

University of Missouri – Columbia

Spring 2023

***Economics 8413
Research Workshop I
Syllabus***

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Virtual Office Hours:

by appointment (just email me to make a Zoom appointment).

CLASS DESCRIPTION

Economics 8413 is designed to help you write a research paper that is acceptable at the Master's level. For most students, this will consist of a replication of a published refereed empirical economics paper, followed by a meaningful extension. You will write your own paper, with your own literature review, your own ideas about why the replicated research is important, your own critique of the replicated paper, and your extension.

Thus, your first task will be to find a paper to replicate. Once you have found a suitable paper, you will spend the rest of the semester:

- Reading the paper and other relevant literature.
- Gathering all the necessary data.
- Performing your estimations.
- Extending the results of the paper.
- Writing your own paper.

Throughout the semester you will receive “prompts,” asking you to post reports of your progress thus far in the semester. Typically, these will be multi-page, detailed, prompts, so please make sure to read them entirely! You will post your answers to these prompts in the class Discussion Board, where your classmates can provide you with feedback on your project, and you will do the same for them.

Note: Exceptionally qualified and ambitious students may elect to write an original research paper, after consultation with me and finding a suitable advisor (see below).

HOW TO CHOOSE A PAPER TO REPLICATE

There will be a lecture on this topic, titled: “Econ 8413 Replicating Paper.” And you also see a Discussion Board prompt, titled “Idea Presentation,” which details and expands on the points below. But here are some important characteristics that the paper you will replicate should have:

1. It should be in a field that interests you, and it should be a paper that you like. The work will be so much more fun if you're interested and invested in the research!
2. It must be published in a good refereed economics journal. In general, unpublished papers (such as working papers) are not acceptable. However, if you find an unpublished paper that you love, feel free to consult with me about that possibility. To find a short list of good economics journals, watch my lecture on how to replicate a paper. To find a much longer list, look at the journal ranking file posted on Canvas. Some things to note, as you go through that file:
 - Journals in the top 250 or so of that ranking will probably be acceptable.
 - Why only “probably”? Because there are some subtle variables in determining a good article, and they are hard to codify. Some journals may not be refereed, for example, and that may not be obvious to you. Generally, avoid journals with institution names in their titles, as they tend to publish mostly internal research. Avoid papers that are just from the proceedings of a conference, as the refereeing process was probably non-standard.

Generally, and obviously, avoid articles whose research looks poor.

- Your first stop could be one or two of the top “general interest” journals. In the journal ranking available on Canvas, **the top general interest journals are highlighted in red.** You won’t necessarily choose an article from one of these journals. They publish top-notch articles, of course, but the paper tend to use advanced econometric techniques that may be still beyond your reach. But it’s good to browse these journals, as they will give you a broad sense of good Economics research. Of course, if you want a challenge, a good article published in a top journal is fine and welcome. Just make sure that replicating it is a doable task, within your skill set.
- You may also take a look at “general interest” journals that have more doable articles. **I’ve highlighted in green some of the general interest journals** that publish articles generally at the level acceptable for this class.
- You should also look at some “field” journals, in fields that interest you. Start with the “top field journal” for the field of interest. **I’ve highlighted some top field journals in blue.**
- Careful: in all cases, there are articles that consist mostly of theory, with a data application that is only an afterthought. You’ll want to find an article where the data analysis is the main point.

Generally speaking, if you want to get the most out of this class, try to find an article that challenges you, but at the same time is doable.

3. The dataset used in the paper must be publicly available or at least you must be able to reconstruct it from publicly-available sources. This is crucial! Without the data you cannot even begin replicating the paper. If you don’t check that the data are available, you may find yourself stranded with an undoable project, having to switch papers midsemester. Although this class is pretty flexible, and switching projects is allowed, you’d obviously be losing time. Also make sure that the paper that you choose has a good data section, one that explains what the author(s) approaches were, how they managed the data, and so on. That’s how you will be able to replicate their work, otherwise it’s difficult.
4. In the past, students in this class were asked to find papers that do not provide a STATA Do-file that can be used to replicate the paper’s results. This is becoming increasingly difficult, as more and more papers provide not only ready-to-go datasets (which is OK), but they also provide the STATA do-files that can be used to replicate their results. This is good scientific practice and provides transparency: anyone can download the data files and the do-files, and replicate the paper’s results. But, for us, it defeats the purpose of this class. You are still encouraged to find a paper without a do-file (if you don’t know what a do-file is, see my lecture on STATA, and my STATA handout). But if the paper you really like does have a do-file, that’s OK too, as we’ll work with an honor system. More details on this will be provided in my “Idea Presentation” prompt.

If you are unable to identify a suitable paper, I will help you. But note that being able to find suitable research is itself part of the skills graded in this class, therefore it’s preferable that you to go through the exercise of finding a suitable paper yourself, at least at first.

EXTENDING YOUR REPLICATED PAPER “IN A MEANINGFUL WAY”

As mentioned in the Class Description, you should strive to extend the replicated paper “in a meaningful way.” This will mean different things for different projects. Some examples are:

- If the data for your project was not readily available, and there was substantial work involved in collecting it from original sources and assembling it, I will consider that a meaningful extension.
- You may extend your data in time. For example the paper you are replicating has data that stops in 2010 and you extend it to, say, 2020.
- You can extend your paper in space. This is generally more difficult, and for that reason it would be a great contribution. Examples: the paper uses data from one certain U.S. state, and you perform an analysis for another state; or the original paper discusses a country or region, and you analyze a different country or region.
- You can stay within the dataset you already have, but use it to ask and analyze a different economic question.
- You can (and should) also be critical of the paper you replicate. Worry about whether the results are valid (any potential for omitted variable bias, for example?), perform additional robustness and sensitivity checks, etc.

YOUR MASTER’S COMMITTEE

Your master’s committee will typically consist of three members: myself, as the instructor of Econ 8413, and who will serve as the main advisor; Dr. Saku Aura, the Director of Master’s Programs; and Dr. Xinghe Wang, the previous Director of Master’s Programs.

Ambitious students who elect to write an original research paper will have a different committee. If you are interested in exploring this possibility, you should approach me very early in the semester to discuss it. Your first task will be to find an advisor in the Economics Department who is interested in your original research project and is willing to advise you on it. Your Master’s committee will then typically be chaired by your main advisor, and have Dr. Aura and myself as members. Finally, if you are in a dual degree (e.g. with Statistics) you may have to follow this route. Your typical committee then has one or two professors from the Economics Department and one or two from your other department. We will communicate very early in the semester about the composition of your committee.

GRADING

NOTE: grades will be awarded with + / -.

Grades will be based on your demonstrated skills in the following:

- i. Ability to find good quality, interesting economic research. Ask yourself: is the economic question interesting? Are the data and the tools used appropriate to answer the economic question asked?
- ii. Ability to do research in economics. For those replicating a paper, you are assessed on: the quality of your STATA work, including readability of your program, and whether it can be run; the quality of the documentation in your program files; the extensiveness and care of the work. If you are doing original research, you are

assessed on: how interesting the economic question is; how the relevant data set and modeling tools are; and whether the statistical analysis answers the question that you posed.

- iii. Ability to write your research as an academic paper (see below).

OPPORTUNITY TO FINISH IN MORE THAN ONE SEMESTER

You have the opportunity to complete your work in more than one semester, with no questions asked. If, given your schedule and your other commitments, you feel that you'd like to elect that route, please let me know. Then the due dates shown on the last page will not be binding to you. At the end of the current semester, you will be assigned a grade of Incomplete. Do not enroll in any other classes that would "complete this class." Rather, keep doing your work. Once you submit all your work, I will change your Incomplete grade from this semester to a letter grade.

IMPORTANT NOTE: University of Missouri rules dictate that you must be enrolled in at least a class in the semester you graduate. If you are a foreign student, you may also have to be enrolled full-time to maintain your visa status. This may have implications for you, if you complete all your other coursework this semester, but would like to extend your work in this class into another semester. An announcement early in the semester will have more details on this.

STATA: DO FILES, LOG FILES, AND DATA FILES

Most students will be doing their work using the STATA statistical package. You are highly encouraged to use this particular statistical package, because this is the one that I am most knowledgeable about, and that I can provide help with. I will provide an "Introduction to STATA" hand-out and a video class on how to use STATA. I will also help you if you have specific questions.

Part of your grade depends on your STATA work. So that I am able to check it, you will post three files at the end of the semester:

- A STATA Do-file, that is, your STATA program.
- A STATA log file.
- At least one STATA data file.

See my hand-out on this. At my discretion, I may attempt to run your files in my computer.

HOW TO WRITE YOUR PAPER

An ideal economics paper will probably have anywhere between 4 and 6 sections, sometimes more. For an empirical paper, one possible structure is described below, but note that this is just an example. You will have to decide which structure works best for your paper. The key is that the paper does a good job of explaining the economic problem at hand, not that it follows some rigid structure. But here is an example of a possible structure:

- i. Introduction. This is where you would tell your reader what your idea is, and why it is interesting. You should put your idea in the context of existing literature and real-world economic questions.
- ii. Literature review. This “section” can just be part of the introduction, as described above, or it can be a stand-alone section. No matter where you place it, please bear in mind that a BAD literature review is, at an extreme, just a collection of abstracts of other papers. A GOOD literature review is something like a map. Just like a map locates cities and roads one in relation to another, a good literature review helps in locating each paper reviewed in relation to the other papers that you are discussing, and especially in relation to your own paper. Thus, it will probably have sentences such as “Paper X extended paper Y [in some way]”; or “Paper X disputed paper Y’s results”; or “Paper X used the empirical methodology prosed in papers Y and Z for a different data set”; and so on. That is, a good literature review allows the reader to create a mental map of the research done in one particular area, and to place your own paper within that map. Explain how your paper extends others’ work, or how it modifies it, or how your paper supports or contradicts previous research. The ultimate goal is to place YOUR research in context, to illuminate your research by referring to previous research.
- iii. Data. An ideal data section is one that would allow your reader to reproduce your data set, after just reading your paper. You must explain your sources, and any further data manipulations that you performed. Ask yourself if someone can, based on your description, reproduce your data set. If the answer is in the negative, consider revising and adding to your data section, as it may be incomplete.
- iv. Methodology. This is where you would explain the empirical model that you propose to estimate. You should have an economic rationale for it. This should be either a formal or an informal model. It is also here that you address any empirical issues (such as endogeneity in your data, omitted variables, etc.), and how you solve them. Or you may have two separate sections, one on the theory behind the model, another on empirical issues. Your choice!
- v. Analysis and results. In this section you may present the results of your statistical analysis. This should be accompanied by a discussion (for example, how do the results conform or oppose your initial expectations, as given by the theory). You may also discuss the robustness of the results to different model specifications.
- vi. Conclusion. In this section, you remind the reader what your question and methodology were, and what results you obtained.

FINAL PAPER DEADLINE

Your **FINAL** paper will be due on **Monday, April 24**. An early deadline is needed to allow enough time to submit your M-3 form (see below). This is also the deadline for your STATA files, as described above. If you complete all work before the due date, I would appreciate it if you submit it as soon as you are done, as I will be working with very tight deadlines to read all papers, and it would be helpful to spread them a bit. Your grade will be mostly based on the final version of your paper.

DEADLINES TO SUBMIT FORMS M-1 AND M-3

You probably have already submitted “Form M-1 - Plan of Study.” But if you have not, please contact Dr. Aura at the **beginning of the semester**, to get this step done.

The final form that allows you to graduate is called “Form M-3 - Report of the Master’s Examining Committee.” The deadline to submit this form this semester is **Friday, April 28** (although the graduate school will typically accept for an extra week after that). See the actual procedure to submit it below. You will also receive an announcement with more details. You can check the deadline, and download the form, here:

<https://gradschool.missouri.edu/current-students/graduation-commencement/graduation-checklist/>. All members of your Master’s Committee must sign Form M-3 before it is submitted, that’s why your deadline for the paper must be earlier.

PROCEDURE TO SUBMIT FORM M-3

Note: you only submit Form M-3 in the semester you graduate. This is often the semester in which you finish Econ 8413, but there are exceptions. If you expect to graduate in a future semester, follow the procedure below *during the semester in which you expect to graduate* (but still submit your paper, in order to be graded in Econ 8413).

- Download “Form M-3: Report of the Master’s Examining Committee”: <https://gradschool.missouri.edu/form/m3-report-of-the-masters-examining-committee/>. Fill in the top part, including your paper title (if in doubt, discuss with me) and send it as an email attachment to me.
- I will consult with Dr. Aura whether you have completed all requirements for the Master’s degree. Then I will email the form to your committee for approval.
- Don’t forget to submit your paper by the deadline.
- NOTE: Do not send your M-3 Form OR your paper to the whole committee: I will do that once I approve your paper.
- Once your committee approves your paper and signs your Form M-3, the department will submit the signed form to the Graduate School.

UNIVERSITY NOTICES

ACADEMIC INTEGRITY

Academic integrity is fundamental to the activities and principles of a university. All members of the academic community must be confident that each person's work has been responsibly and honorably acquired, developed, and presented. Any effort to gain an advantage not given to all students is dishonest whether or not the effort is successful. The academic community regards breaches of the academic integrity rules as extremely serious matters. Sanctions for such a breach may include academic sanctions from the instructor, including failing the course for any violation, to disciplinary sanctions ranging from probation to expulsion. When in doubt about plagiarism, paraphrasing, quoting, collaboration, or any other form of cheating, consult the course instructor or the [Office of Academic Integrity](#).

Students are expected to adhere to this honor pledge on all graded work whether or not they are explicitly asked in advance to do so: "I strive to uphold the University values of respect, responsibility, discovery, and excellence. On my honor, I pledge that I have neither given nor received unauthorized assistance on this work."

ACCOMMODATION OF DISABILITIES

The goal of the University of Missouri is to ensure an inclusive learning environment for all students. [The University of Missouri Disability Center](#) provides services and accommodations for students to participate fully in the learning experience and to experience equitable evaluation of their performance. Students (including online students) with a documented disability can contact the Disability Center to establish an [Accommodation Plan](#). Documented disabilities include hearing, vision, mobility, learning and attention, psychological health, and physical health. Students' accommodations are implemented with the input of students to maximize the learning experiences. The MU Disability Center keeps information about a student's disability confidential.

Please notify me of your eligibility for accommodations as soon as possible. Additionally, if there are aspects of the course that present as barriers, such as inaccessible course content (e.g., learning assessments, PowerPoints, non-captioned videos, images, tables, PDFs) or if you need an immediate accommodation due to an injury, please contact me or the Disability Center as soon as possible.

INTELLECTUAL PLURALISM

The University community welcomes intellectual diversity and respects student rights. Students who have questions or concerns regarding the atmosphere in this class (including respect for diverse opinions) may contact the departmental chair or divisional director, the [Office of Academic Integrity](#), or the [MU Equity Office](#).

ACADEMIC INQUIRY, COURSE DISCUSSION, AND PRIVACY

When students record something that happens in a course (a lecture, class discussions, meetings, etc.) it has an impact on the rights of the people captured in that recording. For example, the instructor and the University may have rights to the intellectual property contained in that recording. At the same time, another student who may have been recorded has the right to privacy. In order to protect these rights, MU employs a policy (called “Executive Order No. 38”) to govern both situations you may encounter while taking a course – when an instructor allows recordings and when they do not.

Instructors should inform students which applies to their course:

- In this class, students may not make audio or video recordings of course activity, except students permitted to record as an accommodation under section 240.040 of the Collected Rules.
- In this class, students may make audio or video recordings of course activity unless specifically prohibited by the faculty member. However, the redistribution of audio or video recordings of statements or comments from the course to individuals who are not students in the course is prohibited without the express permission of the faculty member and of any students who are recorded.

If the instructor doesn’t specifically prohibit recording course activity, then the students are allowed to record and the same prohibitions regarding distribution apply.

Students who violate this policy are subject to discipline in accordance with provisions of section [200.020](#) of the Collected Rules and Regulations of the University of Missouri pertaining to student conduct matters.

FERPA

The Family Educational Rights and Privacy Act (FERPA) of 1974 is a federal law designed to protect the privacy of educational records; to establish the rights of students to inspect and review their education records; and to provide guidelines for the correction of inaccurate and misleading data through informal and formal hearings. The law applies to any individual who is or has been in attendance at an institution and regarding whom the institution maintains educational records. Once students have matriculated to the University of Missouri, i.e. enrolled in course work, FERPA rights transfer to the student, regardless of the student’s age.

Students can enable certain individuals to have access to their education records by signing a FERPA waiver. The consent must specify records to be disclosed, state the purpose of the disclosure and identify the party or class of parties to whom the disclosure must be made.

NONDISCRIMINATION POLICY

The University of Missouri does not discriminate on the basis of race, color, national origin, ancestry, religion, sex* (including gender), pregnancy, sexual orientation, gender identity, gender expression, age, disability, protected veteran status, and any other status protected by applicable state or federal law. Discrimination includes any form of unequal treatment such as denial of opportunities, harassment, and violence. *Sex discrimination includes rape, sexual assault, sexual harassment, unwanted touching, stalking, dating/domestic violence, stalking, and sexual exploitation. Retaliation for making or supporting a report of discrimination or harassment is also prohibited.

If you experience discrimination or sexual violence, you are encouraged (but not required) to report the incident to the MU Office for Civil Rights & Title IX. Learn more about your rights and options at civilrights.missouri.edu or call 573-882-3880. You also may make an anonymous report online.

If you are a survivor, or someone concerned about a survivor, and need immediate information on what to do, see RSVP Resources page. Both the Office for Civil Rights & Title IX and the RSVP Center can provide assistance to students who need help with academics, housing, or other issues.

In the event that you choose to write or speak about having experienced any of these forms of prohibited discrimination or harassment, Mizzou policies require that, as your instructor, I share this information with the MU Office for Civil Rights & Title IX. They will contact you to offer information about resources, as well as your rights and options as a member of our campus community.

MENTAL HEALTH

The University of Missouri is committed to supporting student well-being through an integrated network of care, with a wide range of services to help students succeed. The MU Counseling Center offers professional mental health care, and can help you find the best approach to treatment based on your needs. Call to make an appointment at 573-882-6601. Any student in crisis may call or go to the MU Counseling Center between 8:00-5:00 M-F. After hours phone support is available at 573-882-6601.

Visit our website at <https://wellbeing.missouri.edu/> to take an online mental health screening, find out about workshops and resources that can help you thrive, or learn how to support a friend. Download Sanvello, a phone app that teaches skills and strategies to help you maintain good mental health. Log in with your Mizzou e-mail to unlock all the tools available through Sanvello at no additional cost to you.

LAST DATE OF ATTENDANCE AND IMPACT ON FINANCIAL AID

Federal regulations for financial aid require the student financial aid office to document the attendance of students who have received federal financial aid if they do not successfully

complete any courses during the term. As a result, the last day of attendance (or activity) for any student receiving an F, U, or FN in this course will be recorded in the grade roster and reported to the financial aid office. **Based on the last day of attendance, students may be required to repay a portion of their financial aid award for the semester.**

A student's last day of attendance (or activity) is the last day on which a student participates in an academically-related activity at the University. These include:

- Attendance in class, lab, or an instructor's office hours
- The completion of an assignment or examination
- An appointment with a professor or e-mail correspondence regarding course material
- (Online courses only) For online courses, the last day a student submits an assignment or exam. Only logging into an online class without participating is *not* acceptable for last day of attendance

Please note that discussing a course withdrawal or notifying the instructor of an absence in class does not constitute participation for financial aid purposes. Moreover, any office hour visits or email correspondence must be related to the course material.

NETIQUETTE

Your instructor and fellow students wish to foster a safe online learning environment. All opinions and experiences, no matter how different or controversial they may be perceived, must be respected in the tolerant spirit of academic discourse. You are encouraged to comment, question, or critique an idea but you are not to attack an individual. Our differences, some of which are outlined in the University's nondiscrimination statement, will add richness to this learning experience. Please consider that sarcasm and humor can be misconstrued in online interactions and generate unintended disruptions. Working as a community of learners, we can build a polite and respectful course ambiance.

RELIGIOUS HOLIDAYS & ACCOMMODATIONS

Many religious faiths are represented in the student body. The University of Missouri does not restrict student free exercise of religion, unless 1) the restriction is in the form of a rule of general applicability, and does not discriminate against religion or among religions; and 2) it can be demonstrated that the application of the restriction is essential to furthering a compelling university interest, and is not unduly restrictive considering the relevant circumstance. The policy of the University attempts to strike a reasonable balance between accommodating the religious practice of students and meeting academic needs and standard.

Consult IDE's [Guide to Religions](#) for the form that can be used to notify an instructor of an absence associated with religious practice. Students are expected to notify their instructor(s) by completing and submitting this form in a manner that is consistent with the procedure outlined in the university's policy on student religious accommodation.

Providing false information regarding sincerely held religious practice is a violation of the university's Standard of Conduct and will not be tolerated.

DECREASING THE RISK OF COVID-19 IN CLASSROOMS AND LABS

If you have tested positive for COVID-19 or have been identified as someone who needs to quarantine, do not attend class in person until the mandated period for isolation or quarantine has passed. Your instructor will work with you on arrangements to access class material while you are in isolation or quarantine.

Additionally, if you are experiencing any COVID-related symptoms, or are otherwise feeling unwell, do not attend in-person classes and contact your health care provider and/or student health immediately. COVID symptoms include: fever greater than 100.4 or chills; cough, shortness of breath or difficulty breathing; fatigue; unexplained muscle or body aches; headache; new loss of taste or smell; sore throat; congestion or runny nose; nausea or vomiting; diarrhea.

Instructors or students with concerns about how a student is following any University-mandated COVID-19 policies and protocols should report those concerns to the Office of the Dean of Students. Concerns can be documented on a COVID Safety Measures Reporting Form.

Please note that sub-groups of students may have specific needs during COVID or online learning. One group is international students, who may be participating in class from their home countries and in different time zones. The instructor may be able to make reasonable accommodations to support the success of international students currently living in time zones that differ significantly from that of Columbia, MO. International students are expected to consult with their instructor about possible accommodations as soon as possible after the start of the course.

- [Info for Students & Families](#)
- [Info for Faculty](#)
- [Info for Staff](#)

CLASS SCHEDULE

Week / Day	PURPOSE	REQUIREMENT
Week 1	Introduction to the class. How to find a paper to base your research on. How to write a good economics paper.	Introduce yourself to classmates and to me. See discussion prompt for this.
Week 1	Introduction to STATA. A hand-out will be provided with an introduction to STATA, along with an example dataset.	None, but you should practice STATA with the provided dataset, if you're not familiar with it.
Monday, January 30	Idea Presentation. This is where you will tell me and your colleagues what you will be working on. For most students this means: what paper you will replicate. Describe the main questions of the paper, and its data.	Carefully read the prompt. Post 1-3 paragraphs on the relevant discussion board thread by this date. React to some of your classmates' postings.
Monday, February 27	Mid-Semester Progress Report. This is still a somewhat informal presentation. Discuss how much progress you've made. Attempt to have a literature review and a full presentation of the data. You may also already have one or two preliminary results. If you are having problems with your data or estimation, this is also an opportunity to discuss them.	Carefully read the prompt. Post a full discussion on the relevant discussion board thread by this date. React to some of your classmates' postings.
Monday, April 10	Results and Extensions. Consider this your final check, two weeks before the deadline to submit your paper. You may post a combination of things. At least, your classmates and I will be interested in seeing your full empirical results, and a discussion on how you have extended them, or are planning to extend them. We will discuss such things as final formatting and structure of your paper. The rare student who may be done with their project may elect to post their final work at this time.	You may post a combination of things, depending on how you are doing with your project.
Monday, April 24	Final Paper and STATA Files.	Post your paper and STATA files.