Contact

Michael Gmeiner E-mail: michael.gmeiner@northwestern.edu

TAs: Alex Doser, AlexanderDoser2023@u.northwestern.edu Carl Hallman, CarlHallman2022@u.northwestern.edu Jin Yang, JinYang2025@u.northwestern.edu

Course Description

ECON 281 is an introduction to applied econometrics, or using statistical methods to answer economic questions. We will develop econometric techniques to answer questions of the form: what is the effect of x on y? For example: "How does education affect income?" and "Does unemployment rise when the minimum wage increases?" Main themes are:

1. Mechanics of regression. How are estimates calculated? What assumptions are being made?

- 2. Interpreting results. What can we conclude? Is a relationship causal or correlation?
- 3. Implementation in Stata
- 4. Identification Strategies. Methods to make it likely that our results are causal, not correlation.

Lecture and Section

Lecture: Tuesday and Thursday 11:00-12:20pm Central Time. Zoom on Canvas. Section:

- 21: TA Carl Hallman Monday 3:00-3:50pm.
- 22: TA Jin Yang Monday 4:00-4:50pm.
- 23: TA Alex Doser Wednesday 8:00-8:50am.
- 24: TA Carl Hallman Wednesday 3:00-3:50pm.

Office Hours

Instructor Gmeiner: Tuesday and Thursday 1-2pm, Wednesday 7-8 am, and Friday 9-10 am.

TAs: Carl: Wednesday 1:00-3:00 PM

Jin: Monday and Wednesday 12:30 - 1:30 PM

Alex: Wednesday 3:40 - 5:40 PM

The Basics

Prerequisites: You must have taken ECON 201 and 202, MATH 220, and STAT 210 to enroll in this course.

Stata: Assignments in this course require you to use the statistical software, Stata. To purchase your own copy for your computer, a six-month license for Stata/IC is available for \$48. One purchased license can be used to install Stata on up to 3 computers.

See https://www.stata.com/order/new/edu/profplus/student-pricing/.

During the pandemic, the Northwestern library is allowing students to access the library's computers, and therefore Stata, remotely.

 $See \ https://www.library.northwestern.edu/visit/technology/computers/remote-pc-access.html$

for details. You must first set up a Northwestern VPN.

I do not care which method you use, but it is your responsibility to attain Stata access. The course will teach you how to use Stata, but you must gain access on your own.

Calculators: Only basic calculators are permitted on assessments in this class and on exams. You are not allowed to use a graphing calculator (or any calculator with storage).

Textbook: The optional textbook for this course is *Introductory Econometrics: A Modern Approach* by J. Wooldridge. You can use any edition, but know that lecture will provide all content you need and the textbook is overly detailed.

Electronic Devices Except in the case of necessity, remote learning, or for the purpose of a class exercise, there will be no computers, cellphones, tablets or other mobile communication devices used during the lectures. Keep devices on silent.

Email: Any email you send should contain "ECON 281:" plus a description in the subject line so that I can identify it. If I have not responded within 12 hours, you should send another email to remind me. Email is an excellent method to communicate with me. I may not answer content questions via email sent after 7pm the day before an quiz/exam or an assignment dead-line. This is mostly to (1) give me enough time to provide you with meaningful answers/feedback, and also (2) discourage you from waiting until the last minute to start an assignment or study.

Grading

Assignment	Due Date	Percent of Final Grade
8 Homework Assignments	Throughout the Quarter	15, each is $1.875%$
5 Quizzes	Throughout the Quarter	15, each is 3%
Midterm	5/4/2021 In-Class	30
Final	6/7/2021 12:00 PM	40

Quizzes will be on Tuesdays as marked in the lecture topic plan. If you cannot take a quiz in class due to an excused absence, a class conflict that was explained to Gmeiner prior to the quarter beginning, or due to living in a distant time zone, there will be an alternate quiz at 8:00 pm Central time on the same day. The midterm and final will not have separate evening versions. There will be no make up quizzes or tests. Missing results in a 0. Gmeiner will explain proctoring procedures in class.

No cheat-sheets are allowed, though I encourage you to make yourself one as you study.

Attending fewer than 12 of 17 lectures will result in the final grade being reduced by a letter grade. In online learning, your camera must be on to be marked present.

Homework will be posted at least 1 week before it is due and I do not recommend putting assignments off to the last minute. You will submit work for the Homework assignments electronically through Canvas. Late work is not accepted. You must submit all of your work at one time. If something goes wrong when using Canvas, you must get your work to your TA by the deadline.

Regrades If you believe there was a mistake in the grading of an assessment, please contact a TA or Gmeiner immediately.

Academic Honesty In fairness to students who put in an honest effort, I take plagiarism of other students' work and other forms of academic dishonesty very seriously, and all cases involving suspected violation of the academic integrity guidelines will be referred immediately to the dean's office of Weinberg College. Any academic integrity violation will result in a score of zero on that assignment or exam and can result in an F for the course (this is my discretion). It is your responsibility to inform yourself of campus policies regarding academic misconduct, which can be found here: https://weinberg.northwestern.edu/undergraduate/courses-registration-grades/integrity/

Do your own work. Study groups are encouraged for learning to code in Stata and to discuss general ideas related to assignments, but all submitted answers and code should be written individually in your own words. This means that you should not share answers, computer files, your write-up, or seek (provide) assistance from (to) other students on what you are required to do. If in doubt about something, ask me.

Accommodations Any student requesting accommodations related to a disability or other condition is required to register with AccessibleNU (accessiblenu@northwestern.edu; 847-467-5530) and provide professors with an accommodation notification from AccessibleNU, preferably within the first two weeks of class. If you have emergency medical information you wish to share with me, or if you need special arrangements in case the building must be evacuated, inform me immediately. Please message/talk with me privately after class or see me during office hours. All information will remain confidential.