



LAND ACKNOWLEDGEMENT

Our students, faculty and staff are located across Indigenous lands. In Alberta, we are on the traditional territories of the peoples of 45 First Nations in five treaty areas: 4, 6, 7, 8 and 10. We also acknowledge the Métis Nation of Alberta Districts.

On our Calgary campus, we acknowledge and pay tribute to the traditional territories of the peoples of Treaty 7, which include the Blackfoot Confederacy (comprised of the Siksika, the Piikani and the Kainai First Nations), the Tsuut'ina First Nation and the Stoney Nakoda (including Chiniki, Bearspaw and Goodstoney First Nations). The city of Calgary is also home to the Métis Nation of Alberta (Districts 5 and 6). Our Calgary campus is situated on land northwest of where the Bow River meets the Elbow River, a site traditionally known as Moh'kins'tsis to the Blackfoot, Wíchíspa Oyade to the Îyâxe Nakoda (Stoney Nakoda), Siksikaitsitapi to the Blackfoot Confederacy and Guts'ists'i to the Tsuut'ina.

At our Edmonton campus, we acknowledge the Treaty 6 region, the traditional homelands of Cree, Blackfoot, Nakota Sioux, Iroquois, Dene, Ojibway/ Saulteaux/ Anishinaabe, Inuit and Métis people (Districts 9 and 10). We recognize the rich cultural history of the place, now called the City of Edmonton, which has, for centuries, been a traditional gathering place of Indigenous peoples from across Alberta, BC, and Saskatchewan.

At our Lethbridge campus, we acknowledge the traditional territories of the Blackfoot peoples of the Treaty 7 and 4 regions and the home of the Métis Nation of Alberta (District 1).

OUR COMMITMENT TO EQUITY, RACIAL JUSTICE, DIVERSITY, INCLUSION AND DECOLONIZATION

The Faculty of Social Work (FSW), University of Calgary (UCalgary), is committed to promoting and actualizing equity, racial justice, diversity, inclusion and decolonization. We affirm that diversity and uniqueness are enriching and valuable, and that they can strengthen our teaching, learning, research, scholarship, and community connections. We aim to foster an inclusive, thriving and equitable environment for our students, non-academic and academic staff, and community members. We take the stand that [equity](#) does not mean sameness in treatment of people, but rather requires measures and accommodations for diverse life experiences and circumstances to ensure that no one of a particular social group is disadvantaged, underrepresented or overlooked in all aspects of our work. We intend to address systemic inequities and compounded disadvantages due to intersectionality of social locations, particularly for those who are members of racialized communities, Indigenous peoples, Black peoples, persons with disabilities, migrant groups (including refugees and immigrants), 2SLGBTQ+ communities, linguistic minorities as well as those who have experienced socioeconomic, caregiving, religious, political, and/or cultural barriers to their education and employment. We also recognize, honour, and integrate into our work diverse perspectives, ways of knowing and doing, experiences, and strengths. An anti-oppressive lens, particularly intersectional, anti-colonial, anti-racist and decolonizing frameworks, will inform our work.

Please refer to our full statement of our [Commitment to Equity, Racial Justice, Diversity, Inclusion and Decolonization](#), our [Statement on Anti-Black Racism](#) and the work of the faculty's [Anti-Black Racism Task Force](#), our [Statement on Anti-Asian Racism](#), and the university's [Indigenous Strategy](#).

Course & Session Number	SOWK 745 S01	Classroom	As indicated in D2L
Course Name	Research Methods I: Quantitative		
Dates and Time	Start of Classes: January 14, 2025 End of Classes: April 8, 2025 Dates and Time: In-person instruction (Tuesday, 9am to 11:50am) Add/Drop/Withdrawal Dates: Please refer to the course-specific deadline in your Student Centre ¹ .		
Instructor	Dr. Dora Tam, PhD.	Office Hours	By appointment
UCalgary E-mail	dtam@ucalgary.ca	UCalgary Phone	Please use email

SYLLABUS STATEMENT

Quantitative methodological and design options in social work research.

COURSE DESCRIPTION

Students will apply data analysis techniques using SPSS software. Bivariate and multivariate statistics will be covered, and the focus will be on understanding the logic behind research design, sampling techniques and statistical analyses, using data sets provided throughout the term. Students will develop the skills necessary to evaluate quantitative research related to their dissertation research and will have the opportunity to consider quantitative data analysis procedures that may support their research.

COURSE LEARNING OUTCOMES

- Upon completion of this course, students will be able to:
1. Understand the history of quantitative research, and commonly used quantitative approaches in social work,
 2. Understand ethics approval processes including OCAP (Ownership, Control, Access and Possession) principles, Indigenous ethics review panels, and guidelines for research in or with equity deserving groups or communities,
 3. Understand sampling, research design and statistical analyses in quantitative research,
 4. Understand the role of quantitative data analysis in social work research and practice,
 5. Apply basic statistical methods to analyze quantitative data from sample data provided, and
 6. Critique quantitative research relevant to their dissertation research.

¹ In the Enrolled Courses table, under Deadlines, click on the Calendar icon by each course and the deadlines will appear.

LEARNING RESOURCES

REQUIRED TEXTBOOKS AND/OR READINGS

Rosenthal, J. (2011) *Statistics and data interpretation for social work*. Springer.

Walter, M. & Andersen, C. (2016). *Indigenous statistics: A quantitative research methodology*. Taylor & Francis. Available online through the University of Calgary library.

Students will also be required to download the most recent IBM SPSS software from the University of Calgary's software distribution site. This software is available to registered students free of charge, please follow the instructions on the IT website or contact IT for assistance to install the software: <https://ucalgary.service-now.com/it>

LEARNING TECHNOLOGIES AND REQUIREMENTS

A D2L site is set up for this course, which contains required readings and other relevant class resources and materials. Bringing your own laptop, which has internet access is advised for class practice on SPSS.

RELATIONSHIP TO OTHER COURSES

This course complements other doctoral research courses including SOWK 741: Research Foundations and SOWK 747: Research Methods II Qualitative.

CLASS SCHEDULE

Important Dates for Winter 2025

- Start of Term: Monday, January 6, 2025
- First Day of Class: Monday, January 13, 2025
- End of Term: Wednesday, April 30, 2025
- Last Day of Class: Friday, April 11, 2025
- Fee Deadline: Friday, January 30, 2025
- Alberta Family Day, no classes: Monday, February 17, 2025
- Good Friday, no classes: Friday, April 18, 2025
- Easter Monday, no classes: Monday, April 21, 2025
- Term Break, no classes: Sunday-Saturday, February 16-22, 2025

Week	Date	Topic(s)	Chapters/Readings
1	Jan 14	<ul style="list-style-type: none">● Introduction and course overview● Research process	Ch. 1 & 2 (Rosenthal, 2011)
2	Jan 21	<ul style="list-style-type: none">● Data Screening● Central tendency and variability	Ch. 3A (Meyers et al., 2017) Ch. 3 & 4 (Rosenthal, 2011)

Week	Date	Topic(s)	Chapters/Readings
3	Jan 28	<ul style="list-style-type: none"> Distributions and relationships 	Ch. 5 & 6 (Rosenthal, 2011)
4	Feb 4	<ul style="list-style-type: none"> Odds ratios Correlations and regression Mean differences 	Ch. 7 to 9 (Rosenthal, 2011)
5	Feb 11	<ul style="list-style-type: none"> Research design, causality and confounding variables 	Ch. 10 & 11 (Rosenthal, 2011)
6	Feb 18	<ul style="list-style-type: none"> Term Break, no classes: Sunday-Saturday, February 16-22, 2025 	
7	Feb 25	<ul style="list-style-type: none"> Inferential statistics, confidence intervals and significance tests 	Ch. 12 to 14 (Rosenthal, 2011)
8	Mar 4	<ul style="list-style-type: none"> Large sample test of the mean and statistical power 	Ch. 15 & 16 (Rosenthal, 2011)
9	Mar 11	<ul style="list-style-type: none"> t distribution Independent and dependent t tests 	Ch. 17 & 18 (Rosenthal, 2011)
10	Mar 18	<ul style="list-style-type: none"> Test of proportions 	Ch. 19 (Rosenthal, 2011)
11	Mar 25	<ul style="list-style-type: none"> Chi square test of independence 	Ch. 20 (Rosenthal, 2011)
12	Apr 1	<ul style="list-style-type: none"> Analysis of variance Additional significance tests Multivariate procedures Generalizability 	Ch. 21 – 24 (Rosenthal, 2011) Ch. 2 (Tabachnick & Fidell, 2019)
13	Apr 8	<ul style="list-style-type: none"> Appropriate measures for different situations Last class, course wrap-up and final assignment consultation 	Appendix C1 & C2 (Rosenthal, 2011)

ADDITIONAL CLASSROOM CONDUCT AND RELATED INFORMATION

INSTRUCTOR EMAIL POLICY

All course communication must occur through your @ucalgary email. I will respond to emails sent via your @ucalgary emails within 48 hours excluding weekends and statutory holidays.

RECORDINGS OF ONLINE CLASSES (By Students)

Recording of lectures is generally not permitted. You must seek authorization from your instructor to record any lecture. Any student with a disability who is registered with Student Accessibility Services (SAS), and who requires an accommodation to make audio recordings of course material shall be provided with such an accommodation if determined necessary by an Access Advisor in SAS. Please refer to the [Recording of Lectures Policy](#) and [Student Non-Academic Misconduct Policy](#) for the additional information.

ASSESSMENT COMPONENTS

There are four assignments in this course. Sample data files will be provided for assignments 1 to 3 below and analyses will be conducted using SPSS. Submissions will be written in journal format.

Assignment 1: Descriptive Data Analysis, due Feb 14, 2025 before 4:30pm (MST), weight 20%

Aligned Course Learning Outcomes: 3, 4, & 5

Assignment Description: Students are expected to carry out a number of descriptive data analyses based on course materials covered in chapters 1 to 8 (Rosenthal, 2011). Based on the findings, students are expected to write up a narrative on each finding. Please follow APA 7th edition for formatting.

Assessment Criteria: Clarity, accuracy, and professionally formatted for publication purpose.

Assignment 2: Inferential Data Analysis I, due March 14, 2025 before 4:30pm (MST), weight 25%

Aligned Course Learning Outcomes: 3, 4, & 5

Assignment Description: This assignment requires student to perform a number of inferential data analyses with focuses on hypothesis testing and significance tests that are based on the course materials covered in chapters 12 to 18 (Rosenthal, 2011). On each of selected set of variables for the analysis, students are expected to construct a research question. Based on the findings, students are expected to write up a narrative on the findings. Please follow APA 7th edition for formatting.

Assessment Criteria: Clarity, accuracy, and professionally formatted for publication purpose.

Assignment 3: Inferential Data Analysis II, due April 11, 2025 before 4:30pm (MST), weight 30%

Aligned Course Learning Outcomes: 3, 4, & 5

Assignment Description: This assignment will extend the examination of inferential data analysis with a focus on chi square tests of independence, analysis of variance, and multiple regression analysis that are covered on the course materials. On each of selected set of variables for the analysis, students are expected to construct a research question. Based on the findings, students are expected to write up a narrative on the findings. Please follow APA 7th edition for formatting.

Assessment Criteria: Clarity, accuracy, and professionally formatted for publication purpose.

Assignment 4: Critique of Peer-reviewed quantitative research articles, due April 15, 2025 before 4:30pm (MST), weight (25%)

Aligned Course Learning Outcomes: 1 to 6

Assignment Description: Each student will select and critique 2 academic, peer-reviewed quantitative research articles in recent 5 years relevant to their dissertation research. The critique will include an analysis of methodology, data analysis and interpretation, and limitations – along with an assessment of the contribution of selected articles in addressing EDIAD issues as well as relevance to their dissertation.

Assessment Criteria: Linkages to course materials learned, critical examination on the strengths and limitation of the research articles specific to the quantitative research methods, and professionally written for publication purpose in APA format.

ADDITIONAL ASSESSMENT AND EVALUATION INFORMATION

ATTENDANCE AND PARTICIPATION EXPECTATIONS

Students are expected to be fully present and engaged in each class activities and discussions. Collegial dialogue and debate are foundational to doctoral studies, and your involvement in these discussions is critical to the learning process.

If you must miss a class, please notify the instructor in advance.

GUIDELINES FOR SUBMITTING ASSIGNMENTS

Please submit all assignments electronically through their respective Dropbox in D2L. Assignments must be submitted in Word format. Assignments should have a file name as follows: “Full name and assignment number” (e.g., Jane Smith Assignment 2). Assignments are due by 11:59pm on their due date. Please note that it is the student's responsibility to keep a copy of each submitted assignment and to ensure that the proper version is submitted.

MISSED OR LATE ASSIGNMENTS

Late assignments will be accepted only in exceptional circumstances and at the discretion of the instructor.

EXPECTATIONS FOR WRITING

Writing quality is an important component of any doctoral level written assignments. Students are expected to use APA 7th edition guidelines for formatting, and each written assignment will be evaluated for the quality and clarity of writing. Grading guidelines for each written assignment will include further details. Sources used in research papers must be properly documented and referenced in APA 7th edition format. If you need writing support, please connect with the Student Success Centre, at:

<https://www.ucalgary.ca/student-services/student-success/writing-support>

ACADEMIC MISCONDUCT

It is expected that all work submitted in assignments is the student's own work, written expressly by the student for this course. Students are reminded that academic misconduct, including plagiarism, has serious consequences, as set out in the University Calendar:

<https://calendar.ucalgary.ca/pages/eb50d7931bba4da5942de21f51d1f514>

USE OF ARTIFICIAL INTELLIGENCE TOOLS

In this course, you are expected to complete and draw upon the required readings, learning activities and additional research to complete the assignments. If you intend to use artificial intelligence tools as learning aids, please inform your instructor in advance. You are ultimately accountable for the work you submit. Your approved use of AI tools must be documented in an appendix for each assignment. The documentation should include what tool(s) were used, how they were used, how the results from the AI were incorporated into the submitted work, what you did to verify the AI generated results, what you did to extend your work beyond the AI generated contents and your critical reflection on ethical use of AI tools. Failure to cite the use of AI generated content in an assignment will be considered a breach of academic integrity and subject to Academic Misconduct procedures.

GRADING

A student's final grade for the course is the sum of the separate assignments. It is not necessary to pass each assignment separately to pass the course. The University of Calgary [Graduate Grading System](#) and Faculty of Social Work Percentage Conversion will be used. This grading system overrides the grading system in D2L.

Grade	Grade Point	Description	Percentage Range
A+	4.0	Outstanding performance	95-100
A	4.0	Excellent performance	95-100
A-	3.7	Very good performance	90-94
B+	3.3	Good performance	85-89
B	3.0	Satisfactory performance. Note: The grade point value (3.0) associated with this grade is the minimum acceptable average that a graduate student must maintain throughout the programme as computed at the end of each year of their program.	80-84
B-	2.7	Minimum pass. Note: Students who accumulate two grades of "B-" or lower can be required by the faculty to withdraw from the programme regardless of the grade point average.	75-79
C+	2.3	All grades of "C+" or lower are indicative of failure at the graduate level and cannot be counted toward Faculty of Graduate Studies course requirements.	70-74
C	2.00		65-69
C-	1.70		60-64

D+	1.30		55-59
D	1.00		50-54
F	0.00		Below 50
CR		Completed Requirements. Carries no weight in calculating the grade point average. This will be noted in the calendar description as “Not Included in GPA” where applicable.	

COURSE EVALUATION

At the close of each term, students can provide feedback on their academic learning experience in their courses, including their instructors, through university-wide online surveys. Student feedback contributes to ensuring academic excellence in the university’s curriculum by bringing direct feedback to instructors.

Students will receive an email from **UCalgary Course Experience Surveys** with direct links to their current course surveys, or they can access within the D2L course shell. For more information, visit: <https://www.ucalgary.ca/provost/teaching-learning/student-surveys>

Students are welcome to discuss the process and content of the course at any time with the instructor.

ADDITIONAL SUGGESTED READINGS

Additional recommended readings will be provided in D2L.

UNIVERSITY OF CALGARY POLICIES AND SUPPORTS

Professional Conduct

As members of the University community, students and staff are expected to demonstrate conduct that is consistent with the University of Calgary’s [Code of Conduct](#).

Students and staff are also expected to demonstrate professional behaviour in class that promotes and maintains a positive and productive learning environment. Consistent with the aims of the Social Work Program and the University of Calgary, all students and staff are expected to respect, appreciate, and encourage expression of diverse world views and perspectives; to offer their fellow community members unconditional respect and constructive feedback; and to contribute to building learning communities that promote individual and collective professional and personal growth. While critical thought and debate is valued in response to concepts and opinions shared in class, feedback must always be focused on the ideas or opinions shared and not on the person who has stated them.

Students and staff are expected to model behaviour in class that is consistent with our professional values and ethics, as outlined in the [Canadian Association for Social Workers, Code of Ethics](#) (2024) and the [Alberta College of Social Work Standards of Practice](#) (2023).

Academic Accommodation

It is the student's responsibility to request academic accommodations according to the University policies and procedures. Students seeking an accommodation based on disability or medical concerns should contact [Student Accessibility Services](#) (SAS). SAS will process the request and issue letters of accommodation to instructors. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their instructor. Please refer to the full policy on [Student Accommodations](#).

Research Ethics

"If a student is interested in undertaking an assignment that will involve collecting information from members of the public, they should speak with the course instructor and consult the [CFREB Ethics Website](#) before beginning the assignment.

Academic Misconduct

For information on academic misconduct and its consequences, please refer to the [Integrity and Conduct](#) section in the University of Calgary Calendar.

Instructor Intellectual Property

Course materials created by professor(s) (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the professor(s). These materials may NOT be reproduced, redistributed or copied without the explicit consent of the professor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

Copyright Legislation

All students who use materials protected by copyright are expected to comply with the University of Calgary policy on [Acceptable Use of Material Protected by Copyright](#) and requirements of the [Copyright Act](#) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the [Non-Academic Misconduct Policy](#).

Freedom of Information and Protection of Privacy

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments will be accessible only by the authorized course faculty. [Private information](#) related to the individual student is treated with the utmost regard by the faculty at the University of Calgary.

Sexual and Gender-Based Violence Policy

The University recognizes that all members of the University Community should be able to learn, work, teach and live in an environment where they are free from harassment, discrimination, and violence. The University of Calgary's [Sexual and Gender-based Violence Policy](#) guides us in how we respond to incidents of sexual violence, including supports available to those who have experienced or witnessed sexual violence, or those who are alleged to have committed sexual violence. It provides clear response procedures and timelines, defines complex concepts, and addresses incidents that occur off-campus in certain circumstances.

Other Important Information

Please visit the [Registrar's website](#) for additional important information on the following:

- Wellness and Mental Health Resources
- Student Success
- Student Ombuds Office
- Student Union (SU) Information
- Graduate Students' Association (GSA) Information
- Emergency Evacuation/ Assembly Points
- Safewalk