ECO 4935: Empirical Research in Economics

Instructor: Dr. Michelle A. Phillips Office: Matherly Hall 336

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Office Hours:

Tuesdays 12:50pm-1:40pm MAT 336

Wednesdays 10:30am-11:20am Zoom (link is on Canvas)

Thursdays 12:50pm-1:40pm MAT 336

Or by appointment (please email me for appointment times)

Class Location: Matherly Hall 107

Class Meeting Time: Tuesday and Thursday, 7th and 8th period.

Course Prerequisites: ECO 2013 and 2023.

Course Textbook: Doing Economics: A Guide to Understanding and Carrying out Economic Research by Steven Greenlaw, 1st Edition. Any version of the textbook works (spiral, paperback,

hardcopy).

Course Description:

This course introduces students to the development and testing of economic models. We will learn about empirical methodologies/statistics (including the use of statistical software) and examine empirical papers. Students will then apply the material learned to test their own economic model. Each student will present his/her work to the class throughout the semester. Your classmates will provide feedback for your papers in class. By the end of the term you will have an undergraduate honors thesis draft.

Course Objectives: Students that successfully complete this course will be able to:

- (i) understand and apply empirical methodologies covered in class
- (ii) come up with an empirical economic model of their own
- (iii) complete an undergraduate thesis draft
- (iv) participate in undergraduate economic seminars, providing constructive criticism to peers

Class Modality: This is a fully in-person course. Lectures will not be streamed nor recorded¹. All student presentations will take place in person, during our scheduled class times. The course does not have exams, but it does have several paper and attendance requirements. Part of your grade is also determined by the quality of comments you provide to your classmates during their presentations.

¹ The only scheduled exception to this is Lecture 10 which students can choose to attend virtually due to technical reasons.

Statistical Program: The empirical analysis required for this course can be done using MS Excel, Stata, R, or other software. I will go over how to do this (no prior knowledge is required).

Grading: The course grade is determined by the following:

- A. Class participation 13%
- B. Proposal (written and presentation) 16%
- C. Description and Analysis of Empirical Work (written and presentation) 31%
- D. Final Paper (written) 40%

Class participation:

You will be graded on class participation when we (1) analyze published economics research and (2) when your classmates present their work to the class and (3) on a few discussion posts on Canvas. You must come to class and be ready to provide comments or answer questions about the papers to get full credit for class participation. Constructive comments are an important part of research.

Proposal:

Each student will submit a proposal which develops the hypothesis to be tested and describes the manner in which you will test your hypothesis. Important: You need to make sure that your project is feasible. Please discuss your topic with me at least a week before you start writing your proposal. You can do this either by coming to office hours, talking to me after class, or emailing me. A good/feasible proposal requires: (1) Making sure you can answer your question using the tools we learn in class and (2) Having the data required to test your hypothesis (enough variables and observations). You need a minimum of 50 observations for your paper. Your proposal should include: (a) an introduction that motivates the project, (b) a description of your sample, (c) a description of each variable, (d) information on sources you will use for data, (e) for each independent variable you must provide the economic analysis that underlies your prediction about the effect of the independent variable on your dependent variable.

You will present your proposal in class. Your proposal will be distributed to your classmates who will read it before you present it in class in order to be able to provide you with constructive criticism. Note: The bulk of your grade is based on the written portion of your proposal, not on how you present it. The main purpose of presenting your work is to engage in a discussion with your classmates during which they can provide you with feedback to help improve your paper. However, if you do not show up to the presentation, you will get 0 points for the entire proposal (written part included). A sample proposal and rubric is available on Canvas. These should give you an idea of what is expected. There is a penalty for being late that is described in the "penalties" section of this syllabus.

Description and Analysis of Empirical Work

Each student will present a complete description and analysis of their empirical results. Important: Doing empirical research and describing your results takes time. The earlier you get started on this, the better. You will not be able to get this done the day before it is due. I highly suggest that you give yourself as much time as you can to test your research question. This paper has the following requirements: (a) introduction, (b) description of your sample, (c) for each variable, indicate how it was constructed and report summary statistics (mean, standard deviation, minimum, maximum), (d) for each independent variable, develop the prediction and

discuss whether your results support or refute your hypothesis and whether the variable has a big impact on the dependent variable. Important: Your grade is not affected by whether your hypotheses have been confirmed. As with the proposal, the bulk of your grade will be based on the written portion but you will get 0 points for the entire section if you don't show up to your presentation. The main purpose of the presentation is to gather feedback from your classmates. **A sample and rubric is available on Canvas. There is a penalty for being late** that is described in the "penalties" section.

Final Paper

Your final paper will develop the model and discuss how the data were gathered, how the model was tested, and how revised results relate to the model. A sample final paper and rubric is available on Canvas. There is a penalty for being late that is described in the "penalties" section. You are welcome to submit the final paper earlier than the deadline, as long as you have already presented the "description and analysis of empirical work" to your classmates and incorporated relevant feedback from that.

Penalties

Important: If you miss the deadline (due date) for submitting your work, you will be penalized by 50%. If you miss a presentation you will get a grade of 0 for that entire section (whether it is the proposal or description/analysis). No exceptions. If you are late on submitting your final paper, your grade will fall by 10% each day it is late. An assignment (proposal, description/analysis of empirical work, final paper) is considered late if it is turned in after 11:59pm on Canvas the day it is due. No exceptions.

Submitting your work: Your work must be submitted online (via Canvas) for me to read and via Canvas message for your classmates to read. I will show you how to message all your classmates. You must email your paper to your classmates at least 1 week before your presentations. There's a 5-point penalty for each day you are late emailing your classmates.

Changing your presentation dates: Students are generally not allowed to change their presentation and due dates. It is very important that you plan your time well so you can meet the deadlines. I do, however, keep 4 slots during the last possible presentation date for students who can't meet their deadline. These spots are given out on a first come first serve basis and if you choose to do this there is a 10-point penalty.

Feedback: You will generally receive feedback for your papers and presentations from me within 2 weeks of their due dates.

Contacting Me: The best way to contact me is via e-mail. If you haven't received a response within 2 business days, please assume I didn't receive your email and re-send it. If you want to discuss your research ideas or papers, you can either email me or attend office hours. I expect to be able to answer most emails within 1 business day, but I may not be able to answer emails sent a few hours before an assignment is due on time.

The following scale will be used to determine your final grade:

Grade		Grade Points
93.4-100	A	4.00
90.0-93.3	A-	3.67
86.7-89.9	B+	3.33
83.4-86.6	В	3.00
80.0-83.3	B-	2.67
76.7-79.9	C+	2.33
73.4-76.6	C	2.00
70.0-73.3	C-	1.67
66.7-69.9	D+	1.33
63.4-66.6	D	1.00
60.0-63.3	D-	0.67
0.00-63.2	E	0.00

^{**}The scale listed above is firm. Final course grades will not be rounded.**

Make-up assignments will be arranged *only* for absences that are explicitly covered by the <u>UF</u> <u>Attendance Policy</u>. Whenever possible, you should reach out at least five business days in advance to arrange a make-up assignment or exam. Of course, this will not always be possible. Unforeseen absences and emergencies occur and can be excused without such advance notice. In most cases, you will be asked to provide evidence or documentation of an absence that is explicitly excused by the <u>UF Attendance Policy</u>. Absences related to religious holidays and worship do not require this documentation but must be given ahead of time if the holiday date is known ahead of time.

The above 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

Professionalism and Honor Code: Students are bound to not cheat or plagiarize, and are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: 'On my honor, I have neither given nor received unauthorized aid in doing this assignment."

You should familiarize yourself with the <u>UF Student Honor Code</u>. Cheating and plagiarism are not the only violations of this policy. Importantly, ignorance of a policy is not a valid reason for violating it.

Students Requiring Accommodations: Students with disabilities requesting accommodations should first register with the Disabilities Resource Center (392-8565; https://disability.ufl.edu/), providing appropriate documentation. Once registered, students will receive an accommodation letter that can be presented to the instructor when requesting accommodations. *Please register at the beginning of the course if seeking accommodations*.

Course Evaluation: Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Students will be notified when the evaluation period opens, and can complete

evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/.

UF Writing Studio: The UF Writing Studio offers consultants to help you become a better writer. https://writing.ufl.edu/writing-studio/

UF Teaching Center: The UF Teaching Center offers guidance on study skills and tutoring services. You can find more information at: https://umatter.ufl.edu/office/teaching-center/.

Health Counseling, Emergencies, Services:

U Matter, We Care: If you or a friend is in distress, please contact <u>umatter@ufl.edu</u> or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS): Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or http://www.police.ufl.edu/.

UF Food Pantry: For students experiencing food insecurity. https://pantry.fieldandfork.ufl.edu/

Extended Absences:

If you are out sick for a substantial period of time, and it is unlikely that you can reasonably get caught up in class, you can pursue a medical withdrawal by contacting the UF Care Team (https://care.dso.ufl.edu/).

Recording of class:

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor. A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session. Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or

medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

**** I highly recommend that you browse the Files section on Canvas to fully understand what this class is about and what is required of you before Add/Drop ends.***

If I make any changes to the syllabus, I will announce them via email and will list each change here: This is syllabus version 1.0.

Course Schedule 1

Note: The pace of the course will vary depending on several factors, so some topics may be covered a little earlier or later than listed. Group lists are posted on Canvas². However, the due dates won't change unless there are extenuating circumstances (example: hurricane). Note that class participation is due during class on the dates when we cover published economic journal articles, on the dates when students present their Proposal and DA papers, and on the dates specified on this schedule. Due dates for the DA paper are based on groups and are listed on Schedule 2. Due dates for the Proposal and Final paper are the same for all students.

Th Aug 25	Course overview, Syllabus, Scientific Methodology
Tu Aug 30	Overview of Statistics I
Th Sept 1	Overview of Statistics II
Tu Sept 6	Multivariate Regression, Methodology
Th Sept 8	Statistical significance, Pollution in baseball, Dummy Variables
Tu Sept 13	Hypothesis Testing, Journal Article 1
Th Sept 15	Omitted Variables, Multicollinearity, Journal Article 2, Research Idea Discussion Post Due (part of class participation grade)
	Tu Aug 30 Th Sept 1 Tu Sept 6 Th Sept 8 Tu Sept 13

² All papers and presentations are individual assignments. The groups denote students who have the same due dates for their papers and assignments, not students who will work together in a group. For example, if Anna and Charles are in the Blue Group, it means they will both present their work on the same day. It does not mean that Anna and Charles will work together.

6

L8	Tu Sept 20	Non-Linear Models, Endogeneity, Journal Article 3, Last Day to Discuss your Paper Topic with me, but earlier is better (part of class participation grade)
L9	Th Sept 22	Interaction Effects, Journal Article 4, Functional Forms, Journal Article 5
L10	Tu Sept 27	OLS using Excel and Stata ³ .
L11	Th Sept 29	Journal Article 6 and 7. Work on Proposal.
L12	Tu Oct 4	Work on Proposal and submit it (instead of lecture) ⁴ . PROPOSAL DUE
L13	Th Oct 6	Florida Group Proposal presentation
L14	Tu Oct 11	Gator Group Proposal presentation
L15	Th Oct 13	Albert Group Proposal presentation
L16	Tu Oct 18	Swamp Group Proposal presentation
L 17	Th Oct 20	Orange Group Proposal presentation
L 18	Tu Oct 25	Blue Group Proposal presentation
L 19	Th Oct 27	Gainesville Group Proposal presentation ⁵
L 20	Tu Nov 1	Florida Group DA presentation
L 21	Th Nov 3	Gator Group DA presentation
L 22	Tu Nov 8	Albert Group DA presentation
L 23	Th Nov 10	Swamp Group DA presentation
L 24	Tu Nov 15	Orange Group DA presentation
L 25	Th Nov 17	Blue Group DA presentation
L 26	Tu Nov 22	No class. Please work on your paper during class time.

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³ Today's lecture can be completed in class in person or by watching a video. If you are familiar with running a regression on R, Excel or Stata, you are not required to attend this lecture.

⁴ I will be in the classroom answering any last-minute questions you may have during class time.

⁵ If students can't present on their original date, they can present on Oct 27 (Proposal) and Nov 29 (D&A) with a 10 point penalty. If nobody requests these dates, we will have office hours in the classroom and you can work on your paper during class time.

L27 Th Nov 24 HOLIDAY
 L28 Tu Nov 29 Gainesville Group DA presentation⁶
 L29 Th Dec 1 End of Course Evaluation, Work on final paper during class if needed⁷
 L30 Tu Dec 6 Work on final paper during class if needed⁸, FINAL PAPER DUE

Course Schedule 2

Group ⁹	Proposal	Proposal	D&A paper	D&A	Final Paper
Name	due	presentation	due date	presentation	due date
Florida	Tu Oct 4	Th Oct 6	Tu Oct 25	Tu Nov 1	Tu Dec 6
Gator	Tu Oct 4	Tu Oct 11	Th Oct 27	Th Nov 3	Tu Dec 6
Albert	Tu Oct 4	Th Oct 13	Tu Nov 1	Tu Nov 8	Tu Dec 6
Swamp	Tu Oct 4	Tu Oct 18	Th Nov 3	Th Nov 10	Tu Dec 6
Orange	Tu Oct 4	Th Oct 20	Tu Nov 8	Tu Nov 15	Tu Dec 6
Blue	Tu Oct 4	Tu Oct 25	Th Nov 10	Tu Nov 17	Tu Dec 6
Gainesville ¹⁰	Tu Oct 4	Th Oct 27	Tu Nov 15	Tu Nov 29	Tu Dec 6

HONORS

Liberal Arts and Sciences (CLAS)

Those who take this course and who have a 3.3 average in all economics work and a 3.5 upper division GPA will be considered for magna cum laude or summa cum laude. If your paper is approved by the economics department's undergraduate committee, you will receive summa if your economics GPA is above 3.5 and your upper division GPA is above 3.7 and magna otherwise.

By the <u>fourth week in the semester you graduate</u>, you must schedule a 20-minute presentation to the Undergraduate Committee of what you propose to do in your honors thesis. This committee will determine whether your thesis is acceptable, so take the committee's suggestions seriously!

⁶ If nobody presents on this day, we will have office hours in the classroom and you can work on your paper during class time.

⁷ I will be in the classroom answering any last-minute questions you may have during class time.

⁸ I will be in the classroom answering any last-minute questions you may have during class time.

⁹ You will be assigned to a group name by your instructor at random. Please check Canvas to see what group you were assigned to. Being on a group doesn't mean you are working with your classmates from that same group, it means you have the same due dates as them. You are not required to provide comments to papers from people who are on your same group but you are welcome to provide them if you wish to do so

¹⁰ If students can't present on their original date, they can present on Oct 26 (Proposal) and Nov 23 (D&A) with a 10 point penalty unless they have a valid excuse (i.e, religious holiday, sickness, official UF travel, etc). If nobody requests these dates, the rest of the class will spend those two days working on their papers.

Turning the Paper into a Thesis.

If you are graduating in Spring the term after you take the course or later, you can use your class paper as your thesis. Below are the steps required for the term in which you are graduating:

1. Make sure the honors thesis coordinator (Michelle Phillips) knows you are graduating this term (email her during the first week of class) and that you meet the requirements. The requirements are:

College GPA requirement: 3.50 or higher GPA on all courses taken at UF beginning the semester after accumulating 60 credits.

College GPA requirement for Magna and Summa: Eligible students must have a 3.50 or higher GPA on all courses taken at UF beginning the semester after accumulating 60 credits and completion of, and faculty evaluation of, a thesis, research project or other creative work. Distinction of magna or summa cum laude may be granted based on faculty evaluation of the thesis, and the department will make the determination whether and what level of distinction will be awarded.

PLUS: Economics department requirements:

Magna: Student must earn a 3.30 GPA for all UF economics courses, complete ECO 4935 or ECO 4905 and submit an acceptable thesis

Summa: Student must earn a 3.70 GPA on all courses taken at UF the semester after accumulating 60 credits and a 3.50 GPA for all UF economics courses. Must also complete ECO 4935 or ECO 4905 and submit an acceptable thesis.

PLUS: A completed paper draft to present to the committee (this can be the paper you completed for this class)

- 2. Sign up for an honors thesis committee meeting (this is set up by the honors thesis coordinator)
- 3. Present your paper to the Economics Thesis Committee (3 faculty members).
- 4. The committee will read your thesis and give you a pass or fail. You will receive an email from me letting you know you passed or failed. Important: You must have received final approval from your department before you submit your Honors thesis or project to the Libraries. Please do not proceed to step 5 until you get an email from the honors thesis committee letting you know that you've passed.
- 5. If you received a "pass": At this point you have met all of the Departmental requirements that are needed to upload your thesis to the library (assuming you also meet the College and Department GPA requirements). You will upload your thesis to the library (this can be done as soon as it is ready and approved by the committee). The submission deadline to submit your paper to the library is listed on the link below which also includes information on what steps to follow to upload your thesis to the library: http://cms.uflib.ufl.edu/etd/honors