Course Outline

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Class Time  Wednesdays, 1-3 pm, MACS 331

Course Description
The purpose of this research methods course is to develop skills in conducting survey research in health and consumer contexts. Students will work on individual projects step-by-step over the course of the semester.

Learning Outcomes
• Students develop skills in conceptualization, design, pilot-testing, analysis and presentation of results of health- and consumer-related surveys.  
• Students use different technologies and software (Qualtrics).

Format
• Students will work on a survey project of interest throughout the semester.  
• They need to come prepared to discuss the weekly readings and/or other activities.  
• They will complete a reflective piece (paragraph or other) on each week’s topic and how it relates to their project. Each week we will discuss learnings of applying the topic to their survey project.  
• Each student will need to act as participant for another student’s survey development process

Login for Qualtrics here https://www.uoguelph.ca/ccs/service/online-surveys

Basic knowledge of SPSS is assumed
References/Resources

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Readings and Assignments</th>
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<tr>
<td>1</td>
<td>Conceptualizing Topics, using theory, adapting and developing new Questionnaires&lt;br&gt;Methods for formulating survey objectives, developing the study design and defining survey variables from theory&lt;br&gt;Example - CIHI PHC indicators project</td>
<td>Streiner – Chap 2 and 3&lt;br&gt;Aday – Chap 1and 2&lt;br&gt;Dillman -none&lt;br&gt;CIHI PHC website and process</td>
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<td>2</td>
<td>Qualtrics Tutorials – take the test</td>
<td>Jennifer Marvin - LIB 034A&lt;br&gt; PB away</td>
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<td>3</td>
<td>Methods of data collection&lt;br&gt;Methods of data collection: personal interview, telephone interview; self-administered questionnaire; computer-assisted interview; internet surveys; Comparison of advantages and limitations of different methods;</td>
<td>Aday – Chap 5&lt;br&gt;Dillman – Chap 2 and 8-10&lt;br&gt;Streiner – Chap 13</td>
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<td>4</td>
<td>Formulating survey questions from variables&lt;br&gt;General principles of question writing; Common errors in question wording; Questions about specific topics: demographics, behaviour, knowledge, attitudes, health; Concepts of scales and indexes- psychometric and clinimetric approaches</td>
<td>Aday Chap 8 -11&lt;br&gt;Dillman Chap 4 and 5&lt;br&gt;Wright 1992</td>
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<td>5</td>
<td>Formatting the questionnaires&lt;br&gt;Paper size; Cover letter; Front page; First question; Number of questions; Question order; Instructions; Skip instructions; Mixed mode issues</td>
<td>Aday Chap 12&lt;br&gt;Dillman Chap 6 and 7</td>
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<td>6</td>
<td>Pre-testing and pilot testing&lt;br&gt;cognitive interviewing, Assessment at different stages of development</td>
<td>Presser2004&lt;br&gt;Willis How to Guide&lt;br&gt;Beatty and Willis&lt;br&gt;Blair&lt;br&gt;Example – Heesch - IPAQ</td>
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<td>7</td>
<td>Sampling the survey participants&lt;br&gt;Types of probability sample designs: simple random sample; stratified sample; cluster sample; internet samples; Advantages and limitations of different sample designs; Weighting the sample data to reflect the population; Sample size calculations – how to decide</td>
<td>Aday - Chap 6 and 7&lt;br&gt;Dillman – Chap 3&lt;br&gt;StatsCan. Survey Methods and practices</td>
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| 8    | **Implementing the survey**  
Types and sources of error in a survey; Factors  
afflicting response rates: multiple  
contacts, incentives, other factors; Quality control  
and field procedures for  
different types of surveys; internet surveys  
**Preparing the data for analysis**  
Creating a data dictionary; Checking for errors; Data  
entry; Data cleaning;  
Imputations; Computing simple frequencies | Aday Chap 13 and 14  
Dillman Chap 2 |
| 9    | **Basic Analysis and Interpretation of Survey Data**  
Comparisons of categorical data – multi-group  
Graphical presentation of descriptive data | Start analysis exercise with PCAS (to be  
provided)  
Streiner Chap 6 |
| 11   | **Reliability and Validity – introduction**  
Reliability - ICC (Cronbach’s alpha), kappa  
Correlations – doing the calculations and  
interpreting the results  
Examining validity of questionnaires  
Responsiveness in interventions | Hand in PCAS analysis  
Aday Chap 3 - intro  
Scales and indexes - Streiner Chap 6-12  
Fitzpatrick 1998  
(SPSS Guides to calculations) |
| 12   | **Oral Presentation and demonstration of draft surveys – progress to date** | Oral presentation |
| Dec 11 | **Final assignment due** | Self-reflective report  
Final version of questionnaire |

**Assignments (grade distribution) - Rubrics to come**

1. PCAS analysis - Report on analysis of supplied survey dataset from primary care patient survey of experiences – descriptive analysis of the participants, testing of two hypotheses 20%
2. Oral Presentation - 20%
3. Self-reflective report (5 pages) on development of:  
   a. Conceptual model  
   b. Development of variables to be considered  
   c. Development of questions  
   d. Experience with development of question wording and formats  
   e. Results of pre-testing or cognitive interviewing – in-class only 25%
4. Final version of questionnaire produced in Qualtrics 35%