The University of Western Ontario
SOCIOLOGY 3306-A 001
Investigating the Social World:
Quantitative Research Methods
Fall 2023
In-person

Instructor: Yoko Yoshida
Office Hours: Wednesdays (11am -1pm) - drop-in
Department of Sociology, Office: SSC 5409
Email: yoko.yoshida@uwo.ca

This is a DRAFT only. Please see the course site for the final version.

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.

Unless you have either the prerequisites or written special permission from your Dean to enroll in the course, 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.

Anti-requisite(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 research in sociology. Starting from the formulation of research questions and working through data collection and analysis, this course introduces the 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 project.

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:**


Please consult the Western Bookstore for the prices and purchase options: [https://bookstore.uwo.ca/textbook-search?campus=UWO&term=W2023A&courses%5B0%5D=001_UW/SOC3306A](https://bookstore.uwo.ca/textbook-search?campus=UWO&term=W2023A&courses%5B0%5D=001_UW/SOC3306A)

**Required supplemental readings:**

In addition to the textbook, two chapters (Ch. 12 and 13) from the following book is assigned for the later part of this class. The chapters that are assigned as a part of the required readings are scanned and available on the OWL.


Both books are held on reserved 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/](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_mylabs.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.

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.

Teaching assistant: TBA

Email: TBA

Method of Evaluation:

The evaluation methods described in the course outline are essential requirements for the course.

There are three main components for this course.

1. **Mid-term exam** (25%): A mid-term exam is scheduled on **Tuesday, November 7th**. It will take place in-person during the class time (1:30pm-4:30pm). It will be a **closed-book exam** to test knowledge about fundamental quantitative research design and no use of electric 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. **In-lab Assignment : Data analysis challenge** (15%): An in-lab assignment will be scheduled during one of the workshop sessions (Date: TBA). It will be an assignment to test hands-on skills in working with and interpreting empirical results from the data. You are allowed to consult all the course materials previously introduced in class but expected to work under a time-constrained setting. The questions will be presented at the beginning of the lab, and the results should be submitted via OWL by the end of the class time.

3. **Course Project - Quantitative Research Paper** (60%): 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 must seek a permission by the instructor.)
This assignment will consist of two components:

a) **Literature review and formulating a research question** (20%) – Approx. 5 Pages
   *Due on Friday, October 13 at 11:55PM*

b) **Final research paper** (40%) – Approx. 12 Pages
   *Due on Tuesday, December 5 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.

**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 less than 10% of the overall course grade: N/A*

*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.

Students with an approved absence from the Mid-term exam will be required to write a makeup exam. The make-up Mid-term exam will be administered by the Department of Sociology. The date of the make-up will be announced in class. 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.

Students with an approved absence from the in-lab assignment may seek an alternative date to conduct the assignment by the instructor. Students should be aware that the make-up assignment will not necessarily be in the same format, be of the same duration, or cover the same material as the original assignment.

There is no minimum grade for passing for each component of the course evaluation. Unexcused absence from an exam or submission of an assignment will result in 0 point counted towards the final grade calculation.
## Course Schedule and Readings – Tentative

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sept 12</td>
<td>Introduction/The Nature of Science</td>
</tr>
<tr>
<td>2</td>
<td>Sept 19</td>
<td>The Nature of Science (Cont’d)/Role of Theory and Models in Quantitative Research</td>
</tr>
<tr>
<td>3</td>
<td>Sept 26</td>
<td>Elements of Research Design</td>
</tr>
<tr>
<td>4</td>
<td>Oct 03</td>
<td>Survey Research Methods</td>
</tr>
<tr>
<td>5</td>
<td>Oct 10</td>
<td>Survey Research Methods – Measures</td>
</tr>
<tr>
<td></td>
<td>Oct 13 (Friday)</td>
<td><strong>Deadline: Research Paper – Lit Review &amp; Research Q</strong></td>
</tr>
<tr>
<td>6</td>
<td>Oct 17</td>
<td>Survey Research Methods – Sampling</td>
</tr>
<tr>
<td>7</td>
<td>Oct 24</td>
<td>Survey Research Methods – Instrumentation</td>
</tr>
<tr>
<td></td>
<td>Oct 31</td>
<td>Reading Break - No Class</td>
</tr>
<tr>
<td>8</td>
<td>Nov 07</td>
<td><strong>Mid-term Exam</strong></td>
</tr>
<tr>
<td>9</td>
<td>Nov 14</td>
<td>Data Processing and Elementary Data Analysis</td>
</tr>
<tr>
<td>10</td>
<td>Nov 21</td>
<td>Multivariate Analysis I</td>
</tr>
<tr>
<td>11</td>
<td>Nov 28</td>
<td>Multivariate Analysis II</td>
</tr>
<tr>
<td>12</td>
<td>Dec 05</td>
<td>Research Ethics / <strong>In-lab assignment</strong></td>
</tr>
<tr>
<td></td>
<td>Dec 05</td>
<td><strong>Deadline: Final Research Paper</strong></td>
</tr>
</tbody>
</table>

### Academic Policies:

Please review the Department of Sociology “Important Academic Policies” document [https://sociology.uwo.ca/undergraduate/courses/Academic_Policies.pdf](https://sociology.uwo.ca/undergraduate/courses/Academic_Policies.pdf) for additional information regarding:

- Scholastic Offences
- Plagiarism
- Copyright
- Academic Accommodation
- Accessibility Options
- Mental Health