ECO 4935: Empirical Research in Economics   Fall 2024

Instructor: Dr. Michelle A. Phillips
                    Office: Matherly Hall 336
                    E-mail: michellephillips@ufl.edu
                    Phone: 352-392-5017

Office Hours:

Mondays	11:20am-12:10pm	MAT 336
Tuesdays	9:30am-10:20am	Zoom (see Canvas Syllabus for link)
Wednesdays	11:20am-12:10pm	MAT 336

 Or by appointment.

Class Meeting Time: Mondays and Wednesdays 1:55pm-3:50pm
Class Location: Matherly Hall 114
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. Note: You also need a thesis advisor to be able to graduate with a thesis. I am usually willing to advise students who take the course as long as they meet certain requirements listed on the course website and as long as they have a draft at the level required for a successful honors thesis defense. Passing this course does not guarantee graduation with an honors thesis (you must also secure an advisor and pass a thesis defense).

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 recorded (unless there is an emergency such as a hurricane). 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.

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) (possibly) 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. You are graded on the quality of your comments.

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. Your project has to use Ordinary Least Squares Regression unless you have already secured an Economics department advisor (and I have approved your work with your advisor). 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.   Important: You must use OLS unless you secure an advisor from the Economics department who is willing to check your work. If you use a model other than OLS without the approval of your instructor, you will be asked to resubmit (with penalties for being late if the resubmission is after the due date).

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. Since this is a seminar course, seminars (presentations) are an integral part of the course and are required.

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

what your results suggest. 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. You must attempt your regression for the first time <u>at least one week</u> before your paper is due.

<u>Final Paper</u>
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: **An assignment (proposal, description/analysis paper, final paper) is considered late if it is turned in after 11:59pm on Canvas the day it is due. <u>If you miss the deadline (due date)</u> for submitting your work for the Proposal, DA paper and/or Final Paper, you will be penalized as follows:**

1 hour late: 10% penalty (i.e., highest grade possible is 90%)
2 hours late: 20% penalty (i.e., highest grade possible is 80%)
3 hours late: 30% penalty (i.e., highest grade possible is 70%)
4 hours late: 40% penalty (i.e., highest grade possible is 60%)
5 to 24 hours late: 50% penalty (i.e., highest grade possible is 50%)
25 hours to 2 days late: 70% penalty (i.e., highest grade possible is 30%)
49 hours to 3 days late: 100% penalty (i.e., highest grade possible is 0%)

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 miss an attendance / participation / Q&A assignment, you get a grade of 0 but I will drop 4 absences from attendance points at the end of the term, no questions asked. If you have more than 4 excused absences for attendance/participation/Q&A points, you will take a make up exam of equivalent difficulty on the last week of class instead of using attendance points.

There's a 5-point penalty for each day you are late in posting your paper to the discussion board.

Submitting your work: Your work must be submitted online (via Canvas assignments) for me to read and via Canvas discussion board for your classmates to read. I will show you how to post your paper to <u>both</u> the discussion boards and assignment. You are required to post your paper to Canvas discussion boards for your classmates to read at least 5 days before your presentation. There's a 5-point penalty for each day you are late in posting your paper to the discussion board. You are welcome to submit newer versions of your paper to the discussion board closer to your presentation (ex: the day before), but you should not expect all of your classmates to read the newest version. I will grade the version uploaded to

Canvas by the deadline but would like you to always present your most recent draft. A thesis is a constantly evolving document!

Checking your uploads: It is your responsibility to download anything you upload to Canvas to make sure you uploaded the correct file, your file can be read (it is not corrupted), etc. Uploading a file that cannot be opened (or uploading an incorrect file), is equivalent to not submitting anything at all and will count as no submission.

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 are steep penalties described on the Penalties section. Please also read the Research Journal section prior to requesting an extension.

Feedback: You will generally receive feedback for your papers and presentations from me within 2 weeks of their due dates. Please do not email me asking when I will grade your paper if it has not been more than 2 weeks.

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 1-2 business days, but I may not be able to answer emails sent a few hours before an assignment is due on time. Please do not email me asking me if I received your email if it hasn't been 2 business days since your last email. This will only slow down email response times.

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	B	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 UF Attendance Policy. Whenever possible, you should reach out at least five business days in advance to arrange a makeup 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 UF Attendance Policy. 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. Dental and medical appointments for check ups are not considered medical emergencies and should be scheduled outside of known class hours. Weddings and parties are not valid excuses for missing deadlines. Academic conferences are allowed but I must be informed at least 2 weeks in advance. Make sure you read the Research Journal section prior to asking for an extension.

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 UF Student Honor Code. Cheating and plagiarism are not the only violations of this policy. Importantly, ignorance of a policy is not a valid reason for violating it.

Using ChatGPT or similar software for writing a thesis is considered cheating for the purpose of this class. All suspicious evidence of cheating, plagiarism, making false statements, and any other violation of these rules will be reported to the Dean of Students Office. Additionally, I will advocate for the strictest of available sanctions (dismissal from the University of Florida) for any student who is found responsible for violating these rules.

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. It is very important to *register at the beginning of the course if seeking accommodations, since accommodations are not retroactive. I am always happy to help students navigate the process, please contact me if you have any questions.*

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. I highly recommend that you visit the studio if your grammar/writing is not at the level required for an honors thesis.
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/.

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.

Health Counseling, Emergencies, Services:

> **U Matter, We Care:** If you or a friend is in distress, please contact umatter@ufl.edu or 352 3921575 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/

**** 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 Canvas[1]. **However, the due dates won't change**

---

[1] 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

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.

L1	M Aug 26	Course overview, Syllabus, Scientific Methodology
L2	W Aug 28	Overview of Statistics I
L3	W Sept 4	Overview of Statistics II
L4	M Sept 9	Multivariate Regression, Methodology
L5	W Sept 11	Statistical significance, Pollution in baseball, Dummy Variables, **Research Idea Discussion Post due (part of class participation grade)**
L6	M Sept 16	Hypothesis Testing, Journal Article 1
L7	W Sept 18	Omitted Variables, Multicollinearity, Journal Article 2 and 3, **Last Day to Discuss your paper Topic with me, but earlier is better (part of class participation grade)**
L8	M Sept 23	Non-Linear Models, Endogeneity, Journal Article 4
L9	W Sept 25	Interaction Effects, Journal Article 5, Functional Forms, Journal Article 6
L10	M Sept 30	OLS using Excel and Stata.
L11	W Oct 2	Journal Article 7. Work on Proposal. **PROPOSAL DUE**
L12	M Oct 7	Florida Group Proposal presentation
L13	W Oct 9	Gator Group Proposal presentation
L14	M Oct 14	Albert Group Proposal presentation
L15	W Oct 16	Swamp Group Proposal presentation
L16	M Oct 21	Orange Group Proposal presentation
L17	W Oct 23	Blue Group Proposal presentation

---

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.

L18	M Oct 28	Gainesville Group Proposal presentation[2]
L19	W Oct 30	Florida Group DA presentation
L20	M Nov 4	Gator Group DA presentation

L21	W Nov 6	Albert Group DA presentation
L22	W Nov 13	Swamp Group DA presentation
L23	M Nov 18	Orange Group DA presentation
L24	W Nov 20	Blue Group DA presentation
L25	M Dec 2	Gainesville Group DA presentation[3], Classwork on DA/Final Paper
L26	W Dec 4 [45]	Classwork on Final Paper, End of Course Evaluation, **FINAL PAPER DUE for Florida, Gator, Albert and Swamp Groups**
	W Dec 11	**FINAL PAPER DUE for Orange, Blue, and Gainesville Groups**

Note: In addition to these due dates, you are required to have "research journal" uploads to Canvas every week *if you would like me to consider being your undergraduate honors thesis advisor*. Please see the syllabus section: "research journal" for more information about this requirement. Note that if you have someone else advising your thesis or if you do not plan on turning your paper into an honors thesis, you do not have to meet this requirement. This requirement is only for students who want to ask me to be their advisor (which is separate from the course itself).

Course Schedule 2

Group[5] Name	Proposal due	Proposal presentation	D&A paper due date	D&A presentation	Final Paper due date
Florida	W Oct 2	M Oct 7	W Oct 23	W Oct 30	W Dec 4
Gator	W Oct 2	W Oct 9	M Oct 28	M Nov 4	W Dec 4
Albert	W Oct 2	M Oct 14	W Oct 30	W Nov 6	W Dec 4
Swamp	W Oct 2	W Oct 16	W Nov 6	W Nov 13	W Dec 4
Orange	W Oct 2	M Oct 21	Tu Nov 12	M Nov 18	W Dec 11
Blue	W Oct 2	W Oct 23	W Nov 13	W Nov 20	W Dec 11
Gainesville[6]	W Oct 2	M Oct 28	M Nov 18	M Dec 2	W Dec 11

---

[2] If students can't present on their original date, they can present on Oct 28 (Proposal) and Dec 2 (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.

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

[4] 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

[5] If students can't present on their original date, they can present on Oct 28 (Proposal) and Dec 2 (D&A) with a 10 point penalty unless they have a valid excuse (i.e, religious holiday, sickness, official UF travel, etc). You must notify of excuses ahead of time for absences known ahead of time (and may be asked to present earlier). If nobody requests these dates, the rest of the class will spend those two days working on their papers.

HONORS
Finding an Honors Thesis Advisor

At the end of the term, most students will have a research paper that can be turned into an undergraduate honors thesis. In order to write a thesis you need an advisor. The thesis class is a separate process from the thesis itself. You must submit an application for me to agree to be your thesis advisor. I will only agree to advise theses I think are (1) in good shape by the end of the term, (2) were written by students who manage their time well, and (3) were written by students who show they are self-starters. Taking the thesis class does not entitle you to have a thesis advisor. However, doing a good job in the class, being prepared, being a self-starter, and using your time well, will result in you being able to find an advisor. Note that I evaluate your ability to work well independently in the Fall and meet important deadlines by looking at your Research Journal.

RESEARCH JOURNAL:

If you have a thesis advisor who is not Michelle Phillips, you are not required to read this section.

To fulfill this requirement (which is a requirement for me to be your advisor, not for the course) you should upload a file to Canvas with your current progress on the thesis every week.

I will only advise students who have shown that they made sufficient progress on their thesis on a *weekly* basis. Note: If a student submits a request for a due date change (important: these require proof of sickness, death in family, etc and dates known in advance like religious holidays must be communicated at least 2 weeks in advance), I will look at your weekly upload of progress files during the term. If you have not made sufficient progress or if you posted an upload that I cannot open (ex: a corrupt file) you will still get the extension with appropriate proof but I will not be willing to advise your research paper in the Spring. The Spring term has very strict deadlines and I can only advise students who make sufficient progress *every week* (not just for the due date). I only look at submissions in detail for those who request extensions during the term because I would like to inform you early if you need to find a different advisor. I look at everyone else's submissions at the end of the term.

Your upload will just be ideas in the early weeks of the term. It is fine to put notes rather than well written paragraphs for the Research Journal.

Example of what I would like to see:

Early Weeks: For the early weeks your submission would be roughly a paragraph or a page with ideas or possible data sources. Example:
Week 1: I am thinking of looking at an education question. For example, what is the effect of class size on student outcomes in Florida high schools. I am also considering asking questions relating to entrepreneurship.
Week 2: I looked at data sources and found data at the Florida Dept of Education (include links to data) looking at students from 20 Florida counties. My study level will be schools or counties (not sure yet).
Week 3: I looked at entrepreneurship data from the World Bank and decided to follow my education question. I found these additional data sources and decided to find data at the county level for all variables (like data sources).
At least 1 week before Proposal is due: Submit rough Proposal draft to weekly upload
Week after Proposal due: Finalize data sources and hypotheses.

At least 1 week before D&A paper is due: Run regressions (these can be preliminary).
At least 1 week before Final paper is due: Run regressions (these can be preliminary).

HONORS REQUIREMENTS:

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!

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