

Syllabus

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Course: Economic Growth

Professor:

2026 SECOND SEMESTER

COURSE OUTLINE

This course covers a number of key issues (theory and empirics) in the broad literature of economic growth. We begin with classical and neoclassical models, then develop into endogenous growth theory. After that we explore some papers in the following main subjects: human capital and international diffusion of ideas and technology, financing of human capital, occupation choices, location choices, income distribution, life cycle, retirement.

METHODOLOGY

Much of the class will revolve around discussion of assigned readings. This makes it essential that students read the selected papers before lecture and come prepared to discuss. Besides that students will have to choose a paper from the bibliography section to present and critically assess. The in-class presentation should be based on slides prepared and submitted as part of the assessment. And finally, it is expected that students write and present a paper proposal.

PROGRAM

1. Questions and Evidence
2. Solow Model and Extensions (MRW (1992))
3. Neoclassical Growth: Ramsey-Cass-Koopmans
4. Overlapping Generations Model
5. Neoclassical Endogenous Growth Model
6. Expanding Variety Models & Schumpeterian Growth
7. Directed Technological Change Model
8. Institutions and Growth
9. Human Capital and Development
10. Geography, Location Decisions and Growth
11. Diffusion of Ideas/Technology

BIBLIOGRAPHY

The topics for the lectures are:

I. Questions and Evidence:

1. Acemoglu, D. (2009). Introduction to Modern Economic Growth, Chapter 1.

2. Barro, R.; Sala-i-Martin, X. (2003). Economic Growth, 2ed. The MIT Press. Chapter 1.
3. Klenow, P. & Rodríguez-Clare, A. (1997), "The Neoclassical Revival in Growth Economics"
4. Jones, C. (1997), "On the Evolution of the World Income Distribution"

II. Solow Model and Extensions (MRW (1992)):

1. Acemoglu, D. (2009). Introduction to Modern Economic Growth, Chapters 2, 3 and 4.
2. Barro, R.; Sala-i-Martin, X. (2003). Economic Growth, 2ed. The MIT Press. Chapter 1.
3. Mankiw, Romer & Weil (1992), "A Contribution to the Empirics of Economic Growth"
4. Solow, R. (1956), "A Contribution to the Theory of Economic Growth"

III. Neoclassical Growth: Ramsey-Cass-Koopmans:

5. Acemoglu, D. (2009). Introduction to Modern Economic Growth, Chapters 5 and 8.
6. Barro, R.; Sala-i-Martin, X. (2003). Economic Growth, 2ed. The MIT Press. Chapter 2.

IV. Overlapping Generations Model:

7. Acemoglu, D. (2009). Introduction to Modern Economic Growth, Chapters 5 and 9.
8. Bewley, T. F. (2007). General Equilibrium, Overlapping Generations Models, and Optimal Growth Theory, Harvard University Press, Cambridge, Massachusetts.

V. Neoclassical Endogenous Growth Model:

9. Acemoglu, D. (2009). Introduction to Modern Economic Growth, Chapters 10, 11 and 12.

VI. Expanding Variety Models & Schumpeterian Growth:

10. Acemoglu, D. (2009). Introduction to Modern Economic Growth, Chapter 13 and 14.

VII. Directed Technological Change Model:

11. Acemoglu, D. (2009). Introduction to Modern Economic Growth, Chapter 15.
12. Acemoglu, D. and Zilibotti, F. (2001). Productivity Differences, The Quarterly Journal of Economics, 116(2).
13. Souza, G. (2024). The Labor Market Consequences of Appropriate Technology, Working Paper.

VIII. Institutions and Growth:

14. Acemoglu, D., S. Johnson and J. A. Robinson (2001). "The Colonial Origins of Comparative Development: An Empirical Investigation", American Economic Review 91: 1369- 1401.

IX. Human Capital and Development:

15. Acemoglu, D. and Autor, D., 2011. "Skills, tasks and technologies: Implications for employment and earnings". Handbook of labor economics, 2011 – Elsevier
16. Agostinelli, F., Doepke, M., Sorrenti, G. and Zilibotti, F. 2022. "When the Great Equalizer Shuts Down: Schools, Peers, and Parents in Pandemic Times". Journal of Public Economics, 206, 104574
17. Bills, M., Kaymak, B. and Wu, K. 2024. "Labor Substitutability among Schooling Groups". American Economic Journal: Macroeconomics 16 (4): 1–34.
18. Bills, M. e P. Klenow, 2000. "Does Schooling Causes Growth?," American Economic Review, 90, 5, 1160-1183.
19. Cordoba. J.C. and Marla Ripoll. What explains schooling differences across

- countries? *Journal of Monetary Economics*, 60(2):184--202, 2013
20. Costinot, Arnaud, and Jonathan Vogel. 2010. "Matching and Inequality in the World Economy." *Journal of Political Economy* 118 (4): 747–86
 21. Fernandez, R. and Rogerson, R. "Sorting and Long-Run Inequality" *QJE* (2001) 116 (4): 1305-1341
 22. Ferriere, A., Navarro, G. and Reyes-Heroles, R. 2023. "Escaping the Losses from Trade: The Impact of Heterogeneity on Skill Formation". Working paper.
 23. Fujimoto, J., Lagakos, D. and Van Vuren, M. 2023. "Aggregate and Distributional Effects of 'Free' Secondary Schooling in the Developing World". Working paper.
 24. Hanushek, E. e D. D. Kimko, 2000. "Schooling, Labor-Force Quality, and the Growth of Nations," *American Economic Review*, 90, 5, 1184-1208.
 25. Hanushek, E. and Ruhose, E., 2017. "Knowledge Capital and Aggregate Income Differences: Development Accounting for U.S. States", *American Economic Journal: Macroeconomics*, 9 (4), 184-224
 26. Hendricks, L. and Todd Schoellman. Human capital and development accounting: New evidence from wage gains at migration. *Quarterly Journal of Economics*, 133(2):665--700, 2018
 27. Herrero, J. and Ocampo, S. 2023. "The macroeconomic consequences of subsistence self-employment". *Journal of Monetary Economics*, 136(2023), 91-106
 28. Hsieh, Hurst, Jones, and Klenow, 2019. "The Allocation of Talent and U.S. Economic Growth", *Econometrica*, 87 (5), 1439-74.
 29. Jang, S. and Yum, M. 2024. "Aggregate and Intergenerational Implications of School Closures: A Quantitative Assessment". *American Economic Journal: Macroeconomics*, 16(3), 90-130
 30. Jones, B. 2014. The Human Capital Stock: A Generalized Approach, *American Economic Review*. 104(11)
 31. Jovanovic, B. 2014. "Misallocation and Growth", *American Economic Review*, 104 (4): 1149-71.
 32. Lentz, R. and Roys, N. 2024. "Training and Search on the Job", *Review of Economic Dynamics*, 53, 123-146
 33. Manuelli, R., and Seshadri, A., 2014. "Human Capital and the Wealth of Nations." *American Economic Review*, 104 (9), 2736-62. **
 34. Roys and Seshadri, 2015. "Economic Development and the Organization of Production", working paper.
 35. Tkhir, A. 2021. "Education and Tax Policies in the Presence of Informality". Working paper

X. Geography, Location Decisions and Growth

1. Benabou, R. 1996. "Heterogeneity, Stratification, and Growth: Macroeconomic Implications of Community Structure and School Finance." *American Economic Review*, 86, 584-609.
2. Eaton, Jonathan, and Zvi Eckstein. 1997. "Cities and Growth: Theory and Evidence from France and Japan." *Regional Sci. and Urban Econ.* 27 (August): 443–74.
3. Fogli, A. and Guerrieri, V. "The End of the American Dream? Inequality and Segregation in US Cities", NBER Working Paper No. 26143, July 2019
4. Gennaioli, N., LaPorta, R., Lopez-de-Silanes, F. and Shleifer, A.. 2013. "Human Capital and Regional Development." *Quarterly Journal of Economics* 128 (1): 105-164
5. Glaeser, Edward L. 1999. "Learning in Cities." *J. Urban Econ.* 46 (September): 254–77.
6. Glaeser, Edward L., and David C. Mare. 2001. "Cities and Skills." *J. Labor Econ.* 19 (April): 316–42.
7. Glomm, Gerhard. 1992. "A Model of Growth and Migration." *Canadian J. Econ.* 25 (November): 901–22.

8. Glomm, G., and B. Ravikumar. "Public versus private investment in human capital: endogenous growth and income inequality." *Journal of Political Economy* 100 (1992): 818-34.
9. Fernandez, R. and R. Rogerson. "Public Education and Income Distribution: A Dynamic Quantitative Evaluation of Education-Finance Reform." *American Economic Review* 88 (1998): 813-33.
10. Lucas, R. E. Jr. 2004. "Life Earnings and Rural-Urban Migration", *Journal of Political Economy*, 112 (1). **
11. Rossi-Hansberg, E., Sarte, P. and Schwartzman, F. 2025. "Cognitive Hubs and Spatial Redistribution". *American Economic Journal: Macroeconomics*, forthcoming
12. Walsh, C. 2021. "Firm Creation and Local Growth". Working paper.

XI. Diffusion of Ideas/Technology

1. Adao, R., Beraja, M. and Pandalai-Nayar, N. 2021. "Technological Transitions with Skill Heterogeneity". Working paper.
2. Bento, P. and Olmstead-Rumsey, J. 2021. "Market Concentration and the Productivity Slowdown". Working paper.
3. Berthold Herrendorf and Arilton Teixeira, 2005. "How Barriers to International Trade affect TFP", *Review of Economic Dynamics*, 8 (4), 866-876
4. Buera, F., Hopenhayn, H., Shin, Y. and Trachter, N. 2024. "Big Push in Distorted Economies". Working paper
5. Buera, F. and Oberfield, E. 2015 "The Global Diffusion of Ideas, *Econometrica*, 88 (1), 83-114 **
6. Coe, D.T., E. Helpman, A. Hoffmaister, 1997. "North-South R&D Spillovers," *Economic Journal*, 107 (440), 134-149
7. Comim e Hobijn, 2010. "An Exploration of Technology Diffusion." *American Economic Review* 100 (5), 203–59
8. Comim and Hobijn, 2011. "Technology Diffusion and Postwar Growth, NBER, Annual Cambridge, MA
9. DasGupta, K. 2012. "Learning and Knowledge Diffusion in a Global Economy", *Journal of International Economics*, 87(2), 323-336
10. Eeckhout, J. Jovanovic, B. 2012. "Knowledge Spillovers and Inequality", *American Economic Review*, 92 (5), 1290-1307
11. Garicano, L. and Rossi-Hansberg, E. 2012. "Organizing Growth.", *Journal of Economic Theory*, 147(2), 623-656
12. Jesse Perla, Christopher Tonetti, and Michael E. Waugh, 2021. "Equilibrium Technology Diffusion, Trade, and Growth", *American Economic Review*, 111(1), 73-128.
13. Jonathan Chiu & Cesaire Meh & Randall Wright, 2017. "Innovation and Growth with Financial, and other, Frictions", *International Economic Review*, 58 (1), 95-125
14. Jovanovic, B. and Wang, Z. 2025. "Idea Diffusion and Property Rights". Working paper
15. Krusell, Per, and Erika Fäarnstrand Damsgaard, 2010. "The World Distribution of Income: Country TFP choice in a Nelson-Phelps Economy", working paper
16. Lucas, R., 1988. "On the Mechanics of Economic Development," *Journal of Monetary Economics*, 22, 3-42.
17. Lucas, R. E. and Moll, B. 2014. "Knowledge Growth and the Allocation of Time", *Journal of Political Economy*, 122 (1), 1-51
18. Parente, S. and E.C. Prescott, 1994. "Barriers to Technology Adoption and Development," *Journal of Political Economy*, 102(2), 298-321.

19. Tian, Y., Xia, J. and Yang, R. 2021. "Trade-Induced Urbanization and the Making of Modern Agriculture". Working paper.

GRADING

Problem Sets: 25%

Presentation of a paper of your choice to the class: 25%

Tips for the presentation can be found on:

<https://sites.google.com/site/bertholdherrendorf/presentation-tips>

Presentation of your paper's idea: 20%

Tips for the presentation can be found on:

<https://sites.google.com/site/bertholdherrendorf/presentation-tips>

Writeup of paper proposal: 30%

The purpose of making the assignment a paper proposal is that I would rather you get 50% of the way toward a project you are excited to continue after the course finishes than you complete a project in the timeframe of the course to which you will never return. You will formulate an original research idea, develop a practical plan for executing the idea, and take initial steps in the execution. The paper may take the following form:

1. Introduction: What is the question and why is the question of interest?
2. Literature Review: How does your paper fit into the broader literature?
3. Theoretical Motivation: This could be actual theory or just a sketch of the relevant theory that underlies your question.
4. Data: What data would you use to answer/address this question? Why are the data well suited to the question?
5. Methodology: How would you use the data/model to answer your question? Be explicit about identification and causality, keeping in mind that the same set of empirical facts can often support many theories.
6. Falsification Tests: What other specifications, tests and investigations could either bolster or cast doubt upon the primary tests of your hypotheses?
7. Preliminary Results: The extent of the results provided will differ across students based on the project and discussions with me.

PROFESSOR – EMAIL