

Course Outline for Economics 2300: International Trade
Fall 2011
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Office Hours: Wednesday, 11am-12pm.

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.

Required Texts

There is one *required* textbook for this class:

-Feenstra, Robert C., *Advanced International Trade: Theory and Evidence*, Princeton: Princeton University Press, 2004

The following textbooks are optional. Ph.D. students should purchase them from Amazon or any other online vendor as they will be useful during your career. M.A. students can reference them as needed.

Dixit, A.K. and V. Norman, *Theory of International Trade: A Dual, General Equilibrium Approach*, Cambridge: Cambridge University Press, 1980

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

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.

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 United States Current Population Survey (CPS) provides very large (sample size) and extensive (number of variables) on U.S. residents from 1962-2009. It is 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 cps.ipums.org/cps.

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 using one of two metrics:

Metric 1:

10% referee report

10% Problem Sets

10% research proposal

30% mid-term

40% comprehensive final exam

Metric 2:

40% mid-term

60% comprehensive final exam

Ph.D. students are required to be graded according to *Metric 1*. Masters students have a choice but must let me know via email which metric they prefer by **September 22nd**.

The problem sets will be entirely of the theoretical kind. I will ask you to replicate the equations in a handful of very influential papers. This is to 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. The referee report and replication exercises 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...

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*.

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.

Assigned Readings and Schedule

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

Basic Gains from Trade and Comparative Advantage

**Feenstra Ch. 1

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

Berhofen & Brown (2004) "A Direct test of the Theory of Comparative Advantage: The Case of Japan" *The Journal of Political Economy*, Vol. 112, No. 1, pp. 48-67

Berhofen & Brown (2005) "An Empirical Assessment of the Comparative Advantage Gains from Trade: Evidence from Japan" *The American Economic Review*, Vol. 95, No. 1, pp. 208-225

The Ricardian Model

**Feenstra Ch. 1

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

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

Costinot, Donaldson, and Komunjer (2010) "What Goods Do Countries Trade? A Quantitative Exploration of Ricardo's Ideas," MIT Working Paper, (see Arnaud Costinot's webpage)

Heckscher-Ohlin (Theory and Empirics)

**Feenstra Ch. 3

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

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

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

Ethier, W. (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

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

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

**Feenstra Ch. 2

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

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

*Helpman (1999) "The Structure of Foreign Trade," *Journal of Economic Perspectives*, Vol. 13, no. 2, pg. 121-144

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

Models of Increasing Returns to Scale

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

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

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

Davis (1998), "The Home Market, Trade, and Industrial Structure," *American Economic Review*, Vol. 88, No. 3 (Dec., 1998), pp. 1264-1276

Helpman-Krugman Ch. 6

Obstfeld-Rogoff Notes

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

October 20th: Midterm

Firm Heterogeneity

**Bernard and Jensen (1999) "Exceptional Exporter Performance: Cause, Effect or Both?"

Journal of International Economics Vol. 47, No.1 (1999), 1–25.

** Bernard, Jensen, Redding, and Schott (2007) “Firms in International Trade” *Journal of Economic Perspectives*, vol. 21 pp. 105-130

*Levinsohn (1999) “Employment Responses to International Liberalization in Chile,” *Journal of International Economics*, Vol. 47 April, pp. 321-344

**Melitz (2003) “The Impact of Trade on Intra-Industry Reallocations and Aggregate Productivity,” *Econometrica* Vol. 71 No. XXX pp. 1695-1725

**Melitz and Ottaviano (2008) “Market Size, Trade, and Productivity,” *Review of Economic Studies*, Vol. 75. No. XXX, pp. 295-316

**Trefler (2004) “The Long and Short of the Canada-U.S. Free Trade Agreement,” *American Economic Review*, Vol. 94, No. XXX, pp.870-895

Bernard, Jensen, Eaton, and Kortum (2003) “Plants and Productivity in International Trade,” *The American Economic Review*, Vol. 93, No. 4, pp. 1268-1290

Bernard and Jensen (1995) "Exporters, Jobs, and Wages in U.S. Manufacturing: 1976-87", *Brookings Papers on Economic Activity: Microeconomics*, 1995, pp. 67-112.

Pavcnik (2002) “Trade Liberalization, Exit, and Productivity Improvements: Evidence from Chilean Plants,” *The Review of Economic Studies*, Vol. 69, No. 1, pp. 245-76.

Tybout (2001) “Plant- and Firm-Level Evidence on the ‘New’ Trade Theories,” NBER WP #8418, August.

Multinationals

**Markusen (1995) “The Boundaries of Multinational Enterprises and International Trade,” *The Journal of Economic Perspectives*, Vol. 9, No. 2, pp. 169-189

Hart, *Firms, Contracts, and Financial Structure (Clarendon Lectures in Economics)*, United States: Oxford University Press, 1995. (Chapter 2**)

Antras (2003) “Firms, Contracts, and Trade Structure,” *The Quarterly Journal of Economics*, Vol. 118, pp. 1374-1418

Antras and Helpman (2004) “Global Sourcing,” *The Journal of Political Economy*, Vol. 112, No. 3, pp. 552-580

Grossman and Helpman (2002) “Integration Versus Outsourcing in Industry Equilibrium,” *The Quarterly Journal of Economics*, Vol. 117, No. 1, pp. 85-120

McLaren (2000) “Globalization and Vertical Structure,” *The American Economic Review*, Vol. 90, No. 5, pp. 1239-1254

Trade and Wages in Developed and Developing Countries

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

**Feenstra ch. 4

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

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

**Lemieux (2006) “The Changing Nature of Wage Inequality,” Working Paper, University of British Columbia

**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.

Acemoglu (1996) “Why Do New Technologies Complement Skills? Directed Technical Change and Wage Inequality” *The Quarterly Journal of Economics*, Vol. 113, No. 4, pp. 1055-1089

Acemoglu (2003) “Patterns of Skill Premia” *The Review of Economic Studies*, Vol. 70, No. 2 (Apr., 2003), pp. 199-230

Berman, Bound, and Grilliches (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

Feenstra and Hanson (1999) “The Impact of Outsourcing and High Technology Capital on Wages: Estimates from the United States.” *The Quarterly Journal of Economics*, Vol. 114, No. 3, pp. 907-940

Firpo and Fortin & Lemieux (2009) “Occupational Tasks and Changes in the Wage Structure” Working Paper, University of British Columbia

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

Saez and Veall (2005): “The Evolution of High Incomes in Northern America: Lessons from Canadian Evidence,” *American Economic Review*, Vol. 95 No. 3, pp. 831-849