



The University of Western Ontario
SOCIOLOGY 3302B
Introduction to Big Data
Winter 2025
In-Person

Instructor: Professor Michael Haan

Department of Sociology
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Course Description: Big data are too large or complex to be handled by traditional methods. This course explores what big data are, where they come from, and what we can do with them. We will cover the ethical, philosophical, and methodological complexities involved, and do some introductory hands-on analysis.

Prerequisite(s): Sociology 2205A/B or 0.5 course from the Introductory Statistics Course List.

Unless you have either the prerequisites 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.

Anti-requisite(s): none

Course Objectives and Learning Outcomes:

Course Material:

There is no ideal textbook for this course, but the following required book is close:

Viktor Mayer-Schönberger, and Kenneth Cukier. 2014. *Big Data: A Revolution That Will Transform How We Live, Work, and Think*. Boston: Houghton-Mifflin-Harcourt.

Yes, it's old, but it continues to provide an interesting and succinct introduction to the topic.

In addition to this book, I also plan to assign book sections and articles as necessary and appropriate. These will be made available on Western's OWL site for the course. If you are enrolled in the course, you should be able to access OWL and see the page for the course.

The third assignment will involve the analysis of a big dataset. More details will be provided in-class.

Final Exam **30%**

This will be a comprehensive, cumulative assessment of your knowledge and retention of materials covered throughout the semester. The exam will be in-person, and you will have three hours to complete it. Details on the date and location of the final exam will be made available later in the semester.

For both the midterm and the final exam, 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.

Please note that the Sociology department has scheduled dates for makeup exams (only students with appropriate documentation will be allowed to write these exams):

- Final: TBA

Policies for Assignment Deadlines:

I will deduct 10% per day for late assignments.

Policy on Exams

Every examination in this class (including the final) will be 3 hours long. It will be written in person, and only a calculator not capable of storing text is permitted. The calculator should be able to calculate exponents and square roots. No other devices or cheat sheets are permitted.

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.

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.

University policy on academic considerations are described [here](#). This policy requires that all requests for academic considerations must be accompanied by a self-attestation. Further information about academic considerations, and information about submitting this self-attestation with your academic consideration request may be found here. Please note that any academic considerations granted in this course will be determined by the

instructor, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course outline.”

Students must familiarize themselves with the [Policy on Academic Consideration – Undergraduate Students in First Entry Programs](#). Students missing course work for medical, compassionate or extenuating circumstances can request academic consideration by completing a request at the central academic consideration portal. Students are permitted one academic consideration request per course per term without supporting documentation. Note that supporting documentation is **always** required for academic consideration requests for examinations scheduled by the office of the registrar (e.g. December and April exams) and for practical laboratory and performance tests typically schedule during the last week of the term. Students should also note that the instructor may designate one assessment per course per term that requires supporting documentation. This designated assessment is described elsewhere in this document. Please note that any academic considerations granted in this course will be determined by the instructor of this course, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course outline. Supporting documentation for academic considerations for absences due to illness should use the [Student Medical Certificate](#) or, where that is not possible, equivalent documentation by a health care practitioner.

Students with an approved absence from an in-class test or exam will be required to write a makeup exam. 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.

Absences from Final Examinations:

Students must provide valid medical or supporting documentation to their Home Faculty Academic Counselling Office as soon as possible. Academic Counselling will determine eligibility to write a Special Examination (the name given by the University to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a “Multiple Exam Situation” (e.g., more than 2 exams in 23-hour period, more than 3 exams in a 47-hour period).

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-19 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.

Artificial Intelligence:

All assignments must be completed independently, without the aid of artificial intelligence (AI).

Academic Policies:

Please review the Department of Sociology “[Important Academic Policies](#)” document

https://sociology.uwo.ca/undergraduate/courses/Academic_Policies.pdf for additional information regarding:

- Scholastic Offences
- Plagiarism
- Copyright
- Course Selection
- Absence from Course Commitments
- Missed Tests and Exams
- Religious Accommodations
- Accessibility Options
- Mental Health
- Gender-Based and Sexual Violence statement

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