

ECON 281 Syllabus - Fall 2020

ECON 281: Introductory Applied Econometrics

Welcome to ECON 281! This course is an introduction to applied econometrics, a field in which statistical tools and non-experimental data are utilized in the analysis of economic questions. The main purpose of this class within our economics curriculum is to introduce you to methods economists use in empirical research. The most simple and fundamental question applied econometric techniques seek to answer is: what is the effect of X on Y? How does education affect earnings? Do weather patterns in African countries affect civil conflict? Does unemployment rise when minimum wages increase? By the end of this course, you will:

1. Understand the fundamental, underlying statistics of econometric models.
2. Apply regression techniques to datasets and analyze the results to answer economic policy questions.
3. Critically evaluate the assumptions and results of econometric models in search of causal relationships.
4. Formulate economic arguments based on empirical results from real datasets by using Stata software.

Typical Week

Monday: The week's lecture videos and lecture handouts will be posted along with next week's section problems (based on this material). You may attend a TA session on Zoom at the scheduled times if you have questions about the section problems or the section recording.

Thursday: Take a 20-30 minute Review Quiz at 1pm central time (scheduled class time). This quiz will be based on the previous week of lecture material.

Friday: Finish watching all the week's videos by 5pm central.

General: Review last week's lecture material in preparation for the Thursday quiz. Work on Stata Projects. Join us in office hours!

Office Hours

You can find our office hours and contact information [here](#), and all Zoom meeting info can be found on the course Zoom tab.

+ Lecture

Format: I will record short videos on class topics using Panopto and post them [here](#). On Friday afternoons, the annotated slides from the videos will be posted on that page as well. I encourage you to join my Tuesday and Thursday evening office hours to discuss any questions you have about the week's lecture videos.

General Structure: I will post fill-in-the-blank style handouts that correspond to lecture material and my lecture slides, and will post these handouts along with the lecture videos on Mondays. I strongly encourage (though obviously do not require) you to print out the lecture handouts and use them to take notes while watching the corresponding lectures. It helps with organization over the quarter, and I will reference material in the handouts during lectures.

+ Section

Format: Each week, one TA will record the solutions to the section problems and post this video on Saturday (before the Monday sections), [here](#). TAs will then hold section during the scheduled times in CAESAR via Zoom; meeting information will be available in the Zoom tab of this Canvas site. Think of the Monday sessions as 'targeted' office hours, where you can go to discuss the week's section problems live with your TA without being recorded. You are welcome to attend any TA's Monday section.

General Structure: Each week, I will post section problems that will be similar to those you'll see elsewhere in the course and based on the *previous* week of lecture material. Solutions to these problems will not be provided outside of section and the section video.

+ Required Resources

Hardware: You will need a **scientific calculator** (a non-graphing calculator) with no storage capabilities for exams and quizzes. For office hours, you will need a device capable of joining a zoom meeting (camera and microphone). For exams, you will need a **computer** with a microphone and webcam for Respondus Monitor, and a **smartphone** capable of joining a Zoom meeting with a camera, sound, and microphone. You will also need a **way of holding/positioning your smartphone** during quizzes and exams; see the [proctoring page](#) for more information.

Internet: If you're concerned about your internet connection, check out these university resources for help:

[Get Tech Ready](#) [↗], [Staying Connected](#) [↗], [Trouble-shooting home internet](#) [↗], [Contact Tech Help](#) [↗]

Software: Assignments in this course require you to use the statistical software, **Stata**. [See the first announcement here to explore your options for using Stata](#). To purchase your own copy of the software for your computer, [a six-month license for Stata/IC is available for \\$48](#) [↗]. One purchased license key can be used to install Stata on up to 3 computers. Do this as soon as possible!

Losing your work right just before a deadline is no reason for an extension in the year 2020. I suggest you backup class files with a free account on **Dropbox**, **Box**, **Drive** etc. to save yourself the painful disappointment.

+ Prerequisites, Textbook, Accommodations

Prerequisites

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

Textbook

The *optional* textbook for this course is *Introductory Econometrics: A Modern Approach* by J. Wooldridge. You can use any edition, but note that lecture handouts will be provided. If you're looking for extra practice problems, extra Stata practice, the textbook is a good resource.

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 me 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, inform me immediately. Please request a private Zoom meeting. Anything discussed will remain confidential.

+ Grades

Your grade will be based on your Engagement with the course (35%) and Mastery of the material (65%).

Engagement will be a measure of your *continual participation and engagement* with the class and material over the quarter, such as lecture viewing, section viewing, completing assignments and assessments by their deadlines, regularly demonstrating competency, etc.

Mastery will be a measure of your *performance* on assignments and assessments:

1. Stata Projects (20%)
2. Weekly Review Quizzes (20%)
3. Final Exam (25%)

More detail about each element:

Panopto Videos: Each Friday at 5pm central, I will download the user completion metrics from Panopto on Canvas. Your completion of the week's videos (lecture and section) from these metrics will affect your Engagement grade.

Stata Projects: There will be five Stata-based projects over the quarter consisting of Stata coding and written analysis of your results. You will submit work for the Stata assignments electronically through the Crowdmark grading platform.

Weekly Review Quizzes: In place of traditional midterm exams, every Thursday during scheduled class time (1pm central), you will take a short (15-30min), closed-note quiz based on the *previous week's* lecture material using Canvas and/or Crowdmark. Your lowest quiz grade will be dropped when considering your Mastery, and missing up to two quizzes will not affect your Engagement. The quizzes will be proctored using both Respondus Monitor and Zoom to build trust that these are valid measures of your—and your classmates'—knowledge. See the [proctoring page](#) for more details.

Final Exam: Thursday Dec 3 at 9-11am central. This will be a cumulative, closed-note exam, taken using Canvas and/or Crowdmark, and proctored using Respondus Monitor and Zoom (just like the Weekly Review Quizzes). See the [proctoring page](#) for more details. In order to be eligible for an A course grade, you must also complete (and do well on) a set of bonus questions for the final exam.

Regrades: If you believe there was a mistake in the grading of an assessment, you will need to write me a brief explanation/statement (half a page or so), save this as a pdf, and email it to Prof. Kutzman within 1 week of the initial return of scores. No changes to scores will be made without following this procedure and I will regrade the entire assessment myself. This should encourage you to look through your grading promptly. Note: (1) historically, few grades are changed; (2) because the entire assessment will be regraded, your score may go up or down as a result of the regrade.

+ What if I miss ____ ?

You missed a quiz

No late or make up quizzes will be offered for any reason. Instead, your lowest quiz grade will be dropped when considering your Mastery, and missing up to two quizzes will not affect your Engagement. If you begin a quiz, your score will count for your grade.

- If you miss a quiz for an excused reason, it will use your one-dropped quiz; additional quizzes missed due to excused absences will not be made up, and your final exam grade will be used instead.
- If you miss a quiz for an unexcused reason, your score for that quiz will be zero.

You missed a Stata Project

Stata projects will be posted at least 2 weeks before they are due and I do not recommend putting them off to the last minute. Late work will be accepted up to 24hrs past the deadline, but will face a 10% penalty and will affect your Engagement. This will be strictly enforced!* You must submit all of your work at one time, and if you don't correctly format your submission on Crowdmark, it may be penalized. If anything goes awry, you must get your work to Prof. Kutzman or your TA by the deadline to avoid a late penalty. No work will be accepted after solutions are posted.

You missed the final exam

If you miss the final exam for an excused reason, you may apply for an incomplete grade of X and take a make up exam the following quarter if you have a passing course grade. You must provide documentation to the Office of Undergraduate Studies and Advising (OUSA) and gain their approval to take a make up exam. If you do not take the final exam and/or do not qualify for an incomplete and/or your absence is not excused, then your final exam score will be zero. If you take the exam, or start taking the exam, your score will count for your grade.

Excused vs Unexcused. Situations that constitute an excused vs. unexcused issue can't be exhaustively listed. An excused absence is due to something like illness, or a family emergency. *Especially now, it's important to notify your academic advisor and/or Assistant Dean for Academic Advising Liz Trubey if you find yourself in a situation that prevents you from completing course work and need to request accommodations for your classes. This way, I / all of your professors can be officially notified of your needs without violating your right to confidentiality.*

*Suppose an assignment is due Friday at 5:00pm central. If submitted on Friday at 5:01pm central, 10% of the total possible points will be deducted, and if submitted on Saturday at 5:01pm central, 100% of the total possible points will be deducted.

Recordings

Recording by the Instructor: This class or portions of this class will be recorded by the instructor for educational purposes. These recordings will be shared only with students enrolled in the course in Canvas and will be deleted at the end of the quarter. *Note that this applies to recording of synchronous class components and not to pre-recorded lectures by the instructor and not featuring student contributions.*

Recording by Students: Unauthorized student recording of classroom or other academic activities (including office hours) is prohibited. Unauthorized recording is unethical and may also be a violation of University policy and state law. Students requesting the use of assistive technology as an accommodation should contact [AccessibleNU](#) ^e.

Copyright of Class Materials and Recordings: Unauthorized use of classroom recordings – including distributing or posting them – is also prohibited. Under the University's [Copyright Policy](#) ^e, faculty own the copyright to instructional materials – including those resources created specifically for the purposes of instruction, such as syllabi, lectures and lecture notes, and presentations. Students cannot copy, reproduce, display, or distribute these materials. Students who engage in unauthorized recording, unauthorized use of a recording, or unauthorized distribution of instructional materials will be referred to the appropriate University office for follow-up.

Academic Integrity

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. It is your responsibility to inform yourself of campus policies regarding academic misconduct: <http://www.weinberg.northwestern.edu/handbook/integrity/> ^e.

Do your own work. Study groups are great for discussing general ideas related to the class, but all submitted answers and code should either represent your individual work in your own words, or the joint work of you and an official partner. This also means that you should not share any computer files, or your write-up, or seek (provide) assistance from (to) other students on what you are required to do yourself. If in doubt about something, ask me.