

Course title: Trade, Development and Environment				
Course code: MPE 193		No. of credits: 4		L-T-P: 60-0-0
Learning hours: 60				
Pre-requisite course code and title (if any): MPE 131 (Microeconomics), MPE 172 (Econometrics) or equivalent				
Department: Department of Policy and Management Studies				
Course coordinator: Dr Shantanu De Roy			Course instructor:	
Contact details: shantanu.roy@terisas.ac.in				
Course type: Elective			Course offered in: Semester 3	
Course description: This course is centred around the following question: Why does trade take place and how does it affect the quality of life of people? The initial part of the course presents the evolution of theoretical models which demonstrate that there are gains from international trade. The course also delves into empirical studies that have been carried out to validate these models. While trade may improve productivity and incomes of nations, the distribution of the gains from trade may not be uniform across the population. Further, trade may accelerate environmental degradation and climate change. In a globalized world, policies pertaining to trade, capital flows and environment in one part of the world could have adverse impact on other locations. And therefore, in a globalized world, the success of the goals of sustainable development depend heavily on long term multilateral policies and actions. Finally, the course explores the role of globalization on development in India.				
Course objectives: <div><div></div><div>1. To train students to analyse globalization and its impact on environment and development.</div><div>2. Exposure to a wide range of theories of international trade. Some of these models establish gains from trade and others identify winners and losers from trade under a variety of contexts and assumptions.</div><div>3. To study empirical models of trade and trade policies.</div><div>4. To critically examine these theoretical and empirical models from the standpoint of developing nations.</div><div>5. To explore different aspects of the on-going debates on the impact of trade on environment, climate change, growth and development and to examine the empirical challenges that exist in this literature.</div><div>6. The specific impact of globalization and liberalization policies on India’s economic development will be explored as a part of the broader discussion of trade and development.</div></div>				
Course contents				
Module	Topic	L	T	P
1	International Trade: Theories and Empirics	26		
	<div><div></div><div>1.1 Ricardian Model of Comparative Advantage</div><div>1.2 Heckscher Ohlin and Heckscher Ohlin Vanek Models</div><div>1.3 Trade in Intermediate Inputs</div><div>1.4 Monopolistic Competition and Gravity Equation</div><div>1.5 Global Value Chains</div></div>			
2	Trade Policy	10		
	<div><div></div><div>2.1 Regional and Multilateral Trade Agreements (including WTO)</div><div>2.2 Import Tariffs and Dumping</div><div>2.3 Import Quotas and Export Subsidies</div></div>			
3	Trade and Environment	12		
	<div><div></div><div>3.1 Globalization vs Environment Debate</div><div>3.2 Scale, Composition and Technology Effects</div><div>3.2 Trade and Environmental Regulations (PHH, Porter Hypothesis, etc)</div><div>3.3 Environment and Agreements (WTO & RTAs)</div></div>			
4	Trade and Development	12		
	<div><div></div><div>4.1 Globalization vs Development Debate</div><div>4.2 Trade and Poverty</div><div>4.3 Trade and Inequality</div><div>4.4 Economics of Fair Trade</div><div>4.5 Globalization and India’s Economic Development</div></div>			
	Total (in hours)	60		
Evaluation criteria:				

Test 1: Empirical Exercise and presentation (30%) The students will empirically validate the testable hypothesis of a model of international trade. This task involves collating appropriate data, identifying suitable method and interpretation of the results.

- a. Task: Replication of empirical analysis of any existing literature on any topic in groups
- b. Structure of submission: A report that consists of the summary of the existing literature; outline of empirical method; data sources; interpretation of the results; class presentation and discussion.
- c. Indicators of assessment: content (all items outlined in (b) above), structure and quality of the report (weightage: 75%); content and quality of presentation of the report in the class (weightage: 25%).

Test 2: Term Paper: The students will carry out a critical appraisal of literature on any topic of this course. (30%)

- a. Task: Undertake a critical appraisal of literature on any topic listed in the syllabus.
- b. Structure of submission: A paper that consists of introduction; summary of the literature; critique of the literature with supportive evidence; synthesis and conclusion
- c. Indicators of assessment: selection of appropriate literature (weightage: 5%); clear and concise summaries (weightage: 30%); critique that is supported by evidence using author's calculations or by literature (weightage: 40%); effective introduction and conclusion (weightage: 10%); well-structured essay with no grammatical errors (weightage: 10%); and appropriate format of citations and references (weightage: 5%).

Test 3: Written Exam: Covers all modules (30%)

Test 4: Assignments: Covers all modules (10%)

Learning outcomes:

1. Evolution of theoretical models of international trade and their empirical applications. (Evaluation: Written Exam, Term Paper)
2. Equipping the students with tools and techniques of empirical research in international trade. (Evaluation: Written Exam, Empirical Exercise)
3. Understanding the empirical challenges (data and techniques) of identifying causality between globalization and development/environment (Evaluation: Written Exam, Empirical Exercise, Term Paper)
4. Ability to evaluate the consequences of various instruments of trade policies on different stakeholders. (Evaluation: Written Exam, Term Paper)
5. Articulation of the debates between trade and developmental issues as well as trade and environmental issues (Evaluation: Written Exam, Empirical Exercise, Term Paper)

Reading list (* indicates core readings)

Module 1: International Trade: Theories, Empirics and Policy

*Feenstra, R (2016), *Advanced International Trade: Theory and Evidence, 2nd Edition*, Princeton University Press Chapters 1, 2, 4, 5, 6

Schott, Peter K. (2003), "One Size Fits All? Heckscher-Ohlin Specialization in Global Production," *American Economic Review*, Vol. 93, 686-708.

Trefler, D. (1995), "The Case of the Missing Trade and Other Mysteries," *American Economic Review*, 85(5), 1029-46.

Grossman, G. M. & Rossi-Hansberg, E. (2008) "Trading Tasks: A Simple Theory of Offshoring," *American Economic Review*, vol. 98(5), pages 1978-97

Krugman (1979) "Increasing returns, monopolistic competition, and international trade," *Journal of International Economics*, vol. 9(4), pages 469-479.

*Baldwin & Taglioni (2006) "Gravity for Dummies and Dummies for Gravity Equations," *CEPR Discussion Papers* 5850

*Baldwin, R. and Lopez-Gonzalez, J. (2015) "Supply-chain Trade: A Portrait of Global Patterns and Several Testable Hypotheses." *World Econ*, 38: 1682–1721. doi:10.1111/twec.12189

*R.C. Johnson (2014) "Five Facts about Value-Added Exports and Implications for Macroeconomics and Trade Research" *Journal of Economic Perspectives*, 28(2), 119-142.

Antràs, P and Davin Chor (2018). "On the Measurement Of Upstreamness and Downstreamness in Global Value Chains" *NBER Working Paper* 24185 <http://www.nber.org/papers/w24185>

Module 2: Trade Policy

*Feenstra, R (2016), *Advanced International Trade: Theory and Evidence, 2nd Edition*, Princeton University Press Chapters 7, 8, 9

Romalis, John (2005) "NAFTA's and CUSFTA's Impact on International Trade," *NBER Working Paper Number*

11059.

- *Grossman, G.M. and E. Helpman, (1995) "The Politics of Free Trade Agreements," *American Economic Review*, 84(4), 667-90.
- Broda, C, N Limao and D. Weinstein, (2008) "Optimal Tariffs and Market Power: The Evidence" *American Economic Review*, 98 (5): 2032-65.
- Naito, Takumi, (2000) "A Rationale for Infant-Industry Protection and Gradual Trade Liberalization," *Review of Development Economics*, Wiley Blackwell, vol. 4(2), pages 164-174.
- Messerlin, Patrick A. (2006) "Enlarging the Vision for Trade Policy Space: Special and Differentiated Treatment and Infant Industry Issues," *The World Economy*, vol. 29(10), pages 1395-1407.
- Dasgupta, P. & Stiglitz, J. E., (1988) "Learning-by-Doing, Market Structure and Industrial and Trade Policies," *Oxford Economic Papers*, Oxford University Press, vol. 40(2), pages 246-268.

Module 3: Trade and Environment

- *Grossman, G.M. and Krueger, A. B. (1993) "Environmental Impacts of a North American Free Trade Agreement." In *The U.S. - Mexico Free Trade Agreement*. P.M. Garber, ed. Cambridge, MA: MIT Press, 13-56.
- *Antweiler, W., Copeland, B.R. and Taylor, M.S. (1998) "Is Free Trade Good for the Environment?" *NBER Working Paper No. 6*
- *Copeland, B. R. and M. Scott Taylor (2004) "Trade, Growth, and the Environment" *Journal of Economic Literature*, Vol. 42, No. 1. pp. 7-71.
- Copeland, B. R. and M. Scott Taylor (2005) *Trade and the Environment: Theory and Evidence*, Princeton University Press
- Cherniwchan, J., Copeland, B. R., M. Scott Taylor (2017) "Trade and the Environment: New Methods, Measurements, and Results" *Annual Review of Economics* 9:1, 59-85.
- Martin, L.A. 2012. "Energy efficiency gains from trade: Greenhouse gas emissions and India's manufacturing sector." Unpublished manuscript https://arefiles.ucdavis.edu/uploads/filer_public/2014/03/27/martin-energy-efficiency-nov.pdf
- *Frankel, Jeffrey A. and Andrew K. Rose (2005) "Is Trade Good or Bad for the Environment? Sorting Out the Causality" *The Review of Economics and Statistics* 87:1, 85-91.
- Frankel, J. A. (2003) "The Environment and Globalization" *NBER Working Paper No. 10090* <http://www.nber.org/papers/w10090.pdf>
- George, C. (2014), "Environment and Regional Trade Agreements: Emerging Trends and Policy Drivers", *OECD Trade and Environment Working Papers*, No. 2014/02, OECD Publishing, Paris. <http://dx.doi.org/10.1787/5jz0v4q45g6h-en>
- Chander, Parkash & Khan, M. Ali, (2001) "International treaties on trade and global pollution," *International Review of Economic & Finance*, vol. 10(4), pages 303-324.
- *Sawhney, A. and Rastogi, R. (2015) "Is India Specializing in Polluting Industries?" *The World Economy*, Volume 38(2): 360-378. ISSN 1467-9701
- *Sawhney, A. (2004) "WTO-Related Matters in Trade and Environment: Relationship between WTO Rules and Multilateral Environmental Agreements", *ICRIER Working Paper 133*, and *WTO Research Series No. 5*, Indian Council for Research on International Economic Research, New Delhi.

Module 4: Trade and Development

- *Bardan, Pranab and Udry, Christopher (1999) *Development Microeconomics*, Oxford University Press., (Chapter 14, Trade and Development)
- Bardhan (2006) "Globalization and Rural Poverty", *World Development*, Volume 34, Issue 8, Pages 1393-1404.
- *Winters, L. A., N. McCulloch, and A. McKay (2004). "Trade Liberalization and Poverty: The Evidence So Far", *Journal of Economic Literature*, 42(1): 72-115
- *Rodrik, D. (1997). *Has Globalization Gone Too Far?* Washington D. C.: Institute of International Economics.
- Chang, H.-J. (2002). *Kicking away the ladder: Development strategy in historical perspective*. London: Anthem.
- Rodrik, D. and F. Rodríguez (2000). "Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence", in B. Bernanke and K. S. Rogoff (eds.), *Macroeconomics Annual*, MIT Press, Cambridge, MA, 261-325.
- *Topalova (2007) "Trade Liberalization, Poverty, and Inequality Evidence from Indian Districts" <http://www.nber.org/chapters/c0110.pdf>
- *Goldberg, P., Khandelwal, A., Pavcnik, N and Topalova (2010) "Multiproduct Firms and Product Turnover in the

<p>Developing World: Evidence from India.” <i>The Review of Economics and Statistics</i> Vol. 92, No. 4 (NOVEMBER 2010), pp. 1042-1049 http://www.jstor.org/stable/40985812</p> <p>Dollar, David and Aart Kraay (2004) “Trade Growth and Poverty” <i>Economic Journal</i>, vol. 114, issue 493, F22-F49</p> <p>Darity, W. and Davis, L. (2005) “Growth, Trade, and Uneven Development,” <i>Cambridge Journal of Economics</i>, 29(1), pp. 141-170.</p> <p>Slaughter, M.J. (1999) "Globalization and Wages: A Tale of Two Perspectives." <i>World Economy</i> 22, 609-630.</p> <p>Wood, A., (1995) “How Trade Hurt Unskilled Workers,” <i>Journal of Economic Perspectives</i>, 9 (3).</p> <p>*Dragusanu, Raluca, Daniele Giovannucci, and Nathan Nunn, (2014) “The Economics of Fair Trade”, <i>Journal of Economic Perspectives</i>, 28/3, pp. 217 – 236.</p> <p>Hoekman, Bernard and Michael Kostecki. (2001) <i>The Political Economy of the World Trading System: WTO and Beyond</i>. Oxford University Press</p>
<p>Additional information (if any): Suggested journals: Journal of International Economics, International Economic Review, World Economy.</p>
<p>Student responsibilities: Attendance, feedback, discipline: as per university rules.</p>

Course reviewers:

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