

ECO 5427 : Econometric Analysis 2

Syllabus

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Office Hours: via Zoom Wednesday 2-3pm

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Office Hours: via Zoom by appointment on Calendly

Course Time, Meetings, and Modality:

M,W | Period 3 - 4 (9:35 AM - 11:30 AM) Room MAT 112

This is a fully in-person course. Lectures will not be streamed nor recorded. All exams will take place in person, during our scheduled class times.

Course Description and Purpose:

This course is built on the ECO 5426 Econometric Analysis I. Following an introduction to research design for analyzing data in economics, in this course we will explore various methods with a focus on issues in empirical microeconomics and public policy analysis. Extensions include instrumental variables and regression discontinuity designs.

The goal of the course is twofold: To teach students how to conduct empirical analysis in order to answer questions concerning the identification of causal effects and to provide them with the tools to critique empirical studies. With this goal in mind, the main focus will be on applications while the mathematics of econometrics will be touched upon only when needed. By the end of the course, students will have a grasp of various types of research design that can lead to convincing analysis and be comfortable working with data sets.

Textbook and Course Material:

Lectures are mostly based on the required textbooks:

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

I will also refer to selected chapters from:

Introductory Econometrics by Stock and Watson, 4th Edition

Also another textbook by the same authors as the first required textbook (Joshua Angrist and Jörn-Steffen Pischke) will be very helpful but not required:

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

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 that is not covered in the textbook (such as other videos posted and examples and papers discussed in class).

Discussion Board:

For every module on 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 topic will remain active until the end of the semester. 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 class .

Software: Stata

The applied component to this course requires the use of Stata software. Knowledge of Stata is a prerequisite. Students are required to use Stata software on assignments, and should expect to be tested on basic coding and output. Unfortunately, Stata is not an open source software. You can access Stata through UF Apps (<https://info.apps.ufl.edu/>) from any place.

Tentative Course Outline:

Daily schedule is available on the course’s CANVAS page including the lecture and reading material for each lecture.

Week 1	Introduction of Syllabus + History of Instrumental Variables (IV) Method
Week 2	Introduction to Instrumental Variables Method
Week 3	IV Examples: Effect of Charter Schools and Minneapolis Domestic Violence Experiment
Week 4	2SLS and IV Example: Twins and Sex Mix instruments
Week 5	Stata Exercise: IV Examples of Returns to School Estimates with Various IVs
Week 6	In Class Stata Exercise: IV Examples
Week 7	Exam Review and Exam 1
Week 8	Introduction to Regression Discontinuity Design (RDD)
Week 9	RDD Example: Sharp Design
Week 10	SPRING BREAK
Week 11	RDD Example: Fuzzy Design
Week 12	RDD Assumptions and Discussion of Interpretations
Week 13	Exam Review and Exam 2
Week 14	Presentations of Replication Projects
Week 15	Presentations of Replication Projects
Week 16	Presentations of Replication Projects

Exams:

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

Exam 1: February 22 Wednesday 9.35 pm MAT 112

Exam 2: April 5 Wednesday 9.35 pm MAT 112

These dates are subject to change and finalized dates/times and location 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 firm. That is, I will require documentation for all excused absences (except for religious holidays), and that any issue for which documentation cannot be obtained should be directed to the Dean of Students Office without exception.

Assignments:

You will also be given assignments regularly. You may work in groups; in fact, I highly recommend working with each other. 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 exams. 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.

There will be 4 problem sets throughout the semester on the following dates:

	Opening Date	Due Date
Problem Set 1	Jan 23 (Monday)	Jan 30 (Monday)
Problem Set 2	Feb 6 (Monday)	Feb 13 (Monday)
Problem Set 3	March 1 (Wednesday)	March 8 (Wednesday)
Problem Set 4	March 20 (Monday)	March 27 (Monday)

Presentations and Replication Project:

This project requires a replication and presentation of a paper of your choice.

You will replicate one descriptive (summary) statistics table, and two other tables with main results and robustness checks or other specifications of the paper you select. You will prepare a presentation. The presentation is going to be timed (20 minutes for each presentation). First, you will introduce the research question of the paper, briefly explaining why this is an interesting question along with a literature review. Then you will proceed to the results you are replicating/presenting which should be at least one descriptive table or graph and an another table with the main results of the paper. Last but not least, you will present the conclusion of the paper. In the concluding remarks, you will discuss the potential problems of the identification strategy and possible improvements for further research.

As for grading, it will be graded based on quality/correctness and not based on completion. The presentation's clarity, time use, organization of slides will be also an important part of the rubric.

By March 1 at 5pm, all students will submit a progress report. You will provide the title of the paper, a short description of the main research question of the paper along with the replication of at least one table. Please do not hesitate to ask questions or reach out for help while working on your replication or presentation.

Presentations will be followed by questions/discussion. Audience will have an opportunity to ask questions and give comments. Non-presenters are expected to read the presented paper and submit an evaluation of the paper and the presentation which will be separately graded. **This implies that you will miss an assignment if you have an unexcused absence on the day of presentations of your classmates.**

Presentations will take place during class times. Further information will be available on Canvas.

Grading Policy:

Make-up assignments and exams will be arranged only for absences that are explicitly covered by the UF Attendance Policy.

Your final grade will be calculated as follows:

Exam 1	20%
Exam 2	20%
Assignments	30%
Presentation	20%
Presentation evaluations	10%
<hr/> Total	<hr/> 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. The grading policies are consistent with UF policies regarding grade determination. This information can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx> :

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.)

No Class/No Office Hour:

Jan 16 (Holiday), March 13 and March 15 (Spring Break).

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!

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 each lecture, 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 possible. The discussion board will be monitored closely and all the questions will be answered either on the board or in class.

You are encouraged to attend instructor's and TA's office hours; attendance is highly correlated with success in the course. 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 in class and/or 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 transitional 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.