

# Labor Economics I

ECON 87100

Miles Corak

Last offered Spring 2018

Course Schedule: Thursdays 11:45 to 13:45

Course Location: Room 5212

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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 labour economics. They will be able to critically read public policy documents dealing with labour market issues, and many related articles published in academic journals. Students will have also developed most of the skills needed to formulate and complete a research project in applied labour 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 labour markets; (2) the use of theory to construct empirical models of the most important issues in labour 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 labour 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 labour markets in rich countries and the types of data used to study them. With guidance from the instructor, and in conjunction with their peers, each student will 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 labour markets
  - (a) 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 labour market analysis
  - (a) Students will enhance their familiarity with microeconomic theory and its use to construct empirically testable models through a series of assignments and presentations dealing with contemporary issues in public policy.
  - (b) 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 used in applied analyses of labour market issues
  - (a) 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
  - (b) Students will develop a sense of the most common data used in the study of labour markets in the OECD through a series of weekly 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 the beginning of class, they cannot be slid under the office door or submitted at any other time.

## 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 in groups, 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 and some assignments. It will also often be the starting point for some of the instructor’s lectures. Other texts will be relied upon by the instructor in order to introduce more advanced or supplementary material. Students, particularly those who have not previously studied labour 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 will 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, will be referred to repeatedly throughout the course. A follow up essay by John DiNardo and David S. Lee in Volume 4A will also be of interest, and motivate some of the class discussion: 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 labour economics, but they also presuppose a certain level of econometric knowledge. Students may wish to obtain copies.

Another equally important and related text that focuses on the most important empirical methods used by labour 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

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 involves having completed the readings before the class and being prepared to engage in discussion. It involves your contributions to group work, completion of assignments by the required date, and attention to feedback from your peers and instructor. But obviously if you are not present you cannot participate, and regular attendance is therefore expected. Appropriate documentation justifying an extended absence is required. The policy on absences and late submissions is detailed in the following box.

**Policy on absences and late submissions**

Class attendance is necessary (but not sufficient) to successfully complete this course. Each missed class will result in the loss of five (5) percentage points of the Informed engagement mark. For example, if a student were to miss six classes he or she would be assigned 0 for the Informed Engagement portion of the final mark ( $30 - 6 \times 5$ ). In addition, students not present for a scheduled class presentation for which they are responsible will be assigned a mark of zero for the class presentation. For example, if a student were to miss four classes, one of which included a scheduled presentation for which they are in part responsible as a team member the student would lose a total of 40 marks.

Late submissions of assignments and term papers will not be accepted and will receive a mark of zero. This applies to all assignments including those submitted by email, and in this case, the time of receipt of the email by the professor is guarantor of the time of delivery. Exceptions are made only for illness or other serious situations deemed as such by the professor. All absences from class or exams, and all late submissions due to illness must be supported by a medical certificate. The professor reserves the right to accept or reject the reason put forth if it is not medical. Reasons such as travel, work, and errors made while reading the exam schedule are not usually accepted. In the event of an illness or related complications, only the counseling service and the university clinic may issue valid certificates to justify a delay or absence.

Students are advised to notify the professor as soon as possible if a religious holiday or other event forces their absence during an evaluation.

The final mark will be determined as follows:

Attendance, participation, assignments:	30%	
Class presentation:	10%	To be scheduled
In-class test:	10%	March 8th
Term Paper:	20%	First draft due April 19th Final draft due May 10th
Final Examination:	30%	

The in-class test will be held on March 8th for the duration of the class. A first draft of the term paper is due as a pdf to arrive in the instructor's e-mailbox before the beginning of the class on April 19th, and the final draft is similarly due before the beginning of the last day of the term on May 10th. The final examination will be scheduled during the examination period. Students who miss the in-class test for a valid reason will be assigned a mark of zero, and their final examination mark will account for 40% of their grade. Students who miss the in-class test for an invalid reason will be assigned a mark of zero.

A mark below 65% corresponds to a *C*, 65 to 69% to a *B-*, 70 to 74% to a *B*, 75 to 79% to a *B+*, and in a similar way 80 to 84%, 85 to 89%, and 90 or above to respectively *A-*, *A*, and *A+*.

Please note that attendance at courses is compulsory, and that professors may exclude from the final examination any students whose attendance is unsatisfactory. Further, please note that students who do not submit the draft and final version 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 examination.

## **Disabilities and Accommodations**

Students with disabilities requiring academic accommodations are encouraged to contact Disability Services. The Student Affairs Office of the University has a variety of assistance programs and options for students with a disability or requiring special equipment. After meeting with access services please feel free to make an appointment with the instructor to discuss any remaining concerns you may have. You should do this as soon as possible and at least two weeks before the first in-class test. You can obtain more information at <https://gc.cuny.edu/Prospective-Current-Students/Current-Students/Disability-Services>

## **Academic Fraud and Plagiarism**

Because of the growing number of allegations of academic fraud and plagiarism in recent years, the University has implemented a series of strategies to raise students' awareness of the rules of ethics governing university assignments. It has also established policies on academic fraud and integrity.

In particular, the University has published a document called "Avoiding and Detecting Plagiarism: A Guide for Students and Faculty with Examples." Students are required to read and understand this document, as well as with the "Graduate Center Policy on Academic Honesty," and the "CUNY Policy on Academic Integrity," which are included as appendices to the document available on the University's website.

**Beware of Academic Fraud!**

Academic fraud is an act committed by a student to distort the marking of assignments, tests, examinations, and other forms of academic evaluation. Academic fraud is neither accepted nor tolerated in the academic community to which doctoral students aspire. Here are a few examples of academic fraud:

- engaging in any form of plagiarism or cheating;
- presenting falsified research data;
- handing in an assignment that was not authored, in whole or in part, by the student;
- submitting the same assignment in more than one course, without the written consent of the professors concerned.

In cases where students are unsure whether they are at fault, it is their responsibility to consult the University's Web Site and be familiar with the appropriate resources and policies. The Graduate Center Policy on Academic Honesty states: "Any student who has submitted a paper, examination, project, or other academic work in part or in full not his or her own without appropriate attribution is subject to disciplinary charges. Such charges may result in the imposition of a grade of "F" or other penalties and sanctions, including suspension and termination of matriculation."

## Course Structure and Readings

1. An overview of empirical methods and identification strategies, and examples of their use in labour economics

- (a) Overview

- i. 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.
- ii. 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.

- (b) Randomized Controlled Trials

- i. Joshua D. Angrist and Jörn-Steffen Pischke (2009). *Mostly Harmless Econometrics: An Empiricist’s Companion*. Princeton: Princeton University Press. Chapter 2.
- ii. 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.
- iii. 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.
- iv. Charles Michalopoulos, Doug Tattrie, 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>
- v. David Card and Dean R. Hyslop (2005). “Estimating the Effects of a Time-Limited Earnings Subsidy for Welfare-Leavers.” *Econometrica*. Vol. 73, No. 6 (Nov., 2005), pp. 1723-1770.

- (c) Instrumental variables and Quasi-Experiments

- i. Joshua D. Angrist and Alan B. Krueger (2001). “Instrumental Variables and the Search for Identification: From Supply and Demand to Natural Experiments.” *Journal of Economic Perspectives*, Vol. 15, No. 4 (Autumn), pp. 69-85.
- ii. Guido W. Imbens and Joshua D. Angrist (1994). “Identification and Estimation of Local Average Treatment Effects.” *Econometrica*, Vol. 62, No. 2 (March), pp. 467-475.

- iii. Joshua D. Angrist and Alan B. Krueger (1991). “Does Compulsory School Attendance Affect Schooling and Earnings?” *Quarterly Journal of Economics*, Vol. 106, No. 4 (November), pp. 979-1014.
- iv. Bruce D. Meyer (1995). “Natural and Quasi Experiments in Economics.” *Journal of Business & Economic Statistics*, Vol. 13, No. 2, JBES Symposium on Program and Policy Evaluation (April 1995), pp. 151-161.
- v. G. Donald and Kevin Lang (2007). “Inference with Difference-in-Differences and Other Panel Data.” *Review of Economics and Statistics*. Vol. 89, No. 2 (May), pp. 221-233.
- vi. David Card (1990). “The Impact of the Mariel Boatlift on the Miami Labor Market.” *Industrial and Labor Relations Review*, Vol. 43, No. 2 (January), pp. 245-257.

(d) Regression Discontinuity

- i. Guido W. Imbens, Thomas Lemieux (2008). “Regression discontinuity designs: A guide to practice.” *Journal of Econometrics*, Volume 142, Issue 2, (February), pages 615-635.
- ii. Joshua D. Angrist and Victor Lavy (1999). “Using Maimonides’ Rule to Estimate the Effect of Class Size on Scholastic Achievement.” *Quarterly Journal of Economics*, Vol. 114, No. 2 (May), pp. 533-575.
- iii. Thomas Lemieux and Kevin Milligan (2008). “Incentive effects of social assistance: A regression discontinuity approach.” *Journal of Econometrics*. Volume 142, Issue 2, (February), pages 807-828

2. Labour Supply

(a) The Neoclassical Model of Labour Supply

- i. Pierre Cahuc, Stéphane Carcillo, and André Zylberberg. *Labor Economics*. Second Edition. Chapter 1.
- ii. 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.
- iii. Robert Moffitt (1990). “The Econometrics of Kinked Budget Constraints.” *Journal of Economic Perspectives*. Volume 4 Number 2 (Spring), pages 119-139.
- iv. J.R. Hicks (1946). *Value and Capital*, second edition. Oxford: Oxford University Press, pp. 35-7 and the Mathematical Appendix, sections 1-12.
- v. Y. Ben-Porath (1973). “Labor Force Participation Rates and the Supply of Labor.” *Journal of Political Economy*. Vol. 81, pp. 697-704.

(b) Empirical Studies

- i. Michael P. Keane (2011). "Labor Supply and Taxes: A Survey." *Journal of Economic Literature*. Vol 49, No. 4, pages 961-1075
- ii. 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.
- iii. 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.
- iv. 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.
- v. James Heckman (1974). "Shadow prices, Market Wages, and Labor Supply." *Econometrica*. Vol. 42 (July), pages 679-94.
- vi. Joshua D. Angrist and William N. Evans (1988). "Children and Their Parents' Labor Supply: Evidence from Exogenous Variation in Family Size." *American Economic Review*, Vol. 88, No. 3, pp. 450-477

3. Household and Family Models of Labour Supply, Investments in Children, and Generational Mobility

(a) Theory

- i. Pierre Cahuc, Stéphane Carcillo, and André Zylberberg. *Labor Economics*. Second Edition. Chapter 1.
- ii. John F. Ermisch. *An Economic Analysis of the Family*. Chapters 1 to 4, but especially chapter 2.
- iii. Martin Browning (1992). "Children and Household Economic Behavior." *Journal of Economic Literature*. Vol. 30 no. 3, pp. 1434-75.
- iv. Casey B. Mulligan (1997). *Parental Priorities and Economic Inequality*. Chicago: University of Chicago Press. Chapters 2 and 3.
- v. Gary S. Becker (1991). *A Treatise on the Family*. Enlarged Edition. Cambridge Massachusetts: Harvard University Press. Chapter 7 and Supplement to Chapter 7, pages 201 to 276. Also published as articles co-authored with Nigel Tomes as: (1979), "An Equilibrium Theory of the Distribution of Income and Intergenerational Mobility, *Journal of Political Economy*, Vol. 87 no.6, pages 1153-89; and as (1986), "Human Capital and the Rise and Fall of Families," *Journal of Labor Economics*, Vol. 4 no.3, supplement, pages S1-S39.

(b) Empirical Studies

- i. Bernard Fortin and Guy Lacroix (1997). “A test of neoclassical and collective models of household labor supply.” *Economic Journal*. Vol. 107, pages 933 to 55.
- ii. Martin Browning, François Bourguignon, Pierre-Andre Chiapori, and Valerie Lechène (1994). “Income and outcomes: A structural model of intrahousehold allocation.” *Journal of Political Economy*. Vo. 102, pages 1067-96.
- iii. Gary Solon (1992). “Intergenerational Income Mobility in the United States.” *American Economic Review*. Vol. 82 no. 3, pages 393-408.
- iv. Miles Corak and Andrew Heisz (1999). “The Intergenerational Earnings and Income Mobility of Canadian men: Evidence from Longitudinal Income Tax Data.” *Journal of Human Resources*. Vol. 34 no. 3, pages 504-33.
- v. Anders Bjorklund, Mikael Lindahl and Erik Plug (2006). “The Origins of Intergenerational Associations: Lessons from Swedish Adoption Data.” *Quarterly Journal of Economics*. Vol. 121, No. 3, pages 999-1028.

4. Human Capital, Education, Training, and Earnings

(a) Theory and conceptual framework

- i. Pierre Cahuc, Stéphane Carcillo, and André Zylberberg. *Labor Economics*. Second Edition. Chapter 4.
- ii. 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.
- iii. Jacob Mincer (1974). *Schooling, Experience and Earnings*. New York: Columbia University Press for the National Bureau of Economic Research.
- iv. Zvi Griliches (1977). “Estimating the Returns to Schooling: Some Econometric Problems.” *Econometrica*. Vol. 45, pages 1 to 22.
- v. David Card (1999). “The Causal Effect of Education on Earnings.” Chapter 30 in Ashenfelter and Card editors, *Handbook of Labor Economics*, Volume 3A, pages 1801 to 1858.
- vi. Thomas Lemieux (2006). “The “Mincer Equation” Thirty Years After Schooling, Experience, and Earnings.” In: Grossbard S. (eds) *Jacob Mincer A Pioneer of Modern Labor Economics*. Boston, Massachusetts: Springer.

(b) Empirical Studies

- i. Reuben Gronau (1974). "Wage Comparisons—a Selectivity Bias." *Journal of Political Economy*. Vol. 82 no.6, pages 1119-43.
- ii. H. Gregg Lewis (1974). "Comments on Selectivity Biases in Wage Comparisons." *Journal of Political Economy*. Vol. 82 no.6, pages 1145-55.
- iii. James J. Heckman (1979). "Sample selection bias as a specification error." *Econometrica*. Vol. 47 no. 1, pages 153-61.
- iv. Philip Oreopoulos (2006). "The Compelling Effects of Compulsory Schooling: Evidence from Canada." *Canadian Journal of Economics*. Vol. 39 no. 1, pages 22-52.
- v. Orley Ashenfelter (1978). "Estimating the effect of training programs on earnings." *Review of Economics and Statistics*. Vol. 60 no. 1, pages 47-57.
- vi. Orley Ashenfelter and David Card (1985). "Using the longitudinal structure of earnings to estimate the effect of training programs on earnings." *Review of Economics and Statistics*. Vol. 67 no. 4, pages 648 to 660.
- vii. Robert Lalonde (1986). "Evaluating the econometric evaluations of training programs with experimental data." *American Economic Review*. Vol. 76 no. 4, pages 497-530.

5. Job Search and Unemployment

(a) Theory

- i. Pierre Cahuc, Stéphane Carcillo, and André Zylberberg. *Labor Economics*. Second Edition. Chapters 5 and 9.
- ii. Martin Feldstein (1976). "Temporary Layoffs in the Theory of Unemployment." *Journal of Political Economy*. Vol. 84, pages 937-57.

(b) Measurement and Empirical studies

- i. Nicolas Kiefer (1988). "Economic duration data and hazard functions." *Journal of Economic Literature*. Vol. 26, pages 646-79.
- ii. Anthony B. Atkinson and John Micklewright (1991). "Unemployment compensation and labor market transitions: a critical review." *Journal of Economic Literature*. Vol. 29, pages 1679-1727.
- iii. Stephen W. Salant (1977). "Search Theory and Duration Data: A Theory of Sorts." *Quarterly Journal of Economics*. Vol. 91 no. 1, pp. 39-57.
- iv. 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.

## Student Initiated Readings and Term Papers

Students will work in small groups in order to study a topic dealing with the structure of wages or the impact of public policy and institutions on the labour market. Students should propose topics reflecting both their interests and relevance to the conduct of current public policy debates. The final choice of topics will be made by the professor in a way that balances the interests of the class and meets the overall objectives of the course. Topics may include more in depth studies of those listed in the core readings, they may be chosen from the following list, or they may be student initiated in consultation with the instructor. But in general the topic should be drawn from a chapter in the text book by Cahuc, Carcillo and Zylberberg, and may include:

1. Earnings Inequality, technical change, and international trade
2. Male-Female wage differentials
3. The impact of the minimum wage on earnings and unemployment
4. Labour market consequences of immigration
5. Unemployment insurance and unemployment
6. Relative wage effects of unions

Successful term papers will: outline the public policy relevance of the issue being addressed; outline the appropriate theoretical framework for analyzing the issue; review the econometric issues that need to be addressed to successfully put theory into practice; review the empirical findings in the literature while noting remaining gaps; outline the appropriate data for the study of the issue or the gaps in data.

The milestones and deadlines associated with the presentations and term papers are as follows:

February 22	Group membership established, discussion of topics
March 1	Topics finalized and bibliography of readings submitted
March 8	Presentation schedule finalized
March 22, 29, April 12	In class presentations (tentative)
April 19	First draft of paper due
May 10	Final draft of paper due

Class presentations require a group meeting with the instructor, involving all members of the group, at least one week before the scheduled in-class presentation. The purpose of this meeting is to have the group present a dry-run of the presentation to the professor, and to receive feedback in preparing the final version. This requires a completed PowerPoint presentation, and a mocked-up, but well prepared, presentation. An individual meeting with the professor in the days after the presentation may also be required. The purpose of this meeting is to conduct an oral examination covering the subject of the presentation.