ECO 4422 : Econometrics II
Syllabus

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Office Hours: via Zoom by appointment

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Office Hours: via Zoom Thursday 4:00 – 5:00 pm

Course Meetings :

M,W | Period 3 - 4 (9:35 AM - 11:30 AM) Recorded lecture videos will be posted at class times on Canvas. Q&A (discussion) meetings will take place on Wednesday from 10:30 to 11:30 via Zoom.

Course Description and Purpose:

This course examines econometric issues in empirical microeconomics and public policy analysis: identifying and estimating causal effects. It supplements topics covered in an introductory econometrics course with a focus on the sensible application of econometric methods to empirical problems.

The course provides background on issues that arise when analyzing nonexperimental social science data and a guide for tools that are useful for applied research. By the end of the course, students should have a firm grasp of the types of research design that can lead to convincing analysis and be comfortable working with data sets.

Prerequisite:

Required courses: ECO 2013, ECO 2023, ECO3101, MAC 223 or higher, and ECO4421 (Econometrics).

This course assumes that you have a good grasp of the concepts covered in Econometrics (ECO4421). For example, you should be familiar with the material in Appendices of Chapter 1 and 2 in the Mastering 'Metrics textbook. If you are not comfortable with this material, you should make time out of class to review this material. It is extremely unlikely that you will pass this course without knowledge of this material.

Textbook, Course Material and Delivery:

Lectures are mostly based on the required textbook:

Mastering Metrics: The Path from Cause to Effect by Joshua Angrist and Jörn-Steffen Pischke, Princeton University Press

I have two optional textbooks recommendations: I will refer to selected chapters from another textbook by these same authors (Joshua Angrist and Jörn-Steffen Pischke), called:

Mostly Harmless Econometrics: An Empiricist's Companion. Princeton University Press.

Another textbook that will be helpful is Stock and Watson, Introductory Econometrics: 3rd Updated Edition.

The course will be entirely conducted online and will include a mix of asynchronous recorded lectures and synchronous office hours and exam reviews. Each Monday and Wednesday morning at 9:35am, recorded lecture videos will be posted on the modules pages in Canvas. While you may watch the recorded lecture videos at your convenience, I strongly encourage you to watch each lecture video on the day it is posted online. Watching the videos in a timely manner is particularly important to participate in the discussion board.

Once a lecture has been uploaded into the Canvas course site, it will remain available until the end of the term. You can go back and watch lecture videos to review materials and to prepare for exams.

I will also post on Canvas course site various other readings for selected classes, as well as my lecture slides. The lecture slides are not comprehensive lecture notes and you will be REQUIRED to read the textbooks and additional papers in the required readings. You will also be responsible for material from class videos that is not covered in the textbook (such as other videos posted and examples and papers discussed in class videos).

Discussion Board:

For every lecture video uploaded into the Canvas course site, there will be a discussion board where students are expected to ask related questions for that particular video. If a question you had is already asked in the discussion board, please make sure you make a comment or "like" the already posted question so that we can see which questions are more "popular" on the discussion board. Discussion board for a specific video will remain active until the next video is posted. Students are encouraged to answer questions asked by other students on the discussion board. Regardless, every question will be answered by the TA or the instructor either on the discussion board or in newly recorded videos which will be posted on the same module as the lecture video. Discussion board is designed to keep everyone at the same pace throughout the semester and the participation in the discussion board will be relevant for extra credit eligibility.

Office Hours and Discussion (Q&A) Meetings

This semester I will hold synchronous office hours via Zoom in two formats.

Some office hours will be dedicated to individual meetings to discuss any individual concern or academic and professional questions outside of the course material. You can sign up for these office hours by emailing me. Your individual Zoom meeting link with the password will be sent once the appointment is set.

The Q&A (discussion) office hours will take place on Wednesday from 10:30 to 11:30 am which will be reserved for class meetings to ask questions about the course material where all students can join the conversation and ask their questions. No sign up is required for Wednesday discussion office hours. Just show up with your questions by clicking here to join the Zoom meeting. This will be a good opportunity to have your questions answered, to learn from others' questions, and meet other students virtually and stay connected throughout the semester. These meetings can also help you find study buddies. I encourage you to work together virtually while preparing the assignments and studying for exams.

The TA office hours are held via Zoom every Thursday 4-5pm to help you with your questions on problem sets and Stata use.

Software: Stata

The applied component to this course requires the use of Stata software. Knowledge of Stata is NOT a prerequisite. You will be given a short introduction in the first exercise session. Students are required to use Stata software on assignments, and should expect to be tested on basic coding and output. Great resources are available online. One of them is Stata website. I find the cheatsheets helpful for beginners:

`https://www.stata.com/bookstore/stata-cheat-sheets/`

Unfortunately, Stata is not an open source software. You can access Stata through UF Apps (https://info.apps.ufl.edu/) from any place. Please reach out the the TA in case you have no experience with UF Apps and need help with getting started.

Tentative Course Outline:

Week 1	Introduction of Syllabus + Causality vs Correlation
Week 2	Randomized Trials
Week 3	Randomized Trials - Applications (Discussing Various Results from Papers)
Week 4	Introduction to Stata - Applied Session
Week 5	Regression Analysis and Omitted Variable Bias
Week 6	Nonlinear Regression Functions
Week 7	Regression - Applications (Discussing Various Regression Results from Papers)
Week 8	Regression - Applied Exercise - Stata Session and EXAM 1
Week 9	Review of EXAM 1 + Differences-in-Differences Introduction
Week 10	Differences-in-Differences Model
Week 11	Differences-in-Differences- Applications (Discussing Papers and the interpretation of their results)
Week 12	Differences-in-Differences Extensions and Testing Assumptions
Week 13	Differences-in-Differences and Policy Evaluation
Week 14	Differences-in-Differences- Applied Exercise - Stata Session
Week 15	Review and EXAM 2

Exams:

There will be two exams. The tentative dates for the exams are as follows:

Exam 1: Oct 21 Wednesday 9.35 am

Exam 2: Dec 9 Wednesday 9.35 am

These dates are subject to change and finalized dates/times are going to be announced at least two weeks before the exams. Make-up exams must be arranged BEFORE the exam date/time and will only be offered for UF-related conflicts and religious holidays. Keep in mind that your academic obligations always take precedence over personal and social commitments. Unexcused absences from exams results in a grade of 0. No Incompletes, No Grade Changes, No Extensions, and No Substitute Work. All exam dates/deadlines will be just as firm as they would have been in

an in-person version of this course. That is, I will require documentation for all excused absences, and that any issue for which documentation cannot be obtained should be directed to the Dean of Students Office without exception.

HonorLock will be used for exams, you will be required to use a webcam and speakers or headset with a microphone. You are responsible of testing your equipment before a high stakes exam.

INTERNET CONNECTIVITY ISSUES:

I only offer make-up assignments or exams when there are known system-wide outages. These are the only outages that I can verify. I cannot verify individual connectivity problems, and thus, cannot accommodate them.

You must have a strong and reliable internet connection to take online exams using Honor Lock. When taking online exams, some general best practices are:

- Use a hardwired ethernet connection if possible.
- If you must use WiFi, you should ensure that you have a strong and stable internet connection. As a rule of thumb, if you have trouble streaming videos, you will not be able to take an online exam.
- If you must use WiFi, ask others to refrain from using the internet during your exam if possible.
- Public WiFi and Hotspots are not suitable for taking online exams.

Assignments:

You will also be given assignments regularly. You may work in groups; in fact, I highly recommend working with each other virtually. This can help also to meet and stay connected with your classmates. You are, however, required to submit INDIVIDUAL problem sets for grading. Copying another student's work is not permissible. Submitting the same assignment with other student(s) results in grade of 0.

Both for the exams and assignments, you are required to demonstrate all of your work and provide thorough explanations to receive credit. For assignments you will submit separate Stata do files and outputs. Attach all of your work on additional sheets if necessary.

The assignments should be typed and submitted work should be organized and well-structured as if they are professional business reports.

Failing to turn in the assignments before the deadlines results in a grade of 0. No Incompletes, No Grade Changes, No Extensions, and No Substitute Work. Software and/or computer problems are no excused. You are responsible of making sure your software works and you always back up your work in case the computer crashes.

I only offer make-up assignments when there are known system-wide outages. These are the only outages that I can verify. I cannot verify individual connectivity problems, and thus, cannot accommodate them.

You are responsible for verifying that any online assignment submission has properly been submitted through Canvas. As a best practice, after submitting any assignment, close your browser, reopen Canvas, and check that your assignment properly appears. As an additional best practice, never submit an assignment through the Canvas mobile app.

All submission deadlines will be just as firm as they would have been in an in-person version of this course. That is, I will require documentation for all excused absences, and that any issue for

which documentation cannot be obtained should be directed to the Dean of Students Office without exception.

No Class/No Office Hour:

September 7 Monday (Holiday), November 11 Wednesday (Holiday), Nov 25 Wednesday (Holiday).

Grading Policy:

Your final grade will be calculated as follows:

Exam 1	30%
Exam 2	30%
Assignments	40%
Total	100%

Grades will be rounded to the nearest percentage point and you will obtain your letter grade accordingly. Your final letter grade will be determined as follows:

93–100	A
90–92	A-
87–89	B+
83–86	B
80–82	B-
77–79	C+
73–76	C
70–72	C-
67–69	D+
60–66	D
0–59	E

If you are concerned about your ability to obtain a certain grade that you aim for or you believe your performance does not reflect your ability and effort, you should contact the instructor as early as possible during the semester. There will be NO extra credit homework posted online etc. It is your responsibility to reach out to the instructor latest either after the first assignment grades or immediately after the first exam if you think you did poorly. (Not at the end of the semester.)

Course Resources and Hints for Success

The assignments and applied exercises are the greatest resource you have. These problem sets provide an almost-comprehensive review of the relevant course material and solution techniques.

These exercise sessions and problem sets offer insight into the structure and difficulty level of the actual exams, but they do not necessarily cover the same material. Also, students regularly report that they are less difficult than current term exams. Be prepared for this!

In addition to the lecture videos, lecture slides will be posted online. These slides are not necessarily intended as lecture notes. Superficial cramming will not lead to success; keeping up with

the material is essential. After watching each lecture video, review your notes, and test whether you understand a particular concept. If you have questions please post them in the discussion board as soon as you finish watching the video. The discussion board will be monitored closely and all the questions will be answered either on the board or a new video will be posted covering the questions.

You are encouraged to attend instructor's and TA's office hours; attendance is highly correlated with success in the course. This semester, there will be also Q&A discussion meetings. These meetings are a good opportunity to have your questions answered, to learn from others' questions, and meet other students virtually and stay connected throughout the semester.

You will have multiple opportunities to get help while working on your assignments. Attempt assignment question sets before you bring questions to office hours; the problem sets are substantially less beneficial if you do not attempt them on your own.

There might be extra credit opportunities only for students whose first exam performance does not reflect their effort. Students are REQUIRED to contact the instructor to discuss such an opportunity latest within the first week after the first exam grades are announced.

Communication

I will communicate any relevant information for the lectures, exams, and assignments via email and/or Canvas announcements. It is VERY important that you check your UF emails regularly.

General Comments on Wellness and Success

College is an exciting learning experience and a unique opportunity for personal growth. It can, however, also be a stressful and difficult transitionary period. If you are ever having general issues with your coursework in any course or trouble in your personal life, please seek help from myself or another faculty member. I also encourage you to utilize the FREE and ANONYMOUS services of the UF Counseling and Wellness Center.

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Academic Honesty

You are expected to abide by the University's rules for academic honesty. These are available for your review at http://www.dso.ufl.edu/judicial/academic.php. Cheating, plagiarism, and any other action that violates these rules will be prosecuted to the fullest extent. It should be noted that creating an excuse to take a make-up exam that cannot be verified and signing the attendance sheet on someone else's behalf constitute cheating under the University guidelines.

End-of-Term Course Evaluation

I encourage you to fill out the online course evaluation form that is available at http://evaluations.ufl.edu. I will provide class time – during which I will leave the room – for you to complete this online form at the end of the term. This will be announced in advance, and you will be encouraged to bring a wifi-enabled device (e.g., a laptop, tablet, or smartphone) to class that day.

I will pass out an alternative (separate from the official University of Florida form) course evaluation form at the end of the course. The official University of Florida form does not offer much valuable information for future improvements of this course. Please, help me and future students by offering honest and thorough information -- I greatly appreciate constructive criticism. I will not read these evaluations until all grades have been submitted.

Student Responsibility --be careful to read the syllabus for unique features of this course

Enrollment in this course constitutes acknowledgment of the following:

1. I understand that the University of Florida expects its students to be honest in all of their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action, up to and including expulsion from the University.

2. I will adhere to university copyright policies as found at http://guides.uflib.ufl.edu/copyright/

3. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

4. Continued enrollment in this course is equivalent to acceptance of all stated responsibilities, policies, and due dates. If there is anything that is unclear, talk to me immediately. Waiting until the end of the term often results in less favorable outcomes.

5. Students are expected to attend regularly and participate actively in this course. It is assumed that you have read the assigned material before attending class and are prepared to answer questions based on the readings.