# Survey Design and Sampling (SOC5800)

# Fall 2019 DRAFT (8-3-2019)

Time: 4:15-7:00pm Tuesday

Room: Room 121 McGannon Hall

Instructor: Hisako Matsuo, Ph.D.

Co-Instructor: Tanyathorn Hauwadhanasuk, Ph.D.

Office: Room 1905 Morrissey Hall

Office Phone: (314) 977-2536

E-mail: [hisao.matsuo@slu.edu](mailto:hisao.matsuo@slu.edu), [tanyathorn.hauwadhanasuk@slu.edu](mailto:tanyathorn.hauwadhanasuk@slu.edu)

Office hour of Dr. Matsuo: *Normally* 3:00-4:00pm on Thursday or by appointment

**Objectives**

This course offers basic knowledge and skills of survey methods and sampling so that students will be able to apply various techniques for data collection and sampling, and will be able to solve problems related with sample survey. During the course, students will learn basic proposal development, questionnaire preparation, content validity test, test of reliability, sampling methods, calculation of sample size, solutions for missing cases and data, data collection methods, and data analysis. The course will focus on hands-on practice of survey methods through group projects. Students are expected to write a publishable/presentable manuscript as a term paper.

The course intends to achieve the following goals:

1. To gain basic knowledge of various sample survey methods;
2. To develop survey questionnaires and collect data through survey;
3. To test validity and reliability of instruments;
4. To analyze data collected through survey; and
5. To write up reports on findings.

**Required Textbooks**

Dillman, D.A., Smyth, J.D., & Christian, L.M. *Internet, Phone, Mail, and Mixed-Mode Surveys*. Wiley. 978-1-118-45614-9

**Recommended Textbooks**

DeVellis, Robert F. *Scale Development: Theory and Applications.* Sage.

Daniel, Johnnie. *Sampling Essential: Practical guidelines for making Sampling Choices*. Sage.

Bourque, L.B. & Fielder, E.P. How to Conduct Self-Administered and Mail Surveys. 2nd edition. Sage.

De Leeuw, Edith D., Hoz, Joop J. & Dillman, Don A. *International Handbook of Survey Methodology*. Lawrence Erlbaum Associates.

Fink, A. How to Ask Survey Questions. 2nd edition. Sage.

Fink, A. How to Sample in Surveys. 2nd edition. Sage.

Groves, R.M., Dillman, D.A., Eltinge, J.L. & Little, R.J.A. *Survey Nonresponse.* Willey Inter-Science.

Levy, P.S. & Lemeshow, A. *Sampling of Populations: Methods and Applications*. Willey Inter-Science.

*SPSS Application Guide.* SPSS Inc.

**Required Articles (these are on the Blackboard)**

Yaghmaie, F. (2003). Content validity and its estimation. *Journal of Medical Education*, *3*, 25-27.

Burhmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon’s Mechanical Turk: A New Source of Inexpensive, Yet High-Quality Data? *Perspectives on Psychological Science*, *6*, 3-5.

Maletta, H. (2007). WEIGHTING. *Raynald’s SPSS Tools*. Retrieved from < http://www.spsstools.net/Tutorials/WEIGHTING.pdf>.

Rothman, K. J., Gallacher, J. E. J., & Hatch, E. E. (2013). Why representativeness should be avoided. *International Journal of Epidemiology*, *42* 1012-1014.

Rothwell, H. (working paper). Explaining national political views: The Case of Donald Trump. Gallup Survey.

**Useful Website**

<https://ccsg.isr.umich.edu/>

**Evaluations**

Course grades are based on three elements: mini projects/ homework assignments, final project, and presentation/ class participation. Course grade will be given according to the following weights:

Mini Projects 33.33%

Final Project (manuscript) 33.33%

Presentation/ Class Participation 33.33%

**Mini Projects**: Each group will submit about **three** short reports on various phases of the survey project, including 1) a proposal with outlines of design, 2) an IRB protocol and associated materials, 3) a report on preliminary data analyses. Detailed explanations will be given in the class. Each paper will contribute 11.11% for a total of 33.33%

**Presentation/ Class Participation**: Each group is expected to present short reports on various phases of the project in class. Each group will also receive feedback on the project from peers and the instructor. There will be three semi-formal presentations which will contribute 11.11% each.

**Final Project**: Each group will complete a manuscript to be submitted to a conference or to a journal in their own fields. Detailed explanations will be given in the class.

**Lecture Schedule**

**PART I OVERVIEW OF SURVEY METHOD AND INSTRUMENT**

**PREPARATION**

Week 1 August 27: Introduction and Course Overview

Discussions on Project Topics and Proposal Preparations

Chapters 1 & 2

Week 2 September 3: Preparation of Instrument

Effective Survey Design

Ethical Considerations

Chapters 4 & 5

Week3: September 10: Preparation of Recruitment Letter

Discussions on the Project Design and Instruments (Peer review)

Content Validity and Reliability

Chapter 6

Yaghmaie, F. (2003). Content validity and its estimation. *Journal of Medical*

*Education*, *3*, 25-27.

Week 4 September 17: Discussions on the Project Design and Instruments (Continued)

Protection of Human Subjects in Survey Design

Guest Speaker from SLU IRB Office

**Assignment 1, Draft of Project Proposal and Survey Questionnaire, is due.**

Week 5 September 24: Sampling Theories in Survey Methods

Calculation of Sample size

Power Analysis and Effect Size

Chapter 3 & 9

**PART II PREPARATION FOR DATA COLLECTION**

Week 6 October 1: IRB Protocol Preparation and Peer-Review

IRB Protocol Submission

**Assignment 2, IRB Protocol of the Project, is due.**

Week 7 October 8: Cross-Cultural Issues in Conducting Survey

Types of Questions and Methods of Administering Questionnaire

Mixed-mode Data Collection and Its Application

Guest Speaker(s): TBA

Chapter 7

Burhmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon’s Mechanical Turk:

A New Source of Inexpensive, Yet High-Quality Data? *Perspectives on*

*Psychological Science*, *6*, 3-5.

Matsuo, H., Tomazic, T., & McIntyre, K. (2007). Difficulties and Solutions for Surveying Refugees: Bosnian Refugees in St. Louis, Missouri *Proceedings of American Statistical Association on Survey Research Methods, Seattle, WA.* 3993-3995.

Week 8 October 15: Mixed-Methodology of Quantitative and Qualitative Data

Analysis of Answers to Open-ended Questions

Coding of Qualitative Data

Chapters 8, 10, & 11

Week 9 October 22: Fall break/Catch-up day

**PART III DATA COLLECTION AND DATA ANALYSIS**

Week 10 October 29: Start of Data Collection

Discussions on Problems Related with Data Collection

*SPSS Application Guide.* SPSS Inc.

Week 11 November 5: Survey Nonresponse

Solutions for Missing Cases and Issues of Representativeness

Solutions for Missing Data

Chapter 12

Maletta, H. (2007). WEIGHTING. *Raynald’s SPSS Tools*. Retrieved from

< http://www.spsstools.net/Tutorials/WEIGHTING.pdf>.

Rothman, K. J., Gallacher, J. E. J., & Hatch, E. E. (2013). Why representativeness

should be avoided. *International Journal of Epidemiology*, *42* 1012-1014.

Week 12 November 12: Use of Survey for Needs Assessment and/or Program Evaluation

Preparation of Raw Data and Data Cleaning

Test of Reliability and Review of Inferential Statistics

Matsuo et al. (2014). *Needs Assessment of Older Immigrants in St. Louis Missouri.*

Week 13 November 19: Data Analyses and Preparation of Results Section

**Assignment 3, Short Report on Data Analysis, is due.**

Week 14 November 26: Reanalysis of the Data and Preparation of Conference Abstract and

Manuscript

Week 15 December 3: Students’ Oral Presentation on the Project

Week 16 **Final Paper Due:5:00pm, Friday, December 13th**

**Title IX**

Saint Louis University and its faculty are committed to supporting our students and seeking an environment that is free of bias, discrimination, and harassment. If you have encountered any form of sexual misconduct (e.g. sexual assault, sexual harassment, stalking, domestic or dating violence), we encourage you to report this to the University. If you speak with a faculty member about an incident of misconduct, that faculty member must notify SLU’s Title IX coordinator, Anna R. Kratky (DuBourg Hall, room 36;[akratky@slu.edu](mailto:akratky@slu.edu); [314-977-3886](tel:314-977-3886)) and share the basic facts of your experience with her. The Title IX coordinator will then be available to assist you in understanding all of your options and in connecting you with all possible resources on and off campus.

If you wish to speak with a confidential source, you may contact the counselors at the University Counseling Center at 314-977-TALK. To view SLU’s sexual misconduct policy and for resources, please visit the following web addresses: [www.slu.edu/here4you](http://www.slu.edu/here4you) and <https://www.slu.edu/general-counsel>.

**Disability Services**

Students with a documented disability who wish to request academic accommodations must contact Disability Services to discuss accommodation requests and eligibility requirements. Once successfully registered, the student also must notify the course instructor that they wish to access accommodations in the course.

Please contact Disability Services, located within the Student Success Center, at [Disability\_services@slu.edu](mailto:Disability_services@slu.edu) or [314.977.3484](tel:314.977.3484) to schedule an appointment. Confidentiality will be observed in all inquiries. Once approved, information about the student’s eligibility for academic accommodations will be shared with course instructors via email from Disability Services and viewed within Banner via the instructor’s course roster.

Note: Students who do not have a documented disability but who think they may have one are encouraged to contact to Disability Services.

**Academic Integrity**

*Academic integrity is honest, truthful and responsible conduct in all academic endeavors.* The mission of Saint Louis University is "the pursuit of truth for the greater glory of God and for the service of humanity."  Accordingly, all acts of falsehood demean and compromise the corporate endeavors of teaching, research, health care, and community service via which SLU embodies its mission. The University strives to prepare students for lives of personal and professional integrity, and therefore regards all breaches of academic integrity as matters of serious concern.

The governing University-level Academic Integrity Policy was adopted in Spring 2015, and can be accessed on the Provost's Office website at: <https://www.slu.edu/provost/policies/academic-and-course/policy_academic-integrity_6-26-2015.pdf>.

Additionally, each SLU College, School, and Center has adopted its own academic integrity policies, available on their respective websites.  All SLU students are expected to know and abide by these policies, which detail definitions of violations, processes for reporting violations, sanctions, and appeals.  Please direct questions about any facet of academic integrity to your faculty, the chair of the department of your academic program, or the Dean/Director of the College, School or Center in which your program is housed.

**Student Success Center**

In recognition that people learn in a variety of ways and that learning is influenced by multiple factors (e.g., prior experience, study skills, learning disability), resources to support student success are available on campus. The Student Success Center assists students with academic-related services and is located in the Busch Student Center (Suite, 331). Students can visit <https://www.slu.edu/life-at-slu/student-success-center/> to learn more about tutoring services, university writing services, disability services, and academic coaching.

**University Writing Services**

Students are encouraged to take advantage of University Writing Services in the Student Success Center; getting feedback benefits writers at all skill levels. Trained writing consultants can help with writing projects, multimedia projects, and oral presentations. University Writing Services offers one-on-one consultations that address everything from brainstorming and developing ideas to crafting strong sentences and documenting sources. For more information, visit <https://www.slu.edu/life-at-slu/student-success-center/> or call the Student Success Center at 314-977-3484.

*SLU faculty have begun to request language for a syllabus statement that acknowledges and points students toward supports for basic needs insecurity for things like food and shelter. The Dean of Students Office developed the following statement for those who wish to include this sort of language into their syllabi.*

**Basic Needs Security**

Students in personal or academic distress and/or who may be specifically experiencing challenges such as securing food or difficulty navigating campus resources, and who believe this may affect their performance in the course, are encouraged to contact the Dean of Students Office ([deanofstudents@slu.edu](mailto:deanofstudents@slu.edu) or 314-977-9378) for support. Furthermore, please notify the instructor if you are comfortable in doing so, as this will enable them to assist you with finding the resources you may need.