

Econ 698

Economic Science Replication Workshop

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Course Description:

This course is an introduction to economic research through the replication and modest extension of a published, peer-reviewed empirical paper in economic science. The course will operate as a workshop, involving weekly roundtable progress reports, and discussions of the mechanics of replicating/doing economic research. By replicating and modestly extending a published research paper, students will learn how economic scientists develop and motivate answerable research questions, detail falsifiable hypotheses that follow logically from theory, develop strategies of data collection to quantify elements of theory, evaluate the reliability and validity of data sources used, develop strategies for assembling and cleaning datasets in preparation for econometric analyses, select econometric procedures sensitive to data structure or the measurement precision of variables toward the aims of theory testing or parameter estimation, write code and record workflow to enable replication of empirical claims, interpret data regularities to adjudicate hypotheses, develop ancillary tests to guard against hasty generalizations/conclusions, and sequentially unfold econometric results to persuade/convince the scientific community of conclusions reached.

Class: W 2:00-5:00 pm, Eddy 114

Credit Hours: 3

Recommended Text: *An Introduction to Modern Econometrics Using Stata*, Stata Press

Author: Baum, Christopher F.; **ISBN-13:** 978-1-59718-013-9

Replication Paper and Extensions:

Grades are based on a final paper with the following elements: 1) a detailed summary of all subsections of the replication paper, demonstrating mastery of understanding of all theoretical and methodological elements of the paper; 2) a complete inventory of empirical statements, tables, and figures in the replication paper to be reproduced; 3) an independent assessment of the data used in the replication paper; 4) a carefully annotated Stata .do file showing how each empirical statement, table, and/or figure in the replication paper is reproduced; 5) an assessment of the replication effort, describing unresolved problems (if such problems remain); 6) a sensible motivation for, and description of econometric specification used in an extension/robustness testing effort; 7) interpretation of extension/robustness testing efforts; and 8) a carefully annotated Stata .do file to replicate empirical statements, tables, and/or figures rendered in an extension/robustness testing effort.

Extension or Robustness Testing:

Students will have two options to extend or test the robustness of results reported in the replication paper, including 1) in-sample, or 2) out-of-sample tests. In-sample extensions may involve censoring the range of observations, dropping cases or variables, developing a new operational measure of a variable used in the paper, or strategically adding an interaction of variables in the econometric model. Out-of-sample extensions may involve spatial or temporal adjustments to the data, like changing the geographic scope or the time dimension of the data, or adding a theoretically motivated variable of interest.

Letter Grade Distribution:

>= 93.00	A	73.00 - 76.99	C
90.00 - 92.99	A-	70.00 - 72.99	C-
87.00 - 89.99	B+	67.00 - 69.99	D+
83.00 - 86.99	B	63.00 - 66.99	D
80.00 - 82.99	B-	60.00 - 62.99	D-
77.00 - 79.99	C+	<= 59.99	F

Course Policies:

Academic Integrity

This course adheres to the Academic Integrity Policy of the General Catalog and the Student Conduct Code. As per university policy “Any student found responsible for having engaged in academic dishonesty will be subject to an academic penalty and/or University disciplinary action.” (General Catalog 2014-2015, Section 1.6.). Any academic dishonesty in this course may result in a grade of “F” for the course and may be reported to the Office of Conflict Resolution and Student Conduct Services. Please beware that the General Catalog identifies the following examples of academic dishonesty: cheating in classroom, plagiarism, unauthorized possession or disposition of academic materials, falsification, and facilitation of acts of academic dishonesty. Plagiarism is defined as: “Plagiarism includes the copying of language, structure, ideas, or thoughts of another, and representing them as one’s own without proper acknowledgement. Examples include a submission of purchased research papers as one’s own work; paraphrasing and/or quoting material without properly documenting the source.” (General Catalog 2014-2015, Section 1.6.).

Title IX Statement

CSU’s Discrimination, Harassment, Sexual Harassment, Sexual Misconduct, Domestic Violence, Dating Violence, Stalking, and Retaliation policy designates faculty and employees of the University as Responsible Employees. This designation is consistent with federal law and guidance, and requires faculty to report information regarding students who may have experienced any form of sexual harassment, sexual misconduct, relationship violence, stalking or retaliation. This includes information shared with faculty in person, electronic communications or in class assignments. As Responsible Employees, faculty may refer students to campus resources (see below), together with informing the Office of Support and Safety Assessment to help ensure student safety and welfare. Information regarding sexual harassment, sexual misconduct, relationship violence, stalking and retaliation is treated with the greatest degree of confidentiality possible

while also ensuring student and campus safety. Any student who may be the victim of sexual harassment, sexual misconduct, relationship violence, stalking or retaliation is encouraged to report to CSU through one or more of the following resources: Emergency Response 911 Deputy Title IX Coordinator/Office of Support and Safety Assessment (970) 491-1350 Colorado State University Police Department (non-emergency) (970) 491-6425 For counseling support and assistance, please see the CSU Health Network, which includes a variety of counseling services that can be accessed at: <http://www.health.colostate.edu/>. And, the Sexual Assault Victim Assistance Team is a confidential student resource that does not have a reporting requirement and that can be of great help to students who have experienced sexual assault. The web address is <http://www.wgac.colostate.edu/need-help-support>.

Recording

Students recording, reproducing, screenshotting, photographing, or distributing any video, audio, or visual content from this course is strictly prohibited without prior written approval from *Professor Zahran*. Some students may require a reasonable accommodation under the Americans With Disabilities Act that would allow them to record, reproduce, screenshot, photograph some course content, including video, audio, or other content. To accomplish this, a student should contact CSU's Student Disability Center (SDC) at (970) 491-6385. Recordings of class materials and content for this purpose are to be used solely for individual or group study and may not be reproduced or shared in any way (including electronically or posting in any web environment).

COVID-19 Information

All students are expected and required to report any COVID-19 symptoms to the university immediately, as well as exposures or positive tests from a non-CSU testing location. If you suspect you have symptoms, please fill out the COVID Reporter (<https://covid.colostate.edu/reporter/>). If you know or believe you have been exposed, including living with someone known to be COVID positive, or are symptomatic, it is important for the health of yourself and others that you complete the online COVID Reporter. Do not ask your instructor to report for you. If you do not have internet access to fill out the online COVID-19 Reporter, please call (970) 491-4600. You will not be penalized in any way for reporting. If you report symptoms or a positive test, you will receive immediate instructions on what to do, and CSU's Public Health Office will be notified. Once notified, that office will contact you and most likely conduct contact tracing, initiate any necessary public health requirements and/or recommendations and notify you if you need to take any steps. For the latest information about the University's COVID resources and information, please visit the CSU COVID-19 site: <https://covid.colostate.edu/>.

Accommodation for Students with Disabilities

If you require special accommodation to complete course requirements, please provide documentation and verification from the office of Resources for Disabled Students (<http://rds.colostate.edu>).

Copyright Statement

“Please do not share material from this course in online, print or other media. Course material is the property of the instructor who developed the course. Materials authored by third parties and used in the course are also subject to copyright protections. Posting course materials on external sites (commercial or not) violates both copyright law and the CSU Student Conduct Code. Students who share course content without the instructor’s express permission, including with online sites that post materials to sell to other students, could face disciplinary or legal action.”

Tentative Schedule

Week 1 (01.20.2021): Introduction

Week 2 (01.27.2021): Candidate papers to replicate

Week 3 (02.03.2021): Decide on replication paper and start inventory of empirical results

Week 4 (02.10.2021): Start data assembly or decoding (if data/code provided)

Week 5 (02.17.2021): Data assembly update

Week 6 (02.24.2021): Summarize, familiarize and analyze data

Week 7 (03.03.2021): Data summary update

Week 8 (03.10.2021): Start replicating all tables, results, empirical statements

Week 9 (03.17.2021): Replication update

Week 10 (03.24.2021): Replication code presentations/paper extension ideas

Week 11 (03.31.2021): Paper extension ideas update

Week 12 (04.07.2021): Troubleshooting

Week 13 (04.14.2021): Troubleshooting

Week 14 (04.21.2021): Formal presentation

Week 15 (04.28.2021): Formal presentation

Paper and Code Due 05.04.2021