| WEEK 2: October 5       | TYPES OF QUESTIONNAIRES  
1. Administrative Types  
2. Question Types: Open/Closed  
3. Information Obtainable by Questionnaire: Facts, Behaviors, Attitudes  
Relevant Readings: Aday, Chapters 1-5; Bourque & Fielder, Chapter 1; Curin, Presser, Singer; Fricker et al. |
| ASSIGNMENT 1 DUE       |                          |
| October 7              | HUMAN SUBJECTS PROTECTION AND FORMS  
Download the HS-1 form, the Exemption form, and the list of Exemption categories before class from either the web site or [http://www.oprs.ucla.edu/](http://www.oprs.ucla.edu/). See instructions on pages 11-12.  
Relevant Readings: OPRS web site and materials on web site. |
| ASSIGNMENT 2 DUE       |                          |
WEEK 3: October 12

QUESTIONS TO OBTAIN DEMOGRAPHIC INFORMATION
1. Why?
2. How much?
3. How?
4. Location?
5. Household Roster
6. Selecting Questions from Other Studies

Relevant Readings: Aday, Chapters 8, 10; Bourque & Fielder, Chapters 2, 3; Sigelman, Tuck, Martin; examples on course web site and earthquake web site.

October 14

“BEGINNINGS” AND “ENDS” OF QUESTIONNAIRES
1. Call Record Sheet
2. Enlistment Letters
3. Questions to Interviewer

Relevant Readings: Bourque & Fielder, Chapter 6; examples on websites.

WEEK 4: October 19 & 21

QUESTIONNAIRE SPECIFICATIONS
1. Functions
2. Format

Relevant Readings: Bourque and Fielder, Chapter 3.

ASSIGNMENT 3 DUE October 21

WEEK 5: October 26

ASCERTAINING INFORMATION ABOUT RETROSPECTIVE BEHAVIORS
1. Grids
2. Histories
3. Aided Recall
4. Use of Records

Relevant Readings: Aday, Chapter 11;
WEEK 5, continued

October 28

ASCERTAINING INFORMATION ABOUT
THREATENING BEHAVIORS
1. Approaches
2. Closed vs. Open
3. Using Informants
4. Location
5. Validation

Relevant Readings: Barton.

WEEK 6: November 2 & 4

CODEBOOKS AND CODE CONSTRUCTION
1. Objective
2. Types
3. Content Analysis

Relevant Readings: Aday, Chapter 13; Bourque & Fielder, Chapter 3; Bourque and Clark; Bourque, Coding, Code Frames; examples on web sites.

WEEK 7: November 9

APHA

FORMATTING QUESTIONNAIRES
1. Order/Location
2. Grouping
3. Spacing

Relevant Readings: Aday, Chapter 12; Bourque & Fielder, Chapter 4; Couper, Tourangeau; Krosnick et al; Shaeffer et al.

November 11

Veterans Day

HOLIDAY
WEEK 8: November 16 & 18
MEASURING ATTITUDES
1. Beginning
2. Developing Composite Measures
3. Use of Existent Measures

Relevant Readings: Aday, Chapter 11; examples on websites.

ASSIGNMENT 4 DUE November 18th

WEEK 9: November 23 & 25
MEASURING ATTITUDES, CONTINUED
1. Reliability
2. Validity

WEEK 10: November 30
DATA PROCESSING AND ANALYSIS OF QUESTIONNAIRE DATA
1. Raw Data vs. Processed File
2. Coding
3. Data Entry/Keypunching
4. Cleaning
5. Raw vs. Actual Variables
6. Data Quality, Missing Data, etc.

Relevant Readings: Aday, Chapters 14, 15; Bourque & Fielder, Chapter 6.

December 2
ADMINISTRATION OF SURVEYS

Relevant Readings: Aday, Chapter 13; Bourque & Fielder, Chapter 6.

WEEK 11: December 9
ASSIGNMENT 5 DUE AT 5:00 PM