

## DESARROLLO ECONÓMICO SUSTENTABLE

Codes & Credits		ENECO 771	6 Credits
Type of course	Postgraduate- Common Plan	Theoretical-practical	
Professor	<i>Ramón López</i>		
Assitant	-		
Requirements			
Schedule			

### COURSE DESCRIPTION

We start off by reviewing basic theoretical growth models mainly to deepen certain concepts on dynamic economics. Reviewing standard growth models will hopefully allow us to appreciate their significant limitations as guiding principles to illuminate economic growth processes as well as their implicit ideological biases associated with their “simplifying” assumptions. We show that by ignoring the obvious physical limits of the natural world, the widespread failures affecting environmental and capital markets, as well as by ignoring wealth distribution, mainstream neoclassical growth models provide a highly misleading and distorted view of the process of economic growth. Moreover, their intellectual dominance has been and continues to be in part responsible for massive policy failures to the detriment of the well-being of the vast majority of the population. Despite these shortcomings growth models can be useful as a starting point to begin understanding specific aspects of economic growth provided that we are fully aware of their vast limitations.

A key focus of this course is how countries can sustain economic growth that is both environmentally and socially sustainable in the presence of market failures affecting pollution and natural resources as well as capital markets in societies (such as the Chilean one) where wealth tend to be initially highly concentrated. The emphasis is on the fact that economic growth takes place under severe social and natural constraints which if not fully taken into consideration may lead to economic growth that benefit mostly a small wealthy elite with little improvements of the social well-being of the vast majority of the current generation and to large costs for future generations. We pay particular attention to the case of Chile as a prime example of economic growth that has characteristics that may lead to social and environmentally immiserating economic growth.

## I.- COURSE LEARNING OBJECTIVES

## LG y LO/ Competences

This course provides a unique perspective in analyzing the process of economic development within a framework that integrates economic growth, wealth distribution and the environment. While the course is essentially a course on theoretical aspects of economic development, we do use the growth, social distribution and environmental sustainability of Chile's recent experience as a key motivation of the course. In doing this we pay particular attention to market failures and the role of the state in mitigating or exacerbating the negative consequences of such failures for growth, social equity and the environment

1. Understand the theory around growth and sustainable development	Learning Goal / Learning Objective
2. Review of major growth models	Learning Goal / Learning Objectives:
3. Build the capacity of critical thinking	Learning Goal / Learning Objectives:
4. Reflect on the challenges of sustainability for the economies	Learning Goal / Learning Objectives:
5. Analyze the situation in Chile	Learning Goal / Learning Objectives:

## II.- CONTENTS

Topic	Content	Reading
1	<p><b>Neoclassical Growth models: growth within a "vacuum"</b></p> <p>A. Old Neoclassical Growth Models: Exogenous growth with a single "representative agent", and perfect capital markets</p> <p>B. New Growth models: endogenous growth with a single "representative</p>	<p>A.</p> <p>Swan, T.W. (1956). "Economic growth and capital accumulation". Economic Record, 32 (4): 334-61.</p> <p>Solow, R. (1956). "A contribution to the theory of economic growth". Quarterly Journal of Economics 70 (1):65-94.</p> <p>*Barro, R., and X. Sala I. Martin (1995), Economic Growth, McGraw-Hill Inc., New York (Chapters 1 to 5).</p> <p>B.</p> <p>Romer, P. (1986). "Increasing Returns and long-run growth," Journal of Political Economy, pp. 1002-1037.</p> <p>Romer, P. (1987). "Growth Based on Increasing Returns due to Specialization," American Economic Review, pp. 56-62.</p> <p>Romer, P. (1990). "Endogenous Technical Change," Journal of Political Economy, S71- S102.</p>

	agent” and perfect capital markets	<p>*Aghion, P. and P. Howitt (1998), <i>Endogenous Growth Theory</i>, MIT Press, Cambridge, Mass. Chapters 1 to 3.</p> <p>*Lucas, R. (1998). “On the Mechanics of Economic Development,” <i>Journal of Monetary Economics</i>, pp. 3-42.</p>
2	<p><b>Sustainable development 2: Climate change and economic growth</b></p> <p>A. Mainstream economists: “Kick the can down the road”</p> <p>B. Facing the climate change challenge.</p> <p>C. Natural disasters and economic growth</p>	<p>A.</p> <p>Nordhaus, William D. 1991. “To Slow or Not to Slow: The Economics of the Greenhouse Effect.” <i>Economic Journal</i> 101(407): 920–937.</p> <p>*Nordhaus, William D. 1994. <i>Managing the Global Commons: The Economics of Climate Change</i>. Cambridge, MA: MIT Press.</p> <p>*Nordhaus, William D. 2001. “Global Warming Economics.” <i>Science</i> 294: 1283–1284.</p> <p>B.</p> <p>*Acemoglu, D., P. Aghion, L. Bursztyn, and D. Hemous. “The environment and directed technological change”, <i>American Economic Review</i>, 102 (2012), 131-66.</p> <p>Stern, Nicholas. 2007. <i>The Economics of Climate Change: The Stern Review</i>. Cambridge University Press. Available online at <a href="http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm">http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm</a>.</p> <p>*Stern, Nicholas (2008). “The Economics of Climate Change,” <i>The American Economic Review</i> 98(2): 1-37.</p> <p>Weitzman, M.L. (2009) “On Modeling and Interpreting the Economics of Catastrophic Climate Change.” <i>The Review of Economics and Statistics</i> 2009 91(1): 1-19.</p> <p>Albala-Bertrand, J. M., 1993. "Natural disaster situations and growth: A macroeconomic model for sudden disaster impacts". <i>World Development</i>, 21(9).</p> <p>Jeroen Klomp and Kay Valck, 2014. "Natural disasters and economic growth: A meta-analysis". <i>Global Environmental Change</i>, 26, pp:183–195.</p> <p>*López R. 2011. "Natural Disaster and Dynamics of Intangible Assets. Working Paper}</p>
3	<p><b>Inequality, Credit Market Imperfections and Human Capital Accumulation</b></p>	<p>*Atkinson, Anthony B., Thomas Piketty, and Emmanuel Saez (2011), “Top Incomes in the Long Run of History.” <i>Journal of Economic Literature</i>, 49(1): 3–71.</p> <p>Belley, P. and L. Lochner (2007). “The changing role of family income and ability in determining educational achievement”. <i>Journal of Human Capital</i>, pp. 37-89.</p> <p>Berg, Andrew, Jonathan D. Ostry, and Jeromin Zettelmeyer (2012), “What Makes Growth Sustained?”, <i>Journal of Development Economics</i> 98(2012) 146-166.</p>

Bloom, D.E., Canning, D. & Sevilla, J., (2001). The Effect of Health on Economic Growth: Theory and Evidence. NBER Working Paper.

Caucutt, S. and L. Lochner (2006). "Early and late human capital investments, borrowing constraints, and the family", in *Innovation in Education*, Federal Reserve Bank of Cleveland, pp. 39-48.

\*Deaton, Angus. 2003. "Health, Inequality, and Economic Development." *Journal of Economic Literature*, 41(1): 113–158.

Esteban, J., Ray, D., 2006. "Inequality, Lobbying, and Resource Allocation." *The American Economic Review* 96(1): 257-279.

\*Engerman, Stanley L., and Kenneth L. Sokoloff (2002). *Factor Endowments, Inequality, and Paths of Development among New World Economies [with Comments]*. *Economia*, 3(1), pp.41- 109.

Galor, O., (2000), "Income Distribution and the Process of Development." *European Economic Review* 44: 706-712.

\*Galor, O., Zeira, J. (1993), "Income Distribution and Macroeconomics." *Review of Economic Studies* 60: 35- 52.

Goldberg, Pinelopi Koujianou, and Nina Pavcnik. 2007. "Distributional Effects of Globalization in Developing Countries." *Journal of Economic Literature*, 45(1): 39–82.

Hanushek, Eric A., and Ludger Woessmann (2008), "The Role of Cognitive Skills in Economic Development." *Journal of Economic Literature*, 46(3): 607–68 7

\*Hanushek, E. & Kimko, D. (2000), "Schooling, Labor-force Quality, and the Growth of Nations." *The American Economic Review*, 90(5) 1184-1208.

Haque, N. U., Montiel, P. J. (1989), "Consumption in Developing Countries: Tests for Liquidity Constraints and Finite Horizons." *Review of Economics and Statistics* 71(3):408-415.

Hoff, K. and J. Stiglitz, 2001, "Modern Economic Theory and Development", in Meier and Stiglitz (eds.) *Frontiers of Development Economics*, World Bank and Oxford University Press, New York.

\*Lochner, L. and A. Monge-Naranjo (2011). "Credit constraints in education". NBER Working Paper 17435

\*López, R. (2010). "Global economic crises, environmental-resource scarcity and wealth concentration", *CEPAL Review*, 102, pp 27-47, December, 2010.

Murphy, K. M., Shleifer, A., Vishny, R. W. (1991), "The Allocation of Talent: Implications for Growth." *Quarterly Journal of Economics* 106(2): 503-530.

\*Philippe Aghion & Eve Caroli & Cecilia Garcia-Penalosa (1999). "Inequality and Economic Growth: The Perspective of the New Growth Theories," *Journal of Economic Literature*, vol. 37(4), pages 1615-1660, December

Persson, T., Tabellini, G. (1994), "Is Inequality Harmful for Growth?" *The American Economic Review* 84: 600-621.

		<p>Piketty, Thomas and Emmanuel Saez (2003). "Income Inequality in the United States, 1913- 1998." Quarterly Journal of Economics, 2003, 118(1), pp. 1-39.</p> <p>Restuccia, D. and C. Urrutia (2004). "Intergenerational persistence of earnings: The role of early and college education", AER, pp.1354-78.</p> <p>Goldberg, Pinelopi Koujianou, and Nina Pavcnik. 2007. "Distributional Effects of Globalization in Developing Countries." Journal of Economic Literature, 45(1): 39–82.</p> <p>Stiglitz, Joseph E., Weiss, Andrew M., (1981). Credit rationing in markets with imperfect information. The American Economic Review, 71(3):393–409. 8</p> <p>*Zivin, J.S.G. &amp; Neidell, M.J., 2011. The Impact of Pollution on Worker Productivity. National Bureau of Economic Research Working Paper Series</p>
4	<p><b>Sustainable Development: wealth distribution, poverty, and natural resource scarcity</b></p>	<p>Antoci, A., P. Russu and E. Ticci (2012). "Environmental externalities and immiserating structural change in an economy with heterogeneous agents", Ecological Economics, 81, pp. 80-91.</p> <p>*Antoci, Angelo &amp; Galeotti, Marcello &amp; Russu, Paolo, 2011. "Poverty trap and global indeterminacy in a growth model with open-access natural resources," Journal of Economic Theory, Elsevier, vol. 146(2), pages 569-591, March.</p> <p>*Arrow, K., et al. (1995). "Economic Growth, Carrying Capacity and the Environment," Science (269): 520-21.</p> <p>Brander, J. and M. Taylor (1998). "The Simple Economics of Easter Island: A Ricardo-Malthus Model of renewable Resources", American Economic Review, pp.119-38.</p> <p>*Chilchilnisky, G. (1994). "North-South Trade and the Global Environment," American Economic Review 84: 851-874.</p> <p>*López, R. (1994). "The Environment as a Factor of Production: The Effects of Economic Growth and Trade Liberalization," Journal of Environmental Economics and Management, 27(2): 163-84.</p> <p>*López, R. (2007). "Structural Adjustment and Sustainable Development", in G. Atkinson, S. Dietz and E. Neumayer, Handbook of Sustainable Development, Edward Elgar, Cheltenham, UK and Northampton, MA, USA.</p> <p>López, R. and S. Mitra. (2000). "Corruption, Pollution and the Kuznets Curve," Journal of Environmental Economics and Management, 40, pp 137-150.</p> <p>Pearce, David (2005). Managing Environmental Wealth for Poverty Reduction. Poverty and Environmental Partnership, MDG7 Initiative, UNDP, New York.</p>
5	<p><b>Chile</b></p>	<p>*López, R. and S. Miller, "Chile: The Unbearable Burden of Inequality", World Development 36 (2008):2679-95.</p> <p>López, R. and E. Figueroa (2016). "On the nexus between fiscal policy and sustainable development", Sustainable Development, Vol. 24, pp. 201-219.</p>

		<p>*López, R. "Fiscal Policy: Promoting Faustian Growth", in Sehnbruch and Siavelis (eds.), Democratic Chile, the Politics and Policies of a Historic Coalition, 1990-2010, Lynne Rienner, Boulder, Colorado (2014).</p> <p>*López, R., E. Figueroa and P. Gutiérrez (2013). "La 'parte del león': Nuevas estimaciones de la participación de los súper ricos en el ingreso de Chile". Serie Documentos de Trabajo, Universidad de Chile, Departamento de Economía, Vol. 379 · pp. 1 - 32 · Marzo · 2013.</p> <p>López, R., P. Gutiérrez and E. Figueroa (2016). "Fundamental accrued capital gains and the measurement of top incomes: An application to Chile", The Journal of Economic Inequality, Vol. 14, pp.379-394.</p> <p>López, R. and co-authors (2018). "The wealth gifted to the large-scale copper mining industry in Chile, 2005-15. Cepal Review</p>
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\*Means Required readings

### III.- METHODOLOGY, EVALUATION AND BASIC REGULATIONS

#### 3.1.- Methodology:

Reflective Analytical Method. Face-to-face classes. The teacher exposes the conceptual structure, subsequently; attendees discussed the paper fundamental rights. The course has material of classes, together with articles of reading.

#### 3.2.- Evaluation:

- Two mid-terms (30% of the total grade)
- Written review and class presentation of two related papers (30% of total grade). Detailed instructions will be provided shortly.
- Final exam (40% of the total grade)

#### 3.3.- Basic Regulation

1. The classes will be the days and hours indicated by the program address.
2. For each class, the students must have read and studied in advance the corresponding bibliography.
3. The qualification of all the evaluations will be done with a score from 1 to 7.
4. The teacher reserves the right to add, delete or replace bibliography during the course of the program if he deems it appropriate for the course of the course.
5. The unjustified absence of a student to a requirement will be scored with note 1.
6. It is important to emphasize that each student must assume his / her own responsibility in fulfilling the program, especially in relation to:
7. to. Be up to date on the development of the subject and the various indications given by both the teacher and the course coordinator. For example, absence from a class session does not exempt you from the academic obligations indicated on that day.
8. Ensure the faithful compliance with the dates and deadlines established for the different evaluation activities. Once fixed and known, they will not be modified.
9. Obtain the support material indicated for the chair when appropriate.



10. All work submitted during the course of the program will only be of value to the extent that the author is able to explain and endorse them personally. Deliveries that contradict the above are not accepted. All medical justification corresponding to non-attendance to a requirement must be presented through the regular channels established by the University.
11. All forms of copy and / or plagiarism are penalized drastically, failing the chair with a grade of 1.0. To avoid any inconvenience, please check the relevant regulations here.

## IV.- BIBLIOGRAPHY

### Recommended Readings

- Acemoglu, Daron, and James A. Robinson (2012). *Why Nations Fail*. Crown Publishing Group, New York.
- Baran, Paul A. *The Political Economy of Growth* (1957), Monthly Review Press, New York.
- López, Ramón, and Michael A. Toman, 2006. *Economic Development and Environmental Sustainability: New Policy Options*, Oxford University Press, Oxford, UK.
- Jones, E.L. *Growth Recurring: Economic Change in world History*. 1988. Oxford University Press.
- Piketty, Thomas, 2013. *Capital in the twenty-first century*. Harvard University Press.

### Recommended Media Articles (Newspaper/Magazine/Essays):

- Cowen, T. (2011). "The Inequality That Matters", *The American Interest Online*, February, 2011.
- Fukuyama, F. (2011). "Left out", *The American Interest Online*, February, 2011.
- Fukuyama, F. and S. Colby (2009). "What were they thinking?" *The American Interest*, September/October 2011.
- Krugman, Paul (1999). "The Fall and Rise of Development Economics", At: <http://web.mit.edu/krugman/www/dishpan.html>
- López, Ramon (2011). "Economic Crises in a World of Resource Scarcity and Wealth Inequality" *TripleCrisis: Global Perspectives on Finance, Development, and Environment*. <http://triplecrisis.com/economic-crises-in-a-world-of-resource-scarcity/>
- Noah, Timothy (2010). "The great divergence", *Slate*, September 6- , September 6-16, 2010 16, 2010 16, 2010
- Stiglitz, Joseph E. (2011), "Of the 1%, By the 1%, For the 1%", *Vanity Fair*, May 2011 <http://www.vanityfair.com/society/features/2011/05/top-one-percent-201105>