

Labour Economics Econ 426 - Winter 2025

January 6, 2025

This course is co-taught by Professors Fabian Lange, Nicolas Gendron-Carrier, and Fernando Saltiel, all labour economists at the Department of Economics at McGill. Each of us will teach one-third of the course focusing on different topics.

The subject of “Labour economics” includes everything related to how humans work and get paid for it. This course is an economics class and we therefore analyze how purposeful agents make decisions while facing resource constraints. A large number of different issues are considered: how are wages determined in competitive and non-competitive markets? What are the consequences of wage regulations such as minimum wage legislation? Why do agents go to school rather than work? What accounts for earnings inequality with experience, education, across locations, and across occupations? How has earnings inequality evolved over the last half-century and why? These and other questions will be addressed in this course.

General Information

Information related to the Professors teaching each of the three segments can be found in the parts of the syllabus referring to each segment.

Prerequisites: Econ 230 or Econ 250 or Econ 306.

Math prerequisites: Algebra, Geometry, Basic Linear Algebra, Single variable differential calculus. Most important: a willingness to analyze economic phenomena with mathematical, verbal-analytic, and graphical approaches.

Course Location: Macdonald Engineering Building 279

Meeting Times: Monday / Wednesday 2:35-3:55pm

TA:

Review Sessions:

Course Materials

Textbook

Derek Laing “labour Economics: introduction to classic and new labour economics”, 1st Edition. Eds. W.W. Norton

The library has a few copies of the book and it is available at the book store.

Course Requirements and Grading

You are expected to:

1. check myCourses daily.
2. do the assigned readings before you come to class.
3. come to and participate in class.
4. do your homework and assignments as specified in the modules and come to the exams.

Examinations

There will be an in-class exam for each of the 3 modules taught by Fabian Lange, Nicolas Gendron-Carrier, and Fernando Saltiel. These exams will be administered on

- Module 1: February 3
- Module 2: March 12
- Module 3: April 9

Grading

Each module contributes one-third to the overall grade. To arrive at your overall grade, we will average grades across the 3 modules. In addition, we will award all students in the course 1% extra if at least two-thirds of registered students provide teaching evaluations through the mercury course evaluation system.

Within each module, two-thirds of a grade is accounted for by the in-class exam, with the remainder accounted for by the module-specific assignments.

The due-dates for assignments and the exam dates are listed in the modules below.

Assignments submitted after the deadline will not be accepted.

In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

In the problem sets and midterm exams, you will need to demonstrate

1. Comprehension of core principles taught in class.
2. Ability to use and manipulate models introduced in class.
3. Ability to apply concepts and insights to analyze policy and evaluate statements on labour market phenomena for their truthfulness.

Questions in the problem sets and the midterm exam can be:

1. Short answer question
2. Questions requiring mathematical manipulation
3. Multiple choice questions.

In problem sets and exams, we will penalize unclear answers or extraneous material. To obtain top grades, clear and concise answers will be required. Anything written in an illegible manner will be ignored.

Make-up Exams

You may only miss an exam for a family or medical emergency. If you miss an exam, you must send us a written justification within 7 days of the exam date to explain the reason for your absence.

If you miss an exam without a written justification based on family or medical emergency, you will receive 0% on that exam. Shall you miss an exam due to a family or medical emergency, a 20-minute oral examination will substitute. This oral examination will be scheduled during the last week of term (April 5-11).

Reread Policy

We do our best to ensure fair grading and minimize errors. Nevertheless, if you disagree with the grade you have received in your exam, you may opt to have your exam reread. Before you do, make sure you carefully compare your answers with the solutions we provide.

To request a reread, you must submit to us (the instructor, not the TA) your exam with a written justification for the re-read, specifying the question which you felt was incorrectly graded. This written request for reread must be submitted within 7 days of receiving the exam. We will then reread and reassess the answer. Please note that we may review the entire exam. As a result, your grade may increase, decrease, or stay the same.

Policy on the use of AI

Students are encouraged to make use of technology, including generative artificial intelligence (GenAI) tools such as ChatGPT, to contribute to their understanding of course materials, for example for studying and learning. Students may not use artificial intelligence tools for completing graded assignments, for example when completing problem sets and exams. Students may, however, use GenAI to understand problem set solutions after the assignment has been graded and returned.

Module 1 (January 6 - February 3): Labour Demand and Earnings Inequality

This module discusses the determinants of the demand for labour. To begin, we consider the demand for labour by a firm in a competitive labour market followed by the demand for labour by a firm with market power. We then discuss the implications of firm market power in the labour market for minimum wage policies.

Following this, we use the tools developed in the first part of the course to discuss changes in earnings and income inequality over time. In particular, we consider how the distribution of earnings with education and across occupations changed over the last half-century, as well as tools to analyze these changes. Should time permit, we finish by discussing income inequality at the very top of the income distribution: the top 1 or 0.1% of the population.

Fabian Lange

Email: fabian.lange@mcgill.ca

Office: Leacock 511

Office Hours: Wednesdays 1:00-2:25p

Midterm: February 3rd, 2025. To be held in class.

I will assign 3 problem sets due on January 15, 22, and 29. Problem sets must be submitted as handwritten documents at the beginning of the class on that date.

Lecture 1 Introduction (January 6th) Labour Demand in Competitive Markets

* Laing Chapter 3

Lecture 2 Labour Demand II - Non-competitive Markets (January 8th)

Lecture 3 Minimum Wage Policy (January 13th)

* Laing Chapter 8

Lectures 4-8: Earnings Inequality

Lecture 4: Empirical Facts: Education and occupations. (January 15th)

Lecture 5: Skill-Biased Technical Change since the 1960s (January 20th)

Lecture 6: Wage Polarization across the Occupation Distribution. (January 22nd)

Lecture 7: What will the future bring? (January 27th)

Lecture 8: Wage Inequality at the Top of the Earnings Distribution (January 29th)

Module 2 (February 5 - March 12): Labour Supply and Labour Market Discrimination

This module discusses the determinants of labour supply and labour market discrimination.

Nicolas Gendron-Carrier

Email: nicolas.gendron-carrier@mcgill.ca

Office: Leacock 543

Office Hours: Mondays 1:00-2:25p

Midterm: March 12, 2025.

Problem sets: I will assign two problem sets due on Sunday February 16 and Sunday March 2.

Labour supply: theory (February 5 and 10).

- Laing, Chapter 4.

Labour supply and public policy (February 12 and 17).

- Laing, Chapter 9.
- Eissa, N. and J. Leibman. 1996. "labour Supply Response to the Earned Income Tax Credit." *Quarterly Journal of Economics*.
- Kleven, H. 2023. "The EITC and the Extensive Margin: A Reappraisal." Working Paper.
- Lemieux, T. and K. Milligan. 2008. "Incentive effects of social assistance: A regression discontinuity approach." *Journal of Econometrics*.
- Lee, D. and T. Lemieux. 2010. "Regression Discontinuity Designs In Economics." *Journal of Economic Literature*.

Fertility and labour supply decisions (February 19).

- Angrist, J.D. and W. Evans. 1998. "Children and their Parents' labour Supply: Evidence from Exogenous Variation in Family Size." *American Economic Review*.

Labour market discrimination (February 24 and 26).

Theory: taste-based and statistical discrimination.

- Laing, Chapter 11.
- Goldberg, M. S., 1982. “Discrimination, Nepotism, and Long-Run Wage Differentials.” *Quarterly Journal of Economics*.
- Aigner, D. and G. Cain. 1977. “Statistical Theories of Discrimination.” *Industrial and labour Relations Review*.

Evidence:

- Laing, Chapter 12.
- Goldin, C. and C. Rouse. 2000. “Orchestrating Impartiality: The Impact of ‘Blind’ Auditions on Female Musicians.” *American Economic Review*.
- Bertrand, M. and S. Mullainathan. 2004. “Are Emily and Greg More Employable than Latisha and Jamal? A Field Experiment on labour Market Discrimination.” *American Economic Review*.

Catch-Up / Review Lecture (March 10)

Midterm Exam (March 12)

Module 3 (March 17 - April 9): Human Capital and Job Training

This module discusses the economics of human capital, analyzing the importance of education in the labour market, the estimation of the returns to education, the importance of specific investments, including vocational education and college majors, as well as the role of credit constraints in shaping educational choices. We also examine the importance of job training the labour market.

Fernando Saltiel

Email: fernando.saltiel@mcgill.ca

Office: Leacock 512

Office Hours: Thursdays, 4-5pm.

Midterm: April 9, 2025. To be held in class.

There is one problem set for this module, due on April 14th.

Human Capital Theory (March 17 and 19).

- Laing, Chapter 5: Human Capital.
- Mincer, J. (1958). Investment in human capital and personal income distribution. *Journal of Political Economy*, 66(4), 281-302.
- Ben-Porath, Y. (1967). "The production of human capital and the life cycle of earnings". *Journal of Political Economy* 75 (4), 352-365. Part 1. August.
- Mincer, J. (1974). *Schooling, Experience and Earnings*. Columbia University Press for National Bureau of Economic Research, New York. Chapters I and II.
- Heckman, James J., Lance J. Lochner, and Petra E. Todd. "Earnings functions, rates of return and treatment effects: The Mincer equation and beyond." *Handbook of the Economics of Education*. 1 (2006): 307-458.

Returns to Human Capital (March 24, 26 and 31).

Methodology:

- Laing, Chapter 5: Human Capital.
- J. Angrist and A. Krueger, "Does Compulsory School Attendance Affect Schooling and Earnings?" *Quarterly Journal of Economics*, CVI(4), 1991, pp. 979-1014.
- Card, David. Using Geographic Variation in College Proximity to Estimate the Return to Schooling. No. 4483. National Bureau of Economic Research, Inc, 1993.
- Card, David. "The causal effect of education on earnings." *Handbook of labour Economics*. 3 (1999): 1801-1863.
- Imbens, G. W., and Angrist, J. D. (1994). Identification and Estimation of Local Average Treatment Effects. *Econometrica*, 62(2), 467-475.

Empirical Evidence:

- S. Zimmerman. (2013) "The Returns to College Admission for Academically Marginal Students," *Journal of labour Economics*. October 2014, pp. 711-754.
- Altonji, J. G., Arcidiacono, P., and Maurel, A. (2016). The analysis of field choice in college and graduate school: Determinants and wage effects. In *Handbook of the Economics of Education* (Vol. 5, pp. 305-396). Elsevier.
- Hanushek, E. A., Schwerdt, G., Woessmann, L., and Zhang, L. (2017). General education, vocational education, and labour-market outcomes over the lifecycle. *Journal of human resources*, 52(1), 48-87.
- Kirkeboen, L. J., Leuven, E., and Mogstad, M. (2016). Field of study, earnings, and self-selection. *The Quarterly Journal of Economics*, 131(3), 1057-1111.
- Bertrand, Marianne, Magne Mogstad, and Jack Mountjoy. "Improving educational pathways to social mobility: evidence from Norway's reform 94." *Journal of labour Economics* 39.4 (2021): 965-1010.

Job Training, labour Market Experience and Firm Tenure (April 2 and April 7).

- Laing, Chapter 6: On-the-Job Training.
- E. Lazear, "Why Is There Mandatory Retirement?" *Journal of Political Economy*, 87(6), 1979, pp. 1261-84.
- R. Topel and M. Ward, "Job Mobility and the Careers of Young Men," *Quarterly Journal of Economics*, May 1992, pp. 439-479.
- R. Topel, "Specific Capital, Mobility, and Wages: Wages Rise with Job Seniority." *Journal of Political Economy*, 99(1), 1991, pp. 145-76.
- J. Altonji and N. Williams, "Do Wages Rise with Job Seniority? A Re-assessment," *Industrial and labour Relations Review*, April 2005, Vol. 58, no. 3, pp.
- Lagakos, David, Benjamin Moll, Tommaso Porzio, Nancy Qian, and Todd Schoellman. "Life cycle wage growth across countries." *Journal of Political Economy* 126, no. 2 (2018): 797-849.

Midterm Exam (April 9)

1 Additional Statements:

- McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offenses under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/integrity for further information).

L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le guide pour l'honnêteté académique de McGill).

- In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté (sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue).

- According to Senate regulations, instructors are not permitted to make special arrangements for final exams. Please consult the calendar, section 4.7.2.1, General University Information and Regulations, at www.mcgill.ca.