Applied Economic Research (ECON 482)

Section Co1, Fall 2021, 3 credits

Business & Economics Building | Room 230 | TR | 4:00 PM - 5:15 PM

Instructor: Josh Martin

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Office Hours: 9:00AM – 12:00PM W or by appointment

Office Location: 439 B&E

Prerequisites

Senior Economics Major

Course Description

This course is designed to introduce West Virginia University Economics students to Applied Economics research. Students will be exposed to applications of popular methods and studied subfields within Economics through published research. The course will cumulate with the completion and presentation of a major research project.

Method of Instruction

Lecture

Course Textbook

None. PDFs of all of the readings will be provided on eCampus.

Suggested Textbooks

Angrist, Joshua D., and Jörn-Steffen Pischke. *Mastering 'Metrics: The Path from Cause to Effect*. Princeton University Press, 2014. ISBN: 9781400852383.

Cunningham, Scott. *Causal Inference: The Mixtape*. Yale University Press. 2021. ISBN: 9780300251685.

McCloskey, Deirdre N. *Economical Writing*, 2nd Edition. Waveland Press, 2000. ISBN: 9781577660637.

Expected Learning Outcomes

This course is designed to help West Virginia University economics students learn about and conduct economic research. Upon completing the course students should be able to do the following with respect to an economic research question:

- 1. Apply intermediate microeconomic and macroeconomic methods to analyze an economic policy question;
- 2. Identify published research relevant to the research question;
- 3. Synthesize and contextualize the available relevant literature;

- 4. Describe alternative economic research methods and their limitations;
- 5. Locate, collect, and organize data and empirical evidence;
- 6. Organize collected secondary data into an analysis data file;
- 7. Develop and defend an empirical model with which to analyze the economic policy question;
- 8. Identify and defend an appropriate empirical approach for analyzing the economic policy question;
- 9. Use R to estimate the empirical model;
- 10. Compose effective prose explaining the empirical analysis;
- 11. Present the results of the research study orally and in a written paper.

General Course Policies and Expectations

This is a capstone class. The capstone experience is defined as an academic experience in which students demonstrate- in significant, relevant projects having both oral and written components- their abilities to gather material independently, to think critically about and to integrate the theoretical and practical knowledge they acquired throughout their undergraduate careers, and to consider the ethical or societal issues raised by their projects.

- Students should attend every class meeting.
- Eating or drinking in class is against building rules, can be rude to your instructor and classmates, and therefore is discouraged.
- Engaging in private conversations, reading materials unrelated to the class, leaving the classroom unnecessarily, or any other activity that creates negative externalities for others in the class should be avoided. This includes use of electronic devices in the classroom in a manner that is not consistent with the educational process.
- Students should check their school email regularly as email will be my primary form of mass communication with the class.

Grading

The class will meet from August 19, 2021 – December 15, 2021. We have no class on October 7th, November 23rd or November 25th.

One-Pagers (Critical Analysis)

Research is a conversation. Thus, one must first be able to identify the shortcomings, limitations, and areas of improvement of the recently published work of others before being able to create any meaningful contribution. Thus, much of the work for this class will focus on exposing students to a wide array of popular subjects and empirical methods within Applied Economics – both for the purpose of inspiring research ideas as well as fostering skills for critical analysis.

We will read 13 different papers within Applied Economics. For each assigned paper, 1-2 pages of writing will be due. $\sim 1/3$ of the assignment should consist of a summary of the paper, $\sim 1/3$ should focus on the paper's strengths and contributions, and the remaining $\sim 1/3$ should focus on identifying shortcomings and (more importantly) areas of improvement.

Each of these "one-pagers" is worth 3 points. You will be graded according to your comprehension, analysis and contributions during our in-class discussion. You will submit these online in a PDF format via eCampus' Crowdmark system before the start of class. There will be no assignment due on the day of your presentation.

Presentations

Each student will have two presentations to give throughout the semester. The first will be on the paper of your choosing. Your paper must be a recent (≥2000) applied paper that is published in a peer-reviewed Economics journal. This paper must be signed-off on by the instructor no later than **September**, 23rd. You cannot present on the same paper as another student. Papers will be assigned on a first-come, first-serve basis. Ideally, the paper that you present will inform your research paper.

Your second presentation will cover your work for your research paper. These presentations will take place during the last week of class.

The presentations are worth 12 points each. Each presentation should cover the paper's: Motivation, Introduction, Literature Review, Background, Data, Methods, Results, Conclusion, Contribution and Potential Improvements. The suggested length of each presentation is ~30 minutes.

Research Paper

As a writing and capstone course, this class has one major writing assignment – an individualized final paper in the style of the journal *Applied Economics Letters*. There will be numerous checkpoints for the draft of your paper throughout the semester. These consist of a: topic and survey of the literature, data and summary statistics, preliminary results, literature review, and rough draft. Each are worth 5 points.

To prepare for the empirical work, I will teach all students the programming language R throughout the class. There will be associated assignments along with these lectures that we will work through together in class.

Breakdown of Credit

One-Pagers	39 points
Presentation 1	12 points
Presentation 2	12 points
Research Paper Topic & Lit Survey	5 points
Summary Stats	5 points
Preliminary Results	5 points
Literature Review	5 points
Rough Draft	5 points
Final Draft	15 points
Total	103 points

Grading Scale

Points	Letter Grade		
95+	A+		
95-90	A		
89-80	В		
79-70	C		
69-60	D		
69-60 < 60	\mathbf{F}		

COVID-19 Policy

WVU is committed to maintaining a safe learning environment for all students, faculty, and staff. Should campus operations change because of health concerns related to the COVID-19 pandemic or other campus-wide emergency, it is possible that this course will move to a fully online delivery format. If that occurs, students will be advised of technical and/or equipment requirements, including remote proctoring software.

In a face-to-face environment, our commitment to safety requires students, staff, and instructors to observe the social distancing and personal protective equipment (PPE) guidelines set by the University at all times. While in class, students will sit in assigned seats when required and will wear PPE according to current University guidelines. Students who fail to comply may be referred to the Office of Student Conduct for sanctions.

As detailed in the policy, students who becomes sick or are required to quarantine during the semester should notify the instructor. Students should then work with the instructor to develop a plan to complete the course learning outcomes while he or she is absent.

Adverse Weather Statement

In the event of inclement or threatening weather, everyone should use his or her best judgment regarding travel to and from campus. Safety should be the main concern. If you cannot get to class because of adverse weather conditions, you should contact your instructor as soon as possible. Similarly, if your instructor(s) are unable to reach the class location, they will notify you of any cancellation or change as soon as possible, using agreed upon methods to prevent students from embarking on any unnecessary travel. If you cannot get to class because of weather conditions, instructors will make allowances relative to required attendance policies, as well as any scheduled tests, quizzes, or other assessments.

Inclusivity

The West Virginia University community is committed to creating and fostering a positive learning and working environment based on open communication, mutual respect, and inclusion. If you are a person with a disability and anticipate needing any type of accommodation in order to participate in your classes, please advise your instructors and make appropriate arrangements with the Office of Accessibility Services. (https://accessibilityservices.wvu.edu/)

Academic Integrity

The integrity of the classes offered by any academic institution solidifies the foundation of its mission and cannot be sacrificed to expediency, ignorance, or blatant fraud. Therefore, instructors will enforce rigorous standards of academic integrity in all aspects and assignments of their courses. For the detailed policy of West Virginia University regarding the definitions of acts considered to fall under academic dishonesty and possible ensuing sanctions, please see the West Virginia University Academic Standards Policy. Should you have any questions about possibly improper research citations or references, or any other activity that may be interpreted as an attempt at academic dishonesty, please see your instructor before the assignment is due to discuss the matter.

Mental Health

College students commonly experience issues that may interfere with academic success. Stress, sleep problems, relationship and social concerns, adjustment to college, financial problems, family issues, discrimination, or anxiety and depression all affect one's ability to remember, learn, and perform. If you (or a friend) are struggling, we strongly encourage you to seek support. Supportive resources are available on campus, and most are at no-charge. The Carruth Center for Psychological and Psychiatric Services (CCPPS) offers consultations, short-term individual therapy, group therapy, and various mental health-related workshops. Virtual and inperson (outside of pandemic situations) services are available. Crisis services are also available 24/7/365.

Please call (304) 293-4431 to schedule an appointment or speak to a professional for help in a crisis. For more mental health resources and information, visit the CCPPS website at: https://carruth.wvu.edu/ Crisis services are also available through text: Text WVU to 741741 for support 24/7 from a trained Crisis Counselor.

Schedule

Week	Date	DOW	Due	Readings	Instruction	Topic
1	8/19/2021	R			Lecture	Syllabus, Intro
2	8/24/2021	T			Lecture	Applied Micro
	8/26/2021	R			Lecture	Applied Methods
3	8/31/2021	T	1-Pager #1	Martin & Hall (2020), ECON	Discussion	Regression Analysis
	9/2/2021	R			Lecture	R Tutorial - intro
4	9/7/2021	T	1-Pager #2	Burde & Linden (2011), AEJAE	Discussion	RCTs
	9/9/2021	R			Lecture	R Tutorial - subset
5	9/14/2021	Т	1-Pager #3	Currie & Walker (2011), AEJAE	Discussion	Diff-In-Diff
	9/16/2021	R			Lecture	R Tutorial - ifelse
6	9/21/2021	T	1-Pager #4	Grier (2021), JCE	Discussion	Synthetic Control
	9/23/2021	R	Topic & Lit Survey		Discussion	Research Paper
7	9/28/2021	Т	1-Pager #5	Hoekstra (2009), RESTAT	Discussion	Regression Discontinuity
	9/30/2021	R			Lecture	R Tutorial - stargazer
8	10/5/2021	T	1-Pager #6	Card & Dahl (2011), QJE	Presentation	Student-Chosen Paper
	10/7/2021	R	No Class			
9	10/12/2021	T	1-Pager #7	Arif et al. (2020), SEJ	Presentation	Student-Chosen Paper
	10/14/2021	R	Summary Stats		Discussion	Research Paper
10	10/19/2021	T	1-Pager #8	Bartscher et al. (2021), WP	Presentation	Student-Chosen Paper
	10/21/2021	R			Lecture	R Tutorial - aggregate
11	10/26/2021	T	1-Pager #9	Bloom et al. (2006), WP	Presentation	Student-Chosen Paper
	10/28/2021	R			Workshop	Research Paper
12	11/2/2021	T	1-Pager #10	Ang et al. (2021), WP	Presentation	Student-Chosen Paper
	11/4/2021	R			Workshop	Research Paper
13	11/9/2021	T			Workshop	Research Paper
	11/11/2021	R	Preliminary Results		Discussion	Research Paper
14	11/16/2021	T			Workshop	Research Paper
	11/18/2021	R	Literature Review		Discussion	Research Paper
15	11/23/2021	T	No Class			
	11/25/2021	R	No Class			
16	11/30/2021	T			Workshop	Research Paper
	12/2/2021	R	Rough Draft		Discussion	Research Paper
17	12/7/2021	T	Presentation 1		Presentation	Research Paper
	12/9/2021	R	Presentation 2		Presentation	Research Paper
18	12/15/2021	W	Research Paper (10am)	_		