# University of Waterloo Department of Economics Econ 606 Research Methodology Fall 2019

T-Th 8:30-9:50

# **Instructor Information**

Room: ML 354 Office Phone: 888-4567, ext. 38771 Office Hours: by appointment

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# **Course Description**

The Research Methods course is designed to lay the foundations to prepare students for research in economics or for work as a professional economist. Research tasks include researching material, evaluating information and writing reports or brief notes on a topic, compiling a critical literature review, and designing an academic research project. You will also gain experience in presenting research work to an audience.

The class will be divided in 5 groups and each group assigned a topic: Employment, Education, Environment, Immigration or Discrimination. You will develop your research skills within your area of expertise and enrich your set of skills (and that of your classmates) by providing and receiving feedback across groups.

# **Text books and learning material**

On occasion we will refer to analytical and statistical methods. A convenient reference guide for these is:

 Angrist, J. and J. Pichske (2014) "Mastering metrics. The path from cause to effect", Princeton University Press

# **Course Requirements and Assessment**

For all work in this course, please use Chicago referencing style.

# (1) Oral presentations (20%)

- Summarize and present one paper in the research area assigned to your group and present it during a poster session (5%)
- Present your own research proposal in a research workshop (15%). Presentations start Nov. 6 (or whereabouts) You will have 15-20 minutes to complete the presentation of your research proposal. Slides are mandatory and have to be emailed to me by midnight the night before your presentation.

# (2) Assignments (40%)

Assignments may be done in groups. Larger discussion is encouraged and you are free to discuss assignments by consulting people from other groups. However, you have to submit an individual assignment.

- One annotated bibliography of at least 5 papers (5%)
- One opinion piece (1 pager) as an expert economist on a current issue of your choice within your topic (5%)
- One policy brief within your topic (15%, 2-3 pages). Each group will have two options for a theme (posted on learn). The Policy brief should (i) describe the issue, providing enough background/context for readers to follow your arguments, (ii) describe the policy debate, what policies/changes are people discussing; (iii) Reference theory and report data relevant to the issue; (iv) make a supported policy recommendation regarding the policy issue.
- One research proposal draft (15%, 8-10 pages). The proposal should: (i) formulate the research question in detail (about 2-3 pages), framing it with reference to available literature; (ii) describe the proposed method for statistical analysis as well as the data to be used, (iii) suggest expected outcomes and outline issues that require further work. A power point presentation should be attached. You will receive feedback on your proposal when you present it. NOTE: Evaluation of the final document for the proposal will consider whether you have taken these comments into consideration. You will have to demonstrate attempts to integrate the comments in your final proposal,

## (3) Final research proposal (30%)

A final proposal that updates your draft with the comments received at the workshop presentation is due within one week on the end of classes. The report should be handed electronically.

## (4) Class participation (10%)

Class participation is an important part of your learning experience. There will be mandatory feedback assigned for presentations within your group. You should also read the assigned papers in advance in order to contribute to in-class discussions, as well as during the presentations of your classmates. Participation will be evaluated for economic content.

Failure to deliver any of the above will result in a mark of 0 for the assignment, unless backed by a medical note, in which case an extension of 3 days for written work will be granted. If missing an oral presentation, an effort will be made to switch the presentation to another day.

**ATTENDANCE:** Attendance on presentation dates is mandatory for the full duration of the presentations. Failure to attend ANY presentation sessions - even if you do not miss your own presentation - will result in a 50% penalty on your own presentation grade. There is no make up for this penalty

Week	Topic	Readings Due
1	Introduction – Critical thinking	
2	How to write a policy brief/Library resources Sandra Key	A1 due (Friday Sept, 13 <sup>th</sup> )
3	Economic research / Data	A2 due (Friday Sept, 20 <sup>th</sup> )
4	Lecture: Employment – Education	
5	Lecture: Gender - Immigration - Environment	
6	Poster Presentations : Employment - Education	A3 due (Friday Oct. 11 <sup>th</sup> )
7	Poster Presentations : Immigration - Gender	
8	Poster Presentations : Environment	
9	Presentation of research proposal – Employment	A4 due (Friday Nov. 1st)
10	Presentations of research proposal - Education	
11	Presentation of research proposal – Gender- Immigration	
12	Presentation of research proposal - Environment	Final report due Dec 6 <sup>th</sup>

#### **Late Work**

Late work will not be accepted under any circumstances. Electronic documents must be in Word or pdf format. Please ensure that a readable copy reaches me in the time specified in the assignment. If the document is unreadable or cannot be opened you will get a 0 in that assignment.

#### **Electronic Device Policy**

No electronic devices are allowed to be open during class, unless authorized by the instructor. Specifically, cell phones and any other electronic device that can be used for communication with other individuals or access to the internet must be switched off

#### **Attendance Policy**

Arrive to class in time. Late arrivals are very distracting. If you consistently arrive late, I will ask you to rearrange your schedule or not come to class.

#### Turnitin.com

Text matching software (Turnitin) may be used to screen assignments in this course. Turnitin is used to verify that all materials and sources in assignments are documented. Students submissions are stored on a U.S. server, therefore students must be given an alternative (e.g., scaffolded assignment or annotated bibliography), if they are concerned about their privacy and/or security. Students will be given due notice, in the first week of the term and/or at the time assignment details are provided, about arrangements and alternatives for the use of Turnitin in this course. It is the responsibility of the student to notify the instructor if they, in the first week of term or at the time assignment details are provided, wish to submit the alternate assignment.

**Readings for Poster Presentation** (choose one of the non-starred articles. Articles assigned on a first come, first served basis. Please submit your choice to me by email)

#### 1. Education

(\*) Ferrer and Riddell (2002). "The Role of Credentials in the Canadian Labor Market". *Canadian Journal of Economics*, November 2002; 35(4): 879-905

(\*) Heckman, J., L. Lochner and P. Todd (2003) "50 years of Mincer earnings regressions" NBER WP 9732; IZA DP 775

Behrman, J., M. Tincani, P. Todd, and K. Wolpin, (2016) "Teacher Quality in Public and Private Schools under a Voucher System: The Case of Chile", *Journal of Labor Economics* 34:2, 319-362

Green, D. and C. Riddell (2013) "Ageing and Literacy Skills: Evidence from Canada, Norway and the United States" Labour Economics vol. 22, pp.16-29

Green, D. and K. Foley (2016) "Why More Education Will Not Solve Rising Inequality (and May Make It Worse)", in <u>Income Inequality</u>, the <u>Canadian Story</u>, Green, Riddell and St-Hilaire eds. IRPP

Dorsett, R. and Paolo Lucchino (2018) "Young people's labour market transitions: The role of early experiences" *Labour Economics*, 54, pp. 29-46

Glitz, A. (2017) "Coworker networks in the labour market", Labour Economics, 44, pp.218-230

#### 2. Social issues: Gender / Crime

- (\*) Drolet, M. "The Male-Female Wage Gap" *Perspectives on Labour and Income*, December 2001, pp.5-10, Statistics Canada # 75-001-XIE
- (\*) Goldin, C. and C. Rouse (2000) "Orchestrating Impartiality: The Impact of "Blind" Auditions on Female Musicians", *The American Economic Review*, Vol. 90, No. 4. pp. 715-741.
- (\*) Goldin, C. (2014) "A Grand Gender convergence: Its last chapter", *The American Economic Review*, Vol. 104(4), pp. 1091-119.

Kottelenberg, M. and S. Lehrer (2017) "Targeted or Universal Coverage? Assessing Heterogeneity in the Effects of Universal Child Care." *Journal of Labor Economics*, 35(3): 609-53.

Olivetti, C., and B. Petrongolo. (2017). "The Economic Consequences of Family Policies: Lessons from a Century of Legislation in High-Income Countries." *Journal of Economic Perspectives*, 31(1): 205-30.

Fallesen, P., Lars Pico Geerdsen, Susumu Imai and Torben Tranæs, (2018) "The effect of active labor market policies on crime: Incapacitation and program effects", *Labour Economics* 52, pp.263-268

Angelov, N., P. Johansson, and E.Lindahl, (2016) "Parenthood and the Gender Gap in Pay", *Journal of Labor Economics* 34(3), pp. 545-579

Fischer, S. (2017) "The downside of good peers: How classroom composition differentially affects men's and women's STEM persistence", *Labour Economics* 46, pp. 211-226

Hunt, P., R.L. Pacula and G. Weinberger (2018) "High on Crime? Exploring the Effects of Marijuana Dispensary Laws on Crime in California Counties" *IZA DP 11567* 

# 3.- Immigration

- (\*) Borjas (1987) "Self-Selection and the Earnings of Immigrants", *The American Economic Review*, Vol. 77, No. 4 (Sep., 1987), pp. 531-553
- (\*) Boudarbat B., T. Lemieux (2010) "Why are the Relative Wages of Immigrants Declining? A Distributional Approach", CLSRN working paper 65.

(\*) Card, D. "The Impact of the Muriel Boatlift on the Miami Labour Market" <u>Aspects of Labor</u> Market Behavior: Essays in honor of J. Vanderkamp Toronto University Press

Akcigit, Ufuk, John Grigsby, and Tom Nicholas (2017). "The Rise of American Ingenuity: Innovation and Inventors of the Golden Age.", *National Bureau of Economic Research Working Paper 23047* 

Åslund, O. L. Hensvik, and O. Nordström Skans (2014) "Seeking Similarity: How Immigrants and Natives Manage in the Labor Market", *Journal of Labor Economics* 32:3, 405-441 by Lifang Wang

Ortega, J.and Gregory Verdugo (2014), "The impact of immigration on the French labor market: Why so different?" Labour Economics 29, pp.14-27

Reed, Deborah, and Sheldon Danziger. (2007) "The Effects of Recent Immigration on Racial/Ethnic Labor Market Differentials." *American Economic Review*, 97(2): 373-377.

Barone, G. and Sauro Mocetti (2011) "With a little help from abroad: The effect of low-skilled immigration on the female labour supply", *Labour Economics* 18, pp.664-675

# 4. Employment

- (\*) Autor, D. and D. Dorn (2013) "The Growth of Low-Skill Service Jobs and the Polarization of the US Labor Market", *American Economic Review 2013, 103(5): pp. 1553–1597*
- (\*) Card, D. and A. Mas (2016), "The Labor Market in the Aftermath of the Great Recession", Journal of Labor Economics, vol. 34(1) pp S1-S6
- (\*) Zmitrowicz, K. and M. Khan (2014) "Beyond the Unemployment Rate: Assessing Canadian and U.S. Labour Markets Since the Great Recession", Bank of Canada Review, Spring 2014

Altonji, J., L. Kahn, and J. Speer (2016) "Cashier or Consultant? Entry Labor Market Conditions, Field of Study, and Career Success" *Journal of Labor Economics*, 34:S1, S361-S401, by Maryam Khali

Card, D., Mas, A., Moretti, E., Saez, E. (2012). Inequality at Work: The Effect of Peer Salaries on Job Satisfaction. *American Economic Review*, 102(6):298-3003.

Autor, D., S. Houseman and S. Kerr (2017) "The Effect of Work First Job Placements on the Distribution of Earnings: An Instrumental Variable Quantile Regression", *Journal of Labor Economics*, vol. 35(1) pp. 149-190

Farrell, Diana and Greig, Fiona and Amar Hamoudi, (2019) "The Evolution of the Online Platform Economy: Evidence from Five Years of Banking Data *AEA Papers and Proceedings 2019, 109: 362–366* 

Cramer, Judd, and Alan B. Krueger. 2016. "Disruptive Change in the Taxi Business: The Case of Uber." *American Economic Review*, 106 (5): 177-82

Brynjolfsson, Erik, Tom Mitchell, and Daniel Rock. 2018. "What Can Machines Learn, and What Does It Mean for Occupations and the Economy?" *AEA Papers and Proceedings*, 108: 43-47

# 5.- Environment

Whittington, D. and J. Cook (2019), "Valuing Changes in Time Use in Low- and Middle-Income Countries", Journal of cost-benefit analysis, vol. 10(S1) pp. 51-73

Palma, A., I. Petrunyk and D. Vuri (2019) "Air Pollution during Pregnancy and Birth Outcomes in Italy", IZA DP #12467

Hynes, S., N. Hanley, Cathal O'Donoghue (2009) "Alternative treatments of the cost of time in recreational demand models: an application to whitewater kayaking in Ireland", *Journal of Environmental Management* 90 (2009) 1014–1021

Dolphin, G., M. Pollitt, and D. Newbery (2019) "The political economy of carbon pricing: a panel analysis", Oxford Economic Papers, 2019, 1–29

Indaco, A., F. Ortega and S. Taspinar (2019) "Hurricanes, Flood Risk and the Economic Adaptation of Businesses", *IZA DP No. 12474* 

# Other reading material:

# 1.- Critical Thinking

https://owl.english.purdue.edu/owl/resource/659/03/ (OWL is a great resource throughout the course)

PBS. (2002). "Commanding Heights, Episode One: The Battle of Ideas," documentary film. <a href="http://www.pbs.org/wgbh/commandingheights/hi/story/index.html">http://www.pbs.org/wgbh/commandingheights/hi/story/index.html</a>

"Breaking Through the Criticism Barrier: Making Feedback Count." Columbia University Graduate School of Arts and Sciences Teaching Center.

http://www.columbia.edu/cu/tat/pdfs/breaking\_through.pdf

"Young Minds in Critical Condition." Micheal Roth, New York Times, Opinionator-Blog, May 2014. <a href="http://opinionator.blogs.nytimes.com/2014/05/10/young-minds-in-critical-condition/">http://opinionator.blogs.nytimes.com/2014/05/10/young-minds-in-critical-condition/</a>

"Why Critical Thinking Will Never Be on a Test." Peter Green, Huff Post Education, December 13, 2015 <a href="http://www.huffingtonpost.com/peter-greene/why-critical-thinking-will-never-be-on-thetest">http://www.huffingtonpost.com/peter-greene/why-critical-thinking-will-never-be-on-thetest</a> b 6919576.html

"Taking the Sting out of Criticism at Work." Anne Fisher, Fortune, December 18, 2014. http://fortune.com/2014/12/18/criticism-work-feedback-performance-review/

"Afraid Of Being 'Found Out?' How To Overcome Impostor Syndrome". Margie Warrell. April 3, 2014. Forbes. <a href="http://www.forbes.com/sites/margiewarrell/2014/04/03/impostor-syndrome/">http://www.forbes.com/sites/margiewarrell/2014/04/03/impostor-syndrome/</a>

# 2.- Economics Research

Kramarz, F, Angrist, J.D., Blau, D. M., Falk, A., Robin, J-M., Taber, C. (2006). "How to do Empirical Economics." Investigaciones Económicas, 30(2): 179-206.

Pischke (2012) "How to get started on research in economics?" <a href="http://econ.lse.ac.uk/staff/spischke/phds/get\_started.pdf">http://econ.lse.ac.uk/staff/spischke/phds/get\_started.pdf</a>

Angrist, J.D. and J-S Pischke. (2010). "The Credibility Revolution in Empirical Economics: How Better Research Design is Taking the Con out of Econometrics" *Journal of Economic Perspectives*, 24(2):3–30

Gelman, A. (2009). "A statistician's perspective on "Mostly Harmless Econometrics: An Empiricist's Companion", by Joshua D. Angrist and Jorn-Steffen Pischke." *The Stata Journal*, 9(2): 315–320.

Deaton, A. (2007). "Random Walks by Young Economists." Letter from America, RES newsletter https://www.princeton.edu/~deaton/downloads/letterfromamerica\_apr2007\_random\_walk.html

Varian, H. (1994). How to Build an Economic Model in Your Spare Time in *Passion and Craft: Economists at Work*, M. Szenberg, ed. University of Michigan Press, 1997. http://people.ischool.berkeley.edu/~hal/Papers/how.pdf

Guest Lecture, Sandra Keyes: http://subjectguides.uwaterloo.ca/econ606

# 3.- Working with Data

Chapters 1 and 2 of J.D. Angrist and J.S. Pischke (2009). Mostly Harmless Econometrics: An Empiricist's Companion, Princeton University Press.

Rosenzweig, M., and Wolpin, K. (2000). "Natural 'Natural Experiements' in Economics." Journal of Economic Literature, 38(4):827-874.

Deaton, A. (2009). "Instruments of Development: Randomization in the Tropics and the Search for the Elusive Keys to Economic Development." NBER Working paper #14690.

Engle, R. (2004). "Risk and Volatility: Econometric Models and Financial Practice" American Economic Review, 94(3):405-420. (Revised version of Nobel Lecture)

R. Fernández, A. Fogli, C. Olivetti, (2004), "Mothers and sons: Preference formation and female labor force dynamics", *Quarterly Journal of Economics*, 119 (4) pp. 1249–1299

# 4.- Writing: Annotated Bibliographies and Policy Briefs

Annotated bibliographies: <a href="https://uwaterloo.ca/writing-and-communication-centre/sites/ca.writing-and-communication-centre/files/uploads/files/annotated bibliographies 1.pdf">https://uwaterloo.ca/writing-and-communication-centre/sites/ca.writing-and-communication-centre/files/uploads/files/annotated bibliographies 1.pdf</a>

"How to Write a Briefing Note" University of Victoria - English (Susan Doyle) <a href="http://web.uvic.ca/~sdoyle/E302/Notes/WritingBriefingNotes.html">http://web.uvic.ca/~sdoyle/E302/Notes/index.html</a>

"Policy Brief Instructions: The Pathway to a Focused, Jargon-Free & Visual Document" Policy Institute -UC Davis. <a href="http://policyinstitute.ucdavis.edu/files/Policy-Institute-Policy-Brief-Instructions.pdf">http://policyinstitute.ucdavis.edu/files/Policy-Institute-Policy-Brief-Instructions.pdf</a>

"How-to manuals, tips and best practices when writing for public sector executives: <a href="https://www.publicsectorwriting.com">www.publicsectorwriting.com</a>

## **Examples:**

(a) Immigration:

https://www.oecd.org/policy-briefs/PB-Fiscal-Economic-Impact-Migration-May-2014.pdf
file://artsfileu/artshome\$/aferrer/Downloads/MPI-Europe-INTERACT-Predeparture-FINAL-WEB.pdf
https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2746081

"Health Literacy and Immigrant Populations" Policy brief prepared for Public Health Agency of Canada, 2009. http://www.metropolis.net/pdfs/health literacy policy brief jun15 e.pdf

#### (b) Education:

"Is the return to education the same for everybody?" <a href="https://wol.iza.org/uploads/articles/92/pdfs/is-the-return-to-education-the-same-for-everybody.pdf?v=1">https://wol.iza.org/uploads/articles/92/pdfs/is-the-return-to-education-the-same-for-everybody.pdf?v=1</a>

"The boom in university graduates and the risk of Underemployment" <a href="https://wol.iza.org/articles/boom-in-university-graduates-and-risk-of-underemployment/long">https://wol.iza.org/articles/boom-in-university-graduates-and-risk-of-underemployment/long</a>

http://www.oecd.org/policy-briefs/Belgium-employment-helping-low-educated-young-people.pdf

"Briefing note for the Minister: Standing Committee Report on Raising Adult Literacy" <a href="http://www.publicsectorwriting.com/wp-content/uploads/2010/03/EXAMPLE-Briefing-Note-for-Information.pdf">http://www.publicsectorwriting.com/wp-content/uploads/2010/03/EXAMPLE-Briefing-Note-for-Information.pdf</a>

## (c) Gender:

"Women in crime"

https://wol.iza.org/articles/women-in-crime

"Can universal preschool increase the labor supply of mothers?"

https://wol.iza.org/articles/can-universal-preschool-increase-labor-supply-of-mothers/long

"Equal pay legislation and the gender wage gap"

https://wol.iza.org/articles/equal-pay-legislation-and-the-gender-wage-gap/long

https://siepr.stanford.edu/sites/default/files/publications/Policy-Brief-Jun16.pdf

"Women's Economic Equality Strategy." Canadian Centre for Policy Alternatives, Policy Brief, Oct, 2000. https://www.policyalternatives.ca/publications/reports/policy-brief-re-womens-economic-equalitystrategy

http://www2.warwick.ac.uk/fac/soc/economics/research/centres/cage/manage/events/social-market-foundation-smf-cage-combating-discrimination-on-airbnb-final.pdf

## (d) Employment and Inequality

http://www2.warwick.ac.uk/fac/soc/pais/research/research/esearch/projects/ineq/ineq\_polic y\_brief.pdf

"Overeducation, skill mismatches, and labor market outcomes for college graduates" <a href="https://wol.iza.org/uploads/articles/88/pdfs/overeducation-skill-mismatches-and-labor-market-outcomes-for-college-graduates.pdf?v=1">https://wol.iza.org/uploads/articles/88/pdfs/overeducation-skill-mismatches-and-labor-market-outcomes-for-college-graduates.pdf?v=1</a>

"The Dynamics of Inequality Among Canadian Children" Population and Lifecourse Strategic Knowledge Cluster Policy Brief #18, November, 2014.

http://sociology.uwo.ca/cluster/en/publications/docs/policy briefs/PolicyBrief18.pdf

"Low-wage employment" https://wol.iza.org/uploads/articles/276/pdfs/low-wage-employment.pdf?v=1

#### (e) Environment:

"Environmental regulation" <a href="https://wol.iza.org/uploads/articles/458/pdfs/environmental-regulations-and-labor-markets.pdf?v=1">https://wol.iza.org/uploads/articles/458/pdfs/environmental-regulations-and-labor-markets.pdf?v=1</a>

"Health effects of traffic pollution"

https://siepr.stanford.edu/sites/default/files/publications/nick sanders pb 10.pdf

<sup>&</sup>quot;Program evaluation" <a href="http://ftp.iza.org/dp397.pdf">http://ftp.iza.org/dp397.pdf</a>