## ARE 5203/6203 Economics Methodology: Praxis and Practice

MW 4:40-5:55pm
Location: JONS 229
Instructor: Erik Katovich
Office: Young 303 A
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Office Hours: by Appointment

**Course Description:** This course guides students through the process of writing an original research paper in applied economics. The focus is on development of practical skills and professional practice, including generation of research ideas, literature review, effective writing, causal inference tools, data visualization, reproducible coding, project management, effective presentation and communication of research findings, research ethics, and peer feedback and review.

# Student Learning Objectives: By the end of the semester, students will:

- Develop the skills and knowledge required to undertake original research in applied economics.
- Communicate effectively about research findings.
- Provide constructive feedback to peers.
- Understand professional practices and norms.

Course Website: The Husky CT site will contain reading assignments, class schedule and due dates.

**Course Materials:** Weekly readings are listed in the course outline below, along with links to each reading. When not available online, readings will be uploaded to the Husky CT site.

**Participation:** Students are expected to read all assigned materials <u>prior</u> to each class, actively participate in class activities, and complete assignments.

#### **Assignments:**

- 1. <u>Three research topics (September 15<sup>th</sup>)</u>: Identify three potential research topics and write approximately 200 words (a few paragraphs) about each, discussing economic or policy aspects of the topic that make it an interesting candidate for further research. Be as specific as possible.
- 2. Research proposal (September 29<sup>th</sup>): A 2-to-3-page document outlining:
  - a. Your specific research question
  - b. Motivation and potential contributions (i.e., why do we care?)
  - c. Context: what is the geographical or institutional setting for this question?
  - d. What type of data would you need and what might your identification strategy be?
  - e. Foreseeable challenges and obstacles
  - f. Three key literature references

## Prior to October 15th, schedule a meeting with instructor to discuss your research proposal.

- 3. <u>Data visualization and interpreting results (October 13<sup>th</sup>)</u>: Identify data source(s) for your research question generate nicely formatted descriptive evidence; complete a short problem set
- 4. Research paper intro, empirical strategy, and descriptive evidence (October 27<sup>th</sup>): Turn in what you have so far, including discussion of next steps.
- 5. Referee report (November 10<sup>th</sup>): Select a paper from the provided list and write a 2-page report.
- 6. Final research paper (December 14<sup>th</sup>): Turn in your final paper. It is completely acceptable for this paper to remain a "work-in-progress," which you will hopefully continue to build upon as you develop your dissertation. However, it should still be structured and formatted as if it were a final draft.

## **Grading:**

• Assignments: 40%

• In-class preliminary presentation: 10%

• In-class final presentation: 10%

Participation in class activities and discussions: 20%

• Final paper: 20%

Grades will be based on the following scale:

| A   | 94 - 100 | C   | 74 - 76  |
|-----|----------|-----|----------|
| A - | 90 - 93  | C - | 70 - 73  |
| B + | 87 - 89  | D + | 67 - 69  |
| В   | 84 - 86  | D   | 64 - 66  |
| В-  | 80 - 83  | D - | 63 - 60  |
| C + | 77 - 79  | F   | below 60 |

The following grade points per credit shall be assigned to grades: A, 4.0; A-, 3.7; B+, 3.3; B, 3.0; B-, 2.7; C+, 2.3; C, 2.0; C-, 1.7; D+, 1.3; D, 1.0; D-, 0.7; F, 0.

## **Late Policy**

You are expected to submit all your work by specified deadlines. I will accept late submissions without penalty if requests for extensions are received in advance of due dates and stated reasons for the requests are reasonable and deemed acceptable.

# **Course Outline:**

Useful resources:

- o Chris Roth and David Schindler, EconGradAdvice: Resources for PhD Students. Link.
- o Riccardo Di Cato, Aakash Bhalothia, and Santiago Cantillo, Backstory: How Research Papers in Economics Get Made, Podcast by UCSD Grad Students. <u>Link</u>.
- o The Hidden Curriculum Podcast. <u>Link</u>.
- World Bank Development Impact Blog. <u>Link</u>.

### Week 1

• Monday, August 26th: Starting to think like a researcher

Reading:

- o Paul Niehaus, Doing Research (2019). Link.
- Wednesday, August 28th: Coming up with research ideas

Reading:

- o Frank Schilbach, 5 Steps Toward a Research Paper, MIT Guest Lecture (2019). Link.
- Shiv Hastawala, Developing viable research ideas in applied micro development economics, Blog Post. <u>Link</u>.

## Week 2

• Monday, September 2<sup>nd</sup>: Labor Day – no class

• Wednesday, September 4<sup>th</sup>: How has economic research evolved, and how does it differ from other fields?

Readings (skim these, be ready to compare and contrast):

- o Amartya Sen, Ingredients of Famine Analysis: Availability and Entitlements, The Quarterly Journal of Economics, Vol. 96, No. 3 (1981).
- Esther Duflo, Schooling and Labor Market Consequences of School Construction in Indonesia: Evidence from an Unusual Policy Experiment, American Economic Review, Vol. 91, No. 4 (2001).
- Mark T. Buntaine, Michael Greenstone, Guojun He, Mengdi Liu, Shaoda Wang, Bing Zhang, Does the Squeaky Wheel Get More Grease? The Direct and Indirect Effects of Citizen Participation on Environmental Governance in China, American Economic Review, Vol. 114, No. 3 (2024).
- o Jennifer Raynor, Corbett Grainger, and Dominic Parker, Wolves make roadways safer, generating large economic returns to predator conservation, Proceedings of the National Academy of Sciences, Vol. 118, No. 22 (2021). <u>Link</u>.

#### Week 3

- Monday, September 9th: Peer-to-peer research brainstorming
  - Come to class prepared to discuss research topics.
- Wednesday, September 11<sup>th</sup>: Literature review and reference management *Readings*:
  - o John Cochrane, Writing Tips for PhD Students. <u>Link</u>.

Assignment #1 Due: Three research topics

## Week 4

- Monday, September 16<sup>th</sup>: Effective writing and how to craft a compelling introduction *Readings:* 
  - o David Evans, How to Write the Introduction of Your Development Economics Paper, Center for Global Development (2020). <u>Link.</u>
  - o Mark Bellemare, Doing Economics Chapter 2: Writing Papers, MIT Press (2022).
- Wednesday, September 18th: Overview of empirical strategies in applied economics Readings (review these chapters, no need to read everything):
  - o Scott Cunningham, Causal Inference: The Mixtape (2021), Chapters 6-9 (Regression Discontinuity, Instrumental Variables, Panel Data, Difference-in-Differences). <u>Link</u>.

### Additional Resources:

- o DIMEwiki, Quasi-Experimental Methods. Link.
- o Paul Goldsmith-Pinkham, Applied Empirical Methods Lecture Notes. Link.
- o David McKenzie, A Curated List of Our Postings on Technical Topics Your One-Stop Shop for Methodology, World Bank Development Impact Blog (2018). <u>Link.</u>

#### Week 5

• Monday, September 23<sup>rd</sup>: Credibility and transparency in science *Readings*:

- Edward Miguel, Research Transparency & Reproducibility in Economics and Beyond, NBER Summer Institute Methods Lecture (2019). <u>Link</u>.
- O David McKenzie, A Pre-Analysis Plan Checklist, World Bank Development Impact Blog (2012). <u>Link</u>.

#### Additional Resources:

- o Garret Christensen, Manual of Best Practices in Transparent Social Science Research, Berkeley Initiative for Transparency in the Social Sciences (2018).
- Wednesday, September 25th: Replication and good coding practices

### Readings:

- Maria Jones, Luiza Cardoso de Andrade, Luis Eduardo San Martin, and Avnish Dayal Singh, How to Make Sure Your Research Paper is Reproducible? Evidence from 55 Papers, World Bank Development Impact Blog (2022). <u>Link</u>.
- o Matthew Gentzkow and Jesse Shapiro, Code and Data for the Social Sciences: A Practitioner's Guide, University of Chicago mimeo (2014). <u>Link</u>.

**Assignment #2 Due:** Research Proposal

#### Week 6

• Monday, September 30th: Coding workflow and project management

## Readings:

- o DIME Analytics, Making Analytics Reusable: Using Git and GitHub. Link.
- o Alli Gofman and Jaclyn Wilson, Introduction to Overleaf. <u>Link.</u>

#### Additional Resources

- o DIMEwiki: Reproducible Research. Link.
- o Github, Creating your first repository using Github Desktop. Link.
- Wednesday, October 2<sup>nd</sup>: Telling your story with descriptive evidence

## Readings:

- o Jonathan Schwabish, An Economist's Guide to Visualizing Data, Journal of Economic Perspectives, Vol. 28, No. 1 (2014). Link.
- o Sarah Leo, Mistakes, we've drawn a few: Learning from our errors in data visualization, The Economist (2019). <u>Link.</u>
- o Rosamund Pearce, Why you sometimes need to break the rules in data viz: Best practices help us to avoid common pitfalls in data visualization but we shouldn't follow them blindly, The Economist (2020). <u>Link.</u>

### Week 7

• Monday, October 7th: Interpreting and discussing empirical results

### Reading:

- O David McKenzie, A crowd-sourced checklist of the top 10 little things that drive us crazy with regression output, World Bank Development Impact Blog (2022). <u>Link.</u>
- Wednesday, October 9th: Peer-to-peer research project troubleshooting II
  - o Come to class prepared to discuss your research project.

#### Week 8

- Monday, October 14th: Research proposal presentations and feedback I
- Wednesday, October 16<sup>th</sup>: Research proposal presentations and feedback II

### Week 9

• Monday, October 21st: Grant Writing

Reading:

- Mark Bellemare, Doing Economics Chapter 5: Finding Funding, MIT Press (2022).
   Additional Resources:
  - o Anne Byrne, Updated List of Small Grants for Graduate Students. <u>Link.</u>
  - o UC Riverside, List of organizations/foundations offering fellowships and grants. <u>Link.</u>
  - o STEG PhD Grants: Link.
- Wednesday, October 23<sup>rd</sup>: Ethical research practices and the IRB process

Readings:

- Edward Asiedu, Dean Karlan, Monica Lambon-Quayefio, and Christopher Udry, A call for structured ethics appendices in social science papers, PNAS, Vol 118, No. 29 (2021). <u>Link.</u>
- o Peter Singer, Arthur Baker, and Johannes Haushofer, Are Randomized Poverty-Alleviation Experiments Ethical? Project Syndicate (2019). Link.

Assignment #4 Due: Research paper intro, empirical strategy, and descriptive evidence

#### Week 10

- Monday, October 28th: Referee reports and conference discussions *Readings:* 
  - o Tatyana Deryugina, How to write a good referee report, Medium Blog (2019). Link.
  - o Jonathan Berk, Campbell Harvey, and David Hirshleifer, Preparing a Referee Report: Guidelines and Perspectives (2015). <u>Link</u>.
- Wednesday, October 30<sup>th</sup>: Presentations and public speaking

Readings:

o Mark Bellemare, Doing Economics Chapter 3: Giving Talks, MIT Press (2022).

#### Week 11

• Monday, November 4<sup>th</sup>: Peer review and the publishing process in economics *Readings:* 

- o Mark Bellemare, Doing Economics Chapter 4: Navigating Peer Review, MIT Press (2022).
- Wednesday, November 6<sup>th</sup>: Sharing your research: conferences, blog posts, and elevator pitches

Readings:

• *VoxDev blog post of your choice:* <u>Link.</u>

Additional Resources:

o Anne Burton, Updated Economics Conference List: <u>Link</u>.

Assignment #5 Due: Referee report

#### Week 12

Monday, November 11<sup>th</sup>: How does the economics job market work?

Readings:

- o John Cawley, A Guide and Advice for Economists on the US Junior Academic Job Market (2018). <u>Link</u>.
- Wednesday, November 13th: Career paths: academia, government, and private sector (guest lectures)

#### Week 13

- Monday, November 18<sup>th</sup>: Peer-to-peer research discussion and troubleshooting

  o Come to class prepared to discuss your research project and presentation.
- Wednesday, November 20th: Final research project presentations and discussion I

### **Thanksgiving Break**

### Week 14

- Monday, December 2<sup>nd</sup>: Final research project presentations and discussion II
- Wednesday, December 4th: Final research project presentations and discussion III

Assignment #6 Due: Final research paper

Policy Against Discrimination, Harassment and Related Interpersonal Violence: The University is committed to maintaining an environment free of discrimination or discriminatory harassment directed toward any person or group within its community – students, employees, or visitors. Academic and professional excellence can flourish only when each member of our community is assured an atmosphere of mutual respect. All members of the University community are responsible for the maintenance of an academic and work environment in which people are free to learn and work without fear of discrimination or discriminatory harassment. In addition, inappropriate amorous relationships can undermine the University's mission when those in positions of authority abuse or appear to abuse their authority. To that end, and in accordance with federal and state law, the University prohibits discrimination and discriminatory harassment, as well as inappropriate amorous relationships, and such behavior will be met with appropriate disciplinary action, up to and including dismissal from

the University. Additionally, to protect the campus community, all non-confidential University employees (including faculty) are required to report sexual assaults, intimate partner violence, and/or stalking involving a student that they witness or are told about to the Office of Institutional Equity (OIE). Please be aware that while the information you provide will remain private, it will not be confidential and will be shared with University officials who can help.

An exception to this reporting exists if students disclose information as a part of coursework submitted to an instructor in connection with a course assignment. Even in the absence of such obligation, all Employees are encouraged to contact OIE if they become aware of information that suggests a safety risk to the University community or any member thereof. The University takes all reports with the utmost seriousness. More information, including resources and reporting options, is available at equity.uconn.edu and titleix.uconn.edu.

**Students with disabilities:** The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please let me know immediately so that we can discuss options. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, (860) 486-2020 or http://csd.uconn.edu/.

**Academic Integrity:** This course expects all students to act in accordance with the Guidelines for Academic Integrity at the University of Connecticut. Because questions of intellectual property are important to the field of this course, we will discuss academic honesty as a topic and not just a policy. If you have questions about academic integrity or intellectual property, you should consult with your instructor. Additionally, consult UConn's <u>guidelines for academic integrity</u>.

# **Resources for Students Experiencing Distress**

The University of Connecticut is committed to supporting students in their mental health, their psychological and social well-being, and their connection to their academic experience and overall wellness. The university believes that academic, personal, and professional development can flourish only when each member of our community is assured equitable access to mental health services. The university aims to make access to mental health attainable while fostering a community reflecting equity and diversity and understands that good mental health may lead to personal and professional growth, greater self-awareness, increased social engagement, enhanced academic success, and campus and community involvement.

Students who feel they may benefit from speaking with a mental health professional can find support and resources through the Student Health and Wellness-Mental Health (SHaW-MH) office. Through SHaW-MH, students can make an appointment with a mental health professional and engage in confidential conversations or seek recommendations or referrals for any mental health or psychological concern.

Mental health services are included as part of the university's student health insurance plan and also partially funded through university fees. If you do not have UConn's student health insurance plan, most major insurance plans are also accepted. Students can visit the Student Health and Wellness-Mental Health located in Storrs on the main campus in the Arjona Building, 4th Floor, or contact the office at (860) 486-4705, or https://studenthealth.uconn.edu/ for services or questions.

#### **Accommodations for Illness or Extended Absences**

If illness prevents you from participating in class, it is your responsibility to notify me as soon as possible. If life circumstances are affecting your ability to focus on courses and your UConn experience, students can email the Dean of Students at dos@uconn.edu to request support.

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