# Syllabus: Seminar in Labor Economics I Economics 8676 Fall 2023 Tu-Th 2:00PM - 3:15PM ECON 5

Prof. Richard Mansfield Office: ECON 206C Office Hours: Monday 3:30PM-5:00PM, Tuesday 3:30PM-5:00PM

August 24, 2023

#### 1 Course Format

This course is designed to expose students to the current frontier of research on a collection of prominent topics within Labor Economics. The goal is to develop students' understanding of (a) how to evaluate both individual articles and the literature more generally within a particular topic, and (b) how to generate ideas for research that will advance the field.

With this goal in mind, for each topic I will provide an overview of the key theoretical and econometric issues relevant to the topic, and lead a discussion of the methods and findings of a couple of important papers. Students are expected to ask questions during the presentation.

Students will also be asked to submit two questions and one substantive criticism related to the primary reading for the day. These are primarily meant to ensure that each student has done the requisite reading and is prepared to contribute to the class discussion, but they also help me understand what to cover in the lecture.

The final two weeks of the course will be spent helping you generate your own research ideas by providing descriptions of key datasets in labor economics, big questions that the field has not satisfactorily addressed, and feedback on your nascent ideas.

# 2 Assignments and Grading

You will be graded on your midterm exam (25%), your final proposal (25%), two applied problem sets (35%), and class participation (15%).

The first problem set will involve replicating the results of Willis and Rosen (1979), which will be covered early in the semester. The second problem set will involve coding the estimation of a very simple dynamic discrete choice model.

The midterm exam (the Thursday after Thanksgiving break) will focus on your comprehension of the papers covered in class and in required readings. The final proposal will consist of a 6-10 pages describing a novel research question, requisite data, theoretical model, and approach to identification and estimation. Further details on the proposal will be provided during the course. The class participation score will be based on attendance, oral participation in class, and the questions and criticisms about readings described above.

#### 3 General Reference Materials

- Angrist, J. D., and J.-S. Pischke (2008): Mostly harmless econometrics: An empiricist's companion. Princeton university press.
- Ashenfelter, O., and D. Card (2010): Handbook of labor economics. Elsevier.
- Borjas, G. (2020): Labor Economics, 8th Edition. McGraw Hill.
- Cuhuc, P., S. Carcillo, and A. Zylberberg (2014): *Labor Economics*, 2nd Edition. MIT Press, Chapter 2.
- EHRENBERG, R., AND R. SMITH (2008): Modern Labor Economics, 10th Edition. Pearson/Addison Wesley, Chapters 3-5.
- GIBBONS, R. (1992): Game Theory for Applied Economists. Princeton: Princeton University Press.
- Hamermesh, D. (1993): Labor Demand. Princeton University Press, Chapters 1-3.
- LOVENHEIM, M., AND S. TURNER (2018): Economics of Education. MacMillan.
- Matyas, L., and P. Sevestre (2008): The Econometrics of Panel Data, 3rd Edition. Berlin: Springer-Verlag.

# 4 Course Topics and Associated Reading Lists

\$ indicates a required reading, to be discussed in class.

# 4.1 Empirical Methods in Labor Economics

- ADDA, J., AND R. COOPER (2003): Dynamic economics: quantitative methods and applications. The MIT Press.
- AGUIRREGABIRIA, V., AND P. MIRA (2010): "Dynamic discrete choice structural models: A survey," *Journal of Econometrics*, 156(1), 38–67.

- Angrist, J., and A. Krueger (1999): "Empirical Strategies in Labor Economics," in *Handbook of Labor Economics: Vol. 3A*, ed. by O. Ashenfelter, and D. Card, pp. 1277–1366. North Holland: Amsterdam.
- Blundell, R., and M. C. Dias (2009): "Alternative Approaches to Evaluation in Empirical Microeconomics," *Journal of Human Resources*, 44(3).
- Charness, G., and P. Kuhn (2011): "Lab Labor: What Can Labor Economists Learn from the Lab?," *Handbook of Labor Economics*, 4, 229–330.
- CHRISTENSEN, B. J., AND N. KIEFER (2009): Economic modeling and inference. Princeton Univ Pr.
- Imbens, G., and T. Lemieux (2008): "Regression Discontinuity Designs: A Guide to Practice," *Journal of Econometrics*, 142, 615–635.
- KEANE, M. (2010): "Structural vs. Atheoretic Approaches to Econometrics," *Journal of Econometrics*, 156(1), 3–20.
- MEYER, B. (1994): "Natural and Quasi-Experiments in Economics," NBER Working Paper 170.
- ROTHENBERG, T. (1971): "Identification in Parametric Models," *Econometrica*, 39(3), 577–591.
- WOLPIN, K. (2007): "Ex Ante Policy Evaluation, Structural Estimation and Model Selection," *American Economic Review*, 97(2), 48–52.

# 4.2 Labor Supply

- \$ ECKSTEIN, Z., AND K. WOLPIN (1989): "Dynamic Labour Force Participation of Married Women and Endogenous Wage Growth," *Review of Economic Studies*, 56(3), 375–390.
- \$ Lachowska, M., A. Mas, R. Saggio, and S. A. Woodbury (2023): "Work hours mismatch," Discussion paper, National Bureau of Economic Research.
- \$ MARTINEZ, I. Z., E. SAEZ, AND M. SIEGENTHALER (2021): "Intertemporal labor supply substitution? evidence from the swiss income tax holidays," *American Economic Review*, 111(2), 506–46.

- BECKER, G. (1965): "A Theory of the Allocation of Time," *Economic Journal*, 75(299), 493–517.
- Blundell, R., and T. Macurdy (1999): "Labor Supply," in *Handbook of Labor Economics: Vol. 3*, ed. by O. Ashenfelter, and D. Card, pp. 1559–1695. North Holland: Amsterdam.
- Burtless, G., and J. Hausman (1978): "The Effect of Taxation on Labor Supply," *Journal of Political Economy*, 86(6), 1103–1131.
- CAMERER, C., L. BABCOCK, G. LOEWENSTEIN, AND R. THALER (1997): "The Labor Supply of New York City Cab Drivers: One Day at a Time," *Quarterly Journal of Economics*, 112(2), 407–441.
- CHETTY, R. (2012): "Bounds on elasticities with optimization frictions: A synthesis of micro and macro evidence on labor supply," *Econometrica*, 80(3), 969–1018.
- EISSA, N., AND J. LIEBMAN (1996): "Labour Supply Response to the Earned Income Tax Credit," *Quarterly Journal of Economics*, 111(2), 605–637.
- FARBER, H. S. (2015): "Why you can't find a taxi in the rain and other labor supply lessons from cab drivers," *The Quarterly Journal of Economics*, 130(4), 1975–2026.
- Fehr, E., and L. Gotte (2007): "Do Workers Work More If Wages Are High? Evidence From a Randomized Field Experiment," *American Economic Review*, 97(1), 298–317.
- Goldin, C. (2014): "A grand gender convergence: Its last chapter," *The American Economic Review*, 104(4), 1091–1119.
- Golosov, M., M. Graber, M. Mogstad, and D. Novgorodsky (2021): "How Americans Respond to Idiosyncratic and Exogenous Changes in Household Wealth and Unearned Income," Discussion paper, National Bureau of Economic Research.
- HECKMAN, J. J. (1974): "Shadow Prices, Market Wages, and Labor Supply," *Econometrica*, 42(4), 679–694.
- ———— (1979): "Sample Selection Bias as a Specification Error," *Econometrica*, 47(1), 153–162.

- Keane, M., and R. Moffitt (1998): "A Structural Model of Multiple Welfare Program Participation and Labor Supply," *International Economic Review*, 39(3), 553–589.
- LANG, K., AND S. KHAN (1991): "The Effect of Hours Constraints on Labor Supply Estimates," Review of Economics and Statistics, 73(4), 605–611.
- Zaresani, A. (2020): "Adjustment cost and incentives to work: Evidence from a disability insurance program," *Journal of Public Economics*, 188, 104223.

#### 4.3 Labor Demand

- \$ Acemoglu, D., and P. Restrepo (2018): "Artificial intelligence, automation and work," Discussion paper, National Bureau of Economic Research.
- \$ Autor, D., A. Salomons, and B. Seegmiller (2020): "New Frontiers: The Origins and Content of New Work, 1940–2018," Discussion paper, MIT Mimeo.
- \$ Autor, D. H., D. Dorn, and G. H. Hanson (2013): "The China syndrome: Local labor market effects of import competition in the United States," *The American Economic Review*, 103(6), 2121–2168.
- \$ COOPER, R., J. HALTIWANGER, AND J. WILLIS (2004): "Dynamics of Labor Demand: Evidence From Plant-Level Observations and Aggregate Implications," NBER Working Paper 10297.
- \$ Hamermesh, D., and G. Pfann (1996): "Adjustment Costs in Factor Demand," Journal of Economic Literature, 34(3), 1264–1292.
- \$ Quach, S. (2020): "The labor market effects of expanding overtime coverage," Available at SSRN 3608506.
- ACEMOGLU, D., AND P. RESTREPO (2018): "The race between man and machine: Implications of technology for growth, factor shares, and employment," *American Economic Review*, 108(6), 1488–1542.
- ———— (2020): "Robots and jobs: Evidence from US labor markets," Journal of Political Economy, 128(6), 2188–2244.

- Autor, D. H. (2015): "Why are there still so many jobs? The history and future of workplace automation," *The Journal of Economic Perspectives*, 29(3), 3–30.
- Autor, D. H., D. Dorn, G. H. Hanson, and J. Song (2014): "Trade adjustment: Worker-level evidence," *The Quarterly Journal of Economics*, 129(4), 1799–1860.
- Bewley, T. (1995): "A Depressed Labor Market as Explained by Participants," *American Economic Review*, 85(2), 250–254.
- Brynjolfsson, E., and A. McAfee (2014): The second machine age: Work, progress, and prosperity in a time of brilliant technologies. WW Norton & Company.
- Hamermesh, D. (1993): Labor Demand. Princeton University Press, Chapters 1-3.
- MEER, J., AND J. WEST (2016): "Effects of the minimum wage on employment dynamics," *Journal of Human Resources*, 51(2), 500–522.

# 4.4 Human Capital Investment

- \$ Todd, P., and K. Wolpin (2006): "Using Experimental Data to Validate a Dynamic Behavioral Model of Child Schooling: Assessing the Impact of a School Subsidy Program in Mexico," *American Economic Review*, 96(5), 1384—1417.
- \$ WILLIS, R., AND S. ROSEN (1979): "Education and Self-Selection," *Journal of Political Economy*, 87(5), S7–S36.
- BECKER, G. (1993): Human Capital, 3rd Edition. Columbia University Press, Read Part 1, pg. 29-158.
- BEN-PORATH, Y. (1967): "The Production of Human Capital and the Life Cycle of Earnings," *Journal of Political Economy*, 75(4), 352–365.
- Blundell, R., M. Costa Dias, C. Meghir, and J. Shaw (2016): "Female labor supply, human capital, and welfare reform," *Econometrica*, 84(5), 1705–1753.
- CARD, D. (1999): "The Causal Effect of Education on Earnings," in *Hand-book of Labor Economics: Vol. 3A*, ed. by O. Ashenfelter, and D. Card, p. 1801:1863. North Holland: Amsterdam.

KEANE, M., AND K. WOLPIN (1997): "The Career Decisions of Young Men," Journal of Political Economy, 105(3), 473–522.

# 4.5 Evaluating the Productivity of Educational Inputs

- \$ CHETTY, R., J. N. FRIEDMAN, AND J. E. ROCKOFF (2014a): "Measuring the impacts of teachers I: Evaluating bias in teacher value-added estimates," *The American Economic Review*, 104(9), 2593–2632.
- \$ Deming, D., and C. Walters (2017): "The impacts of price and spending subsidies on us postsecondary attainment," NBER Working Paper.
- ALTONJI, J., T. ELDER, AND C. TABER (2005): "Selection on Observed and Unobserved Variables: Assessing the Effectiveness of Catholic Schools," *Journal of Political Economy*, 113(1), 151–184.
- Angrist, J. D., P. D. Hull, P. A. Pathak, and C. R. Walters (2017): "Leveraging lotteries for school value-added: Testing and estimation," *The Quarterly Journal of Economics*, 132(2), 871–919.
- Bettinger, E. P., B. T. Long, P. Oreopoulos, and L. Sanbonmatsu (2012): "The Role of Application Assistance and Information in College Decisions: Results from the H&R Block Fafsa Experiment," *The Quarterly Journal of Economics*, 127(3), 1205–1242.
- Cunha, F., J. Heckman, and S. Schennach (2010): "Estimating the Technology of Cognitive and Non-Cognitive Skill Formation," *Econometrica*, 78(3), 883–931.
- Dobbie, W., and R. F. Jr. (2011): "Are High-Quality Schools Enough to Increase Achievement Among the Poor? Evidence from the Harlem Children's Zone," *American Economic Journal Applied Economics*, 3(3), 158–187.
- MEGHIR, C., AND S. RIVKIN (2010): "Econometric Methods for Research in Education," NBER Working Paper 16003. Prepared for the Handbook of Education.

- Muralidharan, K., A. Singh, and A. J. Ganimian (2016): "Disrupting education? Experimental evidence on technology-aided instruction in India," Discussion paper, National Bureau of Economic Research.
- OREOPOLOUS, P. (2006): "Estimating Average and Local Treatment Effects When Compulsory Schooling Laws Really Matter," *American Economic Review*, 96(1), 152–175.
- Todd, P., and K. Wolpin (2003): "On the Specification and Estimation of the Production Function for Cognitive Achievement," *The Economic Journal*, 113(485), F3–F33.

#### 4.7 Amenities and Local Labor Markets

- \$ BAYER, P., R. McMillan, A. Murphy, and C. Timmins (2016): "A dynamic model of demand for houses and neighborhoods," *Econometrica*, 84(3), 893–942.
- \$ Busso, M., J. Gregory, and P. Kline (2013): "Assessing the incidence and efficiency of a prominent place based policy," *The American Economic Review*, 103(2), 897–947.
- \$ KLINE, P., AND E. MORETTI (2014): "People, places, and public policy: Some simple welfare economics of local economic development programs,"
- \$ Roback, J. (1982): "Wages, Rents, and the Quality of Life," Journal of Political Economy, 90, 1257–1278.
- \$ ROSEN, S. (1974): "Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition," *Journal of Political Economy*, 82(1), 34–55.
- Anelli, M., and F. Koenig (2021): "Willingness to Pay for Workplace Safety," .
- BAYER, P., F. FERREIRA, AND R. McMILLAN (2007): "A Unified Framework for Measuring Preferences of Schools and Neighborhoods," *Journal of Political Economy*, 115(4), 588–638.
- CHAY, K., AND M. GREENSTONE (2005): "Does Air Quality Matter? Evidence from the Housing Market," *Journal of Political Economy*, 113(2), 376–424.

- CHETTY, R., N. HENDREN, AND L. F. KATZ (2016): "The effects of exposure to better neighborhoods on children: New evidence from the Moving to Opportunity experiment," *The American Economic Review*, 106(4), 855–902.
- CHETTY, R., N. HENDREN, P. KLINE, AND E. SAEZ (2014): "Where is the land of Opportunity? The Geography of Intergenerational Mobility in the United States," *The Quarterly Journal of Economics*, 129(4), 1553–1623.
- DIAMOND, R. (2016): "The determinants and welfare implications of US workers' diverging location choices by skill: 1980-2000," *American Economic Review*, 106(3), 479–524.
- Enrico, M. (2011): "Local labor markets," *Handbook of labor economics*, 4, 1237–1313.
- Greenstone, M., R. Hornbeck, and E. Moretti (2010): "Identifying agglomeration spillovers: Evidence from winners and losers of large plant openings," *Journal of Political Economy*, 118(3), 536–598.
- KLINE, P., AND E. MORETTI (2013): "Local Economic Development, Agglomeration Economies, and the Big Push: 100 Years of Evidence from the Tennessee Valley Authority," *Quarterly Journal of Economics*, Forthcoming.

# 4.8 Labor Market Search/Wage Equilibrium

- \$ Jarosch, G., J. Nimcsik, and I. Sorkin (2019): "Granular Search, Market Structure, and Wages," .
- Cahuc, P., F. Postel-Vinay, and J.-M. Robin (2006): "Wage Bargaining with On-the-Job Search: Theory and Evidence," *Econometrica*, 74(2), 323–364.
- Christensen, B. J., R. Lentz, D. T. Mortensen, G. R. Neumann, and A. Werwatz (2005): "On-the-job Search and the Wage Distribution," *Journal of Labor Economics*, 23(1), 31–58.
- Cuhuc, P., and A. Zylberberg (2004): *Labor Economics*. MIT Press, Chapters 3 and 9.

- Davis, S. T., and J. Haltiwanger (1992): "Gross Job Creation, Gross Job Destruction, and Employment Reallocation," *Quarterly Journal of Economics*, 107(3), 819–863.
- Manning, A., and B. Petrongolo (2017): "How local are labor markets? Evidence from a spatial job search model," *American Economic Review*, 107(10), 2877–2907.
- Marinescu, I. (2017): "The general equilibrium impacts of unemployment insurance: Evidence from a large online job board," *Journal of Public Economics*, 150, 14–29.
- MARINESCU, I., AND R. WOLTHOFF (2016): "Opening the black box of the matching function: The power of words," Discussion paper, National Bureau of Economic Research.
- MORTENSEN, D. (2003): Wage Dispersion: Why Are Similar Workers Paid Differently? Cambridge: MIT Press, All Chapters.
- MORTENSEN, D., AND C. PISSARIDES (1999): "New Developments in Models of Search in the Labor Market," in *Handbook of Labor Economics*, *Volume 3 Part 2*, ed. by O. Ashenfelter, and D. Card. Amsterdam: North Holland Press.
- Moscarini, G. (2001): "Excess Worker Reallocation," The Review of Economic Studies, 68, 593–612.
- PISSARIDES, C. (2000): Equilibrium Unemployment Theory. Cambridge: MIT Press.
- POSTEL-VINAY, F., AND J.-M. ROBIN (2002): "Equilibrium wage dispersion with worker and employer heterogeneity," *Econometrica*, 70(6), 2295–2350.
- ROGERSON, R., AND R. SHIMER (2011): "Search in macroeconomic models of the labor market," *Handbook of Labor Economics*, 4, 619–700.
- SHIMER, R. (2005): "The Assignment of Workers to Jobs in an Economy with Coordination Frictions," *Journal of Political Economy*, 113(5), 996–1025.
- TABER, C., AND R. VEJLIN (2016): "Estimation of a roy, search, compensating differential model of the labor market," Discussion paper, National Bureau of Economic Research.

# 4.10 Matching Markets

- \$ Choo, E., and A. Siow (2006): "Who marries whom and why," *Journal of political Economy*, 114(1), 175–201.
- ABDULKADIROGLU, A., J. D. ANGRIST, Y. NARITA, AND P. A. PATHAK (2015): "Research Design Meets Market Design: Using Centralized Assignment for Impact Evaluation," Discussion paper, Working paper.
- CHIAPPORI, P.-A., M. IYIGUN, AND Y. WEISS (2009): "Investment in schooling and the marriage market," *American Economic Review*, 99(5), 1689–1713.
- Chiappori, P.-A., and B. Salanie (2014): "The econometrics of matching models," forthcoming Journal of Economic Literature.
- CHOO, E. (2015): "Dynamic marriage matching: An empirical framework," *Econometrica*, 83(4), 1373–1423.
- Fox, J. T. (2009): "Structural empirical work using matching models," New Palgrave Dictionary of Economics. Online edition.
- Galichon, A., and B. Salanié (2012): "Cupid's Invisible Hand: Social Surplus and Identification in Matching Models," .
- Mourifié, I., and A. Siow (2021): "The Cobb-Douglas marriage matching function: Marriage matching with peer and scale effects," *Journal of Labor Economics*, 39(S1), S239–S274.
- ROTH, A. E., AND M. A. O. SOTOMAYOR (1992): Two-sided matching: A study in game-theoretic modeling and analysis, no. 18. Cambridge University Press.

# 5 University Policies

#### 5.1 Classroom Behavior

Students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote, or online. Failure to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender

identity, gender expression, veteran status, political affiliation, or political philosophy.

For more information, see the classroom behavior policy, the Student Code of Conduct, and the Office of Institutional Equity and Compliance.

#### 5.2 Requirements for Infectious Diseases

Members of the CU Boulder community and visitors to campus must follow university, department, and building health and safety requirements and all public health orders to reduce the risk of spreading infectious diseases. The CU Boulder campus is currently mask optional. However, if masks are again required in classrooms, students who fail to adhere to masking requirements will be asked to leave class. Students who do not leave class when asked or who refuse to comply with these requirements will be referred to Student Conduct & Conflict Resolution. Students who require accommodation because a disability prevents them from fulfilling safety measures related to infectious disease will be asked to follow the steps in the "Accommodation for Disabilities" statement on this syllabus. For those who feel ill and think you might have COVID-19 or if you have tested positive for COVID-19, please stay home and follow the further guidance of the Public Health Office. For those who have been in close contact with someone who has COVID-19 but do not have any symptoms and have not tested positive for COVID-19, you do not need to stay home. Accommodation for Disabilities, Temporary Medical Conditions, and Medical Isolation Disability Services determines accommodations based on documented disabilities in the academic environment. If you qualify for accommodations because of a disability, submit your accommodation letter from Disability Services to your faculty member in a timely manner so your needs can be addressed. Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance.

If you have a temporary medical condition or required medical isolation for which you require accommodation, e-mail the professor to formulate a plan of action. Also see Temporary Medical Conditions on the Disability Services website.

#### 5.3 Accommodation for Disabilities

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic

environment. Information on requesting accommodations is located on the Disability Services website. Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance. If you have a temporary medical condition, see Temporary Medical Conditions on the Disability Services website.

#### 5.4 Preferred Student Names and Pronouns

CU Boulder recognizes that students' legal information doesn't always align with how they identify. Students may update their preferred names and pronouns via the student portal; those preferred names and pronouns are listed on instructors' class rosters. In the absence of such updates, the name that appears on the class roster is the student's legal name.

#### 5.5 Honor Code

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the Honor Code may include but are not limited to: plagiarism (including use of paper writing services or technology [such as essay bots]), cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to Student Conduct & Conflict Resolution: honor@colorado.edu, 303-492-5550. Students found responsible for violating the Honor Code will be assigned resolution outcomes from the Student Conduct & Conflict Resolution as well as be subject to academic sanctions from the faculty member. Visit Honor Code for more information on the academic integrity policy.

# 5.6 Sexual Misconduct, Discrimination, Harassment and/or Related Retaliation

CU Boulder is committed to fostering an inclusive and welcoming learning, working, and living environment. University policy prohibits protected-class discrimination and harassment, sexual misconduct (harassment, exploitation, and assault), intimate partner violence (dating or domestic violence), stalking, and related retaliation by or against members of our community on- and off-campus. These behaviors harm individuals and our community. The Office of Institutional Equity and Compliance (OIEC) addresses these concerns, and individuals who believe they have been subjected to misconduct

can contact OIEC at 303-492-2127 or email cureport@colorado.edu. Information about university policies, reporting options, and support resources can be found on the OIEC website. Please know that faculty and graduate instructors have a responsibility to inform OIEC when they are made aware of incidents related to these policies regardless of when or where something occurred. This is to ensure that individuals impacted receive an outreach from OIEC about their options for addressing a concern and the support resources available. To learn more about reporting and support resources for a variety of issues, visit Don't Ignore It.

#### 5.7 Religious Holidays

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. If you expect to miss an exam in order to observe a religious holiday, you must communicate this request to the professor prior to Tuesday, August 31st.