

Econ 350, 2014 Plan

This draft, 11/27/13

1. Inequality and Social Mobility—Dimensions
 - (a) Some Facts
 - (b) Importance of Prices, Endowments, Shocks
 - (c) Relative Importance of Skills
 - (d) Transfers and Taxes
 - (e) Importance of Family and Policy on Endowments
 - (f) Philosophical [Typist: D—what?]
2. + 3. Effects of Education—Start with Card
 - (a) Causal Inference + IV
 - (b) Structural Models
 - (c) Evidence
 - (d) Role of Capabilities
(A broader notion of skill)
4. Role of Shocks and Uncertainty—How Much Variability External?
(How to model uncertainty)
5. Dynamics of Skill Formation
 - (a) B.P. + Technology / Adult
 - (b) Creating Initial Conditions
6. Factor Models and Models of Family Influence
7. Genes vs. Environments
8. Health
 - (a) Lifecycle Origins and Determinants
9. Social Mobility—Factors and Models
10. Summary


[Syllabus /
Reading List](#)
[Data](#)
[Problem Sets](#)
[Supplemental
Reading List](#)
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Syllabus](#)
[University of
Chicago](#)

Economics 350, Winter 2013
Life Cycle Dynamics and Inequality
<http://jenni.uchicago.edu/econ350/>

Announcements

Instructor: [James J. Heckman](#)

Lecture times: Tuesday and Thursday, 1:30pm - 3:00pm

Lecture classroom: Rosenwald 329

Teaching Assistants:

- Sara Moreira (spmoreira@uchicago.edu)
- Stefano Mosso (smosso@uchicago.edu)
- Cullen Roberts (cullen.a.roberts@gmail.com)

TA sessions:

- Monday, 4pm - 7pm, Rosenwald 301
- Thursday, 4:30pm - 7:30pm, Rosenwald 432

(Occasionally, the instructor will use a TA session to supplement or make up a class)

If you experience problems with this website, please contact [Jennifer Pachon](#).

Course Overview

This class is organized around the study of lifecycle inequality. This is a vast topic, and one can only consider certain aspects of it. There will be five sub-topics. Economic and statistical frameworks will be used to organize and interpret the evidence and to evaluate alternative policy proposals. The first topic sets the stage for the topics that follow.

The five topics are:

- I. Inequality: Basic Facts, Frameworks, and Open Questions
- II. Consumption, Wealth and Earnings Dynamics
- III. Acquisition and Pricing of Skills
 1. Education: Determinants, Returns, Dynamics and Option Value
 2. Sorting of Workers and Pricing of Skills
 - a. Efficiency Unit Models

- b. Roy Model and Models of Comparative Advantage
 - c. Hedonic Models and Sorting
 - d. Preferences and Traits
- 3. Models of Post-School Investment and Wage Growth
- 4. Uncertainty, Learning, and Wage Growth
- IV. Labor Supply and Labor Demand
 - 1. Labor Supply
 - 2. Labor Demand
- V. Role of Family: Intergenerational Mobility, Skill formation, and Health
 - 1. Intra-Household Allocations and Inequality (Lecturer: Alessandra Voena)
 - 2. Family Influence: Genes, Environments, and Intergenerational Transmission Mechanisms
 - 3. The Technology of Skill Formation
 - 4. Inequality in Health

For some sections, there are videos from the 2012 Summer School on Socioeconomic Inequality that provide useful introductions and summaries of main themes.

Requirements and grading: This class is an advanced seminar on some open questions in the economics of inequality. The goal is to approach, and hopefully advance, the frontiers of knowledge. Active student participation is essential. Student reports and classroom participation supplementing the lectures is requested, starting after the first few weeks of class. The quality of this class depends of the level of engagement of its students. Students should pick one of the major themes and prepare reports on one of the topics within the five broad themes, in consultation with the instructor and the TAs. Students should challenge everything, and successful challenges will be highly rewarded. Problem sets will allow the students to anticipate the material discussed in the course and synthesize it.

Results from a take-home final **or** oral exam will constitute **50%** of the grade. Grades on the problem sets constitute 25% of the final grade. Reports, and active classroom and after-class participation can produce bonus points up to 25% of the grade (this has admittedly subjective elements, but I will ask TAs to help monitor it). In addition, bonuses will be given to students who actively participate in the weekly supplemental methodological sessions, and who make original points in class.

Supplementary Lectures: Class meets twice a week. There will be some exceptions if a make-up class is required. There are review sessions on Monday and Thursday. Supplementary lectures will be held in these sessions to provide students with tools needed to do frontier research in this area. They will focus on aspects of the economic and econometric theory, computation, and empirical research not developed in detail in class. These sessions will be conducted by the instructor, the TAs, and post-doctoral fellows.

There will be supplementary and voluntary lectures on econometric estimation and computational methods organized by Philipp Eisenhauer (eisenhauer@policy-lab.org). For his reading list, please

click [here](#). Students will be taught modern computational techniques to make the theory empirically operational. This is sometimes called "structural econometrics," and is an essential set of tools for students seeking to do creative empirical work guided by theory. The focus is on estimation and model formulation.

There is a core reading list, posted at: <http://jenni.uchicago.edu/econ350/index.htm>. It offers a guide to the literature. The course will follow handouts designated in advance before each lecture. A supplementary reading list (<http://jenni.uchicago.edu/econ350/supplement/index.htm>) is available to help students who wish to investigate topics at greater depth than can be covered in class. A technical reading list providing background on the tools needed to do frontier research is provided at <http://jenni.uchicago.edu/econ350/technical/index.htm>.

Lecture notes will be posted as available. Please check this website in advance of each lecture.

Some background lectures on inequality from the 2012 Summer School on Socioeconomic Inequality can be found here: <http://sssi.uchicago.edu/page/summer-school-socioeconomic-inequality-schedule>

Core Syllabus and Lecture Notes

NOTE: Please note that the lecture notes posted here are for your convenience. Professor Heckman may edit them significantly up until the day when he uses them in class, so please keep this in mind if you intend to print them out.

I. Inequality: Basic Facts, Frameworks, and Open Questions

A. Frameworks and Open Questions

- Lecture Video: Heckman, James J. (2012). "[Inequality: An Overview, Part 1](#)," and "[Inequality: An Overview, Part 2](#)." Presented at the Summer School on Socioeconomic Inequality 2012, Chicago, IL. July 9, 2012.
- Handout: Heckman, James J. (2013). "[Some Open Questions in the Study of Inequality](#)."
- Handout: Heckman, James J. (2013). "[Basic Life Cycle Model Used and Extended Throughout the Course](#)."
- Foster, James and Sen, Amartya. (1997). "[On Economic Inequality After a Quarter Century](#)," in *On Economic Inequality*, Oxford, UK: Oxford University Press. pp. 195-219.
 - [Handout](#) for Foster and Sen (1997).

B. General Facts

- Handout: Heckman, James J. (2013). "[Some Facts and Open Issues in the Study of Inequality](#)."
- Organization for Economic Cooperation and Development. (2011). [Divided We Stand: Why Inequality Keeps Rising](#). Paris, France: OECD Publishing.
 - [Handout](#) for OECD (2011).
 - [Extract](#) from OECD (2011).

- Congressional Budget Office. (2011). "[Trends in the Distribution of Household Income Between 1979 and 2007](#)." Washington, DC: Congress of the United States, Congressional Budget Office.
 - [Handout](#) for Congressional Budget Office (2011).
- Rosenzweig, Mark. (2010). "[Global Wage Inequality and the International Flow of Migrants](#)," in [Equity and Growth in a Globalizing World](#), Ravi Kanbur and Michael Spence, eds. Washington, DC: The World Bank.
 - [Handout](#) for Rosenzweig (2010).
- 1. Wage and Earnings Inequality
 - Goldin, C. and L. Katz. (2007). "[Long-Run Changes in the Wage Structure: Narrowing, Widening, Polarizing](#)." *Brookings Papers on Economic Activity*, 2:135-165.
 - [Handout](#) on Goldin and Katz (2007).
 - Autor, D., L. Katz, and M. Kearney. (2008). "[Trends in U.S. Wage Inequality: Revising the Revisionists](#)," *Review of Economics and Statistics* 90(2): 300-323.
 - [Handout](#) for Autor, Katz, and Kearney (2008).
 - Acemoglu, Daron and David Autor. (2011). "[Skills, Tasks and Technologies: Implications for Employment and Earnings](#)," In: Orley Ashenfelter and David Card, (eds.), *Handbook of Labor Economics*, Volume 4, Part B, Chapter 12. Amsterdam: Elsevier. pp. 1043-1171.
 - [Handout](#) for Acemoglu and Autor (2011)
 - [Data Extract](#)
 - [Theory Extract](#)
 - Handout: Acemoglu, D. and D. Autor. (2011). "[Skills, Tasks and Technologies Beyond the Canonical Model](#)"
 - Piketty, Thomas and Saez, Emmanuel. (2004). Updated and expanded version of "[Income Inequality in the United States, 1913-2002](#)." Originally published in: *Quarterly Journal of Economics*, 118(1): 1-39.
 - [Updated Tables and Figures, 2007](#)
 - [Updated Tables and Figures, 2010](#)
 - [Handout](#) for Piketty and Saez (2004).
 - Kopczuk, Wojciech, and Emmanuel Saez, and Jae Song. (2010). "[Earnings Inequality and Mobility in the United States: Evidence from Social Security Data Since 1937](#)." *Quarterly Journal of Economics*, 125(1): 91-128.
 - [Handout](#) for Kopczuk, Saez, and Song (2010).
 - [Tables and Figures](#)
 - Gottschalk, P. and R. Moffitt. (2009). "[The Rising Instability of U.S. Earnings](#)." *Journal of Economic Perspectives*, 23(4): 3-24.
 - [Handout](#) for Gottschalk and Moffitt (2009).
 - Atkinson, A., T. Piketty, and E. Saez. 2011. "[Top Incomes in the Long Run of](#)

History." *Journal of Economic Literature* 49: 3–71.

- Handout for Atkinson, Piketty, and Saez (2011).
- Jäntti, Markus and Stephen P. Jenkins (2010). "The Impact of Macroeconomic Conditions on Income Inequality," *Journal of Economic Inequality*, 8(2): 221-240.
- Handout for Jäntti and Jenkins (2010).

2. Consumption and Welfare: Going Beyond Earnings Inequality

- Handout: Moreira, Sara. (2013). "Consumption Inequality: The role of measurement problems."
 - Attanasio, Orazio, Battistin, Eric, Ichimura, Hidehiko. (2007). "What really happened to consumption inequality in the US?" In: Berndt, E., Hulten, C. (Eds.), *Hard-to-Measure Goods and Services: Essays in Honor of Zvi Griliches*. University of Chicago Press, Chicago.
 - Handout for Attanasio, Battistin, and Ichimura (2007).
 - Attanasio, Orazio; Hurst, Erik and Pistaferri, Luigi. (2012). "The Evolution of Income, Consumption, and Leisure Inequality in The US, 1980-2010." National Bureau of Economic Research Working Paper No. 17982.
 - Handout for Attanasio, Hurst, and Pistaferri (2012)
 - Aguiar, Mark A. and Mark Bils. (2012). "Has Consumption Inequality Mirrored Income Inequality?" Unpublished working paper, Princeton University.
 - Handout for Aguiar and Bils (2011).
 - Meyer, Bruce C. and James X. Sullivan. (2011). "The Material Well-Being of the Poor and the Middle Class Since 1980," American Enterprise Institute Working Paper No. 2011-04.
 - Handout for Meyer and Sullivan (2011).
 - Meyer, Bruce C. and James X. Sullivan. (2012). "Winning the War: Poverty from the Great Society to the Great Recession," Forthcoming, *Brookings Papers on Economic Activity*.
 - HANDOUT for Meyer and Sullivan (2012).
 - Krueger, Dirk, Fabrizio Perri, Luigi Pistaferri, Giovanni L. Violante. (2010). "Cross-sectional Facts for Macroeconomists," *Review of Economic Dynamics*, 13(1): 1-14.
 - Handout for Krueger, Perri, Pistaferri, and Violante (2010).
 - Fisher, Jonathan, Johnson, David S., and Smeeding, Timothy M. (2012). "Inequality of Income and Consumption: Measuring the Trends in Inequality from 1985-2010 for the Same Individuals," Presented at the Association for Public Policy Analysis and Management 2012 Fall Research Conference, Baltimore, MD, November 8, 2012.
- ## 3. Intergenerational Mobility
- Solon, Gary. (2002). "Cross-Country Differences in Intergenerational Earnings Mobility," *Journal of Economic Perspectives*, 16: 59-66.
 - Handout for Solon (2002)
 - Charles, Kerwin Kofi and Hurst, Erik. (2003). "The Correlation of Wealth across

Generations," *Journal of Political Economy*, 111(6): 1155-1182.

- Handout on Charles and Hurst (2003).
- Corak, Miles. (2006). "Do Poor Children Become Poor Adults? Lessons from a Cross Country Comparison of Generational Earnings Mobility," IZA Discussion Paper No. 1993.
 - Handout for Corak (1993).
- Corak, Miles, Gustafsson, Björn, and Österberg, Torun. (2004). "Intergenerational Influences on the Receipt of Unemployment Insurance in Canada and Sweden," in *Generational Income Mobility in North America and Europe*, M. Corak, ed. Cambridge, UK: Cambridge University Press. pp. 245-288.
- Jäntti, Markus, Bratsberg, Bernt, Røed, Knut, Raaum, Oddbjørn, Naylor, Robin, Österbacka, Eva, Björklund, Anders, and Eriksson, Tor. (2006). "American Exceptionalism in a New Light : A Comparison of Intergenerational Earnings Mobility in the Nordic Countries, the United Kingdom and the United States," IZA Discussion Paper No. 1938.
 - Handout for Jäntti, et al. (2006).
- Black, Sandra E. and Paul J. Devereux. (2011). "Recent Developments in Intergenerational Mobility," In Orley Ashenfelter and David Card, eds., *Handbook of Labor Economics*, Vol. 4. Amsterdam: Elsevier, 2011. pp. 1487-1541.
 - Handout for Black and Devereux (2011).

C. Mincer Models for Earnings and Schooling: A Basic Framework for Measurement and Interpretation

- Heckman, James J.; Lochner, Lance J. and Todd, Petra E. (2006). "Earnings Functions, Rates of Return and Treatment Effects: The Mincer Equation and Beyond," in *Handbook of the Economics of Education*, E. A. Hanushek, and F. Welch, eds. Amsterdam: North-Holland. pp. 307-458.
 - Handout for Heckman, Lochner, and Todd (2006).

II. Consumption, Wealth, and Earnings Dynamics

- Lecture Video: Mosso, Stefano. (2012). "Income Processes and Consumption Choices Over the Life-Cycle, Part 1," and Handout: "Income Processes and Consumption Choices Over the Life-Cycle, Part 2," Presented at the Summer School on Socioeconomic Inequality 2012, Chicago, IL. July 9, 2012.
- Browning, Martin, Lars Peter Hansen and James J. Heckman. (1999). "Micro Data and General Equilibrium Models," in J. Taylor and M. Woodford, eds. *Handbook of Macroeconomics*. Amsterdam: North-Holland. pp. 543-633.
 - Handout for Browning, Hansen, and Heckman (1999).
 - Extract of Browning, Hansen, and Heckman (1999).
 - Permanent Income, Intertemporal Substitution and Credit Constraints (2009).

- Meghir, Costas and Luigi Pistaferri. (2011). "[Earnings, Consumption and Life Cycle Choices](#)," In: Orley Ashenfelter and David Card, eds., *Handbook of Labor Economics*, Vol. 4, Part B. Amsterdam: Elsevier. pp. 773-854.
 - [Handout](#) for Meghir and Pistaferri (2011).
- Meghir, Costas, and Luigi Pistaferri. (2004). "[Income Variance Dynamics and Heterogeneity](#)." *Econometrica*, 72(1): 1-32.
 - [Handout](#) for Meghir and Pistaferri (2004).
- Adda, Jerome, Christian Dustmann, Costas Meghir, and Jean-Marc Robin. (2013). "[Career Progression, Economic Downturns, and Skills](#)," Unpublished manuscript, Institute for Fiscal Policy.
 - HANDOUT for Adda, Dustmann, Meghir, and Robin (2013).
- Krueger, D. and F. Perri. (2006). "[Does Income Inequality Lead to Consumption Inequality? Evidence and Theory](#)." *Review of Economic Studies*, 73(1): 163-193.
 - [Handout](#) for Krueger and Perri (2006)
 - [Full Handout](#) for Krueger and Perri (2006).
- Blundell, Richard and Etheridge, Ben. (2010). "[Consumption, Income and Earnings Inequality in Britain](#)." *Review of Economic Dynamics*, 13(1): 76-102.
 - [Handout](#) for Blundell and Etheridge (2010).
 - [Full Handout](#) for Blundell and Etheridge (2010).
- Blundell, R., L. Pistaferri, and I. Preston. (2008). "[Consumption Inequality and Partial Insurance](#)." *American Economic Review*, 98(5): 1887-1921.
 - [Handout](#) for Blundell, Pistaferri, and Preston (2008).
 - [Full Handout](#) for Blundell, Pistaferri, and Preston (2008).
- Blundell, Richard and Ian Preston. (1998). "[Consumption Inequality and Income Uncertainty](#)," *Quarterly Journal of Economics*, 113(2): 603-640.
 - [Handout](#) for Blundell and Preston (1998).
- Violante, Gianluca. (2012). "[Partial Consumption Insurance: Measurement and Models](#)," Presented at the Becker-Friedman Institute Macroeconomics Lecture Series, November 2012.
- Browning, Martin, and Ejrnæs, Mette. (2010). "[Modelling Income Processes with Lots of Heterogeneity](#)," *Review of Economic Studies*, 77(4): 1353-1381.
 - [Handout](#) for Browning and Ejrnæs, (2010).
 - [Extract](#) of Browning and Ejrnæs, (2010).
- Hause, John C. (1980, May). "[The fine structure of earnings and the on-the-job training hypothesis](#)." *Econometrica* 48 (4): 1013-1029.
 - [Handout](#) for Hause (1980).
- Taber, Christopher and Sanders, Carl. (2012). "[Life-Cycle Wage Growth and Heterogeneous Human Capital](#)," *Annual Reviews of Economics*, 4: 399-425.
 - [Handout](#) for Taber and Sanders (2011).
- Haider, Steven J. (2001); "[Earnings Instability and Earnings Inequality of Males in the United States: 1967-1991](#)." *Journal of Labor Economics* 19(4): 799-836.

- [Handout](#) for Haider (2001).
- Haider, Steven and Gary Solon. (2006). "[Life-Cycle Variation in the Association between Current and Lifetime Earnings](#)." *American Economic Review*, 96(4): 1308-1320.
 - [Handout](#) for Haider and Solon (2006).
- Hryshko, Dmytro. (2012). "[Labor Income Profiles Are Not Heterogeneous: Evidence from Income Growth Rates](#)," *Quantitative Economics*, 3(2): 177-209.
 - [Full Handout](#) for Hryshko (2012).
 - [Handout](#) by Hryshko (2013).
- Hryshko, Dmytro. (2012). "[RIP to HIP: The Data Reject Heterogeneous Labor Income Profiles](#)," Unpublished manuscript, Department of Economics, University of Alberta.
 - [Handout](#) for Hryshko (2009).
- Moffitt, Robert A. and Peter Gottschalk. (2012). "[Trends in the Transitory Variance of Male Earnings: Methods and Evidence](#)." *Journal of Human Resources*, 47(1): 204-236.
 - [Handout](#) for Moffitt and Gottschalk (2012).
- Gottschalk, Peter and Robert Moffitt. (1994). "[The Growth of Earnings Instability in the U.S. Labor Market](#)." *Brookings Papers on Economic Activity* No. 2, pp. 217-272.
 - [Handout](#) for Gottschalk and Moffitt (1994).
- Attanasio, Orazio P and Nicola Pavoni. (2011). "[Risk Sharing in Private Information Models With Asset Accumulation: Explaining the Excess Smoothness of Consumption](#)." *Econometrica*, 79(4): 1027-1068.
 - [Handout](#) for Attanasio and Pavoni (2011).
- Aiyagari, S. Rao. (1994). "[Uninsured Idiosyncratic Risk and Aggregate Saving](#)," *Quarterly Journal of Economics*, 109(3): 659-684.
 - [Handout](#) for Aiyagari (1994).
- Kaplan, Greg; Violante, Giovanni L. (2010). "[How Much Consumption Insurance beyond Self-Insurance?](#)" *American Economic Journal: Macroeconomics*, 2(4): 53-87.
 - [Handout](#) for Kaplan and Violante (2010).
- Heathcote, Jonathan, Storesletten, Kjetil, and Violante, Giovanni L. (2012). "[Consumption and Labor Supply with Partial Insurance: An Analytical Framework](#)," Unpublished manuscript, Federal Reserve Bank of Minneapolis.
 - [Handout](#) for Heathcote, Storesletten, and Violante (2012).
- Blundell, Richard; Pistaferri, Luigi, and Saporta-Eksten, Itay. (2012). "[Consumption Inequality and Family Labor Supply](#)." National Bureau of Economic Research Working Paper No. 18445.
 - [Handout](#) for Blundell, Pistaferri, and Saporta-Eksten (2012).
- Attanasio, Orazio and Davis, Steven J. (1996). "[Relative Wage Movements and the Distribution of Consumption](#)," *Journal of Political Economy*, 104(6): 1227-1262.
 - [Handout](#) for Attanasio and Davis (1996).
- Heathcote, Jonathan; and Storesletten, Kjetil; and Violante, Giovanni L. (2010). "[The Macroeconomic Implications of Rising Wage Inequality in the United States](#)," *Journal of Political Economy*, 118(4): 681-722.

- [Handout](#) for Heathcote, Storesletten, and Violante (2010).
- Heathcote, Jonathan, Storesletten, Kjetil, and Violante, Giovanni L. (2011). "[From Wages to Welfare: Decomposing Gains and Losses from Rising Inequality](#)," Unpublished manuscript, Federal Reserve Bank of Minneapolis. Presented at the Tenth World Congress of the Econometric Society, Shanghai, China, 2011.
 - [Handout](#) for Heathcote, Storesletten, and Violante (2011).
- Handouts:
 - [Risk-Return Relationships in More General Models](#) (2009).
 - Lise, Jeremy. (2009). "[Income Processes/Shocks, Market Structure, and Information](#)."

III. Acquisition and Pricing of Skills

1. Education: Determinants, Returns, Dynamics, and Option Value

- Rubinstein, Yona and Yoram Weiss. (2006). "[Post Schooling Wage Growth: Investment, Search and Learning](#)," In: E. Hanushek and F. Welch, (eds.), *Handbook of the Economics of Education*, Volume 1, Chapter 1. Amsterdam: Elsevier. pp. 1-67.
 - [Handout](#) for Rubinstein and Weiss (2006).
- Lecture Video: Lochner, Lance. (2012). "[Education and Inequality, Part 1](#)," and "[Education and Inequality, Part 2](#)," Presented at the Summer School on Socioeconomic Inequality 2012, Chicago, IL. July 9, 2012.
- Willis, Robert and Sherwin Rosen. (1979). "[Education and Self-Selection](#)," *Journal of Political Economy*, 87(5, Part 2):S7-S36.
 - [Handout](#) for Willis and Rosen. (1979) .
- Handout: "[Notes on Identification of the Roy Model and the Generalized Roy Model and the Benefits of a Factor Structure Model](#)"
- Carneiro, Pedro and James J. Heckman. (2002). "[The Evidence on Credit Constraints in Post-Secondary Schooling](#)," *Economic Journal* 112(482):705-734.
 - [Handout](#) for Carneiro and Heckman (2002).

2. Sorting of Workers and Pricing of Skills

a. Efficiency Unit Models

- Heckman, James J. and Jose Scheinkman. (1987). "[The Importance of Bundling in A Gorman-Lancaster Model of Demand For Characteristics: A Theoretical Analysis With Evidence From the Labor Market](#)," *Review of Economic Studies*, 54(2):243-255.
 - Handout: "[Evidence on Efficiency Unit Models: Is Comparative Advantage & Sorting Needed to Explain Wages? An Efficiency Units Model with Multiple Skills that Can, Under Certain Conditions, Produce a Model of Comparative Advantage: Notes on 'The Importance of Bundling in a Gorman-Lancaster Model of Earnings'](#)."

b. Roy Model and Models of Comparative Advantage

- Heckman, James J., and Bo E. Honore. (1990). "[The Empirical Content of the Roy](#)

Model." *Econometrica*, 58(5): 1121-1149.

- Handout for Heckman and Honore (1990).
- Handout: "Econometric Causality and the Roy Model"
- Handout: Almlund, Mathilde, and James J. Heckman. (2012). "The Roy Model and the Generalized Roy Model." Appendix.
- Handout: "Notes on Generalized Roy Model."
- Handout: "The Generalized Roy Model Applied to the Problem of Policy Evaluation."
- Heckman, J. and G. Sedlacek (1985). "Heterogeneity, Aggregation and Market Wage Functions: An Empirical Model of Self-Selection in the Labor Market," *Journal of Political Economy*, 93(6), 1077-1125.
 - Handout for Heckman and Sedlacek (1985).
- Acemoglu, Daron and David Autor. (2011). "Skills, Tasks and Technologies: Implications for Employment and Earnings," In: Orley Ashenfelter and David Card, (eds.), *Handbook of Labor Economics*, Volume 4, Part B, Chapter 12. Amsterdam: Elsevier. pp. 1043-1171.
 - Handout for Acemoglu and Autor (2011)
 - Data Extract
 - Theory Extract
 - Handout: Acemoglu, D. and D. Autor. (2011). "Skills, Tasks and Technologies Beyond the Canonical Model"
- Costinot, Arnaud and Vogel, Jonathan. (2010). "Matching and Inequality in the World Economy," *Journal of Political Economy*, 118(4): pp. 747-786.
 - Handout for Costinot and Vogel (2010).
- Borjas, George J. (1987). "Self-Selection and the Earnings of Immigrants." *American Economic Review*, 77(4): 531-553.
 - Handout for Borjas (1987).

c. Hedonic Models and Sorting

- Handout: Heckman, James J. (2012). "Hedonic Models and Sorting (Nonlinear Pricing)."
- Sattinger, Michael. (1979). " Differential Rents and the Distribution of Earnings," *Oxford Economic Papers*, 31(1): 60-71.
 - Detailed Notes on Sattinger (1979)
- Tinbergen, Jan. (1956). "On the Theory of Income Distribution." *Weltwirtschaftliches Archiv*, 77(2):155-173. Reprinted in Tinbergen, Jan. (1959). *Selected Papers*, L.H. Klaassen, L.M. Koyck and H.J. Witteveen, eds. Amsterdam: North-Holland.
 - Extracts from Tinbergen (1956).
 - Handout: "Tinbergen and Rosen Hedonic Models."
- Handout: Eeckhout, Jan and Philipp Kircher. (2011). "Sorting and Factor Intensity: Production and Unemployment across Skills," Presented at the Milton Friedman

Institute, University of Chicago, May 2011.

- Ekeland, Ivar, James J. Heckman and Lars Nesheim. (2004). "[Identification and Estimation of Hedonic Models](#)." *Journal of Political Economy*, 112(S1):S60-S109.
 - [Handout](#) for Ekeland, Heckman, and Nesheim (2004).
- Kniesner, Thomas J. and John D. Leeth. (1988). "[Simulating Hedonic Labor Market Models: Computational Issues and Policy Applications](#)," *International Economic Review*, 29(4): 755-789.
 - [Handout](#) for Kniesner and Leeth (1988).
- Chiappori, Pierre-André, Robert McCann, and Lars Nesheim. (2010). "[Hedonic Price Equilibria, Stable Matching, and Optimal Transport: Equivalence, Topology, and Uniqueness](#)." *Economic Theory*, 42(2): 317-354.
 - [Handout](#) for Chiappori, McCann, and Nesheim (2010).
- Kanemoto, Yoshitsugu. (1988). "[Hedonic Prices and the Benefits of Public Projects](#)." *Econometrica*, 56(4): 981-989.
 - [Handout](#) for Kanemoto (1988).

d. Preferences and Traits

- Handout: Heckman, James J. (2012). "[The Economics of Personality](#)" Presented at the Summer School on Socioeconomic Inequality 2012, Chicago, IL. July 9, 2012. [Supplemental Slides](#).
- Almlund, Mathilde, Duckworth, Angela Lee, Heckman, James J., and Kautz, Timothy. (2011). "[Personality Psychology and Economics](#)," In *Handbook of the Economics of Education*, E. Hanushek, S. Machin, and S. Woessman, eds. Amsterdam: Elsevier. pp. 1-181. [IZA Working Paper version](#).
 - [Handout](#) for Almlund, Duckworth, Heckman, and Kautz (2011).
 - Handout: Golsteyn, Bart H.H. , Lex Borghans, James J. Heckman, and John Eric Humphries. (2010). "[IQ, Achievement, and Noncognitive Skill](#)"
- Heckman, James J. and Tim Kautz. (2012). "[Hard Evidence on Soft Skills](#)," Adam Smith Lecture, *Labour Economics*, 19(4): 451-464. (2012).
 - Handout: Heckman, James J. (2012). "[Hard Evidence on Soft Skills](#)."
- Lindqvist, Erik, and Vestman, Roine. (2011). "[The Labor Market Returns to Cognitive and Noncognitive Ability: Evidence from the Swedish Enlistment](#)." *American Economic Journal: Applied Economics*, 3(1): 101-128.
 - [Handout](#) for Lindqvist and Vestman (2011).
- Heckman, James J., Jora Stixrud, and Sergio Urzua. (2006). "[The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior](#)," *Journal of Labor Economics*, 24(3):411-482.
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Economics 350, Winter 2012: Supplemental Reading List

I. Inequality: Facts, Frameworks for Measuring It, and Open Issues

- Aaberge, Rolf and Mogstad, Magne. (2010). "[On the Measurement of Long-Term Income Inequality and Income Mobility](#)," IZA Discussion Paper No. 4699.
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 - [Introduction](#).
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- Piketty, Thomas. (2000). "[Theories of Persistent Inequality and Intergenerational Mobility](#)," in *Handbook of Income Distribution*, A. Atkinson and F. Bourguignon, eds. Elsevier Science: Amsterdam. pp. 429-476.
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- Meyer, Bruce D. and James X. Sullivan. (2011). "[Five Decades of Consumption and Income Poverty](#)," Unpublished manuscript, University of Chicago, Harris School of Public Policy.
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- Meyer, B. and J. Sullivan. (2008). "[Changes in the Consumption, Income, and Well-Being of Single Mother Headed Families](#)." *American Economic Review*, 98(5): 2221-2241.
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- Ben-Shalom, Y., R. Moffitt, and J. K. Scholz. (2011). "[An Assessment of the Effectiveness of Anti-Poverty Policies in the United States](#)." NBER Working Paper No. 17042.
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- Katz, Lawrence F. and David H. Autor. (1999). "[Changes in the Wage Structure and Earnings Inequality](#)," In Orley C. Ashenfelter and David Card, eds., *Handbook of Labor Economics*, Vol. 3, Part A. Amsterdam: Elsevier. pp. 1463-1555.
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- DeNavas-Walt, Carmen, Bernadette D. Proctor, and Jessica C. Smith. (2011). "[Income, Poverty, and Health Insurance Coverage in the United States: 2010](#)," U.S. Census Bureau, Current Population Reports, P60-239. U.S. Government Printing Office, Washington, DC, 2011.
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Inequality: An Overview of the Dimensions of the Problem

- Handouts from TA Session 1, January 11, 2012:
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 - [Econ350: Measures of Inequality](#)
 - [Inequality and Social Welfare](#)
 - [Decomposition of the Gini Coefficient](#)
- Piketty, Thomas and Saez, Emmanuel. (2004). Updated and expanded version of "[Income Inequality in the United States, 1913-2002](#)." Originally published in: *Quarterly Journal of Economics*, 118(1): 1-39.
 - [Updated Tables and Figures, 2007](#)
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 - Jencks, C. et al. (1972). *Inequality: Reassessment of the Effects of Family and Schooling in America*. New York: Basic Books.
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 - Piketty, Thomas and Emmanuel Saez. (2007). "[How Progressive Is the U.S. Federal Tax System? A Historical and International Perspective](#)." *Journal of Economic Perspectives*, 21(1): 3-24.
 - [Handout](#) for Piketty and Saez (2007)
 - Piketty, Thomas, Emmanuel Saez, and Stefanie Stantcheva. (2011). "[Optimal Taxation of Top Labor Incomes: A Tale of Three Elasticities](#)," NBER Working Paper No. 17616.
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 - Foster, James and Michael Wolfson. (2010). "[Polarization and the Decline of the Middle Class: Canada and the U.S.](#)" *Journal of Economic Inequality*, 8(2): 247-273.
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II. Alternative Approaches to Understanding the Pricing of Skills

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- Gabaix, Xavier and Augustin Landier. (2008). "[Why has CEO Pay Increased So Much?](#)" *Quarterly Journal of Economics*, 123(1): 49-100.
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4. Assignment Models

5. Preferences and Traits

- Prevoo, Tyas and Bas ter Weel. (2012). "[The Effect of Personality on Socio-Economic Outcomes: The Importance of Early Conscientiousness](#)," Unpublished manuscript, Maastricht University.

C. Labor Supply and Tax Incentives

- Thomas MaCurdy. (2007). "[A Practitioner's Approach to Estimating Intertemporal Relationships Using Longitudinal Data: Lessons from Applications in Wage Dynamics](#)," In: James J. Heckman and Edward E. Leamer, Eds, *Handbook of Econometrics*, Volume 6, Part 1. Amsterdam: Elsevier. pp. 4057-4167.

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D. Search Theory: Models and Evidence

- [Dimensions of Tax Design: the Mirrlees Review](#), (2010). J. Mirrlees, S. Adam, T. Besley, R. Blundell, S. Bond, R. Chote, M. Gammie, P. Johnson, G. Myles and J. Poterba (eds). Oxford, UK: Oxford University Press

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 - [Topics in Quantitative Economic Analysis](#)
 - [More on Empirical Content of Life Cycle Theory](#)
 - [Creating Panel Data from a Time-series of Cross-sections](#)
 - [Household Models: Some Tests and Some Estimates](#)
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- [Income Processes/Shocks, Market Structure, and Information](#)
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