

Carleton University, Department of Economics ECON 4905 – Honours Capstone Seminar

Fall, 2019

Professor Frances Woolley

Office: D888/889 Loeb building

Office hours: Tuesday 2:00 to 4:00

E-mail: frances.woolley@carleton.ca (best way to contact me)

Class: Wednesday 2:35 pm-5:25 pm SA 406

COURSE DESCRIPTION: The development of individual research projects in suitable economics topic areas with the exchange of results at each stage through in-class discussions and written and oral reports and culminating in a major research paper by each course registrant.

Precludes additional credit for ECON 4890, ECON 4900 (no longer offered), ECON 4901, and ECON 4902.

PREREQUISITES: ECON 3900 with a grade of C+ or higher, ECON 3920 with a grade of C+ or higher, and registration in an Honours Economics program. Students who believe they have taken a similar background course or courses from another university must provide appropriate documentation to the Department of Economics Undergraduate Administrator, Amanda Wright.

DETAILED EXPECTATIONS: The research project you will undertake in this course will involve finding an article that interests you, replicating – that is, redoing and recreating – the analysis in the article, updating or extending the analysis, writing up your results, and discussing why they matter. The evaluation scheme is as follows

Component	Due date	Weight
Assignment 1: Review of Stata, coding, interpretation of regression results. Submit via CuLearn. No hard copy required. Group work permitted.	September 20	5
Assignment 2: Understanding the article that you have chosen to replicate. Submit via CuLearn. No hard copy required.	September 27	10
Poster session: Presentation of article being replicated + any available replication results. Hard copy required. Class held in Discovery Centre, room 482 of the library.	Oct 16	10
Assignment 3: First draft of paper: introduction and literature review; data description; replication; outline of proposed extension. Submit via CuLearn. No hard copy required.	Oct 29	25
Final paper. Please submit a hard copy to the Professor or the TA during office hours. Please submit an electronic copy via CuLearn. The paper will not be graded until a hard copy is received.	Nov 29	40
Poster: Presentation of generalization. Hard copy required. Class held in Discovery Centre, room 482 of the library from 3:00 to 6:00.	Dec 4	10

POSTER PRESENTATIONS: The grade for the poster sessions will be based on (a) the hard copy of the poster itself, which will be collected and graded (b) showing up for the poster session on time and (c) participating, that is, engaging with other students about their posters. Part of the poster session grade will be based on peer evaluation, i.e. other students' assessments of the quality of your presentation and the feedback you provide on people's posters.

LATE WORK AND EXTENSIONS: In the absence of documentation, grades on assignments handed in late will be reduced by x percentage points, where $x=10*(\text{number of days late})$. At the end of the course, I will forgive one late penalty counting for a maximum of 5% of your total course grade.

When both electronic and hard copy submissions are required, work will be considered to be

handed in on time if it is submitted electronically before the deadline.

No course grades are final until approved by the Faculty Dean. Application to write a deferred final examination must be made at the Registrar's Office.

SICK NOTE POLICY: Sick notes are only necessary if you hope to hand in an assignment late and not be penalized, or if you are unable to attend a poster session. In these situations, please provide me with a sick note dated **before the assignment is due**. Any requests for accommodation due to sickness must be accompanied by a Carleton University medical certificate: https://carleton.ca/registrar/wp-content/uploads/med_cert.pdf. Other requests for accommodation due to, for example, bereavement or stress, will be evaluated on a case-by-case basis.

GROUP WORK: Research is a collaborative exercise, and I encourage you to work with others in this course. However, no more than four people may replicate the same article.

If you are replicating the same article as someone else, you may work together in developing code and discussing ideas. However **you must clearly acknowledge the extent of any collaboration (e.g. if you borrow a line of code from another student, say whose code you used, so they get credit for helping you)**. Also, **you must write up your work in your own words**. It is an academic integrity offense to submit the same work as another student without permission of the instructor.

PLAGIARISM: Please be aware that plagiarism is serious offence at Carleton and should be recognized and avoided. For further information on how to do so, please see "Pammett on Plagiarism and Paraphrasing" at www.carleton.ca/economics/courses/writing-preliminaries.

STATISTICAL SOFTWARE You are expected to do empirical work as part of your research essay. I strongly recommend using STATA. It has all of the statistical capabilities you will need for your research paper. I will be providing you with detailed instructions on how to use the program. Stata is available in the labs on-campus and through Carleton's global site-licence. Under the terms of this site-licence, faculty, staff, and students are allowed to download a free personal copy of STATA 15/SE for use both on- and off-campus (as well as classroom and lab installations). To download a copy, simply go to: www.carleton.ca/ccs/stata, login with your regular login credentials, and then follow the instructions. (There are Windows, Mac, Linux, and Solaris versions available.) There are many places where you can learn how to use stata. I particularly recommend searching for Stata tutorials on-line and reading the book "A Gentle Introduction to Stata" on reserve in the library. An introduction to Stata with links to many

additional resources can also be found here: data.princeton.edu/stata. For more Stata links see: www.stata.com/links.

An alternative to Stata is R. The use of R is only recommended for highly motivated students, as I don't use it myself, so can't provide you with much help. However it has the capacities you need for econometric research. There some line resources available, though not as many as for Stata (search for, e.g. "r tutorial" in "YouTube), and you can generally get R help from the statistical consultants at the library Data Centre.

READINGS In past years, students have found that using one of the following books has helped them succeed. Copies of the two Stata books are on reserve in the library, or can be purchased from amazon.ca. (Don't buy both; one is enough).

- An Introduction to Modern Econometrics using Stata by Christopher Baum
- A Gentle Introduction to Stata
- Any ECON 4706 textbook

The following books are supplemental texts that may be helpful to you.

- Mastering 'metrics (highly recommended basic, non-technical introduction to econometric methods).
- Mostly Harmless Econometrics.

ADDITIONAL RESOURCES AND REFERENCES

Writing help:

If you struggle to express yourself in writing, please get help, either from me, or the Centre for Student Academic Support www.stata.com/links. Also useful are these essay writing guidelines: www.pitzer.edu/academics/field_groups/economics/papers.asp

Research help: Bookmark this search engine: scholar.google.ca. Also helpful: repec.org. Also the staff at the library can provide you with lots of tips about how to do research.

Econometric help: Please take advantage of office hours. I also highly recommending making an appointment with the statistical consultant in the library if you wish a longer one-on-one session. See www.library.carleton.ca/contact/service-points/data-centre for more information.

ACCOMMODATIONS: The standard statements about accommodations are at the end of the

course outline.

DATES AND READINGS

Note: During the first few weeks of term, you are expected to bring a laptop to class. If you do not have a laptop, or if you have computer problems on a given day, you can borrow a laptop from IT help desk on the 4th floor of the library. Please tell the people at the IT desk that the laptop is for ECON 4905.

Week 1: September 4th. **Please bring a laptop to class.** In this class we will talk about what you can expect learn in ECON 4905, and my expectations for you. I will talk about what replication is and why it is important, and we will start working through the replication of Chiswick's Sons of Immigrants article. Things I will attempt to teach in this lecture include

- What replication is
- What plagiarism is, and how to avoid it
- how to download data from the IPUMS website, and
- how to select a sample, including the
- keep and drop commands
- use of logical operators

Readings: Powerpoint slides and

- Chiswick, Barry R. "Sons of immigrants: Are they at an earnings disadvantage?." *The American Economic Review* 67.1 (1977): 376-380
https://www.jstor.org/stable/1815933?seq=1#metadata_info_tab_contents (plus correction here
https://www.jstor.org/stable/1813415?seq=1#metadata_info_tab_contents).
- Lars Vilhuber presentation at 2019 CEA meetings in Banff, slides available here: <https://www.dropbox.com/s/w6dp6zedeonwu6w/Vilhuber-Presentation2019-Banff-2019-05-31.pptx?dl=0> and (optional) Daniel Hammermesh, *Replication in Economics*, <http://ftp.iza.org/dp2760.pdf>. These readings explain what replication is, the types of replication studies, and why replication is important for economists.

Week 2: Sept 11th **Please bring a laptop to class.** In this class we will continue to work through replicating the Chiswick article. Things I will attempt to teach in this lecture include:

- 0/1 variables: what they are, and how to interpret them

- Recoding and generating variables
- Coding missing values
- Approaches to dealing with missing values (part 1)
- Creating a set of summary statistics
- Running a regression
- Interpreting a set of regression results

Readings: Powerpoint slides. Recommended readings for week 2 and 3: A Gentle Introduction to Stata, chapters on preparing data for analysis and working with commands. David Giles on Dummies for Dummies: <https://davegiles.blogspot.com/2011/03/dummies-for-dummies.html>

Week 3: September 18th: Please bring a laptop to this class. What makes an article suitable for replication. Finding an article to replicate. Major US data sources. **Time permitting, we may start on the week 4 slides.**

Readings: Power point slides

Week 4: September 25th. Please bring a laptop to this class. Putting the econ in econometrics. Using economics to predict the answer to your research question. Old-school methods for visualizing and interpreting regression results.

Readings: Power points slides.

Week 5: October 2nd: Please bring a laptop to this class. Replication exercise Meng (1987). More on working with categorical variables – the i. command.

Readings: A Gentle Introduction to Stata, chapter 10 (to be confirmed). Powerpoint slides. Meng (1987) “The earnings of Canadian immigrant and native-born males” Applied Economics. Stata manual section on i. command here: <https://www.stata.com/manuals13/u25.pdf>

Week 6: October 9th: Please bring a laptop to this class. Using margins to visualize the results of regression analysis. Making beautiful tables. Slides plus Keith Head’s rule for presenting regression tables <http://blogs.ubc.ca/khead/research/research-advice/regression-tables>; creating publication quality tables in Stata https://www.ssc.wisc.edu/sscc/pubs/stata_tables.htm.

Week 7: October 16th. Poster presentation I. Class will be held in Discovery Centre, MacOdrum library Room 482.

Week 8: Additional topics as needed/requested

Weeks 9-11: Individual meetings and group discussions with professor as needed.

Week 12: December 4: Poster Presentation II. Class will be held in Discovery Centre, MacOdrum library Room 482, from 3:00 to 6:00.

ACCOMODATIONS:

You may need special arrangements to meet your academic obligations during the term because of disability, pregnancy or religious obligations.

Please review the course outline promptly and write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist.

Students with disabilities requiring academic accommodations in this course must register with the Paul Menton Centre for Students with Disabilities (PMC) for a formal evaluation of disability-related needs. Documented disabilities could include but are not limited to mobility/physical impairments, specific Learning Disabilities (LD), psychiatric/psychological disabilities, sensory disabilities, Attention Deficit Hyperactivity Disorder (ADHD), and chronic medical conditions. Registered PMC students are required to contact the PMC, 613- 520-6608, every term to ensure that your Instructor receives your Letter of Accommodation, no later than two weeks before the first assignment is due or the first in-class test/midterm requiring accommodations.

You can visit the Equity Services website to view the policies and to obtain more detailed information on academic accommodation at carleton.ca/equity/accommodation.