



The University of Western Ontario

SOCIOLOGY 3306B – 001
Investigating the Social World:
Quantitative Research Methods
Winter 2023
Mondays 1:30pm-4:30pm / SSC 1032
In-Person

Instructor: Yoko Yoshida, PhD

Office Hours: Thursdays (11am -1pm)

Office: SSC 5409

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3 hours, 0.5 course

Course Description:

Mandatory for third-year Sociology students in an Honours Specialization. In this course students will learn to evaluate quantitative sociological research and gain hands-on experience carrying out and writing up a research project that investigates current social issues. Topics include: posing a research question, developing concepts and measures, and analyzing quantitative survey data.

Prerequisite(s):

- Sociology 2205A/B and Sociology 2206A/B

Note: This course is mandatory for third-year Sociology students in an Honours specialization.

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. The decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

Antirequisite(s): none

Course Objectives and Learning Outcomes:

The goal of this course is to provide the students with a sophisticated understanding of both evaluating and conducting quantitative social science research. Starting from the formulation of research questions and working through data collection and analysis, this course introduces a general flow of research quantitative research process and fundamental methodological concepts, analytic tools and procedures. Throughout the course, an emphasis will be placed on the relationship between theory and methods, the meaning behind the numbers, and telling stories based-on the evidence. Students will learn how to apply them in a real research setting by developing their own research projet.

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

- understand the process of quantitative research in social science;
- develop a set of quantitative research questions, which are theoretically informed and grounded in existing research;
- appreciate the relationship among theory, concepts, measures, and analytical design;
- assess and evaluate best practices in research methods of data collection;
- apply uni-variate, bi-variate, and multi-variate analysis to produce empirical evidence; and
- interpret the results of multivariate quantitative data analyses.

Course Material:

Textbook:

- Singleton, R. and B. Straits. 2018. *Approaches to Social Research, 6th Ed.* Oxford University Press.

For the details of the textbook purchase, please visit the UWO bookstore website for this course at: https://bookstore.uwo.ca/textbook-search?campus=UWO&term=W2022A&courses%5B0%5D=002_UW/SOC3306A

Required supplemental readings: In addition to the textbook, two chapters (Chs 12 and 13) from the following book is assigned for the later part of this class.

- Remler, D. K. and G. G. Van Ryzin. 2021. *Research methods in Practice, 3rd Ed.* Sage Publications, Inc.

The chapters that are assigne as a part of the required readings are scanned and avialbe on the OWL. Both books are held on researve at the Library and available to the students enrolled in SOC 3306A.

Supplemental readings.

A set of supplemental readings are offered in order to help you better understand the materials. They will be posted on the course website (OWL).

Sample Dataset of Instruction:

The *General Social Survey, Cycle 27: Social Identity* (Statistics Canada, 2013) will be used to illustrate examples and concepts taught in the course. Students are encouraged to develop a course project, which uses this dataset. However, a few additional datasets may be introduced in order to reflect a wider range of sociological research areas.

Statistical Computing:

The statistical computing for the course will be done using STATA. STATA is available on computers located in the Social Science computing lab (Room 1032). If you would like to work on STATA for a course project from home, it is also available via MyVLab (<https://myvlab.uwo.ca/>), free of charge for the students registered in this course. You can find access information at: https://myvlab.uwo.ca/using_mfa_on_myvlab.html.

Communication:

Students are responsible for checking the course OWL site (<http://owl.uwo.ca>) on a regular basis for news and updates. This is the primary method by which information will be disseminated to all students in the class. Also students are encouraged to visit the office hours to ask questions about the course materials. For other personal concerns, or if you cannot visit the office hours, you can write an email.

Contacts:

Instructor: Email: yoko.yoshida@uwo.ca.
Phone: 519 661 2111 ext 85045

Teaching assistant: TBA
Email: TBA

Method of Evaluation:

The evaluation methods described in the course outline are essential requirements for the course. There are two main components for this course.

1. **Mid-term exam** (35%): A mid-term exam is scheduled on **Monday, March 6th**. It will take place in-person during the class time (1:30pm-4:30pm). It will be a *closed-book exam* and *no use of electronic devices* will be permitted. The exam consists of a combination of multiple choice and short answer questions and will require knowledge of the textbook, additional assigned readings, and lectures up to the week prior to the exam date. You are responsible for all the material in the assigned chapters and readings even if this material is not covered in class.

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

2. **Course Project - Quantitative Research Paper** (65%): To demonstrate your knowledge of quantitative research methods, you will be asked to develop a research paper using the Canadian General Social Survey (GSS). It is encouraged to select a research topic which can be addressed by the GSS, Cycle 27, Social Identity. (It is possible for you to explore themes outside of the scope of this specific dataset. If a research project requires alternative dataset, student should seek a permission by the instructor.)

This assignment will consists of two components:

- a) **Literature review and formulating a research question** (20%)
Due on Friday, February 10 at 11:55PM
- b) **Final research paper** (45%)
Due on Monday, April 10 at 11:55PM

The final research paper builds on the first assignment. It is suggested to use the first paper as a part of the final paper. In doing so, you are encouraged to modify and improve the first assignment, reflecting the feedback.

The papers should be electronically submitted by the OWL.

Contingency plan for an in-person class pivoting to 100% online learning:

In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, affected course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will **not** change. Any remaining assessments will also be conducted online as determined by the course instructor.

Student Absences:

If you are unable to meet a course requirement due to illness or other serious circumstances, please follow the procedures below.

Assessments worth 10% or more of the overall course grade:

For work totaling 10% or more of the final course grade, students must provide valid medical or supporting documentation to their Home Faculty Academic Counselling Office as soon as possible.

Mid-term exam : Students with an approved absence from an in-class test or exam will be required to write a makeup exam. The makeup exam is scheduled on: ***Friday, March 10 at 12:00-3:00pm*** (Location: TBA). Course professor or teaching assistant(s) may not be available to respond to questions during the makeup exam. Students should be aware that the make-up test

will not necessarily be in the same format, be of the same duration, or cover the same material as the original test.

Course project: Upon approval by the Academic Counselling Office, an extension for the submission will be considered. The lengths of extension will be determined based on the assessment by the Academic Counselling Office.

Unexcused late assignments will be penalized 5% per day (including weekend days). Please note that computer or internet problems are not an excused circumstance. You are expected to follow good computer practices, including backing up your work.

Students are reminded that they should consider carefully the implications of postponing tests or midterm exams or delaying submission of work and are encouraged to make appropriate decisions based on their specific circumstances.

Note: missed work can *only* be excused through one of the mechanisms above. Being asked not to attend an in-person course requirement due to potential COVID-19 symptoms is **not** sufficient on its own. Students should check the Western website to see what directives for Covid are to be followed. Western has been and will continue to follow directives established by the Middlesex-London Health Unit. That directive will state whether students should or should not come to campus/class and any other requirements (e.g., masks are mandatory). Please check on your own and do not email the instructor, the Department Undergraduate Advisor/Coordinator or the Faculty of Social Science Academic Counselling Office.

Overview of Course Schedule (The schedule may change depending on progress.)

Week	Dates	Topic
1	Jan 9	Introduction/The Nature of Science
2	Jan 16	The Nature of Science (Cont'd)/Role of Theory and Models in Quantitative Research
3	Jan 23	Elements of Research Design
4	Jan 30	Survey Research Methods
5	Feb 6	Measurement
	Feb 10 (Friday)	<i>Deadline: Course Project – Lit Review & Research Q</i>
6	Feb 13	Sampling
	Feb 20	Reading Break - No Class
7	Feb 27	Survey Instrumentation
8	Mar 6	<i>Mid-term Exam</i>
9	Mar 13	Data Processing and Elementary Data Analysis
10	Mar 20	Multivariate Analysis I
11	Mar 27	Multivariate Analysis II
12	Apr 3	Research Ethnics
13	Apr 10	Open Lab: Q and A <i>Deadline: Course Project - Final Research Paper</i>

Course Schedule and Readings

(The schedule may change depending on progress and public health protocols. Changes will be announced in class as well as on the course OWL site).

S&S: Singleton, R. and B. Straits. 2018. *Approaches to Social Research, 6th Ed.* Oxford University Press.

Week 1: Introduction/The Nature of Science

Readings: S&S Ch 1&2

Workshop/Lab: Introduction to the course

Week 2: The Nature of Science (Cont'd)/Role of Theory and Models in Quantitative Research

Readings: S&S Chs 2 & 17

Workshop/Lab: Discussion on course projects and developing research questions

Week 3: Elements of Research Design

Readings: S&S Ch 4

Workshop/Lab: Literature search (Presentation by a librarian) & literature review

Week 4: Survey Research Methods

Readings: S&S Ch 9

Workshop/Lab: Research Hypothesis and Operationalization
Explore Datasets (ODESI)

Week 5: Measurement

Readings: S&S Ch 5

Workshop/Lab: Introduction to STATA and GSS

Week 6: Sampling

Readings: S&S Ch 6

Workshop/Lab: Q&A for the Research Proposal Assignment (a)
Data processing with STATA I

Week 7: Survey Instrumentation

Readings: S&S Ch 10

Workshop/Lab: Exam review

Week 8: Midterm Exam – in-person

Week 9: Data Processing and Elementary Data Analysis

Readings: S&S Chapter 15

Workshop/Lab: Uni-variate analysis with STATA I

Week 10: Multivariate Analysis I : Analyzing causal relationship and statistical control

Readings: [Remler & van Ryzin Ch 12](#) & S&S “Elaboration” pp. 532-539

Also suggested to read [Remler & van Ryzin Ch 11](#)

Workshop/Lab: Uni-variate analysis II & Bi-variate analysis

Week 11: Multivariate Analysis : Multiple controls and modeling relationships

Readings: [Remler & van Ryzin Ch 13](#)

Workshop/Lab: Elaboration with three variables (X, Y, Z)

Week 12: Research Ethics and Conclusion

Readings: S&S 3

Workshop/Lab: TBA

Week 13: TBA – Open Lab Q&A --

Important Policies

Academic Consideration for Missed Work: Students must provide valid medical or supporting documentation in order to receive accommodation for missed work worth 10% or more of the final grade in the course. All required documentation for absences must be submitted to the Academic Counselling office of a student's Home Faculty. Individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds or for other reasons.

Western's policy on Accommodation for Medical Illness can be found at https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf. The student medical certificate is available at https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.

Religious Accommodation: When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request accommodation for their absence in writing at least two weeks prior to the holiday to the course instructor and the Academic Counselling office of their Faculty of Registration. Please consult University's list of recognized religious holidays (updated annually) at <https://multiculturalcalendar.com/ecal/index.php?s=c-univwo>.

All students pursuing academic consideration, regardless of type, must contact their instructors no less than 24 hours following the end of the period of absence to clarify how they will be expected to fulfill the academic responsibilities missed during their absence. Students are reminded that they should consider carefully the implications of postponing tests or midterm exams or delaying submission of work and are encouraged to make appropriate decisions based on their specific circumstances.

Accessibility Options: Students with disabilities or accessibility challenges should work with Accessible Education (formerly SSD http://academicsupport.uwo.ca/accessible_education/index.html), which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: [Academic Accommodation for Students with Disabilities](#). Information regarding accommodation of exams is available on the Registrar's website: www.registrar.uwo.ca/academics/examinations/accommodated_exams.html

Scholastic Offences: Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following web site: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

A Note on Plagiarism: Students must write their assignments in their own words. Whenever students take an idea from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major scholastic offence.

Plagiarism Checking: All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the

service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<https://www.turnitin.com/>).

Mental Health: Students who are in emotional/mental distress should refer to Mental Health@Western (www.uwo.ca/health/mental_wellbeing/index.html) for a complete list of options how to obtain help.

Please visit the Social Science Academic Counselling webpage for information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters: [Academic Counselling - Western University \(uwo.ca\)](http://www.uwo.ca/academic_counselling/).

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at https://www.uwo.ca/health/student_support/survivor_support/get-help.html .To connect with a case manager or set up an appointment, please contact support@uwo.ca.