

Rutgers University Department of Economics  
**Econ 402: Labor Economics**  
Summer 2019.

Instructor: **Monica Mogollon.**

**Classroom:** Scott Hall 101

**Class Hours:** Tuesday and Thursday 6:00-10: 00 pm

Email: [mmogollon@economics.rutgers.edu](mailto:mmogollon@economics.rutgers.edu) (Please write down Econ 402 in the subject.)

Office Hours: Tuesday, Thursday 2:00 pm 5:00pm or by appointment.

Third Floor Library, NJ Hall.

*This syllabus is subject to change at any time during the session. Please pay attention to announcements in class, email, or on Canvas portal.*

**Course Description:**

Does the transfer of universal basic income reduce work incentives? Are immigrants reducing job opportunities for natives? Should my state increase the minimum wage to usd15 per hour? Those are some questions in the current debate on public policy that have been studied in labor economics. This course will present the students the microeconomic toolset to think critically about the labor market and apply the concepts to current policy debates.

This course is an upper-level elective. The first section are lectures covering the models of labor market from the supply, demand side and equilibrium characteristics. Next, it presents how to apply this framework to analyze the effect of institutions such as minimum wage and unions. In the second half, this course discusses critical issues of the current US labor market policy debate: wage inequality, labor market concentration, basic universal income, and immigration. We follow a more applied approach, doing practical data analysis activities in class. The applied sessions will help to understand the empirical approach that labor economists use in their research.

**Learning Outcomes:** The goal is to train students in developing clear thinking and analytical reasoning to solve questions about the labor market. Upon completion of this course, the student will be able to:

- Apply the basic microeconomics toolset for basic analysis of labor markets.
- Analyze concrete public interventions in the labor markets using the standard microeconomics toolset.
- Build simple linear regression models and interpret the coefficients in the context of the labor market.
- Be familiar with basic data analysis using modern quantitative methods like differences in differences and basic programming techniques.
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## Econ 402: Labor Economics Summer 2019.

**Prerequisites.** Econ. 320 Intermediate Microeconomics and Econ. 322 Econometrics.

**Text:** The textbook for the class is:

Borjas, G.J. 2019. Labor Economics. 8<sup>th</sup> ed McGraw-Hill Education.

You can use seventh or sixth editions of this textbook.

However, you can also follow: Ehrenberg, R.G., and R.S. Smith. 2017. Modern Labor Economics: Theory and Public Policy 13<sup>th</sup> ed. Routledge.

**Readings:** Other articles are not required, but certainly help to illustrate applications of models presented and provide an insight to have an informed opinion on current public policy debates. They also help as a reference to the data analysis project. A digital copy of the articles is posted on Canvas, but also you can find them on Libraries Online Catalog.

Blog links complement some of the suggested articles. It is very usual in economic that authors make dissemination efforts of their research through blogs and other media channels such as podcasts and twitter. Those blogs are well crafted and present a good summary of the insights of the article.

**Course Website:** announcements are posted on Canvas and email. Check the Canvas site frequently to get announcements, assignments and answers, readings, lecture notes, data analysis project guide and all additional material.

**Communication:** Emails will be the best way to contact me. The emails must have the subject Econ 402. This helps me to find your email easier and answer sooner. I will try to answer emails within 24 hours. But emails from Friday and weekend might have more delay (48 hours)

**Lectures:** for the summer, the lectures consist of three hours sessions from 6-9pm, with 20-minute breaks every hour and a half. Leaving the lecture after the break will decrease score in the attending and participation grade. From 9-10pm lectures could continue depending on the conditions of each session. In general, this time could be assigned to office hours and assignments working time for the students in which the instructor might be present.

### Evaluation.

In class assignments, participation, attendance	10%
Homework Assignments	10%
Midterm Exam	35%
Final Exam	30%
Data Analysis Project.	15%

### Grading Scale

final course score	final course grade
90-100	A
85-89.99	B+
78-84.99	B
73-77.99	C+
65-72.99	C
58-64.99	D
0-57.99	F

**Homework assignments:** two problem sets, in the first session of the course, in order to master the core microeconomic labor market theory. Homework assignments due dates are clearly stated in the schedule. No late submissions accepted. Answers will be posted on Canvas. We will discuss some questions in class, and you should email or look for office hours for help if you do not understand.

Homework assignments are to be submitted in groups up to 3. (if you want to submit individually let me know). However, I suggest that you work individually the assignments and understand the material. The questions in the midterm will be related to the ones in the homework assignment. Therefore, it is important to understand the problems and questions, instead of memorizing.

**Exams:** The midterm and final exams are individually presented. No collaboration of groups of any kind is allowed. The exams are essay questions that evaluate the ability to apply principles of economics developed in the readings, lectures and homework assignments. Exams are open notes and open books. The emphasis is on understanding the material and analysis skill, not in the memorization of content. Review questions are provided with answers so that you can familiarize with the kind of answer expected.

#### **Rules during exams:**

No mobile phones, tablets or laptops allowed. Only printed notes. Anyone trying to use these devices during exams will be removed.

Anyone talking to others in exams will be removed from the classroom. Anyone removed from the classroom will not be readmitted to the classroom without prior consultation with the instructor and the dean of students

Summer School rarely allow for makeup exams. If you can not take the exams on the date provided let me know as soon as possible.

**Data Analysis Assignment:** Two submissions. Short data analysis exercise using R-Studio software. They will be the main assignment after the midterm exam. You will work in this individually. Data will be provided. We will review examples of the code to solve the assignments on class. For the assignment, you should adapt the code to the new data set provided. You need to submit the results, analysis on the results and the code. The goal is to get a brief demonstration of how practitioners in Labor Economics are using data to provide new evidence and analyze labor market questions and policies.

Note on empirical Data Analysis Assignment: You should ensure that the project you are submitting is the product of your own writing and work. Also, the code and supporting materials should be the product of your own work. Please use standard citation practices. This also includes acknowledging any assistance and help in your coding or writing from friends or any other assistance.

Key Grading Rubric for in Data Analysis Assignment	Description	Points (MAX 10)
Submit all code and output from R	Code exactly reproduce the output you present	2
	Code incomplete and unrelated with output	1
Comments on the output.	Your answers reflect the analysis of the output you present	2
	No clear link between output and interpretation. Incomplete answers to the questions	1
Interpretation of coefficients.	Precise interpretation of parameters of the model	2
	Not clear or incorrect interpretation of parameters in the model	1
Interpretation of results with economic model	Correctly linking the results of the exercise to the labor market theoretical model.	2
	Confusing or unclear link of the labor market theoretical model, and the results of the data analysis.	1

### **In Class Activity I: Context and Background.**

Objectives: I want the students to review and discuss the current debates about policies in labor economics, like migrations, unions, and minimum wage. This will help them to get a background of the theoretical model that I am going to analyze in class. Student will have a better perspective on why the model is important in the real world.

Plan: Discussion Board.

Break up the class in two groups of 20 each. For each group, send a separate news article about migration that illustrate the main debates. The students need to read the article and then participate in the discussion board. Create 2 separate discussion boards for each article.

Article 1: Sharp Cuts in Immigration Threaten U.S. Economy and Innovation <https://www.nytimes.com/2019/10/11/business/immigration-cuts-economy.html>

Article 2: How much inmigration is too much.

Next: the student need write one paragraph to summarize and give a brief opinion about the article that was assigned in the appropriate forum.

Next: students need to reply to one student in the forum they were not assigned initially.

Outcomes: Students understand the current debate and are able to recognize the common arguments involved.

### **In Class Activity II: Data Analysis Workshop**

Objectives: I want students to be familiar with the methods and practice of empirical economics. When working with code and data analysis is important to solve problems and share knowledge through teamwork and peer's discussion.

Plan: Think Pair Share.

#### Part 1. Individual work

Students are required to watch a video/attend a lecture, where I explain a simple regression model using example data from R. I explain in detail all steps and provide code.

Next: I assign a new exercise, that will use the same steps but with a new data set. Students need to build their own code, but the exercise will look close to the example in lecture.

#### Part 2. Pair work.

In pairs, I give them the following questionnaire to answer.

## Econ 402: Labor Economics Summer 2019.

1. Discuss about two errors that you founded in your team while running the code.
2. Name two different solutions for the problems you identify before.
3. What are two different ways of uploading the dataset to R.

### Part 3. Share finding with the class.

- In class, groups present the answers to the questionnaire, identifying the most common errors.
- I provide feedback on how to address and avoid those errors.

Outcomes: Clean code and output for the exercise. Students will identify common errors and avoid them in the future.

**Tips for this class:** Note that additional time and effort is required to complete credit for this course in the summer session. This includes not leaving the lecture after the break. We are all making a big effort here for preparing this class. You will become more efficient if working during the entire 6 weeks consistently, in small to medium chunks of time, that to leave all the work to the end.

You will make your life easier and mine if you follow the next suggestions: 1. Be prepared for class, reading the materials before class. 2. Checking emails and Canvas site before class. 3. Be on time and pay attention during lectures. 4. Participate in discussions and ask questions. 4. Take good lecture notes and learn to prepare cheat-sheets for exams.

**Academic Dishonesty:** Please review the University's Academic Integrity policy:

<http://academicintegrity.rutgers.edu/>. Academic misconduct will be taken very seriously. You are responsible for reading and adhering to Rutgers plagiarism and student academic integrity guidelines.

**Regrading policy:** In case you believe a score on midterm or homework is assigned incorrectly, you must turn in the exam with a 1-page description of the situation regarding a question with a complete explanation of why you believe deserve more credit. For the Final exam probably, there will be no time for this kind of claims.

**Course Schedule**

Below is a tentative course schedule. Please pay attention to announcements on Canvas in case of any scheduling changes.

<b>Date</b>	<b>Topic</b>	<b>Assignment</b>
<b>May 28</b>	Introduction: US labor market facts	
	Review Econometrics and Intermediate Micro	Intermediate Micro Handout
<b>May 30</b>	Labor Supply: A model for the decision to work.	
	Labor Supply: Empirical Analysis of Labor Supply	
<b>June 4</b>	Labor Supply: Work incentives and Social Welfare Programs	Assignment 1
	Labor Demand: The firm decision in the short run and the long run. Substitution and Scale Effects.	
<b>June 6</b>	Labor Demand: Wage Elasticities of demand. Substitutes and complements in production.	Assignment 2
	Labor Market Equilibrium: Payroll Taxes and Mandated Benefits	
<b>June 11</b>	Labor Market Equilibrium: Monopsony	In class activity 1.
	Review for Midterm	
<b>June 13</b>	Midterm Exam	
	Data Analysis Project working session.	
<b>June 18</b>	Human Capital: Education and Training	In class activity 2.
	Wage Distribution: skills biased technical change	
<b>June 20</b>	Minimum Wage revisited and empirical debates.	Data Analysis Project: first submission
	Immigration: Effects on wages.	
<b>June 25</b>	Immigration: Labor Mobility.	
	Discrimination in the labor market: Gender and race wage gaps.	
<b>June 27</b>	Labor Unions	Data Analysis Project: second submission
	Incentive Pay and Productivity compensation within firms.	
<b>July 2</b>	Final Exam.	
<b>July 3</b>	Submit final Data Analysis Project.	
<b>July 4</b>	No Class (Independence Day)	





## Course Readings.

It is important to read at least the Chapter of the textbook that goes along with each topic before class and certainly before exams! The articles are not required but provide a broader understanding of each topic and policy implications. Additional articles could be announced via Canvas site.

### 1. Introduction

- a) Basic Facts of the USA Labor Market. Measuring the Labor Force.  
Borjas. Chapter 1. Chapter 2: 2.1 and 2.2

Andrew Blank and Roxanna Edwards, "Tight labor market continues in 2018 as the unemployment rate falls to a 49-year low," Monthly Labor Review, U.S. Bureau of Labor Statistics, May 2019, <https://doi.org/10.21916/mlr.2019.9>

- b) Econometrics Review: Regression Analysis. Missing Variables Problem.  
Borjas. Chapter 1. Appendix

- c) Intermediate Microeconomics Review: Utility and Indifference Curves, Consumer Problem Price and Income Elasticity of Demand.  
Chapter 2 and 3. Nicholson, W., and C.M. Snyder. 2014. Intermediate Microeconomics and Its Application. Cengage Learning.

### 2. Labor Supply

- a) A model of the decision to work.  
Borjas. Chapter 2: 2.3-2.7

Blau, Francine D., and Lawrence M. Kahn. 2007. "Changes in the Labor Supply Behavior of Married Women: 1980–2000." Journal of Labor Economics 25 (3): 393–438.  
<https://doi.org/10.1086/513416>.

- b) Empirical Analysis of Labor Supply  
Borjas Chapter 2: 2.8.

Cesarini, David, Erik Lindqvist, Matthew J. Notowidigdo, and Robert Östling. 2017. "The Effect of Wealth on Individual and Household Labor Supply: Evidence from Swedish Lotteries." American Economic Review 107 (12): 3917–46.

<https://doi.org/10.1257/aer.20151589>.

Blog: <https://www.povertyactionlab.org/evaluation/how-does-winning-lottery-affect-labor-supply-evidence-sweden>

c) Work incentives and Social Welfare Programs

Borjas. Chapter 2: 2.11, 2.12, 2.14.

Jones, Damon, and Ioana Marinescu. 2018. "The Labor Market Impacts of Universal and Permanent Cash Transfers: Evidence from the Alaska Permanent Fund." National Bureau of Economic Research Working Paper Series No. 24312. <https://doi.org/10.3386/w24312>.

### 3. Labor Demand

a) The firm decision in the short run and the long run. Substitution and Scale Effects.

Borjas. Chapter 3: 3.1-3.4

Ehrenberg and Smith: Chapter 3: appendix 3A

b) Wage Elasticities of demand. Substitutes and complements in production.

Borjas. Chapter 3: 3.5-3.7

Hunt, Jennifer. 1999. "Has Work-Sharing Worked in Germany?\*" The Quarterly Journal of Economics 114 (1): 117–48. <https://doi.org/10.1162/003355399555963>.

Crépon, Bruno, and Francis Kramarz. 2002. "Employed 40 Hours or Not Employed 39: Lessons from the 1982 Mandatory Reduction of the Workweek." Journal of Political Economy 110 (6): 1355–89. <https://doi.org/10.1086/342807>.

### 4. Labor Market Equilibrium.

a) Equilibrium in the labor market. Equilibrium across Labor Markets. Payroll Taxes and Mandated Benefits

Borjas. Chapter 4: 4.1-4.4

b) Monopsony

Borjas. Chapter 4: 4.9

Azar, José A, Ioana Marinescu, Marshall I Steinbaum, and Bledi Taska. 2018. "Concentration in US Labor Markets: Evidence From Online Vacancy Data." National Bureau of Economic Research Working Paper Series No. 24395. <https://doi.org/10.3386/w24395>.

Blog: <http://rooseveltinstitute.org/how-widespread-labor-monopsony-some-new-results-suggest-its-pervasive/>.

## 5. Human Capital: Education and Training

a) Education: The Schooling Model. Schoolings and Earnings. Estimating the returns to Education.

Borjas. Chapter 6. 6.2-6.6

Zimmerman, Seth D. 2014. "The Returns to College Admission for Academically Marginal Students." *Journal of Labor Economics* 32 (4): 711–54. <https://doi.org/10.1086/676661>.

Media Coverage: <https://slate.com/business/2014/09/college-graduate-vs-high-school-graduate-salaries.html>

b) Training: On the job Training. Training Programs. Mincer Equation.

Borjas. Chapter 7.1-7.2-7.3-7.4

LaLonde, Robert J. 1986. "Evaluating the Econometric Evaluations of Training Programs with Experimental Data." *The American Economic Review* 76 (4): 604–20.

Hentschel, J. Skills or jobs: Which comes first?. *IZA World of Labor* 2017: 339  
doi: 10.15185/izawol.339

Kluve, J. Youth labor market interventions. *IZA World of Labor* 2014: 106  
doi: 10.15185/izawol.106

## 6. Wage Distribution: skills biased technical change.

Borjas. Chapter 7.5,7.7,7.8

Autor, David H. 2019. "Work of the Past, Work of the Future." *AEA Papers and Proceedings* 109: 1–32. <https://doi.org/10.1257/pandp.20191110>.

Blog: <https://voxeu.org/article/work-past-work-future>

## 7. Minimum Wage.

a) Minimum Wage Theory revisited. Efficiency Wages.

Borjas. Chapter 3.10 Chapter 11.6

Paul Krugman. Notes on Walmart and Wages (Wonkish). *The New York Times* 2015.

b) Recent Empirical Debates: Employment.

Card, David, and Alan B. Krueger. 1994. "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania." *The American Economic Review* 84 (4): 772–93.

Dube, Arindrajit, T. William Lester, and Michael Reich. 2010. "Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties." *The Review of Economics and Statistics* 92 (4): 945–64. [https://doi.org/10.1162/REST\\_a\\_00039](https://doi.org/10.1162/REST_a_00039).

Neumark, D. Employment effects of minimum wages. *IZA World of Labor* 2018: 6 doi: 10.15185/izawol.6.v2

Neumark, David, J. M. Ian Salas, and William Wascher. 2014. "Revisiting the Minimum Wage—Employment Debate: Throwing Out the Baby with the Bathwater?" *ILR Review* 67 (3\_suppl): 608–48. <https://doi.org/10.1177/00197939140670S307>.

c) Recent Empirical Debates: Minimum Wage and Poverty.

Arindrajit Dube. Minimum wages and the distribution of family incomes in the United States. <https://equitablegrowth.org/minimum-wages-and-the-distribution-of-family-incomes-in-the-us/>

David Cooper. Raising the federal minimum wage to \$15 by 2024 would lift pay for nearly 40 million workers. <https://www.epi.org/publication/raising-the-federal-minimum-wage-to-15-by-2024-would-lift-pay-for-nearly-40-million-workers/>

## 8. Discrimination in the labor market.

a) Gender and Race Wage Gaps

Borjas Chapter 9.7-9.11

Kleven, Henrik, Camille Landais, Johanna Posch, Andreas Steinhauer, and Josef Zweimüller. 2019. "Child Penalties across Countries: Evidence and Explanations." *AEA Papers and Proceedings* 109: 122–26. <https://doi.org/10.1257/pandp.20191078>.

Blog Coverage: <https://voxeu.org/article/child-penalties-across-countries-evidence-and-explanations>

b) Employer Discrimination. Customer Discrimination. Statistical Discrimination

Borjas. Chapter 9.2-9.5

Bertrand, Marianne, and Sendhil Mullainathan. 2004. "Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination." *American Economic Review* 94 (4): 991–1013. <https://doi.org/10.1257/0002828042002561>.

## 9. Immigration.

a) Effects on natives' wages. Review of Theory.  
Borjas. Chapter 4.5-4.7

Card, David, and Alan B. Krueger. 1994. "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania." *The American Economic Review* 84 (4): 772–93.

Clemens, Michael A, and Jennifer Hunt. 2017. "The Labor Market Effects of Refugee Waves: Reconciling Conflicting Results." National Bureau of Economic Research Working Paper Series No. 23433. <https://doi.org/10.3386/w23433>.

Blog coverage: What 'Marielitos' Say About the Impact of Immigration. <https://www.cgdev.org/article/what-marielitos-say-about-impact-immigration-us-news-world-report>

b) Immigration and Labor Mobility: Internal Migration.  
Borjas Chapter. 8.1-8.5

## 10. Labor Unions

Models of Unions and efficient contracts. Union Wage Effects.  
Borjas. Chapter 10

DiNardo, John, and David S. Lee. 2004. "Economic Impacts of New Unionization on Private Sector Employers: 1984–2001\*." *The Quarterly Journal of Economics* 119 (4): 1383–1441. <https://doi.org/10.1162/0033553042476189>.

## 11. Incentive Pay and Productivity compensation within firms.

Piece Rates and Time Rates. Tournaments.

Borjas. Chapter 11. 11.1-11.5

CEO Compensation:

Mankiw, N. Gregory. 2013. "Defending the One Percent." *Journal of Economic Perspectives* 27 (3): 21–34. <https://doi.org/10.1257/jep.27.3.21>.

CEO compensation surged in 2017. Report • By Lawrence Mishel and Jessica Schieder • August 16, 2018. <https://www.epi.org/publication/ceo-compensation-surged-in-2017/>

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