ECO220 (Introduction to Data Analysis and Applied Econometrics)

Tentative Course Outline for Section L0101, Summer 2024

1 Instructor Information

First Half [May/June]

Instructor: Benjamin Lauzon E-mail: benjamin.lauzon [at] mail.utoronto.ca Office: GE6 Office Hours: TBD

Second Half [July/August]

Instructor: Quinlan Lee E-mail: qt.lee [at] mail.utoronto.ca Office: GE74 Office Hours: TBD

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 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: There are two recommended textbooks for this course:

- 1. Business Statistics, 4th Canadian Edition, by Sharpe, De Veaux, Velleman, and Wright.
- 2. Introductory Econometrics: A Modern Approach, 6th Edition, by Wooldridge.

For the first half, you will find that Business Statistics is a good complement to the structure of the course. For the second half, the lectures follow closely to the ordering of the Introductory Econometrics textbook. However, it is generally a difficult read for second year students, since it is and advanced undergraduate textbook. As such, there are no mandatory readings for this course, but we make these recommendations so students have a reference text in case they want further readings.

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.

2.4 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 with your ACORN section. (If you attend with the wrong section you cannot get credit for submitted work.).

Tutorials: Tutorials are practicums where the TA's will cover practice problems or reinforce concepts learned in the lecture. They are not mandatory, but helpful for understanding the materials in the class.

3 Assessments

3.1 Grade Breakdown

Assessment	Weight	Instructor	Makeup?	Date
Term Test 1	16%	Ben	Yes	May 28th 2024
Term Test 2	22%	Ben & Quin	No	July 16th 2024
Term Test 3	16%	Quin	Yes	August 1st 2024
DACM participation	12%	Ben		See section 3.3
Final Examination	34%	Ben & Quin		TBD

3.2 Tests

There will be three term tests in total with varying weights:

- Term Test 1 and Term Test 3 [16% each]: Two hour tests to be written by the individual instructors for each half [Ben for Term Test 1, and Quin for Term Test 3].
- Term Test 2 [22%]: A two hour test written by both instructors, which will cover approximately 2.5 weeks of material in each half, to be written early in the second half.

3.3 DACM

There will be **eight mandatory** DACM practicums throughout the Summer term. DACM practicums will occur on May 16, May 23, June 4, June 13, July 4, July 11, July 25 and August 8. Note that the quality of your work counts! Therefore, attendance is not what determines your grade but rather the effort and quality demonstrated within your submitted work. The lowest 2 grades in your DACM practicums are automatically dropped. Each practicum counts for 2 % of your final grade for a total of 12 %.

3.4 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

Generally, questions about the course material should be asked during lecture time, office hours or on Piazza. If you have a personal question, you can email us, but please include ECO220 in the subject line. Note that Ben is in charge of the first half of the course and DACM. Quin is in charge of the second half of the course. Further, we will only answer emails sent from official UofT email accounts.

4.2 Piazza

Piazza will be made available in both terms. This is a forum for students to ask questions about the course material, and is the best way to reach the instructors. We also encourage students to try to answer questions as well! Piazza is treated as a classroom and hence any questions or material answered there is also fair game for any test or exam.

4.3 Office Hours

Each week, there will be two hours of office hours - one with the instructor and one with the TA. This is also 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.

- For Term Test 1 and Term Test 3, there will be a make-up test that will be administered after the original test date. There is no make-up for the make-up test, so if you miss that one as well, you will be assigned a grade of zero.
- For Term Test 2, there is no make-up test. Instead, the weight of the test [22%] will be shifted to the final exam.

Missed DACM: The 2 lowest grades in your 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. Note that there are no grade appeals for DACM.

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 accomodate, 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 wide range of reasons. We are very happy to provide those accomodations to you, but you will have to register for them formally. For example, you can click here to learn about religious accomodations, or here to learn about accessibility services. From our understanding, it takes time for accommodation 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 of missing **two weeks of** lectures in a regular term (since the summer course runs more than 2 times 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, its 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 Ben or Quin and let us know!