

ECON 2P35: Economics of Pandemics

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2024-01-01

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Class Times

Mondays, 2pm-5pm, TH245

TA: TBA

How to ask questions

The best way to have questions answered is to ask in class. The second best is to come to drop-in hours (if the above time slot does not work for you, email me and we can make alternate arrangements). If you email me, I will try to reply within two business days (I do not check or reply to emails on weekends or during evenings). I will not answer questions sent on Teams.

Before you email me, please check the course website (including the announcements section) and the syllabus to see if your question is already answered there. If your question is already answered on the syllabus or course website, I will not reply.

When emailing, please use proper email etiquette. Here are two example guides: [guide 1](#), [guide 2](#).

Registration & Prerequisites

You are responsible for ensuring that you are registered in the correct courses. If you notice a problem with your registration, contact your academic counselor right away.

The prerequisites for this course are ECON 1P91, and 1P92. Please note that you are responsible for ensuring that you have successfully completed all course prerequisites. The lack of prerequisites will not lead to any preferential treatment and may not be used as basis for appeal.

Course Description

Current understanding of the economics of pandemics including COVID-19. Introduction to key economic and health facts about pandemics. Examination of theoretical models to explain those facts, as well as empirical evidence regarding the success of specific policies such as lock-downs.

Course Objectives

After completing this course, you should be able to:

1. Understand the multi-faceted impact that COVID-19 and other pandemics (as well as policy responses) have on outcomes including, but not limited to, employment, mental health, crime and pollution;
2. Interpret studies using natural experiments (mainly difference-in-differences);
3. Present and critically evaluate the essentials of a research paper;
4. Have a broader view of what kinds of questions and outcomes economists study and care about.

Suggested Materials

There is no required textbook for this course. Information provided during readings, lectures, and in the slides will be sufficient to write the exams.

Note that it is not compulsory to read all articles/books listed below each week. These are listed for students who would like to learn more, though I recommend trying to read the introduction and conclusion of whichever paper looks most interesting to you each week as good practice for your presentation.

Evaluation

The course grade will be based on the midterm exam, a final exam, a presentation, and participation.

The distribution of the marks is as follows:

Item	Weight	Date
Midterm	25%	Week 06, 02/12
Final	35%	TBD
Presentation	25%	Weeks 12 and 13, 03/18 - 03/25
Participation	15%	Weeks 03-10

Exams

Midterm and final exams will be a combination of multiple choice, short answer, and long answer questions. **The midterm will be held in-class on February 12.** The final exam will be held during the exam period. The final exam will be cumulative (covering all material in the course) but will more heavily feature material covered after the midterm.

There will be no make-up exams. In extraordinary, documented circumstances, the marks allocated to a missed midterm may be redistributed. My re-grading policy is that requests for re-grading must be made within 1 week of the exam being returned and accompanied by a written explanation of why a re-grade is necessary. The entire exam will be re-graded and your mark may go up or down.

Presentations

Presentations will be done in groups of 3, which have been randomly assigned. Presentation dates will be randomly drawn in class. Each group will present a course-relevant paper they

have found related to the economics of pandemics. Presentations will be 15 minutes long with 5 minutes afterwards for questions. Papers for the presentation must be approved. **The deadline for submitting your paper for approval is February 12.** Your groups will be announced by the end of the first week.

Participation

Beginning in week 3 and in the same groups assigned for presentations, each group will answer a weekly question about one of the readings. Each group will be assigned one reading from one of the next week's reading list. During the next class, the group will then answer one question about that reading. Questions will not be provided in advance (but will be one of the "Big 5" questions introduced in class that can be learned from reading the introduction) and should be answered orally on the spot. The group's answer will be graded as satisfactory (full marks) or unsatisfactory (no marks). Each in-class question is worth 3% of the final course grade. There are 6 opportunities to answer in-class questions and 5 answers will be counted.

For both presentations and in-class questions, group members will fill out a peer evaluation form. The peer evaluation will be used to adjust the group grade up or down based on the group members' evaluation of each other's contribution to the group.

Course Schedule

Note that additional topics may be added or some of the below topics may be deleted or revised. Material may be covered in a different order. Students are reminded that attending lectures and keeping updated about all changes to the course curriculum is their responsibility.

Week 1: Jan. 8

Introduction, Regression Analysis and Program Evaluation

Angrist, Joshua D., and Jörn-Steffen Pischke. *Mastering' Metrics: The Path from Cause to Effect*. Princeton University Press, 2014.

Ravallion, M, 2001. "The Mystery of the Vanishing Benefits: An Introduction to Impact Evaluation," *World Bank Economic Review*, 15(1), 115-40.

Week 2: Jan. 15

Macroeconomic Consequences of COVID-19

Alon, Titan, et al. "Macroeconomic effects of covid-19 across the world income distribution." *IMF Economic Review* (2022): 1-49.

Brodeur, A., Gray, D., Islam, A. and Bhuiyan, S. J., 2021. *A Literature Review of the Economics of COVID-19*. *Journal of Economic Surveys* (forthcoming).

Fernández-Villaverde, Jesús, and Charles I. Jones. "Macroeconomic Outcomes and COVID-19: A Progress Report." Working Paper. Working Paper Series. National Bureau of Economic Research, October 2020. <https://doi.org/10.3386/w28004>.

Week 3: Jan. 22*Heterogeneity by Demographic and Occupational Characteristics*

Couch, K., Fairlie, R.W., and Xu, H, 2020. Early evidence of the impacts of COVID-19 on minority unemployment. *Journal of Public Economics*, 189, p. 104287.

Béland, L.P., Brodeur, A. and Wright, T., 2020. The Short-Term Economic Consequences of COVID-19: Exposure to Disease, Remote Work and Government Response. GLO Discussion Paper Series 524, Global Labor Organization (GLO).

Dingel, J.I. and Neiman, B., 2020. How many jobs can be done at home? *Journal of Public Economics*, 189, p. 104235.

Adams-Prassl, A., Boneva, T., Golin, M., and Rauh C., 2020. Inequality in the impact of the coronavirus shock: Evidence from real time surveys. *Journal of Public Economics*, 189, p. 104245.

Week 4: Jan. 29*Pink-Collar Recession?*

Albanesi, S., and ahin, A., 2018. The gender unemployment gap. *Review of Economic Dynamics* 30: 47-67.

Alon. T., Doepke, M., Olmstead-Rumsey, J. and Tertilt, M., 2020. This Time It's Different: The Role of Women's Employment in a Pandemic Recession. National Bureau of Economic Research Working Paper, No. w27660.

Beland, L. P., Brodeur, A., Haddad, J., & Mikola, D., 2020. Determinants of Family Stress and Domestic Violence: Lessons from the COVID-19 Outbreak. *Canadian Public Policy* (forthcoming).

Furman, J., Kearney, M.S., and Powell, W., 2021. The Role of Childcare Challenges in the US Jobs Market Recovery During the COVID-19 Pandemic. National Bureau of Economic Research Working Paper, No. w 28934.

Costs and Benefits of Lockdowns

Hsiang et al., 2020. The effect of large-scale anti-contagion policies on the COVID-19 pandemic. *Nature*. <https://www.nature.com/articles/s41586-020-2404-8>

Kong, E. and Prinz, D., 2020. Disentangling policy effects using proxy data: Which shutdown policies affected unemployment during the COVID-19 pandemic? *Journal of Public Economics*, 189, p. 104257

Baek, C., McCrory, P.B., Messer, T., and Mui, P., 2020. Unemployment Effects of Stay-at-Home Orders: Evidence from High Frequency Claims Data. *Review of Economics and Statistics* (forthcoming).

Goolsbee, A., and Syverson, C., 2021. Fear, lockdown, and diversion: Comparing drivers of pandemic economic decline 2020. *Journal of Public Economics*, 193, p. 104311.

Beland, L. P., Brodeur, A. and Wright, T., 2020. COVID-19, Stay-At-Home Orders and Employment: Evidence from CPS Data. IZA Discussion Paper 13282. <https://www.iza.org/publications/dp/13282/covid-19-stay-at-home-orders-and-employment-evidence-from-cps-data>

Week 5: Feb. 5*Other Costs and Benefits*

Leslie, E., and Wilson R., 2020. Sheltering in place and domestic violence: Evidence from calls for service during COVID-19. *Journal of Public Economics*, 189, p.104241.

Bullinger, L.R., Carr, J.B., and Packham, A., 2021. COVID-19 and Crime: Effects of Stay-at-Home Orders on Domestic Violence. *American Journal of Health Economics*, 7:3, p. 249.

Baron, E.J., Goldstein, E.G., and Wallace, C.T., 2020. Suffering in silence: How COVID-19 school closures inhibit the reporting of child maltreatment. *Journal of Public Economics*, 190, p. 104258.

Abrams, D., 2021. COVID and crime: An early empirical look. *Journal of Public Economics*, 194, p. 104344.

Mental Health

Beland, L.P., Brodeur A., Mikola, D. and Wright, T., 2021. COVID-19, Occupation Tasks and Mental Health in Canada. *Canadian Journal of Economics* (forthcoming).

Brodeur, A., Clark, A.E., Fleche, S., and Powdthavee, H., 2021. COVID-19, lockdowns and well-being: Evidence from Google Trends. *Journal of Public Economics*, 193, p. 104346.

Guintella, O., Hyde, K., Saccardo, S., and Sadoff, S., 2020. Lifestyle and mental health disruptions during COVID-19. *PNAS*, 118(9), e2016632118.

Week 6: Feb. 12*Midterm***Week 7: Feb. 19***Reading Week***Week 8: Feb. 26***Pollution (and car collisions)*

Brodeur, A., Cook, N. and Wright, T., 2021. On the Effects of COVID-19 Safer-At-Home Policies on Social Distancing, Car Crashes and Pollution. *Journal of Environmental Economics and Management*, 106:102427.

Persico, C. L., and Johnson, K.T., 2021. The effects of increased pollution on COVID-19 cases and deaths. *Journal of Environmental Economics and Management*, 107:102431.

Dang, H.H., and Trinh, T., 2021. Does the COVID-19 lockdown improve global air quality? New cross-national evidence on its unintended consequences. *Journal of Environmental Economics and Management*, 105:102401.

Isphording, I.E., and Pestel, N., 2021. Pandemic meets pollution: Poor air quality increases deaths by COVID-19. *Journal of Environmental Economics and Management*, 108:102448.

Determinants of Social Distancing, Masks, and Vaccination

Abaluck, J., Kwong, L.H., Styczynski, A., Haque, A., Kabir, M.A., Bates-Jefferys, E., Crawford, E., Benjamin-Chung, J., Raihan, S., Rahman, S. and Benhachmi, S., 2022. Impact of community masking on COVID-19: a cluster-randomized trial in Bangladesh. *Science*, 375(6577), p.eabi9069.

Allcott, H., Boxell, L., Conway, J., Gentzkow, M., Thaler, M., and Yang, D., 2020. Polarization and public health: Partisan differences in social distancing during the coronavirus pandemic. *Journal of Public Economics*, 191, p. 104254.

Bargain, A., and Aminjonov, U., 2020. Trust and compliance to public health policies in times of COVID-19. *Journal of Public Economics*, 192, p. 104316.

Brodeur, A., Grigoryeva, I. and Kattan, L., 2021. Stay-at-Home Orders, Social Distancing and Trust. *Journal of Population Economics*, 34(4), p. 1321.

Campos-Mercade, P., Meier, A.N., Schneider, F.H., Meier, S., Pope, D. and Wengström, E., 2021. Monetary incentives increase COVID-19 vaccinations. *Science*, 374(6569), pp.879-882.

Chang, Tom, et al. Financial incentives and other nudges do not increase covid-19 vaccinations among the vaccine hesitant. No. w29403. National Bureau of Economic Research, 2021.

Dave, Dhaval, et al. "Association between statewide COVID-19 lottery announcements and vaccinations." *JAMA Health Forum*. Vol. 2. No. 10. American Medical Association, 2021.

Geoffard P., and Philipson T., 1996. Rational Epidemics and Their Public Control. *International Economic Review*, 37(3), p. 603.

Geoffard P., and Philipson T., 1997. Disease Eradication: Private Versus Public Vaccination. *American Economic Review*, 87(1), p. 222.

Khan, Hibah, et al. Who doesn't want to be vaccinated? Determinants of vaccine hesitancy during COVID-19. International Monetary Fund, 2021.

Jørgensen, Frederik Juhl, Alexander Bor, and Michael Bang Petersen. "Increased pressure leads to decreased trust among the unvaccinated: effects of the announcement of the re-introduction of Covid passports in Denmark." (2021).

Week 9: Mar. 4*Determinants of Social Distancing, Masks, and Vaccination (continued)**Education*

Ager, Philipp, et al. "School closures during the 1918 flu pandemic." *The Review of Economics and Statistics* (2020): 1-28.

Bacher-Hicks, Andrew, Joshua Goodman, Jennifer Greif Green, and Melissa K. Holt. "The COVID-19 Pandemic Disrupted Both School Bullying and Cyberbullying." *American Economic Review: Insights* 4, no. 3 (September 2022): 353–70. <https://doi.org/10.1257/aeri.20210456>.

Gassman-Pines, Anna, Elizabeth Ananat, John Fitz-Henley, and Jane Leer. "Effects of Daily School and Care Disruptions During the COVID-19 Pandemic on Child Mental Health." Working Paper. Working Paper Series. National Bureau of Economic Research, January 2022. <https://doi.org/10.3386/w29659>.

Hansen, Benjamin, Joseph J. Sabia, and Jessamyn Schaller. "Schools, Job Flexibility, and Married Women's Labor Supply: Evidence From the COVID-19 Pandemic." Working Paper. Working Paper Series. National Bureau of Economic Research, January 2022. <https://doi.org/10.3386/w29660>.

Takaku, Reo, and Izumi Yokoyama. "What the COVID-19 School Closure Left in Its Wake: Evidence from a Regression Discontinuity Analysis in Japan." *Journal of Public Economics* 195 (March 1, 2021): 104364. <https://doi.org/10.1016/j.jpube.2020.104364>.

Week 10: Mar. 11

Historical Pandemics

Basco, Sergi, Jordi Domenech, and Joan R. Rosés. "The Redistributive Effects of Pandemics: Evidence of the Spanish Flu." *World Development*, May 1, 2020. <https://doi.org/10.1016/j.worlddev.2021.105389>.

Chapelle, Guillaume. "The Medium-Term Impact of Non-Pharmaceutical Interventions. The Case of the 1918 Influenza in US Cities." *Economic Policy*, January 1, 2022. <https://doi.org/10.1093/epolic/eiac003>.

Edwards, Jeremy, and Sheilagh Ogilvie. "Did the Black Death Cause Economic Development by 'Inventing' Fertility Restriction?" *Oxford Economic Papers* 74, no. 4 (October 1, 2022): 1228–46. <https://doi.org/10.1093/oep/gpaa056>.

Jedwab, Remi and Johnson, Noel D. and Johnson, Noel D. and Koyama, Mark, *Pandemics, Places, and Populations: Evidence from the Black Death* (February 9, 2019). GMU Working Paper in Economics No. 19-04, Available at SSRN: <https://ssrn.com/abstract=3331972> or <http://dx.doi.org/10.2139/ssrn.3331972>

Jedwab, Remi, Noel D. Johnson, and Mark Koyama. "Negative shocks and mass persecutions: evidence from the Black Death." *Journal of Economic Growth* 24.4 (2019): 345-395.

Jordà, Òscar, Sanjay R. Singh, and Alan M. Taylor. "Longer-run economic consequences of pandemics." *Review of Economics and Statistics* 104.1 (2022): 166-175.

Karlsson, Martin, Therese Nilsson, and Stefan Pichler. "The Impact of the 1918 Spanish Flu Epidemic on Economic Performance in Sweden: An Investigation into the Consequences of an Extraordinary Mortality Shock." *Journal of Health Economics* 36 (July 1, 2014): 1–19. <https://doi.org/10.1016/j.jhealecon.2014.05.001>

Voigtländer, Nico, and Hans-Joachim Voth. "The three horsemen of riches: Plague, war, and urbanization in early modern Europe." *Review of Economic Studies* 80.2 (2013): 774-811.

Week 11: Mar. 18

Presentations

Week 12: Mar. 25

Presentations

Week 13: Apr. 1

Overflow slot

Review

PLEASE NOTE

Remember that students are expected to take responsibility for their own academic programs and to ensure that they are registered in the correct courses.

1. Please familiarize yourself with the University codes of conduct.
2. Cheating is an academic offence. Students are responsible for understanding what it means to “cheat”. Cheating incidents will be treated very seriously and any suspect behaviour will be investigated. Students found guilty will incur penalties.
3. Plagiarism: Students must write assignments in their own words. Whenever students take an idea or a passage from another author, they must acknowledge it by using quotation marks where appropriate and referencing with footnotes or citations. Plagiarism is a major academic offence.
4. Systematic adjustments of the entire grade distribution may occur either up or down.
5. Ensure to consult the Brock University Undergraduate Calendar (<https://brocku.ca/webcal/2022/undergraduate>) for correct deadlines to add or drop a course.
6. Oversleeping or misreading an exam schedule is not an excuse for a make-up exam.
7. As part of Brock University’s commitment to a respectful work and learning environment, the University will make every reasonable effort to accommodate all members of the university community with disabilities. If you require academic accommodations related to a documented disability to participate in this course, you are encouraged to contact Services for Students with Disabilities in the Student Development Centre (4th Floor, Schmon tower, ex. 3240). You are also encouraged to discuss any accommodations with the instructor well in advance of due dates and scheduled assessments