CSUS 834: Survey Research Methods Spring 2021

Tuesday 11:30-2:20 pm Synchronous/Virtual

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1. Introduction

The field of survey methodology draws on frameworks, theories, and practices developed over decades of academic research in social science disciplines including: economics, statistics, sociology, human dimensions of natural resources, agriculture, health, and psychology.

This course introduces students to a set of principles of (a) general research methods, (b) survey design, and (c) survey data analysis through basic statistical techniques using practical and "handson" experiences.

The course also covers alternative modes of data collection, field administration operations, the role of the survey interviewer, impacts of nonresponse or enumerator bias on survey statistics, the effect of question structure, wording and context on respondent behavior, models of measurement error, post-survey data processing, and estimation in surveys. The course is intended as an introduction to the field, taught at a graduate level.

2. Course Aims

This course has several specific aims related to introducing students how to conduct quantitative survey research. The course is therefore designed to:

- (1) Introduce students to a number of techniques that are used to collect and analyze quantitative survey data and to provide practical experience with each.
- (2) Help students think analytically about a given research question and to design an appropriate survey to answer that question or set of questions.
- (3) Examine the nature of quantitative research and to reflect upon what constitutes high quality survey research and how to design survey research based on these principles
- (4) Develop an appreciation for the interplay between (a) developing a theoretically-based research question, (b) designing and administering a survey instrument to answer this question and (c) analyzing survey data and communicating the answer to the research question posed.

Learning Objectives

At the end of the course, students should be able to:

- (1) Design general research questions that can be answered through survey research methods
- (2) Design measurement instruments (surveys) and survey items (questions)
- (3) Administer surveys through appropriate sampling techniques
- (4) Analyze survey data by selecting appropriate statistical techniques
- (5) Communicate findings and survey results through appropriate venues (reports, academic papers, etc.)
- (6) Appreciate the virtues and limitations of a quantitative survey approaches to research and the role that it may play in addressing scholarly as well as practical questions.

3. Course Format

The class meets in A324 Wells Hall on Tuesdays from 11:30 am-2:20 pm. Most classes will be comprised of four major parts that include: (1) lectures that present basic information on survey research; (2) lectures that present basic information on statistical methods and survey data analysis (3) in-class exercises that

use statistical software package (SPSS) to analyze survey data and (4) opportunities for small group discussions and group-work related to designing surveys and analyzing survey data. Students are encouraged to bring questions related to their graduate research topic to class for group discussion. Students will also be asked to bring survey research examples from literature relevant to their field in order to analyze and critique studies that use survey techniques as the primary research method. Therefore, in addition to the lectures, the class is designed to provide students with hands-on experiences and discussions that prepare them to conducting their own survey research independently.

Collegiality and adaptability is important in this course. Each of us should feel free to raise questions, share research experiences during class, bring interesting articles or issues to class, or make suggestions about how we do things. Above all, the course is designed to be useful to you in your academic career and beyond. Therefore while this syllabus provides a basic structure, some assignments and activities can be adapted to fit your individual needs with prior instructor approval. While the course is designed around providing you with content information and skills related to survey research in a structured format, overall this course is about engaging in a research and analytical process that can sometimes be messy and uncertain where there is no "right" answer. This class is designed, in part, to embrace that messiness and uncertainty in a collaborative and comfortable environment.

4. Course Materials and Resources

The course PowerPoint slides covered in lecture will be posted on-line on the class' D2L website under "Content." All of the required readings will be posted there, but some students may want to purchase the 2 textbooks from which many of the readings/lectures are derived. Both of these texts are good reference books for those doing survey-based theses or dissertations; take the opportunity to have a look at them and considering buying one or two.

4.1 Central Texts

Dillman, Don A., Jolene D. Smyth, and Leah Melani Christian. *Internet, phone, mail, and mixed-mode surveys: the tailored design method.* John Wiley & Sons, 2014.

Field, Andy. Discovering statistics using IBM SPSS statistics. Sage, 2013.

4.2 In-class Lab Exercises

For most classes, there will be at least some portion devoted to short lab exercises intended to orient students to using SPSS and analyzing data using common statistical techniques. After lectures about different statistical techniques, we will be watching short videos and doing lab exercises using a free online SPSS training models. While these lab exercises do not count toward your cumulative grade you may find them useful references in the future when you are working on analyzing survey data independently. All of these lab exercises can be found on the link below

This online SPSS Training Workshop is developed by Dr Carl Lee, Dr Felix Famoye, student assistants Barbara Shelden and Albert Brown, Department of Mathematics, Central Michigan University. SPSS Online Training Workshop. Link: http://calcnet.mth.cmich.edu/org/spss/toc.htm

Note: Midway through the course we will evaluate how it is going and try to make whatever changes we can to meet our course objectives and/or improve the experience.

5. Course Requirements and Assessment

This course will require a significant amount of time in and out of class to collect and analyze data if even in pilot data form so that you can analyze it for the final individual or group research project. It's important that you budget your time carefully and plan ahead for all the assignments, particularly the

research exercises that lead up to the final project. With respect to grading, the percentages below reflect the relative weight of an assignment in determining your final grade.

Participation: 10%

Human Subjects Certification 5%

Research Project 20%

Developing a Research Question

Developing a Research Design (Sampling, Data Collection)

Developing a Data Analysis Plan

Survey Design

Article Presentation 10%

Data Analysis Report 15% (Individual)

Final Report 30% (Group)

Presentations 10% (Group)

6. Course Policies

Active participation and interaction with group members is necessary to make this class a meaningful learning experience.

- <u>6.1 .Class attendance</u> Students are expected to attend class and to be on time. Absences will be noted. If you are sick, please stay home and get well. However, please notify me beforehand. If you miss class it is your responsibility to obtain notes from fellow students and check D2L for upcoming assignments.
- <u>6.2 Class conduct</u> Collegiality is important in this course. Each of us should feel free to raise questions, share experiences during class, bring interesting articles or issues to class, or make suggestions about how we do things.
- **6.3 Readings** All assigned readings should be completed before coming to class. Be ready to discuss them in depth. The readings are chosen carefully to give you background information about the different data collection and analysis techniques and are helpful resources when carrying out your final essay
- <u>6.4 Lab Exercises</u> Most class days we will have short lab exercises. If you miss class, you are expected to have engaged in the online training assigned for that particular day.
- <u>6.5 Grading</u> Throughout the course I will grade your work. To help those who are conscious of grades, I will also try to give students an indication of "where you stand in the class" from time to time. Although we try to focus on what we are learning rather than grades, I am sympathetic to students' desire to have feedback about how they are faring in the class. If you feel unsure about this you should always feel free to come talk to me and ask me; it's completely fair—so don't be embarrassed if you are concerned.
- <u>**6.6 Accommodations**</u>. If you need accommodations in this class related to a disability or religious holidays, please make an appointment with me to discuss as soon as possible.
- **6.7 Academic Integrity**. Article 2.III.B.2 of the SRR states: "The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards." In addition, (insert name of unit offering course) adheres to the policies on academic honesty specified in General Student Regulation 1.0, Protection of Scholarship and Grades; the all-University Policy on Integrity of Scholarship and Grades; and Ordinance 17.00, Examinations. Therefore, unless specified otherwise, you are expected to complete all written course assignments on your own. This means you are

expected to develop original work for this course; therefore, you may not submit course work you completed for another course to satisfy the requirements for this course. Also, you are not authorized to use the www.allmsu.com Web site to complete any course work in this course. Students who violate MSU regulations on Protection of Scholarship and Grades will receive a failing grade in the course or on the assignment. Faculty are required to report all instances in which a penalty grade is given for academic dishonesty.

Students reported for academic dishonesty are required to take an online course about the integrity of scholarship and grades. A hold will be placed on the student's account until such time as the student completes the course.

7. Course Scheduling and Topics

	Date	Topic	Materials
Week 1	January 12 th	Reading and Reflection	
Week 2	January 19 th	Introduction to the Course (and each other!)	Syllabus
Week 3	January 26 th	Intro to Survey Research; Human Subjects Certification; Intro to SPSS	Chapter 1 Dillman Chapter 1 Field https://hrpp.msu.edu/required-training
Week 4	February 2 nd	Responding to Societal Changes in Survey Research; Intro to SPSS (con't)	Chapter 12 Dillman Chapter 2 Field Individual Presentations Begin
Week 5	February 9 th	Group discussions Intro to SPSS con't	
Week 6	February 16 th	Selecting who to survey; Intro to IRB process; Data entry and Transformation	Chapter 3 Dillman Chapter 3 Field https://hrpp.msu.edu/msu-irb-online-application-system-instructions Group Research Questions Due
Week 7	February 23 rd	Reducing Peoples Reluctance to Respond to Surveys; Interpreting Data output window in SPSS	Chapter 2 Dillman Group Research Questions Due
Week 8	March 2	Wellness Day (no class)	
Week 9	March 9	The fundamentals of writing questions; Creating Graphs with data; Intro to Sigma Plot	Chapter 4 Dillman Chapter 4 Field
Week 10	March 16 th	How to write open-ended and close-ended questions; Descriptive Statistics and Frequencies	Chapter 5 Dillman Initial Survey Due
Week 11	March 23 th	Ordering questions; Comparing Means (t-test and ANOVA); GLM	Chapter 7 Dillman Chapter 9 Field Data Analysis Plan Due

Week 12	March 30 th	Mail questionnaires and	Chapter 10 Dillman
		implementation; Latent	Chapter 8 Field
		Constructs and Reliability;	
		GLM	
Week 13	April 6 th	Web questionnaires and	Chapter 9 Dillman
		implementation; Factor	Chapter 17 Field
		Analysis	
Week 14	April 13 th	Mixed Mode questionnaires;	Chapter 11 Dillman
		Linear Regression	Chapter 18 Field
Week 15	April 20th	Logistic Regression	Chapter 19 Field
			Dataset Analysis Summary Report
Week 16	April 27 th	Group or Individual	Presentations
		Presentations	