BOSTON COLLEGE
Department of Economics

EC 871 Prof. Anderson
International Trade Theory
MW 3-4:15 Fall 2021

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Syllabus

Course Requirements are: (1) a series of homework assignments
(2) a mid-term exam Oct. 20
(3) a final exam, date TBA

The purpose of this course is to acquaint the student with the basic tools of international trade theory. Trade theory is the richest lode of applied general equilibrium theory. Two sorts of homework develop skill and intuition in applied ge theory. Written mathematical and intuitive exercises is one sort. The other sort is programming exercises with simple computable general equilibrium models.

Some topics skipped here will be covered in EC876, Political Economy of Trade and Development. These include the political economy of trade policy, and the institutions of trade. Other currently interesting topics will be selected in EC876, with the underlying theme of learning how to do research in economics.

The reading list is small compared to many graduate reading lists. I think less is more in learning the basics. The reading list may have more papers by me than are justified by their pure merit. I excuse this possible excess by noting that I can communicate more about the creation of economics in discussing the work I (probably) know best.

Textbooks

A. A. Dixit and V. Norman, Theory of International Trade, Cambridge University Press, 1980. A beautifully constructed reference for neoclassical trade theory.
B. R. Feenstra Advanced International Trade: Theory and Evidence, 2nd edition, 2016. It is particularly outstanding for treatment of empirical work in the context of theory.

Undergraduate textbooks are useful for perspective on how to explain the essence of complex models and justify their usefulness. R. Feenstra and A. Taylor International Economics is good.

Important Monographs

Helpman and Krugman, Market Structure and Foreign Trade, MIT 1985.
Helpman and Grossman, Innovation and Growth in the Global Economy, MIT 1991.

Web sites: this course teaches theory and some applications and we tend to lose sight of why we study the stuff. These sites give information on the application of ideas to the policy issues:
WTO: www.wto.org vast amount of information about the WTO and its dispute settlement processes. (How secretive is this organization?)

USTR reports: http://www.ustr.gov.

USTR is the negotiation arm of US trade; these are its briefs for disputes.

USITC: https://usitc.gov. gravity portal: www.usitc.gov/data/gravity/index.htm
USITC does economic analysis of 'injury' from trade, maintains world trade and production databases and provides gravity modeling tools.

The Economist: www.economist.com. Lots of their current stories and opinion are free.

Syllabus

Citations marked with an asterisk are basic starting points and fundamental to the lectures.

I. Spatial Arbitrage: the Gravity Model

1. Basics

Readings:

* Keith Head and Thierry Mayer. Gravity Equations: Workhorse, Toolkit, and Cookbook. In *Handbook of International Economics*, pages 131–195. 2014

* James E Anderson. The Gravity Model. *Annual Review of Economics*, 3:133–160, 2011.

* James E Anderson and Eric van Wincoop. Gravity with Gravitas: A Solution to the Border Puzzle. *American Economic Review*, 93(1):170–192, 2003.

2. Inferred Trade Costs: Satellite View

Readings:

*"Trade Costs", J. Anderson and E. van Wincoop, JEL, 2004.

*"Gravity with Gravitas: A Solution to the Border Puzzle", J. Anderson and E. van Wincoop, *AER* March 2003.

J. Rauch (1999), "Networks vs. Markets in International Trade", JIE 48, 7-37.

Feenstra, ch. 5.

Helpman, E. M. Melitz and Y. Rubinstein "Estimating Trade Flows: Trading Partners and Trading Volumes", *QJE* (2008).

Arkolakis, C. "Market Penetration Costs and the New Consumers Margin in International Trade", *JPE,* 118(6), 2010.

Anderson, J.E. and Yoto V. Yotov, "Short Run Gravity", *JIE*, 2020.

3. Inferred Trade Costs: Street View

Readings:

*Dave Donaldson. Railroads of the Raj: Estimating the Impact of Transportation Infrastructure. American Economic Review, 108(4-5):899–934, 2018

*Giulia Brancaccio, Myrto Kalouptsidi and Theodore Papageorgiou, "Geography, Transportation, and Endogenous Trade Costs", 2020, *Econometrica*, 88(2), 657-691.

S. Ganapati, W.F. Wong, O. Ziv "Entrepot: Hubs, Scale and Trade Costs", (2021), NBER Summer Institute.

II. Neoclassical Trade Models

1. Supply and Demand with Duality

Readings

*DN, ch. 2

*A. Woodland, (1980), "Direct and Indirect Trade Utility Functions", RES, 47,907-26.

2. The Gains from Trade

Readings

*DN, ch. 3

3. Special Cases

A. The Ricardian Theory

readings:

*DN, Ch. 2

*Dornbusch, Fischer and Samuelson, 1977, AER, "The Ricardian model with a continuum of goods"

Feenstra, ch. 3.

B. Factor Proportions Theory

1. The Heckscher-Ohlin-Samuelson Model

Readings:

*DN, ch. 4

*Feenstra, ch. 2

R. Jones, "The Structure of Simple General Equilibrium Models," JPE Dec. 1965.

2. Extensions of HOS

Readings

*Ethier, W.J., "Higher Dimensional Issues in Trade Theory," In Gene M Grossman and Kenneth S Rogoff, editors, Handbook of International Economics North Holland, 1995. (Handbook)

*Dixit-Norman, Chs. 2, 4.

*Neary, JP and AS Schweinberger, "Factor Content Functions and the Theory of International Trade", RES, 1986.

Feenstra, ch. 3

Dixit-Woodland, "The Relationship Between Factor Endowments and Commodity Trade," JIE, May 1982

Neary, JP, 1985, "Twoness and Trade Theory", Econometrica, 53

C. Empirical Work on Core Trade Models

Readings:

Do Endowments and Technology Explain Trade?

Readings:

*Feenstra, chs. 2,3

*Justin Caron, Thibault Fally, and James R Markusen. International trade puzzles: a solution linking production and preferences. *Quarterly Journal of Economics*, 129(3):1501–1552, 2014.

Leamer and Levinsohn, Handbook.

Does Trade Affect Factor Prices?

Readings:

*Feenstra, ch. 4

III. Imperfect Competition and Scale Economies

1. Product Differentiation, Monopolistic Competition and Trade

Readings:
*Helpman and Krugman, Chs. 6-11.
*Feenstra, ch. 5

2. Division of Labor and Scale Economies

Readings:
*Ethier, W., "National and International Returns to Scale in the Modern Theory of International Trade" AER, June 1982, also in G. Grossman Imperfect Competition and International Trade.

3. Firm Behavior, Trade and the Empirics of Productivity

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

*Feenstra, ch. 6

Marc J. Melitz and Stephen J. Redding. "Heterogeneous Firms and Trade", Handbook volume 4. Elsevier B.V., 2015

Alla Lileeva and Daniel Trefler. "Improved access to foreign markets raises plant-level productivity... for some plants." *Quarterly Journal of Economics*, 125(3):1051–1099, 2010

IV. Heterogeneity and Gains from Trade

Readings:
*Feenstra, ch. 6
* Costas Arkolakis, Arnaud Costinot, and Andrés Rodríguez-clare. New Trade Models, Same Old Gains? American Economic Review, 102(1):94–130, 2012b
* Arnaud Costinot and Andrés Rodríguez-Clare. Trade Theory with Numbers: Quantifying the Consequences of Globalization. In Handbook of International Economics, volume 4, pages 197–261. Elsevier B.V., 2015

V. Heterogeneity and Inequality

A. Matching and Sorting of Workers and Firms

Readings:

*Elhanan Helpman, Oleg Itskhoki, Marc-Andreas Muendler, and Stephen J Redding. "Trade and inequality: from theory to estimation." *Review of Economic Studies*, 84(1):357–405, 2017

Elhanan Helpman, Oleg Itskhoki, and Stephen J Redding. "Inequality and Unemployment in a Global Economy." *Econometrica*, 78(4):1239–1283, 2010.

Arnaud Costinot and Jonathan Vogel. "Matching and Inequality in the World Economy." *Journal of Political Economy*, 118(4):747–786, 2010.

B. Workers, Import Competition and Mobility Frictions

Readings:

*David H. Autor, David Dorn, and Gordon H. Hanson. The China syndrome: Local labor market effects of import competition in the United States. American Economic Review, 103(6):2121–2168, 2013.

*Lorenzo Caliendo, Maximiliano Dvorkin, and Fernando Parro. "Trade and Labor Market Dynamics: General Equilibrium Analysis of the China Trade Shock." *Econometrica,* 87 (3), 741-835, 2019.

*Rafael Dix-Carneiro and Brian K Kovak. Trade Reform and Regional Dynamics :. *American Economic Review*, 107(10):2908–2946, 2017.

VI. Agglomeration and Geography

Readings:

*Treb Allen and Costas Arkolakis. Trade and the Topography of the Spatial Economy. *Quarterly Journal of Economics*, 129(3):1085–1140, 2014.

Paul Krugman." Increasing returns and economic geography". *Journal of Political Economy*, 99(3):483–499, 1991

Gabriel M. Ahlfeldt, Stephen J. Redding, Daniel M. Sturm, and Nikolaus Wolf. "The Economics of Density: Evidence From the Berlin Wall. *Econometrica*, 83(6):2127–2189, 2015.

VII. Trade, Ideas and Growth

A. Trade and Firm Innovation

Readings:

*Bee Yan Aw, Mark J Roberts, and Daniel Yi Xu. "R&D Investment, Exporting, and Productivity Dynamics. *American Economic Review,* 101(4):1312–1344, 2011.

Nick Bloom, Mirko Draca, and John Van Reenen. "Trade induced technical change? The impact of Chinese imports on innovation, IT and productivity." *Review of Economic Studi*es, 83(1):87–117, 2016.

B. Trade and International Diffusion of Ideas
Readings:
Thomas Sampson. "Dynamic Selection: An Idea Flows Theory of Entry, Trade and Growth." *Quarterly Journal of Economics*, 131(1):315–380, 2016.

Francisco J Buera and Ezra Oberfield. "The Global Diffusion of Ideas." *Econometrica*, 88(1):83–114, 2020.