University of Alberta Faculty of Education



Course: EDPY 504 – Survey Design & Implementation

Term: Winter 2024

Class Day/Time: Monday 9:00 AM - 11:50 AM

Room: TELUS Centre (TEL) 143

Instructor: Dr. Okan Bulut

Contact Information:

Office: Ed North 6-110C E-mail: bulut@ualberta.ca

Website: http://www.okanbulut.com

Phone: 780-492-3668

Office Hour: Please email to set up an in-person or virtual meeting.

Course prerequisites: No prerequisites.

General Description

The main goal of EDPY 504 – Survey Design & Implementation is to help you develop an understanding of basic survey research methods, particularly those that apply to educational settings with research applications in education, psychology, and the social sciences. In addition, you are expected to develop a practical understanding of the principles of survey data analysis and reporting. The course is taught from the theoretical basis of Social Exchange Theory and will include the review of state-of-the-art research on survey methods.

Each lecture will focus on key points of the day's topic(s) and a period of questions and answers. Many of the lectures will include time to debate issues and challenge assumptions raised by students and myself as the instructor. Also, several lectures will include small group work. I highly value providing students with opportunities to pursue additional clarifications in and out of class. Therefore, I strongly recommend you to ask your questions during the lectures, work with your peers, if possible, and also send me your questions after class to complete your understanding of the material from the moment you begin to feel uncertain. It is during these moments of uncertainty that a great deal of learning can occur.

Specific Course Objectives

At the end of this course, you will be able to apply basic survey research methods to the design of survey instruments, as well as the collection, analysis, and interpretation of responses. Generally, you will be able to:

- evaluate the appropriateness of survey research methods given the research context,
- plan and execute a pilot test of survey instruments for instrument refinement,
- identify sources of sampling and non-sampling errors,
- develop basic sampling designs,
- select analysis methods appropriate for survey data, and
- write a complete proposal for a survey research project.

Course Format

During Winter 2024, we will primarily follow an in-person delivery format in EDPY 504 – Survey Design & Implementation. For each lecture, we will meet at ED 1-130 for face-to-face lectures between 9 am and 11:50 am on Mondays. For some lectures, we may use asynchronous learning (i.e., pre-recorded lectures), if needed.

Required Textbook and Readings:

Gideon, L. (2012). Handbook of survey methodology for the social sciences. New York, NY: Springer.

The textbook is **freely available** from

- Springerlink (use your CCID and password to log in), or
- The University of Alberta Libraries (by searching for the title of the book).

Additional readings (e.g., journal articles and reports) will be available on eClass (https://eclass.srv.ualberta.ca/portal/). Please read the assigned chapters from the textbook and additional reading materials prior to class. We will discuss most of the material in the textbook during class. Much of the material concerning measurement and the application of certain statistical techniques in the analysis and interpretation of survey results will be presented in class but is not presented in the textbook.

Recommended Textbooks:

Dillman, D. A. (2014). Internet, phone, mail, and mixed-mode surveys: The tailored design method (Fourth edition). Hoboken, New Jersey: Wiley.

Johnson, R. L., & Morgan, G. B. (2016). Survey scales: A guide to development, analysis, and reporting. New York, NY: The Guilford Press.

Software:

- jMetrik (freely available from https://itemanalysis.com/jmetrik-download/)
- JASP (freely available from https://jasp-stats.org/)

Evaluation

The final grade of EDPY 504 will be determined based on a combination of marks from a set of projects and assignments. The following section briefly summarizes these projects and assignments.

1. A Complete Survey Proposal (see the details on page 8):

- A survey plan (25 marks)
- A survey draft (50 marks)
- A sampling plan (25 marks)
- A data analysis plan (25 marks)
- A survey pilot study (25 marks)

2. Assignments:

- Sampling assignment (25 marks)
- Survey data analysis assignment (25 marks)

The tasks listed under "A Complete Survey Proposal" constitute a comprehensive survey proposal. The first two components of the survey project will be exchanged for peer review. This practice will allow you to make modifications based on this review prior to submitting your survey for evaluation in the following week. The "Assignments" are just simple exercises for you to understand the sampling and data analysis procedures in survey research. All of these projects and assignments will be submitted via eClass. The survey project is worth 150 marks; the assignments are worth 50 marks.

The assessment and grading in Educational Psychology courses are informed by the interim Faculty of Education Guidelines (December 13, 2012) and aligned with UA Parent Policy on Assessment and Grading (UAPPOL, May 28, 2012), which can be found at: https://policiesonline.ualberta.ca/PoliciesProcedures/Policies/Assessment-and-Grading-Policy.pdf and the specific Grading Procedures Policy (UAPPOL May 28, 2012), which can be found at: https://policiesonline.ualberta.ca/PoliciesProcedures/Procedures/Grading-Procedure.pdf. Concerns with this policy should be directed to the Chair or Associate Chairs of the Department.

According to these policies, final letter grades reflect judgments of student achievement made by instructors and must correspond to the associated descriptor (e.g., A as Excellent, B as Good, C+ as Satisfactory). These judgments are based on a combination of absolute achievement and relative performance in a specific class. Your final course grade will be reported as a letter grade that corresponds to the most appropriate descriptor (see table below) and is not official until it has been approved by the Associate Chair and posted on Bear Tracks. Although, Educational Psychology courses do not use an absolute grading system, they also do not require a specific pattern of distribution of letter grades.

In EDPY 504, there are **200 marks** available in total. The final grade will be ascertained by combining the marks obtained on the evaluation components summarized above (i.e., **100*(the Sum of Your Marks/200)=Your Final % Grade**). After students are ranked by their total marks, I will look for meaningful cut points that differentiate Excellent (A) from Good (B) from

Satisfactory (C+) achievement and assign the final letter grades accordingly. Please note that the conversion from percentages to letter grades is at <u>the full discretion</u> of the course instructor and is **NOT** determined ahead of time.

Grading - Graduate Courses		
Descriptor	Letter Grade	Point Value
Excellent	A+	4.0
	A	4.0
	A-	3.7
Good	B+	3.3
	В	3.0
Satisfactory	B-	2.7
	C+	2.3
Failure	С	2.0
	C-	1.7
	D+	1.3
	D	1.0
	F	0.0

Important Dates

- January 8, 2024: First day of classes in Winter 2024
- February 19, 2024: No class due to Reading Week
- April 8, 2024: Last class of EDPY 504
- April 12, 2024: Last day of classes in Winter 2024

You can also consult the University Calendar for other important dates.

Statement of Expectation for AI Use

In this course, we commit to artificial intelligence (AI) use guided by ethical and transparent principles. While students are allowed to use generative AI tools, such as ChatGPT or Dall-E 2, for certain assignments, it is crucial to adhere to the following guidelines:

- Seek prior approval from the instructor for AI use in specific assignments.
- When allowed, clearly attribute and cite any AI-generated content in your work, including prompts and AI outputs as part of your academic record.
- Include an additional reflection component in your assessments, discussing how AI tools contributed to your learning process.

Important: Please note that AI use is strictly prohibited in assessments and assignments that have not been approved by the instructor. Failure to abide by this guideline may be considered an act of cheating and a violation as outlined in the relevant sections of the University of Alberta (November 2022) Code of Student Behaviour.

Course Outline Policy

Policy about course outlines can be found in Academic Regulations, Evaluation Procedures and Grading System (2.) of the University Calendar.

Course Outline Retention Statement

Please retain this document for your records, as it may be required by licensing or accreditation bodies. The Faculty of Education does not guarantee course outlines will be retained indefinitely.

Code of Student Behaviour

The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour (online at www.governance.ualberta.ca) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

Equity Statement and Inclusive Language Policy

The Faculty of Education is committed to providing an environment of equality and respect for all people within the university community, and to educating faculty, staff and students in developing teaching and learning contexts that are welcoming to all. In seeking to achieve a climate of respect and dignity, all staff and students must use inclusive language to create a classroom in which an individuals experience and views are treated with equal respect and value in relation to his/her gender, racial background, sexual orientation, and ethnic background. We are encouraged to use gender-neutral or gender-inclusive language and become more sensitive to the impact of devaluing language in order to create a thoughtful and respectful community..

Personal or Academic Difficulties

Support is available within the University for students experiencing academic or personal difficulties. A list of resources can be found at the following link: https://www.ualberta.ca/current-students/index.html

Student Accessibility Services

Students who require accommodations in this course due to a disability affecting mobility, vision, hearing, learning, or mental and physical health are advised to discuss their needs with the Academic Success Centre, 1-80 Students Union Building (SUB), 780-492-3381, e-mail: arrec@ualberta.ca. Communicate with your instructor promptly if you need accommodations in terms of due dates, quiz times, or accessibility concerns. Where appropriate, try to take advantage of any online sessions offered by the Academic Success Centre.

Recording of Lectures

Audio or video recording, digital or otherwise, of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as a part of an approved accommodation plan. Student or instructor content, digital or otherwise, created and/or used within the context of the course is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the content author(s).

Cell Phones

Cell phones are to be turned off when in class. Cell phones are not to be brought into exams.

Tentative Topics and Course Schedule

A tentative list of topics and the course schedule is presented below. The list and schedule may be amended as the semester progresses given different problems, concerns, and interests.

Day	Topic	Project Due
January 8	Introduction to survey methods	
January 15	Social Exchange Theory & measurement	Survey Plan (In-class review)
January 22	Conducting research with surveys; concerns and challenges	Survey Plan Due
January 29	Item/question development for surveys & hands-on session	
February 5	Survey design and construction	Draft Survey (In-class review)
February 12	Survey piloting strategies & think-aloud protocol	
February 19	NO CLASS (Reading Week)	Draft Survey Due (Feb 25)
February 26	Sampling theory & sampling strategies	
March 4	Simple random, stratified, and cluster sampling	Sampling Plan Due
March 11	Survey data analysis - Part I: Item and scale analysis	Sampling Assignment Due
March 18	Survey data analysis - Part II: Graphical displays	
March 25	Complex surveys, nonresponse issue	Data Analysis Assignment Due
April 1	NO CLASS (Easter Monday)	
April 8	Ethics and reporting in survey research	Data Analysis Plan Due
April 12	The last day of classes in Winter 2024	Pilot Study Due

A Complete Survey Proposal

I recommend you to create a **single** proposal document with the following sections. Each time you submit the proposal project, add the new section when it is due. Please write this proposal like a single coherent document, not separate assignments (with the exception of the survey instrument itself, which should be submitted separately).

1. **Title page:** It should contain the title of the survey, your name and affiliation, and any partners or clients associated with the project.

2. A Survey Plan:

- Prepare a survey plan that explains the intended purpose and context for the survey project (i.e., the BIG questions the survey is trying to answer from which the survey questions will come). These questions (mostly 2 to 3 questions) can be either program evaluation questions or research questions (or problems).
- Briefly describe the intended audience (no sampling information necessary at this point), the characteristics of the population of interest.
- Describe the type of survey you will develop (e.g., online or paper-and-pencil; length of the survey; how long it would take to complete it, etc.). If you plan to develop an online survey, identify the online tool you will use to develop and administer the survey.
- Define the topics you will cover or the traits, characteristics, or constructs you will measure in the survey.
- Provide a complete schedule with dates from design to reporting (one that is realistic, **not** within the timeline of this course). On the page 10, you will find an actual structure of a survey project. You can refer to this page when you create your schedule.
- 3. A Draft Survey: This document should be fully formatted and submitted separately from the proposal document containing the remaining sections. The draft survey should include:
 - A pre-notice letter (or card or email) for respondents
 - A consent form (use the U of A template available on eClass)
 - The survey should include
 - (a) An introduction (may be a cover letter of 1^{st} page of the survey)
 - (b) Complete instructions for respondents to be able to complete the survey
 - (c) 10 or more unique questions (not including background or demographic questions)

4. A Sampling Plan:

- Describe the research design and why it is appropriate in your context (cross-sectional, longitudinal, etc.)
- Explain your procedures for securing the sampling frame
- Specify the sampling plan. Completely describe sampling and selection procedures
- Estimate the expected sample size. Explain how you came up this size.
- Describe limitations and describe how you are minimizing sources of survey error

5. A Data Analysis Plan:

- Describe your sample in terms of the sampling design and what this means for analysis (i.e., what are your actual analysis options given the sampling design?).
- Explain the options you have for presenting descriptive results (graphical displays, tables of frequencies, etc.)
- Describe the analysis procedures for each major evaluation or research question:
 - What statistics or statistical tests will you use?
 - How are the methods that you have selected appropriate?
 - How will you interpret the results?
 - What about generalizability of the results?

The data analysis plan should be organized by research questions – addressing the major questions posed in the survey plan.

6. A Survey Pilot Study:

- Conduct a pilot study (30 respondents, or more if possible) and think-aloud procedures (3 or more respondents).
- Summarize results (e.g., frequencies of responses, major or helpful comments from thinkaloud interviews).
- Describe any revisions made to the survey based on the results of the pilot study.
- Do you have any additional recommendations for implementation based on your experience from the pilot study?

The Actual Structure of a Survey Project

The timeline of the course prohibits us from mimicking the actual schedule you should follow to complete a survey project. Here is a common set of activities in a typical survey project:

- ✓ Plan the survey background research, communicating with target audience
- ✓ Identify the topics complete instrument plan
- ✓ Write clean and quality questions for the survey (which may take weeks)
- \checkmark Conduct question reviews: experts, members of the participant audience; editing
- ✓ Conduct draft survey review (by clients, partners, survey experts, community leaders)
- ✓ Ethics approval process, prior to pilot data collection (for us EDPY 504 class protocol)
- ✓ Pilot: full pilot study including all of the steps of a full administration; conduct think-aloud interviews
- ✓ Submit pilot report for review (to clients, partners, survey experts, community leaders)
- ✓ Edit questions, submit final instrument for review (to clients, partners)

 Notice at this point, that you have an instrument plan, sampling plan, analysis plan, pilot results, and final instrument. This is where the course ends.
- ✓ Submit reviewed survey and proposal to Research Ethics Office (if pursuing full administration)
- \checkmark Pre-notice email or letter (at least one week prior to administration)
- ✓ Administration period begins (typically 2-3 weeks of data collection for online administration; longer administration period for mail and in-person administration may be needed)
- ✓ Reminder (2-3 weeks of additional data collection)
- ✓ End data collection, begin data cleaning and analysis (length of time depends on the extensiveness of data analysis)
- ✓ Write reports, papers, etc.
- ✓ Consider presentation and review of members of the target community prior to release of data or formal reports.