ECO220 (Introduction to Data Analysis and Applied Econometrics)

Course Outline for Section L0101, Summer 2025

1 Instructor Information

First Half [May/June]

Instructor: Alison Cane E-mail: a.cane [at] mail.utoronto.ca Office Hours: Wednesdays [1PM - 2PM] online Zoom link, Meeting ID: 898 4631 2089 Thursdays [4PM - 5PM] in person (office GE072)

Second Half [July/August]

Instructor: Dina O'Brien E-mail: dina.obrien [at] mail.utoronto.ca Office Hours: TBD

Data Analysis Course Module (DACM)

Instructor: Benjamin Lauzon E-mail: benjamin.lauzon [at] mail.utoronto.ca

Teaching Assistant [May/June]: Chenyue Liu

Office Hours: Mondays and Wednesdays [9AM - 10AM] online Zoom link, Meeting ID: 522 334 0944

2 Course Information

2.1 Course Overview

The purpose of this course is to provide a comprehensive introduction to econometric methodology and data analysis. The content can be separated into four major sections:

- 1. Understanding Data: The collection, processing, and interpretation of raw data.
- 2. Probability: The mathematical tools we use to quantify uncertainty.
- 3. **Statistical Inference:** The use of probability to infer characteristics from a population using a sample of data.
- 4. Regression: Building and understanding statistical models of economic relationships.

Using a combination of lectures and practicums, you will have an opportunity to build your foundation of knowledge in econometrics and apply the theory you learn with real life examples. By the end of the course, you should feel comfortable working with data, interpreting your results, and explaining your findings to others.

2.2 Course Delivery Format

All lectures are expected to be in-person for the duration of the term. If a lecture needs to be online, an announcement will be made in advance via Quercus. Although participation is not enforced in this course, you will find that attending lectures is the best way to understand the material that will be tested. Lectures will not be recorded, so if you miss a class, it is your responsibility to make up for the material that you missed.

2.3 Textbook and Slides

Recommended Textbooks: The recommended textbook for this course is *Business Statistics, 4th Canadian Edition, by Sharpe, De Veaux, Velleman, and Wright.* The 3rd Canadian Edition is also a good substitute.

Readings for the course include the textbook and supplements available on Quercus' Readings tab.

Slides: The instructors will provide slides in the course, which are mandatory reading materials. However, it is important you attend lectures, since many concepts on the slide deck will be explained in detail during class.

2.3.1 Data Analysis Course Module (DACM) and Tutorials

DACM: DACM practicums are **mandatory** TA run tutorials where you learn data analysis skills, reinforce your understanding of core course curriculum, and practice effective writing skills. These tutorials will require the use of Excel. Therefore, it is important to bring your laptop with an up-to-date installation of Microsoft 365 ProPlus. Also, bring pencils, erasers, your TCard, and the course aid sheets. **NOTE:** You must attend the section you are registered for on ACORN. (If you attend with the wrong section you cannot get credit for submitted work.)

Tutorials: Review sessions will be held prior to term tests to cover practice problems and review concepts learned in the lectures. They are not mandatory, but helpful for understanding the class material.

3 Assessments

3.1 Grade Breakdown

Assessment	Weight	Instructor	Date
Participation	2%	Alison & Dina	See section 3.2
Term Test 1	22%	Alison	June 24
Term Test 2	12%	Dina	July 22
Term Test 3	12%	Dina	Aug 7
DACM Participation	12%	Ben	See section 3.4
Final Examination	40%	Alison & Dina & Ben	August 16-25, TBD

3.2 Participation

Participation is worth 2% of your final grade. It will be assessed throughout the course based on your use of the course resources and engagement with the material. We will discuss it further in class.

3.3 Tests

There will be three term tests in total:

- Term Test 1 [22%]: Two hour test covering material from the first half [written by Alison].
- Term Test 2 and Term Test 3 [12% each]: Two hour tests covering material from the second half [written by Dina].

3.4 DACM

There will be **six mandatory** DACM practicums throughout the Summer term. DACM practicums will occur on May 23, June 6, June 13, July 4, July 11, and July 25. Note that the quality of your work counts! Your grade will not be determined by attendance but rather the effort and quality demonstrated within your submitted work. Each practicum counts for 3% of your final grade for a total of 12%.

3.5 Final Exam

The final exam is a three hour assessment which covers all materials in the course, including both halves and DACM.

4 Other Important Things

4.1 Email Policy

Questions about the course material can be asked during lecture time, office hours, or on Piazza. You may also email any of the instructors if you have questions, but note that longer questions may be difficult to answer over email.

4.2 Piazza

Piazza will be made available in both terms. This is a forum for students to ask questions about the course material. We encourage students to try to answer questions and discuss the material! Piazza will be monitored by the instructors/TAs who will also answer questions.

4.3 Office Hours

Each week, there will be at least two hours of office hours - one with the instructor and one with the TA. This is a great opportunity to ask us questions related to course materials.

4.4 Missing Assessments

Missed Test: If you miss a term test, you **must** fill out a missed test form within 72 hours of the assessment date. We will not accommodate more than one missed test. If your situation is such that you are unable to complete more than one test, you should consult your College Registrar for advice on

dropping the course and retaking it when you are in a better position to complete the required work.

There are no make-up tests. Instead, the weight of the test will be shifted to the final exam. In addition, if you write all three term tests but perform better on the final exam, we will automatically drop the results of your lowest term test and shift the full weight to the final exam. Any questions around your academic integrity for any work disqualify you from automatic adjusted weights.

Missed DACM: The 2 lowest DACM practicums are automatically dropped from grade calculation. This is done automatically, and in particular, you do not need to submit any documentation if you miss a practicum. No further accommodations will be made for DACM.

Missing the Final Exam: If you miss the final exam, you need to submit a petition to the Faculty of Arts and Science for a deferred final exam. Please consult this link for more information on the petition process.

4.5 Appealing Grades

After your tests are returned, you will have an opportunity to review them via Crowdmark. A form to appeal your grade will be made available for one week after the return date. By submitting an appeal, you agree to having your entire test remarked. In particular, it is possible for your grade to increase OR decrease after the regrading process.

4.6 Cheating or Academic Dishonesty

Don't cheat or commit academic offenses; its not worth it! If you cheat or commit an academic offense, we are obligated to report it to the relevant university authority, and it could negatively affect your academic record. Everything you need to know about academic integrity is right here.

4.7 Recording, Photography and Sharing Course Material

In general you shouldn't be recording the lecture unless you ask us for explicit consent to do so. Some students may need to record the lecture for accessibility reasons, and we are happy to accommodate, but you will have register for it (see below). Under no circumstances should you publish any of the course material online or distribute it to others outside of the class. This is an infringement of copyright.

4.8 Accommodations

Some students may require special accommodation on assessments for a wide range of reasons. We are very happy to provide those accommodations to you, but you will have to register for them formally. For example, you can click here to learn about religious accommodations, or here to learn about accessibility services. From our understanding, it takes time for accommodations to be processed, so the sooner you submit the paperwork, the better.

Moreover, if you are struggling with the course, or expect to miss a significant portion of classes and/or tests, we also encourage you to reach out to your College Registrar immediately. Note that missing one week of class is equivalent to missing **two weeks of** lectures in a regular term (since the summer course runs more than twice as fast). Hence, any significant absence could have an important impact on your chances at success in this course.

4.9 Equity Statement

The equity statement of our university can be found here. In short, it's everyone's responsibility to foster a positive, respectful, and welcoming environment for all. As the instructors, we will do our best to ensure our learning environment is inclusive so that all our students can feel safe and comfortable being a member of our class.

If there is anything else that you find missing from the syllabus or unclear, please e-mail us and let us know!