

Course Outline for Economics 2300: International Trade
Fall 2016
Peter M. Morrow
(This version: September 19th, 2016)

Room and Time: AB 107, Thursdays 11am-1pm

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Office Hours: Tuesdays 3pm-4pm in GE 336.

Email Policy

I will do my best to respond to e-mail within 24 hours on a weekday, 48 hours on a weekend.

Course Orientation

This class will generally be taught at a mixed *M.A./Ph.D.* level. What does this mean? The class will have three general goals. First, we will work to develop an understanding of the mathematical models that the economics profession has chosen to use to understand the theoretical structure of international trade. Second, we will cover empirical work that seeks codetermines the path that research follows. Third, I will introduce recent contributions to both the theory and empirics of international trade. Further exploration of more modern approaches will be conducted in the winter term with Daniel Trefler.

Updating of the syllabus

This draft represents by best guess/ambition for the papers I want to cover this semester. If the past is any lesson, this will likely change such that I will update the readings as we progress. Please refer to the date at the top of this document for the most recent version of the syllabus. The version posted on Blackboard will always be the “right” version.

Textbooks

Although there are no required books for this class, there are a series that are recommended for the class (*) and others that will be useful if you specialize in international trade. These are easily available on Amazon or any other online vendor.

*Dixit, A.K. and V. Norman, *Theory of International Trade: A Dual, General Equilibrium Approach*, Cambridge: Cambridge University Press, 1980 (“DN” below)

*Feenstra, Robert C., *Advanced International Trade: Theory and Evidence*, Princeton: Princeton University Press, 2004 (“F” below)

*Helpman, E. and P.R. Krugman, *Market Structure and Foreign Trade: Increasing Returns, Imperfect Competition, and the International Economy*, Cambridge: MIT Press, 1985. (“HK” below)

*Handbook of International Economics, (2014), edited by Gita Gopinath, Elhanan Helpman and Kenneth Rogoff

Handbook of International Economics, (2003), edited by E. Kwan Choi and James Harrigan

Handbook of International Economics, (1995), edited by G.M. Grossman and Kenneth Rogoff

Handbook of International Economics, (1984), edited by R.W. Jones and P.B. Kenen

In addition, if you are uncertain about your familiarity with the microeconomics needed for this course, please reference

Varian, H., *Microeconomic Analysis*, 3rd edition, New York: W.W. Norton 1992.

Mas-Colel, Andreu and Michael D. Whinston and Jerry Green, *Microeconomic Theory*, 1st edition, New York: Oxford University Press (1995).

Given the attention that will be paid to empirical analysis in this class, you should have some idea of the data that is publicly available

1) Robert Feenstra (and collaborators) have assembled extensive data covering world trade and U.S. imports at varying levels of aggregation across a number of decades. This data is available at www.internationaldata.org and also at www.nber.org/data.

2) Robert Barro and Jong-Wha Lee have assembled extensive world data on educational attainment for the entire second half of the 20th century. This is useful when examining countries' "endowments" of skilled labor. This data is available at www.nber.org/data.

3) The ipums website contains data on the United States Current Population Survey (CPS), international population surveys, census public use sub-samples, and the United States American Community Survey. These provide very large (sample size) and extensive (number of variables) data for many years. These data sets have been used extensively in empirical work. They are very useful for almost all questions related to wages and occupational choice. Although registration is required data is free and extracts can be created at www.ipums.org.

4) John Haveman has provided a great service by posting various industrial concordances, country codes, and industry verbal definitions at:

<http://www.freit.org/Resources.html>

Course Requirements

The final grade will be calculated according to the following metric:

- 10% referee report
- 20% problem sets
- 10% research proposal
- 20% mid-term
- 30% comprehensive final exam

The problem sets be a mix of theory and empirics. Some will be as simple as uploading data to STATA and running summary statistics and other will ask you to replicate a handful of very influential papers. The former will give you practical skills and teach you the more mundane tasks of the profession so that you will not waste time figuring them out later. The latter force you

to get “under the hood” and see how these models work. In addition, I will also ask you to prove a few simple results on other problem sets.

The referee report is a written evaluation of a paper that I will assign you. It should evaluate the motivation for the paper and how well it answers the question it seeks to ask. In doing so, you should note that it is far more difficult to improve a paper than it is to point out its shortcomings. More detailed information will be provided when it is assigned. The referee report and problem sets will be graded as “check plus” (10%), “check” (6%), or “check minus” (2%).

The research proposal will be to get you started thinking about research. While a finished project will not be required, a simple question is a good place to start. From there, review the literature to see what the current state of knowledge is regarding this question. I will discuss this more as the semester goes on but good papers often start with questions that are interesting regardless of what the answer. Hoping for a result is usually not a good plan. Again, more details will be given when it is assigned.

Academic Misconduct

Students should note that I do not tolerate any form of academic misconduct. Any student caught engaging in such activities will be subject to academic discipline ranging from a mark of zero on the test or examination to dismissal from the university as outlined in the academic handbook. Any student abetting or otherwise assisting in such misconduct will also be subject to academic penalties.

ABSENCE FROM EXAMS.

- If you miss Midterm I due to illness or other *excused* absence and present a medical note within one week of the date of the test, all weight will be placed on the comprehensive end of term exam. Failure to produce a medical note in time will result in a mark of 0 on the midterm. Other excuses (e.g. funerals and car accidents) must be accompanied by a note from a responsible adult that I can verify *in order for excusal to even be considered*. The validity of these excuses will then be evaluated by the undergraduate chair.

- To be considered, an illness must render the student incapacitated and unable to take the exam. Vague illnesses such as “gastroenteritis”, “fever”, “inability to concentrate” will not be considered. In addition, in order for a doctor’s note to be accepted, the illness must be immediately verifiable to the doctor. Illnesses of the “student claims to be...” will not be accepted.

- If you miss the December exam due to an *approved* excuse, a make-up will be given at an mutually agreed upon time in the first 7 days of the Winter term (weekends included).

- The only acceptable medical notes are those provided by the University of Toronto Student Medical Certificate (see the Registration Handbook & Timetable for a copy of the certificate).

- The office of academic misconduct imposes a punishment of **suspension for 4 months for passing on fake sick notes.**

- The Faculty of Arts and Science selects the dates for examinations within the final exam period. You must not make travel, employment or other plans that may conflict with the date chosen for the examination in this course and any such conflict will not be accepted as grounds for writing a

deferred exam. Instructors cannot make special arrangements with students who miss the final exam for any reason.

Test Score appeals: appeals will be conducted according to the following procedure: a) Please *type* a short paragraph explaining the grievance and why you should obtain additional points. Give a hard copy of this document to me. b) Conditional on this argument being found persuasive by me, the *entire* exam will be re-graded. Your score can go *up or down*.

Assigned Readings and Schedule

Readings with a double asterisk (**) are required. Readings with a single asterisk (*) are recommended. Remaining readings are for those with further interest in the subject.

Basic Gains from Trade and Comparative Advantage

**F Ch. 1

*DN Ch. 3

*Deardorff, Alan V. (1980) "The General Validity of the Law of Comparative Advantage" *The Journal of Political Economy*, Vol. 88, No. 5, pp. 941-957

Bernhofen, Daniel M. and John C. Brown (2004), "A Direct Test of the Theory of Comparative Advantage: The Case of Japan," *Journal of Political Economy*, Vol. 112, No. 1, pp. 48-67

Costinot, Arnaud (2009), "An Elementary Theory of Comparative Advantage", *Econometrica*, Vol. 77 No. 4, pp. 1165-1192.

The Ricardian Model

**F Ch. 1

**Dornbusch, Rudiger and Stanley Fischer, and Paul Samuelson (1977) "Comparative Advantage, Trade, and Payments in a Ricardian Model with a Continuum of Goods," *The American Economic Review*, Vol. 67, No. 5, pp. 823-839

** Eaton, Jonathan and Samuel Kortum (2002) "Technology, Geography, and Trade," *Econometrica*, Vol. 70, No. 5, pp. 1741-1779

*Costinot, Arnaud and David Donaldson, and Ivana Komunjer (2012) "What Goods Do Countries Trade? A Quantitative Exploration of Ricardo's Ideas," *Review of Economic Studies*, Vol. 79, No. 2, pp 581-608.

Heckscher-Ohlin (Theory)

**F Ch. 2 & 3

*Deardorff, Alan V. (1982) "The General Validity of The Heckscher-Ohlin Theorem," *The American Economic Review*, Vol. 72, No. 4, pp. 683-694

*Jones, Ronald (1965) "The Structure of Simple General Equilibrium Models," *The Journal of Political Economy*, Vol. 73, No. 6, pp. 557-572

Neary, J. Peter (1978): "Short-run Capital Specificity and the Pure Theory of International Trade," *Economic Journal* v. 88, pp. 488-510.

Dornbusch, Rudiger and Stanley Fischer, and Paul Samuelson (1980) "Heckscher-Ohlin Trade Theory with a Continuum of Goods," *The Quarterly Journal of Economics*, Vol. 95, No. 2, pp. 203-224

Ethier, Wilfred (1984) "Higher Dimensional Issues in Trade Theory." In R.W. Jones and P.B. Kenen eds. *Handbook of International Economics* Vol. 1, Amsterdam: North-Holland, 1984. Ch. 3

Heckscher-Ohlin (Empirics)

**Bowen Harry and Edward Leamer and Leo Sveikauskas, (1987) "Multicountry, Multifactor Tests of the Factor Abundance Theory" *The American Economic Review*, Vol. 77, No. 5, pp. 791-809

**Trefler, Daniel (1993) "International Factor Price Differences: Leontief was Right!" *The Journal of Political Economy*, Vol. 101, No. 6, pp. 961-987

**Trefler, Daniel (1995) "The Case of the Missing Trade and Other Mysteries," *The American Economic Review*, Vol. 85, No. 5, pp. 1029-1046

**Davis, Donald and David Weinstein (2001) "An Account of Global Factor Trade," *The American Economic Review*, Vol. 91, No. 5, pp. 1423-1453

Leamer, Edward (1980) "The Leontief Paradox, Reconsidered." *Journal of Political Economy*, Vol. 88 pp. 495-503

Models of Increasing Returns to Scale

**Krugman, Paul (1979) "Increasing Returns, Monopolistic Competition, and International Trade" *Journal of International Economics* Vol 15. Pp. 313-321

**Krugman, Paul (1980) "Scale Economies, Product Differentiation, and the Pattern of Trade," *The American Economic Review*, Vol. 70, No. 5 (Dec., 1980), pp. 950-959

Ottaviano, Gianmarco and Takatoshi Tabuchi, and Jacques-Francois Thiesse (2002) "Agglomeration and Trade Revisited," *International Economic Review*, Vol. 43, No. 2, pp. 409-435

Romalis, John (2004), "Factor Proportions and the Structure of Commodity Trade," *American Economic Review*, Vol. 94, No.1, pp. 67-97

October 22nd: Midterm

Gravity, Geography, and Trade

** [Revisited] Eaton, Jonathan and Samuel Kortum (2002) "Technology, Geography, and Trade," *Econometrica*, Vol. 70, No. 5, pp. 1741-1779

**Redding, Stephen and Anthony Venables (2004) "Economic Geography and International Inequality," *Journal of International Economics*, Vol. 62, No. 1, pp. 53-82

*Anderson, James and Eric van Wincoop (2003) "Gravity with Gravitas: A solution to the border puzzle," *American Economic Review*, Vol. 92, No. 1, pp. 170-192

Krugman, Paul and Anthony Venables (1995) "Gloabization and the Inequlity of Nations", *Quarterly Journal of Economics*, Vol. 110, no. 4 (1995): 857-880.

Fujita, Masahisa and Paul Krugman and Anthony Venables (1999) *The Spatial Economy: cities, regions, and international trade*, The MIT Press, Cambridge, MA.

Alvarez, Fernando and Robert Lucas (2007) "'General equilibrium analysis of the Eaton-Kortum model of international trade," *Journal of Monetary Economics*,, vol. 70, No. 6, pp. 1726-1768.

Head, Keith and Thierry Mayer (2013) "Gravity Equations: Workhorse, Toolkit, and Cookbook", *forthcoming in the Handbook of International Economics*.

Yagan, Danny (2014), "Moving to Opportunity? Migratory Insurance over the Great Recession." Mimeo, UC Berkeley.

Trade and Wages in Developed Countries

**Autor, David and Frank Levy, and Richard Murnane (2003) "The Skill Content of Recent Technological Change: An Empirical Exploration," *Quarterly Journal of Economics*, November.

**Autor, David and David Dorn (2013), "The Growth of Low Skill Service Jobs and the Polarization of the U.S. Labor Market," *American Economic Review*, 103(5), 1553-1597

**Autor, David and David Dorn and Gordon Hanson (2013), "The China Syndrome: Local Labor Market Effects of Import Competition in the United States," *American Economic Review*, 103(6), 2121-2168

**F ch. 4

**David Hummels & Rasmus Jorgensen & Jakob Munch & Chong Xiang, (2014), "The Wage Effects of Offshoring: Evidence from Danish Matched Worker-Firm Data," *American Economic Review*, vol. 104(6), pages 1597-1629.

Katz, Lawrence and Kevin Murphy, (1992): "Changes in Relative Wages, 1963-1987: Supply and Demand Factors," *The Quarterly Journal of Economics*, Vol. 107, No. 1, pp. 35-78

Berman, Eli and John Bound, and Zvi Griliches, (1994) "Changes in the Demand for Skilled Labor Within U.S. Manufacturing Industries: Evidence from the Annual Survey of Manufacturing" *The Quarterly Journal of Economics*, Vol. 109, No. 2, pp. 367-397

Erhan Artuc & Shubham Chaudhuri & John McLaren, 2010. "Trade Shocks and Labor Adjustment: A Structural Empirical Approach," *American Economic Review*, vol. 100(3), pages 1008-45.

Firpo, Sergio and Nicole Fortin & Thomas Lemieux, (2013), "Occupational Tasks and Changes in the Wage Structure" Working Paper, University of British Columbia

Autor, David and David Dorn and Gordon Hanson (2014), "Trade Adjustment: Worker Level Evidence," *Quarterly Journal of Economics*, 129(4), 1799-1860

Autor, David and David Dorn and Gordon Hanson (2015), "Untangling Trade and Technology: Evidence from Local Labour Markets," *Economic Journal*, 125(584), 621-646

Pierce, Justin R, and Peter K Schott, (2015) "The Surprisingly Swift Decline of U.S. Manufacturing Employment." Yale Department of Economics Working Paper.

Acemoglu, Daron and David Autor and David Dorn and Gordon Hanson and Brendan Price (2015), "Import Competition and the Great U.S. Employment Sag of the 2000s," *Journal of Labor Economics*, forthcoming

Trade and Wages in Developing Countries

**Robert Feenstra and Gordon Hanson (1997) "Foreign direct investment and relative wages: Evidence from Mexico's maquiladoras" *The Journal of International Economics*, Vol. 42, pp. 371-393

**Eric Verhoogen (2008) "Trade, Quality Upgrading and Wage Inequality in the Mexican Manufacturing Sector" *The Quarterly Journal of Economics*, Vol. 123, No. 2, pp 489-530.

**Kovak, Brian (2013) "Regional Effects of Trade Reform: What is the Correct Measure of Liberalization?" *The American Economic Review*, Volume 103, Number 5, August 2013, pp. 1960-1976(17)

**Dix-Carneiro, Raphael (2014) "Trade Liberalization and Labor Market Dynamics" *Econometrica*, Volume 82, Number 3, May 2014, pp. 825-885

**Golberg and Pavcnik (2007) "Distributional Effects of Globalization in Developing Countries," *Journal of Economic Literature*, Vol. 45, No. 1, pg. 39-82