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Economics 87100

## LABOR ECONOMICS I

Spring 2022

Tuesdays from 2:00 to 4:00 pm in person at GC 4422  
On a need be basis via Zoom Meeting ID 854 4309 0471

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The class meets Tuesday afternoons from 2:00 to 4:00 pm according to the following schedule (which is subject to adjustments according to the professor's perception of student needs and other opportunities).

	February 1	0. Administration and introductions
	February 8	No class, Graduate Center on Friday schedule
	February 15	1. Research Design – Randomized Controlled Trials
	February 22	2. Labor Supply – the intensive margin
	March 1	3. Labor Supply – the extensive margin
	March 8	4. Labor Supply – econometric analysis
	March 15	5. Labor Supply – case study and review
	March 22	6. Individual meetings
Student led	March 29	7. Labor Demand and minimum wages
Student led	April 5	8. Human Capital, schooling, and earnings
Student led	April 12	9. Job Search and unemployment
	April 19	Spring Recess, no class
Student led	April 26	10. Union impacts on wages and inequality
Student led	May 3	11. Discrimination / Technical change and inequality
	May 10	12. Human capital and post schooling investments

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## **Course Description**

The course is intended for graduate students of economics who have had exposure to microeconomic theory and econometrics during their undergraduate or graduate studies. Upon completion of the course students will have the skills and knowledge associated with an advanced level in labor economics. They will be able to critically read public policy documents dealing with labor market issues, and many related articles published in academic journals. Students will also have developed most of the skills needed to formulate and complete a research project in applied labor market analysis.

## **General Course Objectives**

Upon completion of this course students will be familiar with: (1) the principles of economic theory used to understand contemporary labor markets; (2) the use of theory to construct empirical models of the most important issues in labor market analysis; and (3) the most common econometric methods, identification strategies, and data sets used in applied analyses of these issues. The course involves developing knowledge of both economic theory and empirical methods, but also of the institutions and the data needed to use theory and econometrics to understand labor markets in the OECD countries.

Students will read, summarize, and critically assess texts in microeconomic theory and econometric techniques, as well as develop a familiarity with the basic structure of labor markets and the types of data used to study them. They will complete an assignment examining a case study of a policy relevant issue. With guidance from the instructor, and in conjunction with their peers, each student will lead a class and prepare a term paper on an issue they find of interest and relevant to contemporary public policy.

## **Learning Goals and Outcomes**

1. To develop a knowledge of microeconomic theory used to understand contemporary labor markets

Students will be introduced to the basic principles of microeconomic theory through lectures based upon readings they will do from standard textbooks, but also from some of the most important journal articles and books that have influenced the discipline.

2. To use theory to construct empirical models of the most important issues in labor market analysis

Students will enhance their familiarity with microeconomic theory and its use to construct empirically testable models through assignments and presentations dealing with contemporary issues in public policy. Students will work in small groups and individually in the preparation of presentations and assignments.

3. To understand the most common econometric methods, identification strategies, and data sets used in applied analyses of labor market issues

Students will be introduced to the most common econometric techniques and identification strategies through lectures based upon readings they will do from standard textbooks and the most influential journal articles. Students will develop a sense of the most common data used in the study of labor markets through a series of assignments and presentations.

Assignments and presentations will also be used as a means of progressively completing a term paper, covering all three of these objectives. Assignments and term papers must be submitted to the professor by email to arrive in his inbox before the beginning of class.

## **Teaching Methods**

The successful student will take full advantage of the opportunities provided in class. Attending classes, handing in assignments on time, and consistently contributing to the class in all activities—whether group, pair, or individual—will all be considered as measures of success in effectively using your class time. The classroom is intended to be a safe place where students can question and practice, receive feedback from both the instructor and their peers, and rely on their classmates as partners and resources in the learning process.

The instructor's role is to provide resources, guidance, and support, but students are responsible for engaging actively in the process. Students are responsible for completing readings before the class, being prepared for discussions, submitting assignments on time, volunteering material for consideration by the class, offering feedback to their classmates, and constructively incorporating the feedback they receive from both classmates and the instructor into their own work. Working individually or in groups, and in conjunction with the professor, students will also make in-class presentations of early drafts of their term papers.

## **Resources**

There is one required text for the course.

Pierre Cahuc, Stéphane Carcillo, and André Zylberberg (2014). *Labor Economics*. Second Edition. Cambridge Massachusetts: The MIT Press.

This text will serve as your primary resource for readings, some assignments, and presentations. It will also often be the starting point for some of the lectures. Other texts will be relied upon in order to introduce more advanced or supplementary material.

Students, particularly those who have not previously studied labor market economics, may wish to consult one or more undergraduate textbooks.

A couple of examples include:

George Borjas (2016). *Labor Economics*. Seventh edition. McGraw-Hill.

Ronald G. Ehrenberg and Robert S. Smith (2018). *Modern Labor Economics: Theory and Public Policy*. Thirteenth edition. Routledge.

Reference may also be made throughout the course to a number of the essays in the following texts:

Orley C. Ashenfelter and David Card, editors (1999). *Handbook of Labor Economics*, Volume 3A. Amsterdam: Elsevier North Holland.

Orley C. Ashenfelter and David Card, editors (2011). *Handbook of Labor Economics*, Volume 4A. Amsterdam: Elsevier North Holland.

Two essays in these volumes will be of particular interest with reference to the empirical methods used in labour economics. The first chapter in Volume 3A by Joshua D. Angrist and Alan B. Krueger, “Empirical Strategies in Labor Economics,” pages 1277-1366, offers an important backdrop for the course. A follow up essay by John DiNardo and David S. Lee in Volume 4A may also be of interest: John DiNardo, David S. Lee, “Program Evaluation and Research Designs,” pages 463-536. These chapters offer expositions and critical overviews of some of the most important identification strategies used in modern labor economics, but they also presuppose a certain level of econometric knowledge.

Another equally important and related text that focuses on the most important empirical methods used by labor economists, and that directly addresses and offers a clear exposition of some methods covered in the course is:

Joshua D. Angrist and Jörn-Steffen Pischke (2009). *Mostly Harmless Econometrics: An Empiricist’s Companion*. Princeton: Princeton University Press

This text details many of the important identification strategies that are overviewed in the two *Handbook of Labor Economics* chapters, and as such offers students important econometric background. Depending upon their background students may also wish to rely upon standard econometric texts to support their work in this course.

The course will also rely upon articles in standard economic journals, all but the most recent of which can be obtained through JSTOR, an electronic catalogue of academic journals available through the University.

## Assessment Methods

The final mark will be determined as follows

Informed engagement:	10 %
Two case study assignments:	30 %
Presentation:	10 %
Paper, first draft:	10 %
Paper, second draft:	25 %
Final test:	15 %

The final mark will be the maximum of the above marking scheme, or a scheme in which the final test is weighted to represent 45 % and the two assignments 0 %.

A mark of 65% is the lowest passing mark for the course and corresponds to a C.

Marks from 65 to 69% correspond to a B- , 70 to 74% to a B, 75 to 79% to a B+. In a similar way marks from 80 to 84%, 85 to 89%, and 90 or above correspond to A- , A , and A+ .

Please note that class attendance is compulsory, and that the professor may exclude from the final evaluation of the term paper and final test any students whose attendance is unsatisfactory. Further, please note that students who do not submit the first and second drafts of the term paper according to the specified deadlines, without valid and appropriate documentation being given to the instructor, will not be permitted to write the final test.

All this said, the fact that the course is being given during pandemic times will no doubt pose challenges in a whole host of ways, both foreseen and unforeseen. Students may at times need accommodations in ways not recognized by this course outline and are encouraged to maintain regular and sincere communication with the professor as challenges arise and circumstances change. The professor commits to fully respecting student needs and will seek to adjust and accommodate course expectations as fairly and transparently as possible. In this regard there may be repeated occasions in which the classes will be given online using the Zoom address listed on the opening page.

### **Informed engagement (10%)**

Emphasis is given to your engagement in the course and the activities of the class. This is best demonstrated by motivated and informed involvement. This requires attending all scheduled classes, but also having completed the readings before the class and being prepared to engage in discussion. It involves contributions to group work, completion of assignments by the required date, attention to feedback from peers and the instructor, and offering constructive feedback to colleagues. But obviously if you are not present you cannot participate, and regular attendance is therefore expected as is punctually arriving for the beginning of class. Appropriate documentation justifying an extended absence is required.

### **Case study assignments (30% but possibly 0%)**

These assignments represent a cornerstone of the course, and are intended to develop your familiarity with, and understanding of, the course materials. They will deal with a critical appraisal of the use of Randomized Controlled Trials in the evaluation of labor market policy; and with the use of the standard (static) theory of labor supply to evaluate the impacts of a public policy supporting the low-income population.

The assignments will be distributed as separate documents. They require students to submit a hardcopy of a memo by email to arrive in the professor's inbox before noon (New York time) on February 22<sup>nd</sup> and March 15<sup>th</sup>. Each answer should include a properly formatted bibliography of all sources used, which certainly should include articles and resources on the course reading list, but likely others, including web-based resources.

Students are free to work individually, in pairs or small groups, or even collectively, in developing their answers, and are free to exchange resources with their classmates. But all assignments must be written and submitted individually, with appropriate acknowledgement of any help received.

### **Presentation, paper first draft, paper final draft (10% + 10% + 25%)**

Students are required to complete a term paper, submit a first draft of the paper, and also engage one-on-one with the instructor.

The first draft of the paper is due at any point after students have completed their in-class presentation, but no later than noon (New York time) May 10<sup>th</sup>. The in-class presentation must be preceded by a one-on-one discussion conducted online with the professor at a mutually convenient time but no later than five days before the scheduled in-class presentation. At this meeting students will mock up (that is to say, actually give) their presentation and receive feedback from the instructor, using this experience to improve their class presentation. If at this meeting the instructor judges that the student has not made sufficient progress, the student's in-class presentation will be cancelled and the student will receive a mark of zero for this portion of the course. The meeting and class presentation should be seen as a stepping-stone toward completing the first draft of the paper, to be submitted electronically to the professor.

The professor will offer feedback on the first draft within one week of receiving it from the student, and the final (second) draft of the paper is due before noon (New York time) on May 17<sup>th</sup>, to be submitted electronically to the professor as a pdf properly formatted and edited following accepted academic standards. Papers dated as arriving past this deadline will not be read, and students will receive a zero for this portion of the course

In conjunction with the professor, students will collectively determine their presentation and paper topics using the chapters of the textbook as a starting point. A final draft of this course outline reflecting conversations with students and including a complete list of required readings as well as the schedule for the presentations, will be circulated as soon as possible.

## Final test (15% but possibly 45%)

A final test will be offered and conducted toward the end of the course to assess students' knowledge of the core course materials. The structure and deadline of this test will be negotiated with the students at some point during the second half of the course.

## Required readings

### 1. Randomized Controlled Trials, and the meaning and significance of “identification strategy”

#### (a) Overview and competing perspectives

Joshua D. Angrist and Alan B. Krueger, “Empirical Strategies in Labor Economics.” In Orley C. Ashenfelter and David Card, editors (1999). *Handbook of Labor Economics*, Volume 3A. Amsterdam: Elsevier North Holland. pp. 1277-1366.

John DiNardo and David S. Lee, “Program Evaluation and Research Designs.” In Orley C. Ashenfelter and David Card, editors (2011). *Handbook of Labor Economics*, Volume 4A. Amsterdam: Elsevier North Holland. pp. 463-536.

Ester Duflo (2017). “The Economist as Plumber.” *American Economic Review*. 107 (5), 1-26.

Angus Deaton and Nancy Cartwright (2018). “Understanding and misunderstanding randomized controlled trials.” *Social Science and Medicine*. 210, 2-21.

Angus Deaton (2010). “Instruments, Randomization, and Learning about Development.” *Journal of Economic Literature*. 48 (June), 424-55.

Christopher J. Ruhm (2018). “Shackling the Identification Police?” National Bureau of Economic Research, Working Paper 25320.

David Card (2021). “Design-Based Research in Empirical Microeconomics.” Nobel Prize Lecture. Available at:

<https://eml.berkeley.edu/~card/papers/CardNobelLecture.pdf>

#### (b) Randomized Controlled Trials and a case study

Joshua D. Angrist and Jörn-Steffen Pischke (2009). *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton: Princeton University Press. Chapter 2.

Gary Burtless (1995). “The Case for Randomized Field Trials in Economic and Policy Research.” *Journal of Economic Perspectives*. Vol. 9 No. 2 (Spring), pages 63-84.

James J. Heckman and Jeffrey A. Smith (1995). "Assessing the Case for Social Experiments." *Journal of Economic Perspectives*. Vol. 9 No. 2 (Spring), pages 85-110.

Charles Michalopoulos, Doug Tattler, Cynthia Miller, Philip K. Robins, Pamela Morris, David Gyarmati, Cindy Redcross, Kelly Foley, Reuben Ford (2002). *Self-Sufficiency Project (SSP) – Making Work Pay: Final Report on the Self-Sufficiency Project for Long-Term Welfare Recipients*. Ottawa: Social Research and Demonstration Corporation. Executive Summary pages ES-1 to ES-26, and Chapter 1. Available at <http://www.srdc.org/media/11007/SSP54.pdf>

David Card and Dean R. Hyslop (2005). "Estimating the Effects of a Time-Limited Earnings Subsidy for Welfare-Leavers." *Econometrica*. 73 (6), 1723-1770.

Chris Riddell and W. Craig Riddell (2020). "Interpreting Experimental Evidence in the Presence of Postrandomization Events: A Reassessment of the Self-Sufficiency Project." *Journal of Labor Economics*. 38 (4), 873-914.

## 2. Labour Supply

### (a) The Neoclassical Model of Labour Supply

Pierre Cahuc, Stéphane Carcillo, and André Zylberberg. *Labor Economics*. Second Edition. Chapter 1.

Angus Deaton and John Muelbauer (1980). *Economics and Consumer Behaviour*. Cambridge: Cambridge University Press. Chapter 1, especially pages 3 to 14, and Chapter 4, especially pages 86 to 108.

Robert Moffitt (1990). "The Econometrics of Kinked Budget Constraints." *Journal of Economic Perspectives*. Vol. 4 No. 2 (Spring), pages 119-139.

J.R. Hicks (1946). *Value and Capital*, second edition. Oxford: Oxford University Press, pages 35-7 and the Mathematical Appendix, sections 1-12.

Y. Ben-Porath (1973). "Labor Force Participation Rates and the Supply of Labor." *Journal of Political Economy*. Vol. 81, pages 697-704.

### (b) Empirical Studies (use of Simultaneous Equations Model)

Michael P. Keane (2011). "Labor Supply and Taxes: A Survey." *Journal of Economic Literature*. Vol. 49, No. 4, pages 961-1075.

Richard Blundell and Thomas Macurdy (1999). "Labor supply: A review of alternative approaches." Chapter 27 in Ashenfelter and Card editors, *Handbook of Labor Economics*, Volume 3A, pages 1560 to 1695.

James Heckman (1993). “What has been learned about labor supply in the past twenty years?” *American Economic Review*. Vol. 83 no.2, pages 116-21.

Orley Ashenfelter and James Heckman (1974). “Estimating labor supply functions.” In G. Cain and H. W. Watts (editors). *Income Maintenance and Labor Supply: Econometric Studies*. Chicago: Rand McNally. Pages 265-78.

James Heckman (1974). “Shadow prices, Market Wages, and Labor Supply.” *Econometrica*. Vol. 42 (July), pages 679-94.

Pierre Cahuc, Stéphane Carcillo, and André Zylberberg. *Labor Economics*. Second Edition. Chapter 12, pages 744-787.

Robert McClelland and Shannon Mok (2012). “A Review of Recent Research on Labor Supply Elasticities.” Working Paper 2012-12, Congressional Budget Office. Available at: <https://www.cbo.gov/publication/43675> .

Raj Chetty, Adam Guren, Day Manoli and Andrea Weber (2011). “Are Micro and Macro Labor Supply Elasticities Consistent? A Review of Evidence on the Intensive and Extensive Margins.” *American Economic Review*. 101(3): 471-75.

Henrik Kleven (2019). “The EITC & the extensive margin: A reappraisal.” *National Bureau of Economic Research*. Working paper 26405

### 3. Labor Demand and Minimum Wages (use of Difference in Differences)

Pierre Cahuc, Stéphane Carcillo, and André Zylberberg. *Labor Economics*. Second Edition. Chapter 2 and Chapter 12 pages 786-811.

David Card and Alan Krueger (1994). “Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania.” *American Economic Review*. Vol. 84 No. 4, pages 772-793.

Doruk Cengiz, Arindrajit Dube, Attila Lindner, and Ben Zipperer (2019). “The Effect of Minimum Wages on Low-Wage Jobs: Evidence from the United States Using a Bunching Estimator.” NBER Working Paper No. 25434.

Sylvia Allegretto, Arindrajit Dube, Michael Reich and Ben Zipperer (2013). *Credible Research Designs for Minimum Wage Studies*. Institute for Research on Labor and Employment, Working Paper No. 148-13.

Arindrajit Dube (2017). *Minimum Wages and the Distribution of Family Incomes*. IZA Discussion Paper No. 10572.

Arindrajit Dube, Jeff Jacobs, Suresh Naidu, and Siddharth Suri (2018). *Monopsony in Online Labor Markets*. NBER Working Paper 24416.

José Azar, Ioana Marinescu, and Marshall I. Steinbaum (2017, Revised February 2019). Labor Market Concentration. NBER Working Paper No. 24147.

#### 4. Human capital, schooling, and earnings (use of Instrumental Variables)

Pierre Cahuc, Stéphane Carcillo, and André Zylberberg. *Labor Economics*. Second Edition. Chapter 4 (Focus on sections 2, 4, and 5).

Joshua D. Angrist and Alan B. Krueger (1991). “Does Compulsory School Attendance Affect Schooling and Earnings?” *Quarterly Journal of Economics*. Vol. 106 No. 4, pages 979-104.

Philip Oreopoulos (2006). “Estimating Average and Local Average Treatment Effects of Education When Compulsory Schooling Laws Really Matter.” *American Economic Review*. Vol. 96 No. 1, pages 152-175.

Gary S. Becker (1993). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. Third Edition. Chicago: University of Chicago Press. Chapter III, “Investment in Human Capital: Effect on Earnings” pages 29 to 58.

#### 5. Job Search and Unemployment (use of Field Experiments)

Pierre Cahuc, Stéphane Carcillo, and André Zylberberg. *Labor Economics*. Second Edition. Chapters 5 and 9.

Kory Kroft, Fabian Lange, and Matthew J. Notowidigdo (2013). “Duration Dependence and Labor Market Conditions: Evidence from a Field Experiment.” *Quarterly Journal of Economics*. Vol. 128 no. 3, pages 1123-1167.

John A. List and Imran Rasul, “Field Experiments in Labor Economics.” In Orley C. Ashenfelter and David Card, editors (2011). *Handbook of Labor Economics*, Volume 4A. Amsterdam: Elsevier North Holland. pp. 103-228.

Nicolas Kiefer (1988). “Economic duration data and hazard functions.” *Journal of Economic Literature*. Vol. 26, pages 646-79.

Stephen W. Salant (1977). “Search Theory and Duration Data: A Theory of Sorts.” *Quarterly Journal of Economics*. Vol. 91 no. 1, pp. 39-57.

#### 6. Union Impacts on Wages and inequality (use of Regression Discontinuity)

Pierre Cahuc, Stéphane Carcillo, and André Zylberberg. *Labor Economics*. Second Edition. Chapter 7.

Farber, Henry S., Daniel Herbst, Ilyana Kuziemko, Suresh Naidu (2021). “Unions and Inequality over the Twentieth Century: New Evidence from Survey Data.” *Quarterly Journal of Economics*.

John DiNardo and David S. Lee (2004). “Economic Impacts of New Unionization on Private Sector Employers: 1984-2001.” *Quarterly Journal of Economics*. Pages 1383-1441.

David S. Lee and Thomas Lemieux (2010). “Regression Discontinuity Designs in Economics.” *Journal of Economic Literature*. Vol. 48, Pages 281-355.

## 7. Discrimination

Claudia Goldin (2014). “A Grand Gender Convergence: Its Last Chapter.” *American Economic Review*. Vol. 104, pages 1091-1119.

Nicole M. Fortin, Brian Bell and Michael Böhm (2017). “Top earnings inequality and the gender pay gap: Canada, Sweden, and the United Kingdom.” *Labour Economics*. Vol. 47, pages 107-123.

John DiNardo, Nicole Fortin and Thomas Lemieux (1996). “Labor Market Institutions and the Distribution of Wages, 1973-1992: A Semiparametric Approach.” *Econometrica*. Vol. 64, Pages 1001-1044.

Ronald Oaxaca (1973). “Male-female wage differentials in urban labor markets.” *International Economic Review*. Vol. 14, pages 693-709.

## 8. Technical change and inequality

Pierre Cahuc, Stéphane Carcillo, and André Zylberberg. *Labor Economics*. Second Edition. Chapter 10.

Lawrence Katz and Kevin Murphy (1992). “Changes in Relative Wages 1963-1987: Supply and Demand Factors.” *Quarterly Journal of Economics*. Vol. 107, No. 1, pages 35-78.

David Card and John DiNardo (2002). “Skill Biased Technological Change and Rising Wage Inequality: Some Problems and Puzzles.” *Journal of Labor Economics*. Vol. 20 No.4, pages 733-783.

Paul Beaudry, David Green and Benjamin Sand (2016). “The great reversal in the demand for Skill and Cognitive Tasks.” *Journal of Labor Economics*. Vol. 34 No. S1, pages 199-247.

David Autor, Frank Levy, and Richard J. Murnane (2003). “The Skill Content of Recent Technological Change: An Empirical Exploration.” *Quarterly Journal of Economics*. Volu. 118(4), pages 1279-1334.

#### 9. Human capital, post schooling investments

Jacob Mincer (1974). *Schooling, Experience and Earnings*. New York: Columbia University Press for the National Bureau of Economic Research.

Gary S. Becker (1993). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. Third Edition. Chicago: University of Chicago Press. Chapter III, “Investment in Human Capital: Effect on Earnings” pages 29 to 58, and Addendum to Chapter IV section 3 “Human Capital and the Personal Distribution of Income: An Analytical Approach” pages 108 to 130.

Thomas Lemieux (2006). “The “Mincer Equation” Thirty Years After Schooling, Experience, and Earnings.” In S. Grossbard (ed.) *Jacob Mincer A Pioneer of Modern Labor Economics*. Boston, Massachusetts: Springer.