Behavioral economist Dan Ariely notes that – despite their similarities – several pairs of European countries (e.g., Denmark and Sweden, Germany and Austria) differ by over 80 percentage points in the number of individuals willing to donate their organs after death. In countries like Austria and Sweden (which have over 85% participation) people getting their drivers licenses are asked to “Please check this box if you do not want to participate in the organ donation program.” In countries such as Denmark and Germany (with less than 15% participation) prospective drivers are asked to “Please check this box if you want to participate in the organ donation program.”

Although choices about the design and formatting of questionnaires don’t always have the life and death implications described above, they are among the most common data collection methods that social science researchers employ. Thus, surveys wield tremendous impact on the data-based decision-making that increasingly permeates our educational system, environmental policies, and across society more broadly. Yet, far too few scholars are fluent in the basic processes needed to produce high quality survey measures. If asked about any of the following, most will grin nervously and change the topic of conversation quickly:

- how they chose between open-ended, ranking, or rating items;
- how they decided between asking questions or posing statements for respondents to agree/disagree with;
- why they decided on 4 vs. 5 vs. 6 vs. 7 response options; or
- what the organizational logic underlying their survey is

Yet, empirical studies provide guidance on each of these choices and many more. This course will familiarize students with the steps and procedures that are essential to developing surveys with high levels of reliability and strong evidence of validity.

As detailed in the next pages of this syllabus, participants in the course will learn a survey design process that includes the following steps: performing a literature review, conducting interviews/focus groups, synthesizing a master list of indicators, writing items according to best

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practices, conducting an expert review, cognitive pre-testing items, and administering a small-scale pilot test. Other important topics include: defining constructs; item wording; response scales; organizing, ordering, and formatting surveys; and bolstering response rates. Finally, students will learn a modest number of theories to inform survey design in the (numerous) areas in which the extant research provides little guidance. The course does not cover sampling procedures, interviewing, item-response theory/Rasch modeling, or data analytic approaches for survey data.

**Course goals**

A wise academic at my former institution once counseled:

> You can't fix by analysis what you have bungled by design.

The overarching aim of this course is to help students to minimize the frequency and severity of the design-related bungling that might otherwise occur in constructing questionnaires.

Specifically, four fundamental goals drive the course:

1. Students should learn what the empirical work states about the best way to design questionnaires.
2. Students should learn selected relevant theories that can guide their questionnaire design judgment in those instances where empirical evidence is scant, conflicting, or dubious.
3. Students should learn a basic template for a high quality survey design process and be knowledgeable about the tradeoffs of adapting it in different ways.
4. By the course’s end, students should apply this empirical and theoretical knowledge towards designing and developing their own scale (or adapting an existing scale) and embedding it within a broader questionnaire.

**The Two Audiences:**

I have designed this course for students who are actively developing questionnaires (for their dissertation work, helping faculty with research, MESM projects, or other pastimes) or are interested in gainful employment in the real world where they will design questionnaires. Logistically, the course is really a course nested within a course. The goal of this somewhat complicated structure is to better serve two primary audiences (including masters and doctoral students). Please consider the following as you ascertain which version is a better fit for you:

1. Students who will largely want to take the full 4 credit version of the course are those who want to not only learn but experience a process for designing their own surveys from scratch. Much of this process enables students to test (in various ways) whether the scales that comprise the surveys are behaving as they are supposed to.
2. Students who will gravitate towards the 2 credit version of the course are those who are more interested in adapting existing surveys to improve them. They will learn how the larger survey design process works but will gain experience only around a couple key steps in that process.

See the comparison table that follows.
4-unit vs. 2-unit comparison:
The big overarching difference between the “full” (4-credit) version of the course vs. the “lite” (2-credit) version is that participants in the “full” course experience the full survey design process (and should be able to replicate it in the future) whereas participants in the “lite” version will learn intellectually rather than experientially and will not be equipped to verify the quality of the final survey scale they adapt. The chart below details which topics which are covered in each version of the course:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Coverage in full 4-unit course</th>
<th>Coverage in 2-unit course</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction/Overview</strong></td>
<td><strong>Introduction to survey scales and constructs</strong></td>
<td><strong>Theoretical grounding</strong></td>
</tr>
<tr>
<td>Students conceptualize and define their own construct that they will design a scale for in the course</td>
<td>Presented in class; theories are applied via mini-exercises</td>
<td></td>
</tr>
<tr>
<td><strong>Steps in the survey design process</strong></td>
<td>Each step is executed during the course</td>
<td>Process is learned, but application is limited to best practices in designing items (see below)</td>
</tr>
<tr>
<td><strong>Validity of survey scales</strong></td>
<td>Presented in class; final project requires (modest) evidence of validity for scale</td>
<td>Presented in class</td>
</tr>
<tr>
<td><strong>Scale design process</strong></td>
<td><strong>Literature review</strong></td>
<td><strong>Best practices in designing items:</strong></td>
</tr>
<tr>
<td></td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td><strong>Interviews/focus groups of respondents</strong></td>
<td></td>
<td><strong>Types of items</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Synthesis of literature review and interview</strong></td>
<td>Guidelines are presented in class; applications are learned through mini-exercises and final projects</td>
</tr>
<tr>
<td><strong>Expert review</strong></td>
<td>Required</td>
<td><strong>Response scales</strong></td>
</tr>
<tr>
<td><strong>Cognitive pre-testing</strong></td>
<td>Required</td>
<td><strong>Ordering and formatting surveys</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Whole survey construction</strong></td>
<td><strong>Introductions/Instructions/Transitions</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Maximizing response rates</strong></td>
<td><strong>Mixing modes</strong></td>
</tr>
<tr>
<td></td>
<td>Guidelines are presented in class and applied to final projects</td>
<td>Guidelines are presented in class and applied through mini-exercises</td>
</tr>
<tr>
<td></td>
<td><strong>Guidelines</strong></td>
<td></td>
</tr>
</tbody>
</table>

Prepared by: [Your Name]  
Prepared Date: [Date]
**Additional course considerations:** Students should be aware that (for the 4-unit version of the course) there is a substantial, ongoing applied component to the class. Students’ major task for the course is to develop a survey scale; the default mode for accomplishing this task is to do so with a partner. Thus, students may accomplish this task in one of two ways:

1) Producing their own original survey scale and ultimately embedding it in a longer questionnaire during the course, or
2) Collaborating with a fellow student to develop a survey scale that the partner is interested in and creating a questionnaire with that colleague.

In terms of the pedagogy for the course, students should be prepared for an experience that falls at the intersection of a typical lecture/discussion class, a workshop, a field experience, and a “cognitive” apprenticeship. The basic course structure will blend lectures with sections that will feel more like a workshop. Students taking the course for 2 credits need to attend the specific classes identified on their syllabus but are welcome to sit in on any/all of the remaining class sessions.

The course is quantitative in orientation, although only minor quantitative background is needed (i.e., knowledge of descriptive statistics and correlations).

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2 There are a range of looser and tighter collaborations that can work so think flexibly and coordinate with the teaching team to figure out a partnership that works for you.
Assignment Overview for 2-unit students:

A series of “mini-assignments” are due on a couple of occasions and a main assignment is due at the end of the course. These are designed to help you a) practice implementing the principles we have learned in class and b) allow you to get feedback from your classmates. These assignments will be turned in as follows:

<table>
<thead>
<tr>
<th>Due Date</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:59pm on 4/11</td>
<td>Choose a scale to revise for your final project</td>
</tr>
<tr>
<td>11:59pm on 5/6</td>
<td>Improve the item-stems and response anchors for the scale posted on the website</td>
</tr>
<tr>
<td>11:59pm on 5/30</td>
<td>Main assignment</td>
</tr>
</tbody>
</table>

Main assignment: Due as soon as you feel so inclined but no later than 11:59pm on 5/30.

Locate a scale that assesses a construct of interest to you. Write a succinct, yet comprehensive summary of the problems with the scale and how you have corrected each one. Include the revised scale as an appendix at the end of your report. For those who do not have any scale that they are particularly interested in improving, a list of options will be posted on the website. Full assignment details are on the website.

Class dates. Students taking the 2-unit version of the course must attend class on:
- Week 1: 4/2 & 4/4
- Week 4: 4/23 & 4/25
- Week 5: 4/30 & 5/2
- Week 7: 5/14 & 5/16
- Week 8: 5/21 & 5/23

Grading: Your grade will consist of a possible total of 100 points.

Assignments will be weighted as follows:
- Choose a scale = 15 points
- Improve items & response options = 25 points
- Revise a scale = 40 points
- Citizenship* = 20 points

= 100 points

*Please see ‘the fine print’ section at the end.
Required Text:

Recommended Texts:
**COURSE OUTLINE**:  

<table>
<thead>
<tr>
<th>WEEK 1</th>
<th>Overview</th>
</tr>
</thead>
</table>
| 4/2 & 4/4 | The big picture  
Bounding the course  
Surveys in context  
Defining constructs & scales, items & indicators |

**Required Reading**


**...and listening**

[http://onpoint.wbur.org/2013/08/27/college-affordability](http://onpoint.wbur.org/2013/08/27/college-affordability) (make sure to listen to the first 6 minutes & then about minute 17 until 22 <when they start taking callers> – the rest is up to you)

Content readings as needed to help you choose the construct you want to measure with your survey scale.

**UNIT 1**  

**Survey items**

Due by 11:59pm on 4/11  
Select a scale for revision

**WEEK 4**  

**Item wording**

4/23 & 4/25  
Themes  
Language & terminology  
Bias  
Double-barreled questions  
Negatives  
Sensitive information

**Required Reading**

- Dillman – Chpt. 4 & 5 (p. 127 – 134; i.e., the beginning thru “Close-ended questions” only). Whatever additional content-relevant reading you need to do in preparation for learning about your construct.

**WEEK 5**  

**Response scales**

4/30 & 5/2  
Number of scale points

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3 Articles are available online unless otherwise noted.
<table>
<thead>
<tr>
<th>Themes</th>
<th>Required Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Words vs. numbers</td>
<td>Dillman Chpt. 5 (p. 134 - 167; i.e., “Close-ended questions” thru the end of the chapter)</td>
</tr>
<tr>
<td>The strongly disagreeable case of “agree-disagree” response scales</td>
<td>Assignment #2 due: Improve item stems &amp; anchors</td>
</tr>
</tbody>
</table>

**UNIT 2**  
**Survey organization**

**WEEK 7**  
**Ordering and formatting surveys**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Required Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bias summary: acquiescence, social desirability, primacy/recency, response order</td>
<td>Dillman Chpt. 6 &amp; 7</td>
</tr>
<tr>
<td>Respondent engagement</td>
<td></td>
</tr>
<tr>
<td>Context Effects</td>
<td></td>
</tr>
<tr>
<td>Serial Position</td>
<td></td>
</tr>
<tr>
<td>Spacing &amp; formatting</td>
<td></td>
</tr>
<tr>
<td>Anchoring &amp; adjusting; survey dissonance experiments</td>
<td></td>
</tr>
</tbody>
</table>

**WEEK 8**  
**Other components of the questionnaire**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Required Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructions</td>
<td></td>
</tr>
<tr>
<td>Transitions</td>
<td></td>
</tr>
<tr>
<td>Review of validity &amp; error issues</td>
<td></td>
</tr>
</tbody>
</table>

**Due by 11:59pm on 5/6**

**Assignment #2 due: Improve item stems & anchors**

**Due by 11:59pm on 5/30**

**Assignment #3 due: Final survey scales**
The Fine Print

Grading. This course—particularly the 4-unit version—requires punctual submission of work. If this is something you have struggled with historically, you will have to figure out some strategy to mend your procrastinating ways. Because there is a substantial level of mutual interdependence (e.g., reviewing survey scales for one another), getting your work done in a timely fashion is likely to impact others.

Going solo. It is assumed that you will find a partner to work with to develop your scale. The 2 person team will submit one document and will receive the same grade for all assignments. Separate grades will be given in the “Citizenship” category. In those instances where it is personally important for a student to work on a particular scale and s/he cannot generate enough interest in the topic to lure a partner, it is permissible to work only loosely with a partner (who primarily provides feedback). Please get permission from a member of the teaching staff if you are considering this option.

Auditing. Auditing the course is fine. Auditors will not be getting feedback from peers or the teaching staff unless they are teaming up with a classmate who is taking the course for credit. Bear in mind that you will not get nearly as much out of the course if you decide to attend lectures but not do the work.

Citizenship. In a class where students depend upon each other to a significant extent for advice, critique, and inspiration, the effort and attitude of everybody matters critically—we are all on the same team. I expect everybody to participate, to listen, and to build off of each other’s ideas. Thus, this component of your grade allows me to make sure that you follow through on the little things that are key to a productive learning experience for all.

Late Assignments. I deduct 5% of the total possible points per day that an assignment is late.

Academic Integrity. Students must take responsibility for knowing and adhering to UCSB’s academic integrity policy. Students who violate the academic integrity policy will be subject to academic sanctions from me and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). If you have any questions, please review the Honor Code (http://judicialaffairs.sa.ucsb.edu/AcademicIntegrity.aspx) and/or come see me.

Absences/lateness. Class will start on time. If you are late, please do not ask questions regarding what we have already covered. If you have to miss class, please let me know at least 36 hours ahead of time as it may influence certain activities we have planned. I expect you to catch up on what you missed with a classmate or two first, then if you have additional questions, please see the teaching team.

General Academic Support & Writing. Students are encouraged to visit Campus Learning Assistance Services (CLAS) early and often. CLAS offers instructional groups, drop-in tutoring, writing and ESL services, skills workshops and one-on-one consultations. CLAS is located on the third floor of the Student Resource Building, or visit http://clas.sa.ucsb.edu

Students with Learning Disabilities. In addition to discussing needs, requests, strategies, etc. with me, students with disabilities who need accommodations are encouraged to check in with the folks at Disability Services – they can help suggest/determine accommodations. Contact: 805-893-2668, 2120 Student Resource Building, and http://dsp.sa.ucsb.edu. Above all, please come see me – we’ll work something out!

Managing Stress. Personal concerns such as stress, anxiety, relationships, depression, cultural differences, can interfere with the ability of students to succeed and thrive. For helpful resources, please contact UCSB Counseling & Psychological Services (CAPS) at 805-893-4411 or visit http://counseling.sa.ucsb.edu/.

Above all, please come see me – we’ll work something out!