

York University
Faculty of Liberal Arts & Professional Studies
Department of Economics
Fall 2021

AP/ECON3210 3.0B – Use of Economic Data

Instructor: Uros Petronijevic
Email address: upetroni@yorku.ca
Virtual Office hours: Thursday 12:00pm to 1:00pm on Zoom.
Scheduled class meeting time: Tuesday and Thursday 11:30am-1:00pm
Course website: <http://eclass.yorku.ca/>

Class time and location

Please note that this is a course that depends on remote teaching and learning. There will be no in-person interactions or activities on campus. The entire course, including the submission of assignments, participation/discussion, and test-taking, will take place on the course's e-Class page.

Technical requirements for taking the course

Several platforms will be used in this course (e.g., e-Class, Zoom, etc.) through which students will interact with the course materials, the course director/TA, as well as with one another. Please review this syllabus to determine how the class meets (in whole or in part), and how office hours and presentations will be conducted.

Students shall note the following:

- Zoom is hosted on servers in the U.S. This includes recordings done through Zoom.
- If you have privacy concerns about your data, provide only your first name or a nickname when you join a session.
- The system is configured in a way that all participants are automatically notified when a session is being recorded. In other words, a session cannot be recorded without you knowing about it.

Please review the technology requirements and FAQs for e-Class.

Students will need a stable internet connection to access lecture materials, lecture videos, assignments and practice problems, and exams online on the course's e-Class page. All course materials will be posted there on a weekly basis. Virtual office hours will be held online using Zoom.

Here are some useful links for student computing information, resources, and help:

- Student Guide to e-Class
- [Zoom@YorkU Best Practices](#)
- [Zoom@YorkU User Reference Guide](#)
- [Computing for Students Website](#)
- [Student Guide to eLearning at York University](#)

Virtual Office Hours

I will hold virtual office hours/tutorial sessions on Zoom every **Thursday 12:00pm to 1:00pm** (during the last hour of our regularly scheduled weekly meeting time). This meeting will be setup as a recurring Zoom meeting every week on our course's e-Class page.

Please note that **I reserve the right to extend the duration of this weekly office hour meeting by starting at 11:30am on Thursday in some weeks**. If that decision is made, I will communicate the details to students well in advance over a e-Class announcement and email.

Course Description

This course introduces the theory and practice of empirical analysis of economic models. It develops tools to estimate economic relationships involving two or more variables and to test their significance. It relies on the use of data sets and statistical software packages to show how linear regression analysis is applied.

Prerequisites: AP/ECON2500 3.00 or equivalent. Note: No credit will be retained for this course for students who have successfully completed or who are currently enrolled in AP/ECON 4210 3.00.

Course credit exclusions: HH/PSYC 3030 6.00, SC/MATH 3330 3.00. Note: Acceptable course substitutes are available in the Calendar. PRIOR TO FALL 2009: Course credit exclusions: SC/BIOL 2060 3.00, AK/AS/ECON 3210 3.00, AK/AS/SC/MATH 3033 3.00, AS/SC/MATH 3330 3.00.

Course Organization

This course will proceed on a **weekly** basis. We will (usually) cover new topics each week. (A tentative list of topics to be covered appears below.) I will post all relevant material for the week on the course's e-Class page by Tuesday at 11:30am. I will also use e-Class announcements to regularly communicate with the class and provide updates when needed. Please make sure your email address on e-Class is up to date.

Each week, I will both post pre-recorded lecture videos (and the associated slides in PDF format) and hold live lecture/tutorial sessions over Zoom. Here is an outline of **how we will proceed each week between 11:30am and 1:00pm on Tuesdays and Thursdays** (our regularly scheduled meeting times):

- **By 11:30am on Tuesday of each week** (likely earlier): I will post a set of pre-recorded lecture slides and videos, in which I discuss the topic(s) for that week.
- **Between 11:30am and 1:00pm each Tuesday:** I recommend you use this time to go over the notes and watch the videos. Of course, you can go over the notes and videos whenever you like. This is time is just a **suggestion**.
- **Between 11:30am and 12:00pm each Thursday:** Briefly review what you learned on Tuesday and gather any questions you may have.
- **Between 12:pm and 1:00pm each Thursday:** I will hold a live lecture/tutorial session over Zoom. We will use this time in two main ways:
 - We will use the statistical software package Stata in this course. We will use the live lecture sessions to demonstrate how to use Stata to execute the analyses that are covered in the lecture notes.

- **Please note: attending tutorial sessions is required and iClicker quizzes will be administered in tutorials.** That is, I will ask multiple choice quiz questions during tutorials using *iClicker* technology. See more on how to setup *iClicker* accounts and how these quizzes are graded below.
- We also use this time as a virtual office hours session, in which students should feel free to ask their questions.

To sum up, by Tuesday morning of each week I will post (i) my lecture slides in PDF format and (ii) lecture videos, in which I discuss the slides. You should then go over these materials. We will then use the last hour of our scheduled meeting time on Thursdays as virtual office hours, during which I will demonstrate how to use Stata, ask easy multiple-choice questions via *iClickers*, and go over any questions you may have.

As we move through the course, I will also post three (3) problem sets that are to be submitted in groups of up to four (4) students. I will notify students when these are posted and when they are due (usually within two weeks of being posted). See more detail about the problem sets and course grade breakdown below.

Required Course Textbook

Each week, the lectures will be based on chapters from the following textbook:

Wooldridge, Jeffery M., *Introductory Econometrics: A Modern Approach* 7th Edition.
Cengage Learning.

The **e-book version** is available from the university's bookstore.

Statistical Software Used in the Course

This course involves assignments with statistical analysis. The statistical software package that this course supports is Stata (<http://www.stata.com/>). The current version of Stata is 17 but any version that is 13 or above is fine.

You are strongly encouraged to use Stata for your assignments, as I will provide demonstrations of how to use Stata during virtual office hours and will often provide Stata code (“do files”) for both examples we cover in lecture and to get you started on your assignments. You are also expected to know (a few, very basic) Stata commands on exams.

(You are free to use other software for assignments, such as R, Python, Matlab, etc., but I will not provide support for questions pertaining to any software package other than Stata.)

Unfortunately, Stata is not a freely distributed software. However, you can purchase Stata at a discounted student price:

Purchase a six-month license of Stata

You can visit this website <http://www.stata.com/order/new/edu/gradplans/student-pricing/> and purchase a six-month license of Stata/BE for a student price of \$48.00 (US dollars). You can then download and install the software immediately (although I believe you need to prove you are a student with a photocopy of a student ID card).

(Trying to) Use Stata for Free through York

You can try going to <https://myapps.yorku.ca/> and logging in with your passport York ID. You will be asked to download an app. Please do so and follow all the instructions. After the app is installed on your computer, scroll down the list of applications on the MyApps website and find Stata 13. Hovering your mouse over it and clicking "virtual" should launch Stata on your desktop.

Please note: York University recently made some unfortunate changes to the Stata license on MyApps. As of fall 2021, we were only able to secure 40 licenses for our students in ECON 3210, which means only 30 students can use Stata on MyApps on each day. I do not know the current license quota and would therefore recommend purchasing Stata directly through Stata Corp (see above). But, if you like, you can try to use the software on the MyApps platform, understanding the license uncertainty discussed here.

Please make sure you can open Stata prior to our first Zoom meeting. I will demonstrate how to use Stata during our virtual office hours.

iClicker Software Used in the Course

To facilitate our learning of Stata, I will be using *iClicker* multiple choices quizzes during our weekly tutorials. These quizzes will count for **5 percent** of your total grade. To take the stress off, and help you learn Stata without fear of making mistakes, the **quizzes will be grade for participation only**, not based on whether you answer correctly. That is, you will earn full points each week just by showing up to answer the questions.

Throughout the course, there will usually be a quiz every Thursday during the tutorial, but there may not be a tutorial in the rare weeks when there are no new skills to cover in Stata. Because the number of tutorials is not determined yet, the total number of quizzes is also not determined. Nonetheless, no matter the total number of quizzes, you are **allowed to miss two (2) tutorials throughout the semester with no penalty**. To allow for this, I will calculate your total quiz grade as follows:

- Let TQ be the total number of quizzes/tutorials we have during the semester.
- Participating in each quiz/tutorial with iClickers will earn you one point per quiz/tutorial, for a total of TQ possible points at the end of the semester.
- Let PQ be the number of quizzes/tutorials in which you participate. Your final (overall) quiz grade, denoted as QG , is

$$QG = \frac{PQ+2}{TQ}$$

Note: your quiz grade QG will be **capped at maximum 100%**.

- **Example:** if we have 12 quizzes ($TQ=12$) and you participate in 11 of them ($PQ=11$), your final quiz grade is $QG = (11 + 2)/12 = 13/12$. But I will cap this at $12/12$, making the total quiz grade in this example a perfect 100 percent.

You can view your iClicker grade on eClass. It is your responsibility to regularly check your iClicker grade in eClass for any discrepancies and bring them to my attention within 14 days of the tutorial.

To participate in the iClicker sessions and ensure that your grades are properly reflected in the gradebook,

you will need to setup an iClicker account by **CAREFULLY** following the steps outlined in the “**Setting Up Your iClicker Account**” slides I have posted on our e-Class website. There is **NO COST** for the iClicker account. We will spend some time in the first tutorial to walk through setting up your iClicker account.

Course Breakdown

The final course grade will consist of three assignments, one midterm exam, and a final exam, according to the following breakdown (with one exception noted below):

Evaluation	Date	Weight of Final Grade
Assignment 1	To be announced on course website	5%
Assignment 2	To be announced on course website	5%
Assignment 3	To be announced on course website	5%
<i>iClicker</i> quizzes	Ongoing on (most) Thursdays	5%
Midterm Exam	Tuesday October 26, 2021. 11:30am to 1:00pm.	30%
Final Exam	To be scheduled by the University	50%

The grading scheme in the table above is the baseline grading scheme. If, however, a student scores higher on the final exam than on the midterm, I will shift 50% of the weight of the midterm toward the final exam. Therefore, for students who score higher on the final exam than on the midterm exam, their grade will be determined as follows:

Evaluation	Date	Weight of Final Grade
Assignment 1	To be announced on course website	5%
Assignment 2	To be announced on course website	5%
Assignment 3	To be announced on course website	5%
<i>iClicker</i> quizzes	Ongoing on (most) Thursdays	5%
Midterm Exam	Tuesday October 26, 2021. 11:30am to 1:00pm.	15%
Final Exam	To be scheduled by the University	65%

Midterm and Final Exam

A few important points about the midterm and final exam:

- Please **note the date and time of the midterm exam**: The midterm exam will be held online (and accessed through the course’s e-Class page) on **Tuesday October 26, 2021, from 11:30am to 1pm EST**.
- The final exam will also be held online during the university’s official exam period. It will be scheduled by the university.
- The midterm exam will cover approximately the first half of the course and the final exam will cover the entire course, although with more emphasis on the second half of the course.

Exams must be taken by all students at the scheduled time. **There is NO make-up exam for a missed midterm exam.** If a student misses the midterm exam, the weight of the midterm exam will be transferred to final exam only if the student missed the midterm for a legitimate reason (e.g., illness or

injury, death in the family) and can provide detailed documentation of this reason as required by the economics department. If a student misses the midterm and fails to meet these requirements, they will receive a grade of zero on the midterm. **When the midterm exam is missed with a valid reason and the associated documentation is provided, the weight of the final exam will be 80%.** There will be no deferred standing agreements. This means that students missing the final exam must petition following the corresponding administrative procedures as established by the faculty.

Homework Assignments

The homework assignments will include a combination of data work using statistical software packages and theoretical work. Students are strongly encouraged to attempt all the homework questions. You may complete the assignments in groups of up to four (4) students. Assignments will be posted on the course website and students will submit their answers there as well.

Not only do the assignments count toward the course grade, but learning statistics requires working through difficult ideas and getting your hands dirty with data analyses. There is no way around this. Please complete all assignments to the best of your ability and ask a question when something is unclear.

No assignments will be accepted after the due date, unless proof of the legitimate reason that caused delay is provided. If a student does not provide detailed documentation of the reason, a grade of zero will be assigned to the late assignment.

Regrade Policy

For both assignments and the midterm exam, students who wish to request a regrade must do so within one week from the day the assignment or the midterm is returned to the class, regardless of when the student receives his or her assignment or midterm. If a student finds a problem with the grading of a problem set or the midterm exam, she/he should inform the course instructor immediately. When requesting a regrade, the student should submit a clear, concise note, explaining which question she/he would like regraded and why, making clear reference to how her/his answer compares to the correct solution.

If an assignment or the midterm is submitted for a regrade, the entire assignment or midterm will be regraded, not just the question(s) that is (are) of interest. This means the overall grade on the evaluation can go up, down, or stay the same.

Grading

The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A+ = 9, A = 8, B+ = 7, C+ = 5, etc.). Assignments and tests will bear either a letter grade designation or a corresponding number grade (e.g. A+ = 90 to 100, A = 80 to 90, B+ = 75 to 79, etc.).

Topics to be Covered:

The following is a preliminary list of topics and planned schedule for coverage. Please note that this is

subject to change.

Week	Topic(s) to be Covered
Week 1: Thursday September 9, 2021	<ul style="list-style-type: none"> • Introduction (Chapter 1) • <i>Stata/iClicker</i> Introduction
Week 2: Tuesday September 14, 2021	<ul style="list-style-type: none"> • Review of Basic Statistical Concepts (Textbook Appendices)
Week 3: Tuesday September 21, 2021	<ul style="list-style-type: none"> • Simple Regression Model Part 1 (Chapter 2)
Week 4: Tuesday September 28, 2021	<ul style="list-style-type: none"> • Simple Regression Model Part 2 (Chapter 2)
Week 5: Tuesday October 5, 2021	<ul style="list-style-type: none"> • Multiple Regression Analysis: Estimation Part 1 (Chapter 3)
Week 6: Tuesday October 12, 2021	Reading Week
Week 7: Tuesday October 19, 2021	<ul style="list-style-type: none"> • Multiple Regression Analysis: Estimation Part 2 (Chapter 3)
Week 8: Tuesday October 26, 2021	Midterm: 11:30am to 1pm.
Week 9: Tuesday November 2, 2021	<ul style="list-style-type: none"> • Multiple Regression Analysis: Inference Part 1 (Chapter 4)
Week 10: Tuesday November 9, 2021	<ul style="list-style-type: none"> • Multiple Regression Analysis: Inference Part 2 (Chapter 4)
Week 11: Tuesday November 16, 2021	<ul style="list-style-type: none"> • Multiple Regression Analysis: Further Issues (Chapter 6)
Week 12: Tuesday November 23, 2021	<ul style="list-style-type: none"> • Multiple Regression Analysis: Dummy Variables (Chapter 7)
Week 13: Tuesday November 30, 2021	<ul style="list-style-type: none"> • Heteroskedasticity (Chapter 8)

Important Course Information for Students

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Academic Standards, Curriculum & Pedagogy webpage (see Reports, Initiatives, Documents): <http://www.yorku.ca/secretariat/policies/index-policies.html/>

- Senate Policy on Academic Honesty and the Academic Integrity Website
- Ethics Review Process for research involving human participants
- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities
- Student Conduct Standards
- Religious Observance Accommodation

Please also take note of the following important dates:

Course ADD/Drop Deadlines

	Fall Term 2021 (F)	Winter Term 2022(W)
Last date to add a course without permission of instructor (also see Financial Deadlines)	Sept. 22	Jan. 23
Last date to add a course with permission of instructor (also see Financial Deadlines)	Oct. 5	Feb. 7
Last date to drop a course without receiving a grade (also see Financial Deadlines)	Nov. 12	March 18
Course Withdrawal Period (withdraw from a course and receive a grade of “W” on transcript – see note below)	Nov. 13 - Dec. 7	March 19 - Apr. 10

****Policy and Guidelines on Withdrawn from Course:**

<http://secretariat-policies.info.yorku.ca/policies/withdrawn-from-course-w-policy-and-guidelines/>