

Winter 2023

Course & Session Number	SOWK 745 S01	Classroom	3-276
Course Name	Research Methods I: Quantitative		
Day(s) & Time	Start of term classes: January 9 th , 2023 End of term classes: April 12 th Class days and times: Fridays: 9:00 to 11:50 a.m. Add/Drop/Withdrawal Dates: Please refer to the course-specific deadline in your Student Centre ¹ .		
Instructor	Rick Enns, PhD, RSW	Office Hours	As arranged
UCalgary E-mail	renns@ucalgary.ca	UCalgary Phone	NA

EQUITY, DIVERSITY, INCLUSION AND RECONCILIATION

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 <u>Our Commitment to Equity, Racial Justice, Diversity, Inclusion and</u> <u>Decolonization</u>, the work of the faculty's <u>Anti-Black Racism Task Force</u>, and the university's <u>Indigenous</u> <u>Strategy</u>.

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

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

Following this course students will:

- 1. Understand the history of quantitative research and critiques of quantitative research methodologies,
- Understand ethics approval processes including OCAP principles, Indigenous ethics review panels, and guidelines for research in or with LGBTQ2S+ and BIPOC communities, and in or with other vulnerable and displaced 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.

LEARNING RESOURCES

REQUIRED TEXTBOOKS AND/OR READINGS

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

Walter, M. & Andersen, C. (2013). *Indigenous statistics: A quantitative research methodology.* Routledge. Available online through the University of Calgary library. <u>Click here</u>.

Students will also be required to download the most recent SPSS software from the University of Calgary's software distribution site. This software is available to registered students free of charge at <u>https://iac01.ucalgary.ca/SDSWeb</u>. Please contact <u>ITsoftware@ucalgary.ca</u> if you have any problems installing the software.

Additional and required readings for this course may be posted on the D2L site or noted in class or by email. Students will be required to access these readings using their UC IT accounts.

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

Week	Date	Topic(s)	Chapters
1	Jan. 13	Introduction and course overviewResearch process	See D2L site for class readings
2	Jan. 20	Central tendency and variability	1 to 4
3	Jan. 27	Distributions and relationships	5&6
4	Feb. 3	 Odds ratios Correlations and regression Mean differences 	7 to 9
5	Feb. 10	 Research design, causality and confounding variables 	10 & 11
6	Feb. 17	 Inferential statistics, confidence intervals and significance tests 	12 to 14
7	Feb. 24	Reading week: no class	
8	Mar. 3	Large sample test of the mean and statistical power	15 & 16
9	Mar. 10	 <i>t</i> distribution Independent and dependent <i>t</i> tests 	17 & 18
10	Mar. 17	Test of proportions	19
11	Mar. 24	Chi square test of independence	20
12	Mar. 31	 Analysis of variance Additional significance tests Multivariate procedures Generalizability 	21 - 24
13	Apr. 7	Good Friday	
	Apr. 28	End of winter term	

- Add/Drop/Swap and Withdraw deadlines: Check the University of Calgary Student Centre
- Start of term: January 3, 2023
- Block week: January 3 to January 7, 2023
- Start of classes: January 9, 2023
- Term Break: February 19 to February 25, 2023
- Recognized holiday: April 7 and April 10, 2023
- End of Classes: April 12, 2023
- End of Term: April 28, 2003

ADDITIONAL CLASSROOM CONDUCT AND RELATED INFORMATION

GUIDELINES FOR ZOOM SESSIONS IN ONLINE CLASSES

Students are expected to participate actively in all Zoom sessions. If you are unable to attend a Zoom session, please contact me to arrange an alternative activity for the missed session (e.g., to review a recorded session) for your best learning experiences. Please be prepared, as best as you are able, to join class in a quiet space that will allow you to be fully present and engaged in Zoom sessions. Students will be advised by their instructor when they are expected, if they are able, to turn on their webcam (for group work, presentations, etc.). All students are expected to behave in a professional manner during the session.

MEDIA RECORDING FOR ASSESSMENT OF STUDENT LEARNING

The instructor may use media recordings as part of the assessment of students. This may include but is not limited to classroom discussions, presentations, clinical practice, or skills testing that occur during the course. These recordings will be used for student assessment purposes only and will not be shared or used for any other purpose.

ZOOM RECORDINGS OF ONLINE CLASSES

The instructor may record online Zoom class sessions for the purposes of supporting student learning in this class – such as making the recording available for review of the session or for students who miss a session. Students will be advised before the instructor initiates a recording of a Zoom session. These recordings will be used to support student learning only and will not be shared or used for any other purpose and only the instructor is authorized to record online classes. Recordings are not to be copied either in whole or in part or distributed for any purpose. Failure to comply with expectations noted here may be classified as instances of academic misconduct and subject to academic misconduct penalties as outlined by the university and may be considered a violation of copyright law.

ASSESSMENT COMPONENTS

There are four assignments in this class. 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.

1. Descriptive data analysis

The focus of this assignment will be on descriptive data analysis and data presentation, and specific questions will be provided. The assignment will draw on material and concepts covered in chapters 1 to 5. Further details will be provided in class.

Weight: 10% Format: APA 7th ed.; 12-point Times New Roman font; 1" margins; double-spaced Length: 6 pages Due: **February 17th by 11:59 p.m.;** assignment should be emailed as a **WORD** document to renns@ucalgary.ca.

2. Inferential data analysis: I

This assignment will introduce inferential data analysis with a focus on hypothesis testing, significance, and *t* tests. The assignment will draw on material and concepts covered in chapters 6 to 18. Further details will be provided in class.

Weight: 30% Format: APA 7th ed.; 12-point Times New Roman font; 1" margins; double-spaced Length: 8 pages Due: **March 17th by 11:59 p.m.;** assignment should be emailed as a **WORD** document to <u>renns@ucalgary.ca</u>.

3. Inferential data analysis: II

This assignment will extend the examination of inferential data analysis with a focus on chi square tests of independence and analysis of variance. The assignment will draw on material and concepts covered in chapters 19 to 24. Further details will be provided in class.

Weight: 30% Format: APA 7th ed.; 12-point Times New Roman font; 1" margins; double-spaced Length: 8 pages Due: **April 11th by 11:59 p.m.;** assignment should be emailed as a **WORD** document to renns@ucalgary.ca.

4. Critique of peer-reviewed, quantitative research articles related to dissertation research. Students will select and critique 2 academic, peer-reviewed quantitative research articles 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 to their dissertation.

Weight: 30% Format" APA 7th ed.; 12-point Times New Roman font; 1" margins; double-spaced Length: 10 to 12 pages Due: **April 22nd by 11:59 p.m.;** assignment should be emailed as a **WORD** document to renns@ucalgary.ca.

ADDITIONAL ASSESSMENT AND EVALUATION INFORMATION

GRADING CONVENTIONS USED IN THIS COURSE

Grades assigned for each assignment will be rounded to 2 decimal points if necessary and the total of all grades will be rounded to the nearest whole number at the end of term. Students must meet or exceed the lower threshold of the percentage range indicated for each letter grade to achieve the corresponding letter grade for the course.

GUIDELINES FOR SUBMITTING ASSIGNMENTS

All assignments are due by 11:59 p.m. on the due date specified. Assignments should be submitted as WORD documents to the instructor by email at <u>renns@ucalgary.ca</u>.

LATE ASSIGNMENTS

All assignments are due by the date and time indicated on the course outline, unless an extension has been discussed and agreed upon with the instructor, as a result of emergency or unexpected circumstances, or for other reasons approved by the instructor. Five percent of the grade allocated for the assignment will be deducted for each day or portion thereof for late assignments if an extension has not been approved.

EXPECTATIONS FOR WRITING

Quality of writing is an important component of all 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. <u>Click here</u> to connect with the Student Success Centre and click here for abbreviated APA 7th ed. resources. Additional APA resources can be found here.

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: http://www.ucalgary.ca/pubs/calendar/current/k.html

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 in order to pass the course. The University of Calgary <u>Graduate Grading</u> <u>System</u> and Faculty of Social Work Percentage Conversion will be used.

Grade	Grade Point	Description	Percentage Range
A+	4.0	Outstanding	95-100
A	4.0	Excellent – superior performance, showing comprehensive understanding of subject matter	95-100
A-	3.7	Very Good Performance	90-94
B+	3.3	Good Performance	85-89
В	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
В-	2.7	Minimum pass for students in Graduate Studies. 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 below "B-" are indicative of failure at the graduate level and cannot be counted towards Faculty of Graduate Studies course requirements.	70-74
С	2.00		65-69
C-	1.70		60-64
D+	1.30		55-59
D	1.00		50-54
F	0.00		Below 50

COURSE EVALUATION

Student feedback will be sought at the end of the course through the standard University and Faculty of Social Work course evaluation forms. 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 listed on the course D2L site.

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 <u>Code of Conduct</u>.

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 <u>Canadian Association for Social Workers</u>, <u>Code of Ethics</u> (2005) and the <u>Alberta College of Social Work Standards of Practice</u> (2019).

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 <u>Student Accessibility Services</u> (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 <u>Student Accemmodations</u>.

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 <u>CFREB Ethics</u> <u>Website</u> before beginning the assignment.

Academic Misconduct

For information on academic misconduct and its consequences, please refer to the <u>Integrity and</u> <u>Conduct</u> 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 <u>Acceptable Use of Material Protected by Copyright</u> and requirements of the <u>Copyright Act</u> 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 <u>Non-Academic Misconduct Policy</u>.

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 <u>Sexual and Gender-based Violence Policy</u> 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 <u>Registrar's website</u> 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