



**Western University**  
**SOCIOLOGY 3306B-001**  
**Quantitative Research**

Wednesdays 9:30am – 12:30pm (HSB 16)  
Winter 2019

**Instructor: Dr. Stephen Lin**

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**Course Description:**

The goal of this course is to provide you with a sophisticated understanding of both evaluating and conducting quantitative social science research. This course takes a hands-on approach to learning—the best way to learn research methods is to do research. One important area in which you will have the opportunity to enhance your skills is the analysis of data using statistical software.

**Anti/Prerequisites:**

Prerequisite(s): Sociology 2205A/B and 2206A/B. Course restricted to 3<sup>rd</sup> and 4<sup>th</sup> year students in the Department of Sociology modules on Main Campus.

Antirequisite(s): The former Sociology 3300A/B or 3302A/B.

**Learning Outcomes**

At the end of this course, students will:

- Identify, analyze and evaluate a variety of theoretical perspectives in Sociology, and assess the conceptual differences among them.
- Apply theory and sociological research to interpret social events and practices
- Read, synthesize and critically evaluate theoretical arguments and published research
- Understand and demonstrate the competent use of different quantitative methodologies.
- Interpret the results of multivariate quantitative data analyses
- Understand and meet the ethical standards for conducting research with human subjects.
- Write theoretically-informed papers that make a sustained, evidence-based, sociological argument, and present ideas and sociological concepts clearly.
- Demonstrate effective oral communication and presentation skills, and the ability to discuss ideas clearly and articulately.

## Required Text(s):

- Singleton, R. and B. Straits. 2017. *Approaches to Social Research, 6<sup>th</sup> Ed.* Oxford University Press.

**\*\*Note: I strongly recommend that you have a copy of a social statistics textbook from any previous statistics course. You can use it as a reference book to aid your learning in this course.**

## Statistical Computing:

The statistical computing for the course will be done using SPSS (Statistical Package for the Social Sciences). SPSS is available on computers located in the Social Science computing lab. Although it is not necessary, you may opt to purchase a student version of the SPSS software and install it on your home computer (check the Campus Computer Store for availability and pricing.) There is some lab time set aside during class hours, but you will most likely need to spend a significant amount of your own time in the lab. A description of some of the most common procedures in SPSS necessary for the project will be provided to you in class.

## Reading and Participation:

This course is required for the honours programme in sociology. As a result, it is expected that students will come to class prepared to discuss the assigned material. There are no participation or attendance grades, but failure to attend classes regularly will put you at a disadvantage. Much of the course is cumulative, so missing one class can cause problems for comprehending the material in the following classes. You are expected to attend all computer lab sessions.

## Method of Evaluation:

Learning the skills to conduct your own research and evaluate the research of others requires hands-on experience. As a result, there is a term project that you will complete in stages over the course of the semester, a mid-term test, and a final exam. The weighting of these components of your grade is as follows:

|                              |     |
|------------------------------|-----|
| Group Assignment 1           | 5%  |
| Two In-Class Tests (15% x2): | 30% |
| Final Group Project:         | 30% |
| Final Exam:                  | 35% |

## Evaluation Breakdown (detailed information provided in class and OWL)

### **Assignment #1 (5%) – Due by 4:00pm, February 1 (OWL dropbox submission)**

In this course, you and your partner will be asked to conduct a research project. The very first step of this project is to write a research proposal and details will be provided in the instruction sheet on OWL.

**In-Class Tests (15% x 2) – February 6 & March 20**

There are two in-class tests and each is worth 15% of the total grade. Test #1 will cover material from Jan 9 to Jan 30. Test #2 will cover material from Feb 6 to March 13. Both tests last for **one hour** and they consist of multiple choice questions only. Lecture material should be your primary preparation material. Anything from the readings that are not mentioned in lectures will not be tested.

**Final Project (30%) – Due by 4:00pm, April 11 (Department Dropbox Submission)**

The final project involves carrying out and writing up a research project using quantitative survey data, including formulating a research question, operationalizing variables, describing the survey sample, analysis methodology, and study limitations, and presenting and interpreting results. I will provide data for this analysis. Complete details, instructions, and due dates will be discussed in class and posted on OWL.

**Final Exam (35%) – April Exam Period**

The final exam will cover everything you have learned in this course. However, more questions will be from material covered after Test #2. This exam includes multiple choice questions only.

**Course Schedule and Readings:**

\*S&S = Singleton & Straits textbook

| Week | Date   | Topic/Assignment   | Assigned Readings                           |
|------|--------|--|---|
| 1    | Jan 9  | Introduction<br>The Process of Social Sciences   | S&S Ch. 2                                   |
| 2    | Jan 16 | Quantitative Research Designs<br>Survey Research Methods<br><b>COMPUTER LAB #1:<br/>Introduction to SPSS &amp; the<br/>Data (Bring your USB key)</b>             | S&S Ch. 4<br>S&S Ch. 9 (pp. 256-top of 267) |
| 3    | Jan 23 | Concepts to Measurement  | S&S Ch. 5                                   |
| 4    | Jan 30 | Causal Inference<br><b>Research Proposal (5%) DUE<br/>Friday, Feb 1 by 4:00pm (OWL<br/>Dropbox Submission)</b><br><b>COMPUTER LAB #2: Creating<br/>variables</b> | S&S Ch. 7 & 8                               |

|    |          |   |   |
|----|----------|---|---|
| 5  | Feb 6    | <b>Test #1 (9:30am – 10:30am)</b><br>Writing Research Report<br>**In-Class Research Time                        | S&S Ch. 17  |
| 6  | Feb 13   | Research using secondary data<br><b>COMPUTER LAB #3: Creating variables, continued</b>                          | S&S Ch. 12 (pp. 385-top of 402)                               |
| 7  | Feb 20   | Reading Week (No Class)   | No Reading  |
| 8  | Feb 27   | Foundations of Data Analysis  | S&S Ch. 15 (pp. 489-518)                                      |
| 9  | March 6  | Common Data Analysis<br>Review of Hypothesis Testing<br><b>COMPUTER LAB #4: Creating variables, continued</b>   | See Lecture Materials or Social Statistics Reference Textbook |
| 10 | March 13 | Making Comparison: Chi Square<br>Comparing Means of Two Groups: T test<br><b>COMPUTER LAB #5: Data Analysis</b> | See Lecture Materials or Social Statistics Reference Textbook |
| 11 | March 20 | <b>Test #2 (9:30am – 10:30am)</b><br>Comparing Means of Two or More Groups - ANOVA                              | See Lecture Materials or Social Statistics Reference Textbook |
| 12 | March 27 | Multivariate Analysis Part I<br><b>COMPUTER LAB #7: Data Analysis Continued</b>                                 | S&S Ch. 16 (pp. 526- top of 539)                              |
| 13 | April 3  | Multivariate Analysis Part II<br><b>COMPUTER LAB #8: Data Analysis, cont.</b>                                   | S&S Ch. 15 (pp.518-521)                                       |
| 14 | April 10 | Final Exam Review<br><b>FINAL PAPER DUE on Thursday, April 11 by 4:00pm (Hard Copy Submission)</b>              | No Reading  |

## ***Important Policies***

### **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 (the Scholastic Offence Policy can be viewed in the Western Academic Calendar).

### **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 (<http://www.turnitin.com>).

### **Policies on Examinations**

You may not use any electronic devices during examinations. Computer marked multiple-choice tests/exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating

### **Policy on Laptops and other Electronics/Phones in Class:**

Laptops are permitted in class but if it is observed that students are on social networking sites such as Facebook or Twitter, they will be told to close the lid and they will not be permitted to use it for the remainder of the class. Be sure that all cell phones are turned off at the beginning of class.

### **Policy on Accommodation for Medical Illness**

Western's policy on Accommodation for Medical Illness can be found at [http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/accommodation\\_medical.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf).

Students must see the Academic Counsellor and submit all required documentation in order to be approved for certain accommodation:

[http://counselling.ssc.uwo.ca/procedures/medical\\_accommodation.html](http://counselling.ssc.uwo.ca/procedures/medical_accommodation.html)

### **Accessibility Options:**

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 519 661-2111 x 82147 for any specific question regarding an accommodation. Information regarding accommodation of exams is available on the Registrar's website: [http://www.registrar.uwo.ca/examinations/accommodated\\_exams.html](http://www.registrar.uwo.ca/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:

[www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_undergrad.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf)

## Mental Health

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

## Grade Guidelines

Department of Sociology guidelines require a particular course grade distribution, which may require curving or otherwise adjusting your course grade in order to meet this requirement. As much as possible, your earned course grade will be the grade you receive. **For 3300-level courses, the course mean is to be between a 70-74%.**



*Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 519 661-2111 x 82147 for any specific question regarding an accommodation.*

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