

# Graduate International Trade Course

ECON 8413 - Fall 2017

University of Colorado, Boulder

Instructor: Prof. Jeronimo Carballo

email: [jeronimo.carballo@colorado.edu](mailto:jeronimo.carballo@colorado.edu)

Office Hours: Wednesday 9:00am-10:30am, Econ 14B

## Syllabus

This course takes a theoretical and empirical approach to the study of international trade. The class is structured around research papers, primarily recent contributions to the frontier of international trade research. We will first discuss core trade theories and empirical applications based on these theories. Next, we will turn to more recent theories that focus on the firm's decision to export, investigating the role of heterogeneity in firm productivity on patterns of trade. This will be followed by an exploration of multinational activity, including different types of foreign direct investment and different intersections between trade and other fields.

This course is targeted at second-year (and higher) Ph.D. students in economics. Students are expected to have completed first-year micro and macro theory courses.

## Topics

1. Comparative Advantage, Gains from Trade, International Equilibrium
2. Ricardian Models
3. New Trade Theory
4. Firm-level Trade

5. Gravity Models
6. Multinationals
7. Demand Patterns and Trade
8. Trade and Labor
9. Trade policy

## Reading List

There are no required texts for the course. However, the following books are very useful sources for particular issues in trade theory:

R. Feenstra, *Advanced International Trade*, Princeton U Press, 2004 (F).

J. Markusen and K Maskus, *International Trade: Theory and Evidence*, manuscript 2014 (MM); I will email this text to you.

A. Dixit and V. Norman, *Theory of International Trade*, Cambridge U. Press. 1992 (DN).

Helpman and P. Krugman, *Market Structure and Foreign Trade*, MIT Press, 1986 (HK).

K. Bagwell and R.W. Staiger *The Economics of the World Trading System*, MIT Press, 2003 (BS).

P. Combes, T. Mayer, and J-F Thisse, *Economic Geography*, Princeton U Press, 2008 (CMT).

### 1. Comparative Advantage, Gains from Trade, International Equilibrium and Ricardo

Dixit, Avinash and Victor Norman, Ch. 1, p. 1-8, Ch. 3, p. 65-85, Ch. 4, p. 93-96

\* Feenstra, Robert, Ch. 1, p. 1-4

\* Dornbusch, Rudiger, Stanley Fischer, and Paul Samuelson (1977). *Comparative Advantage, Trade, and Payments in a Ricardian Model with a Continuum of Goods*, *American Economic Review*

\* Eaton, Jonathan and Samuel Kortum, *Technology, Geography, and Trade*, *Econometrica* (Sept. 2002)

\* Donaldson, Dave (2010). Railroads of the Raj: Estimating the Impact of Transportation Infrastructure, MIT mimeo

Deardor , Alan (1980). The General Validity of the Law of Comparative Advantage, Journal of Political Economy

Dixit, Avinash and Victor Norman (1986). Gains from Trade without Lump-Sum Compensation, Journal of International Economics

## 2. Factor Endowment Models

### A. Heckscher-Ohlin

Dixit, Avinash and Victor Norman, Ch. 1, p. 8-19, Ch. 2, Ch. 4 p. 96-102, 106-122

\* Feenstra, Robert, Ch. 1-4

\* Tre er, Daniel (1995). The Case of the Missing Trade and other Mysteries, American Economic Review

Jones, Ronald (1965). The Structure of Simple General Equilibrium Models, Journal of Political Economy

Deardor , Alan and Robert Staiger (1988). An Interpretation of the Factor Content of Trade, Journal of International Economics

Davis, Donald and David Weinstein (2001). An Account of Global Factor Trade, American Economic Review

Zhu, Susan and Daniel Tre er (2005). Trade and Inequality in Developing Countries: A General Equilibrium Analysis, Journal of International Economics

### B. Ricardo-Viner

Dixit, Avinash and Victor Norman, Ch. 4, p. 102-106, 122-125

\* Feenstra, Robert, p. 72-75

\* Artuc, Erhan, Shubham Chaudhuri and John McLaren (2010). Trade Shocks and Labor Adjustment: A Structural Empirical Approach, American Economic Review

Neary, Peter (1978). Short-Run Capital Specificity and the Pure Theory of International Trade, Economic Journal

Matsuyama, Kiminori (1992). A Simple Model of Sectoral Adjustment, Review of Economic Studies

Magee, Christopher, Carl Davidson and Steven Matusz, (2005). Trade, Turnover and Tithing, Journal of International Economics

### 3. Monopolistic Competition and Trade

Helpman, Elhanan and Paul Krugman, Ch. 6-11

\* Krugman, Paul, (1980). Scale Economies, Product Differentiation, and the Pattern of Trade, American Economic Review, p. 950-959

Helpman, Elhanan, (1981). International Trade in the Presence of Product Differentiation, Economies of Scale, and Imperfect Competition: A Chamberlin-Heckscher-Ohlin Approach, Journal of International Economics

Krugman, Paul, (1979). Increasing Returns, Monopolistic Competition, and International Trade, Journal of International Economics

### 4. Gravity Models, Geography and Trade Costs:

\* Anderson and van Wincoop, Gravity with Gravitas: A Solution to the Border Puzzle, AER 2003, 170-92

\* Head and Mayer, Gravity Equations: Workhorse, Toolkit, and Cookbook,

\* Redding and Sturm, The Costs of Remoteness: Evidence from German Division and Reunification, AER 2008, 1766-97

Anderson and van Wincoop, Trade Costs, Journal of Economic Literature 2004, 691-751

Hummels, Transportation Costs and International Trade in the Second Era of Globalization, Journal of Economic Perspectives 2007, 131-54

Baier and Bergstrand, Bonus Vetus OLS: A Simple Method for Estimating International Trade Cost Effects Using the Gravity Equation, JIE 2009, 77-85.

## 5. Firms and the Decision to Export: Theoretical Models with Firm Heterogeneity

\* Melitz, Marc (2003). "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," *Econometrica*, 71(6), p. 1695-1725

\* Bernard, Andrew, Stephen Redding and Peter Schott (2007). "Comparative Advantage and Heterogeneous Firms," *Review of Economic Studies* 74

\* Eaton, Jonathan, Samuel Kortum and Francis Kramarz (2004). "Dissecting Trade: Firms, Industries,

Costinot, Arnaud, Dave Donaldson, and Ivana Komunjer (2012). "What Goods Do Countries Trade? New Ricardian Predictions," *Review of Economic Studies*, 79(2).

## 7. Demand Patterns and Trade:

\* Markusen, Putting Per-Capita Income Back into Trade Theory, *JIE* 2013, 255- 65

\* Caron, Fally and Markusen, International Trade Puzzles: A Solution Linking Production and Preferences, working paper 2013, *QJE* 2014

Markusen, Explaining the Volume of Trade: an Eclectic Approach, *AER* 1986, 1002-1011

MM, Ch. 14 Hunter, The Contribution of Nonhomothetic Preferences to Trade, *JIE* 1991

Bergstrand, The Heckscher-Ohlin Theorem, the Linder Hypothesis, and the Volume and Pattern of International Trade, *EJ* 1990

## 8. Horizontal FDI and the Proximity-Concentration Hypothesis

\* Helpman, Elhanan and Paul Krugman, Ch. 12-14

\* Brainard, Lael (1997). "An Empirical Assessment of the Proximity-Concentration Trade-off Between Multinational Sales and Trade," *American Economic Review*, 87(4), p. 520-544

Markusen, James and Anthony Venables (2000). "The Theory of Endowment, Intra-industry and Multi-national Trade," *Journal of International Economics*, 52, p. 209-234

\* Helpman, Elhanan, Marc Melitz, and Stephen Yeaple (2004). "Exports versus FDI with Heterogeneous Firms," *American Economic Review*, 94(1), p. 300-316

Markusen, James (1984). "Multinationals, Multi-Plant Economies, and the Gains from Trade," *Journal of International Economics*, 16, p. 205-226

Markusen, James (1995). "The Boundaries of Multinational Enterprises and the Theory of International Trade," *Journal of Economic Perspectives*, 9(2), p. 169-189

Markusen, James and Anthony Venables (1998). "Multinational Firms and the New Trade Theory," *Journal of International Economics*, 46(2), p. 183-203

Markusen, James (2002). "Multinational Firms and the Theory of International Trade, Cambridge, MA, MIT Press

## 9. Vertical FDI

\* Helpman, Elhanan (1984). "A Simple Theory of International Trade with Multinational Corporations," *Journal of Political Economy*, 92(3), p. 451-471

\* Yeaple, Stephen (2003a). "The Role of Skill Endowments in the Structure of U.S. Outward FDI," *Review of Economics and Statistics*, August, 85(3), p. 726-734

\* Yeaple, Stephen (2003b). "The Complex Integration Strategies of Multinationals and Cross Country Dependencies in the Structure of FDI," *Journal of International Economics*, 60, p. 293-314

\* Ramondo, Natalia and Andres Rodriguez-Clare (2010). Trade, Multinational Production, and the Gains from Openness, mimeo

\* Arkolakis, Costas, Natalia Ramondo, Andres Rodriguez-Clare, Stephen Yeaple (2012). Innovation and Production in the Global Economy, mimeo

\* Hanson, Gordon, Raymond Mataloni and Matthew Slaughter (2005). "Vertical Production Networks in Multinational Firms," *Review of Economics and Statistics*, 87(4), p. 664-678.

Helpman, Elhanan and Paul Krugman (1985). *Market Structure and Foreign Trade*, Cambridge, MA: MIT Press. Chapter 12

Carr, David, James Markusen and Keith Maskus (2001). "Estimating the Knowledge-Capital Model of the Multinational Enterprise," *Anterprisuic1(le)-36nIrJ -333(Review)-333(o92(3i,)-334(p.)-444(451-4716]TJ7084 9.*



## 10. The Boundaries of the Multinational Firm

Antràs, Pol (2003). "Firms, Contracts, and Trade Structure," *Quarterly Journal of Economics*, 118(4), p. 1375-1418

\* Antràs, Pol (2005). "Incomplete Contracts and the Product Cycle," *American Economic Review*, 95(4), p. 1054-1073

\* Antràs, Pol and Elhanan Helpman (2004). "Global Sourcing," *Journal of Political Economy*, 112, p. 552-580

Antràs, Pol and Elhanan Helpman (2008). "Contractual Frictions and Global Sourcing," forthcoming in E. Helpman, D. Marin, and T. Verdier (eds.), *The Organization of Firms in a Global Economy*, Harvard University Press

Yeaple, Stephen (2006). "Offshoring, Foreign Direct Investment, and the Structure of U.S. Trade," *Journal of the European Economic Association*, 4, p. 602-611

\* Nunn, Nathan and Daniel Treisman (2008). "The Boundaries of the Multinational Firm: An Empirical Analysis," forthcoming in E. Helpman, D. Marin, and T. Verdier (eds.), *The Organization of Firms in a Global Economy*, Harvard University Press

Feenstra, Robert C. and Gordon H. Hanson (2005). "Ownership and Control in Outsourcing to China: Estimating the Property-Rights Theory of the Firm," *Quarterly Journal of Economics*, 120(2), p. 729-761

Bernard, Andrew, Jensen, Bradford, Redding, Stephen, and Peter Schott (2010). "Intra-firm Trade and Product Contractibility." *American Economic Review* P&P, 100(2), p. 444-448.

Helpman, Elhanan (2006). "Trade, FDI and the Organization of Firms," *Journal of Economic Literature*, 44, p. 589-630

McLaren, John (2000). "Globalization and Vertical Structure," *American Economic Review* 90(5), p. 1239-1254



\* Broda, C, N Limao and D. Weinstein, Optimal Tariffs and Market Power: The Evidence American Economic Review, 2008

Koujianou Goldberg, P. and G. Maggi, Protection for Sale: An Empirical Investigation, American Economic Review 89(5): 1135-55, December 1999.

\* Grossman, G.M. and E. Helpman, Protection for Sale, American Economic Review, September 1994, 84(4), 833-50.

Bagwell, Kyle, and Robert W. Staiger. 2006. What Do Trade Negotiators Negotiate About? Empirical Evidence from the World Trade Organization. National Bureau of Economic Research Working Paper 12727.

Grossman, G.M. and E. Helpman, The Politics of Free Trade Agreements, American Economic Review, September 1995, 84(4), 667-90.

## Grading

Your final grade will be determined according to the following percentages

Problem Sets/Reading checks 40%

In class participation 10%

Referee Report 15%

Research Proposal 35%

Reading checks are going to be due almost weekly. These checks should detail: 1) a brief summary using your own words, 2) the most important contribution(s) of the paper, 3) its main limitations (if you find one), 4) and your questions (if any). The comments should be precise and clear, this is the most important part of the grade on these comments. Do not copy parts of the abstract or conclusion, but find your own way to write them. If you feel that you have not understood an important point of the paper, please say it in the comments. That way, I can put an emphasis on those points during the lectures (your questions will remain confidential).

Referee report should be on one of the following paper.

Allen, Treb. "Information Frictions in Trade."

Faber, Benjamin. "Trade Integration, Market Size, and Industrial Structures in Trade."

*Electronics in Class.* Cell phones must be turned off. Any sort of use of cell phones in class will not be tolerated and anyone violating such rule will be asked to leave the lecture hall. Computers are permitted in lectures. However, they must be used only for course-related purposes. If you use your laptop for class purposes, you are required to sit in one of the last three rows of the lecture hall. Uses for any other purpose impose negative externalities on others and are inappropriate during class time. For these reasons, anyone who uses computers for non-course-related purposes must leave the lecture hall.

## University Policies

The University adheres to the standards for student privacy rights and requirements as stipulated in the Federal Rights and Privacy Act (FERPA) of 1974 (see <http://www.colorado.edu/registrar/resources/family-educational-rights-and-privacy-act-ferpa>)

*Disability Accommodations.* Campus policy regarding disabilities requires that faculty adhere to the recommendations of Disability Services. Any student eligible for and needing academic adjustments or accommodations because of disability should submit to me a letter from Disability Services describing appropriate adjustments or accommodations and should arrange to meet with me as soon as possible so that arrangements can be made in a timely manner. University policies regarding disabilities are available at

aliation, or political philosophy, should contact the Office of Discrimination and Harassment (ODH) at