



## General Course Information

<b>Instructor:</b>	Louis N. Christofides
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<i>Office Location</i>	Rm. 736
<i>Office Hours</i>	Mondays and Wednesdays from 11.30 – 12:30
<i>Department/School</i>	Department of Economics and Finance

**Class Schedule:** Mondays and Wednesdays 10:00am-11:20am

## Course Description

This course is designed for MA and PhD students interested in Labour Economics and will encompass tools relevant to this field from microeconomics, macroeconomics and econometrics. The course will outline extant theoretical material and, typically, proceed to examine its empirical implementation. Relevant econometric tools, which might not be covered in regular courses, will be outlined in detail and example findings which use these techniques discussed. Empirical findings in the literature are based on a variety of programming languages and software but STATA is, typically, the software of choice among researchers in the field at the moment.

## Indicative Content

### 1. Labour Supply

- BGLR chapters 2, 3 and 4.
- CCZ chapter 1.
- G (sections/chapters on MLE, limited dependent variables, incidental truncation, and Sample Selection). In the 7<sup>th</sup> edition, see chapter 19.
- H3A, chapter 27: Blundel, R. and T. MaCurdy. “Labor supply: a review of alternative approaches”.
- H3A, chapter 24: Moffitt, R. A. “New developments in econometric methods for labour market analysis”
- Erosa, A., L. Fuster, and G. Kambourov (2012) “Labour supply and government programs: A cross-country analysis”, *Journal of Monetary Economics*, 59, pp. 84-107. See also the discussion, in the same volume, by Imrohorglu (\*) (You may wish to consult Erosa, A., L. Fuster, and G. Kambourov (2011). “Towards a micro-founded theory of labor supply”, IMDEA working paper, July, (see [www.imdea.org](http://www.imdea.org))).
- Fortin, B., G. Lacroix and S. Drolet (2004) “Welfare benefits and the duration of welfare spells: Evidence from a natural experiment in Canada”, *Journal of Public Economics*, 88, pp. 1495-1520. (\*)
- Lemieux, T. and K. Milligan (2008) “Incentive effects of social assistance: A regression discontinuity approach”, *Journal of Econometrics*, 142(2), pp. 807-828. (\*) This and the previous paper should be seen together.

## 2. Labour Demand

- BGLR chapters 5 and 6.
- CCZ chapter 2.
- H1 chapter 8: Hamermesh, D. "The Demand for Labor in the Long-Run."
- H1 chapter 9: Nickell, S. "Dynamic Models of Labour Demand."
- Hamermesh, D. *Labor Demand*, Princeton UP, 1993.
  
- Crepon , B. and F. Kramarz (2002) "Employed 40 hours or not employed 39: Lessons from the 1982 mandatory reduction of the workweek", *Journal of Political Economy*, 110 (December), pp. 1355-1389. (\*)
- Crepon , B. and F. Kramarz (2008) "The two French work-sharing experiments: Employment and productivity effects" in T. Boeri, M. Burda and F. Kramarz (eds) *Working hours and job sharing in the EU and the USA*, Oxford University Press. (\*). This and the previous paper should be seen together.
- Chemin, M. and E. Wasmer (2009) "Using Alsace-Moselle local laws to build a difference-in-differences estimation strategy of the employment effects of the 35-hour workweek regulation in France", *Journal of Labor Economics*, 27 (October), pp. 487-524.
- Hijzen, A and D. Venn (2011) "The role of short-time work schemes during the 2008-00 recession" OECD WP 115. (\*)
- Hunt, J. (1999) "Has work-sharing worked in Germany?" *Quarterly Journal of Economics*, 114, pp. 117-148. (\*)

## 3. Wage and employment outcomes

- BGLR chapters 8 (compensating differentials), 10 (structures across markets), and 12 (discrimination).
- CCZ chapter 3 and 8.
- Lemieux, T. (2006) The Mincer equation thirty years after: Schooling, experience and earnings, in S. Grossbard (ed), J. *Mincer: A pioneer of modern labor economics*, Springer.

### *Compensating differentials*

- H1 chapter 12: Rosen, S. "The Theory of Equalizing Differences."
  
- Bonhomme, S and G. Jolivet (2009) "The pervasive absence of compensating differentials", *Journal of Applied Econometrics*, 24 (5), pp. 763-795. (\*)
- Villanueva, E. (2007) "Estimating wage differentials using voluntary job changes: Evidence from Germany", *Industrial and Labor Relations Review*, 60(4), pp. 544-561. (\*)

### *Structures across markets*

- H4B chapter 12: Acemoglu, D. and D. H. Autor "Skills, tasks and technologies: implications for employment and earnings".
  
- Borjas, G, J. (1987) "Self-selection and the earnings of immigrants", *American Economic Review*, Vol. 77, No 4, pp. 531-553. (\*) For helpful notes, see D. Autor (2009) "Lecture note: The Roy model". Available at <http://economics.mit.edu/files/4092>

### *Discrimination*

- H1 chapter 13: Cain, G. "The Economic Analysis of Labour Market Discrimination: A Survey."
- H3C chapter 48: Altonji, J. G. and R. M. Blank "Race and Gender in the Labor Market."
- H4A chapter 1: Fortin, N. T. Lemieux, S. Firpo "Decomposition Methods in Economics".
- Heckman, J. (1998). "Detecting Discrimination" *Journal of Economic Perspectives* 12, pp. 101-116.
  
- Lang, K. and M. Manove (2011) "Education and labor market discrimination", *American Economic Review*,

101, pp. 1467-1496. (\*)

- Manning, A. and J. Swafield (2008) "The gender gap in early-career wage growth", *The Economic Journal*, 118 (July), pp. 983-1024. (\*)

- Caliendo, M., W-S. Lee and R. Mahlstedt (2014), "The gender wage gap: Does a gender gap in reservation wages play a part?" IZA DP No. 8305. (\*)

#### **4. Causal effects, identification, instrumental variables**

- G: in the 7<sup>th</sup> ed. See chapter 8 (endogeneity and instrumental variables estimation).

- Murray, M.P. (2006) "Avoiding invalid instruments and coping with weak instruments", *Journal of Economic Perspectives*, vol. 20, No. 4, pp 111-132.

- Angrist, J., G. Imbens and D. Rubin (1996) "Identification of Causal Effects Using Instrumental Variables", with discussion, *Journal of the American Statistical Association*, pp. 91434-472.

- H3A chapter 23: Angrist, J. and A. Krueger 1999. "Empirical Strategies in Labor Economics".

- H4A chapter 6: French, E. and C. Taber. "Identification of Models of the Labor Market".

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

- Card, D. and T. Lemieux (2001) Can Falling Supply Explain the Rising Return to College for Younger Men?" *Quarterly Journal of Economics*, 116, No. 2, pp. 705-706.

- Oreopoulos, P. (2006) "Estimating Average and Local Average Treatment Effects of Education when Compulsory Schooling Laws Really Matter" *American Economic Review*, 96(1), pp. 152-175. (\*)

#### **5. Human capital**

- BGLR chapter 9.

- CCZ chapter 4.

- H1 chapter 10: Willis, R.J. "Wage Determinants: A Survey and Reinterpretation of Human Capital Earnings Functions".

- H3A chapter 30: Card, D 1999 "The causal effect of education on earnings".

- Meghir, C. and S. Rivkin. (2011) "Econometric Methods for Research in Education" in Hanushek, Eric A., Ed.; Machin, Stephen J., Ed.; Woessmann, Ludger, (eds) *Handbook of the Economics of Education*, vol. 3, ch.1.

-Card, D. and T. Lemieux (2001) "Going to College to Avoid the Draft", *American Economic Review Papers and Proceedings*, May, pp. 97-102.

- Card, D. (1995) "Using geographic variation in college proximity to estimate the return to schooling", in Christofides et al (eds) *Aspects of Labour Market Behaviour: Essays in honour of John Vanderkamp*, University of Toronto Press; with discussion by J. Davies, pp. 201-224. (\*)

- Mulligan, C. and Y. Rubinstein (2008) "Selection, investment and women's relative wages over time", *Quarterly Journal of Economics*, 123, pp. 1061-1110. (\*)

#### **6. Unions and the labour market**

- BGLR chapters 14 and 15.

- CCZ chapter 7.

- H2 chapters 18-20, especially 18: Farber, H.S. "The analysis of union behaviour".

- H4B, chapter 11: Manning, A. "Imperfect competition in the labour market".

- MacDonald, I. and R. Solow (1981) "Wage bargaining and employment", *American Economic Review*, 71(5), pp. pp. 896-908.

- Manning, A. (1987) "An integration of trade union models in a sequential bargaining framework", *Economic Journal*, 97, pp. 121-137.

Andrews, M.J., Harrison, A. (1998) "Testing for efficient contracts in unionized labour markets", *Bulletin of Economic Research* 50, no. 3, pp. 171-200. (\*)

## 7. Unemployment, search, duration analysis

- BGLR chapters 16 and 17.
- CCZ chapters 5 and 9.

### *Unemployment*

- H2 chapter 16: Johnson, G.E. and P.R.G. Layard "The Natural Rate of Unemployment: Explanation and Policy".
- H2 chapter 17: Lilien, D.M. and R.E. Hall "Cyclical Fluctuations in the Labor Market".
- H3B chapter 37: Farber, H. S. "Mobility and Stability: The Dynamics of Job Change in Labor Markets".
- H3B chapter 41: Davis, S. J. and J. Haltiwanger "Gross Job Flows".
- H3B chapter 46: Nickell, S. and R. Layard "Labor Market Institutions and Economic Performance".
- H3B chapter 47: Machin, S. and A. Manning "The Causes and Consequences of Longterm Unemployment in Europe".

### *Search*

- Romer, D. (2012) *Advanced Macroeconomics* 4<sup>th</sup> ed, chapter 10 (efficiency wage models useful for section 6 and simple search macro model).
- H4A chapter 7: Rogerson, R. and R. Shimer "Search in macroeconomic models of the labor market".
- Rogerson, R., R. Shimer and R. Wright (2005) "Search-Theoretic Models of the Labor Market: A Survey" *Journal of Economic Literature*, 43(4), pp. 959-988.
- Pissarides, C. (2000). *Equilibrium Unemployment Theory*, 2<sup>nd</sup> Edition, MIT Press, chapters 1 and 2.
- Pissarides, C. (2009) "The unemployment volatility puzzle: Is wage stickiness the answer?" *Econometrica*, Vol. 77, No. 5, pp. 1339-1369. (\*)

### *Duration analysis*

- CCZ chapter 5, sections 3.2 and 3.3.
- Kiefer, N.M. "Economic Duration Data and Hazard Functions," *Journal of Economic Literature* XXVI (June 1988), pp. 646-679.
- Lancaster, T. (1990). *The Econometric Analysis of Transition Data*, CUP, chapters 1-3.
- Jenkins, S. (2005) *Survival analysis* available at <https://www.iser.essex.ac.uk/files/teaching/stephenj/ec968/pdfs/ec968lnotesv6.pdf>
- Jenkins, S.P. and C. Garcia-Serrano (2004) "The relationship between unemployment benefits and re-employment probabilities: Evidence from Spain", *Oxford Bulletin of Economics and Statistics*, 66, pp. 239-260. (\*)

## Course Assessment

Students will be required to either (i) write up a lecture, carefully present it and lead discussions (depending on class size) on relevant applied material (papers which might be used are suggested but also appear on the web site for CCZ, see below) or (ii) embark on and present an empirical project of relevance to the course which they must also present and discuss. In both cases, the topic must be approved by the instructor but students will be expected to work independently, resolving conceptual and empirical difficulties with their own initiatives, just as they would in the workplace or during the process of research. Projects will carry a weight of 5 points more than presentations of published papers, with a corresponding reduction of 5 points from the final examination. Active participation in all presentations will be required and graded (10 points). Thus, students presenting published papers will be subject to grading scheme A (Midterm 25%, Participation 10%, Presentation 25% and Final 40%), while those embarking on a project will be judged according to scheme B (Midterm 25%, Participation 10%, Presentation 30% and Final 35%). The in-class Midterm Examination will be on October 15, 2014.

## Teaching and Learning Practices (*as appropriate*)

**Lectures**            Lectures will be self-contained.

## Course Resources

In class, readings from the relevant literature will be assigned and discussed; the list below identifies some significant landmarks.

An introduction to labour market topics for those with no previous background in the field is available in Benjamin, Gunderson, Lemieux and Riddell *Labour Market Economics*, 2012, 7th Edition. McGraw-Hill Ryerson (BGLR). This is an excellent undergraduate textbook, but below the level expected in this course. It is also an excellent source for recommendations on further reading.

The graduate textbook by P. Cahuc, S. Carcillo and Andre Zylberberg, *Labor Economics*, second edition, MIT Press, 2014 (CCZ) is a substantially revised version of the first edition authored by Cahuc and Zylberberg. A very useful web site [www.labor-economics.org](http://www.labor-economics.org) is now also available. The references below are to the second edition although the first edition would also be helpful. The second edition is recommended but not required.

The several volumes of the *Handbook of Labor Economics* (H), edited by O. Ashenfelter and D. Card and published by Elsevier North Holland (San Diego and Amsterdam) over several years, are important (if sometimes dated) references for anyone wishing to explore a particular topic in depth.

A good source of information on most of the econometric techniques that we will be touching upon is William Greene *Econometric Analysis*, Prentice Hall (G). This has undergone a number of revisions; the latest edition (7<sup>th</sup>) is most inclusive but earlier editions also contain information on some of the material that will be covered. A number of other outstanding textbooks are also available and students might prefer to consult another source.

## University Policies

### Academic Consideration

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for

Academic Consideration: <https://www.uoguelph.ca/registrar/calendars/graduate/2014-2015/>

### Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Graduate Calendar:

<https://www.uoguelph.ca/registrar/calendars/graduate/2014-2015/>

### Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Centre for Students with Disabilities as soon as possible.

For more information, contact CSD at 519-824-4120 ext. 56208 or email [csd@uoguelph.ca](mailto:csd@uoguelph.ca) or see the website: <http://www.csd.uoguelph.ca/csd/>

### Course Evaluation Information

Please refer to: <https://www.uoguelph.ca/economics/course-evaluation>

### Drop date

The last date to drop one-semester courses, without academic penalty, is October 31<sup>st</sup>, 2014. For regulations and procedures for Dropping Courses, see the Academic Calendar:

<https://www.uoguelph.ca/registrar/calendars/graduate/2014-2015/>

## Course Learning Outcomes

**In keeping with the University's Learning Outcomes, the objectives of this course in the Department of Economics and Finance are as follows:**

### ***Skills***

#### *1. Written Communication*

This is achieved through having to write the material for the lecture presentation or the project.

#### *2. Numerical Problem Solving*

Students will be required to work through the lectures, course, and presentation materials all of which will involve numerical problem solving. For example, male-female wage differentials and the extent to which these can be explained will be calculated. The project involves the processing of data and estimation through statistical software.

#### *3. Analytical Problem Solving*

This is required in order to solve models such as the work-leisure or rent sharing model.

#### *4. Problem Solving in a Real World Context*

The implications of policies, such as welfare, for labour market behaviour (e.g. participation in the labour market and offer of hours of work) will be examined.

#### *5. Professional and Ethical Awareness and Conduct*

Students will be made aware of the value added in a particular published article, the need to acknowledge the work of others, the appropriate use of analysis and data, and the need to discharge their own obligations responsibly.

### ***Knowledge***

#### *1. Mathematical Methodology*

The course is replete with model construction and solving and evaluating their implications.

#### *2. Statistical and Econometric Methodology*

Theories analysed (see above) will be confronted with data, using appropriate econometric techniques.

#### *3. Microeconomic Modelling*

It is required throughout the course, most obviously in the work-leisure model.

#### *4. Understanding Specific Markets*

The course is about the labour market and a better understanding of how it functions will result.

#### *5. Historical and global context*

The evolution of variables over time and across countries will be an integral part of the course. Papers involving experience and policies in other countries are on the reading list.

#### *6. Economic Policy and Regulation*

Most of the topics covered involve analysing the effects of policy. For instance, the length of unemployment durations may be conditioned by the provisions of the unemployment insurance system; this is something we discuss in depth.