



The University of Chicago Booth School of Business

International Macroeconomics and Trade

BUSN 33946 & ECON 35101

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Logistics

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Office hours: Zoom appointments, please email

Teaching assistant: Takashi Onoda (onoda@uchicago.edu)

Course materials: github.com/jdingel/econ35101 and canvas.uchicago.edu

Class schedule: Mondays 8:30 AM - 11:30 AM via Zoom

This course will *start September 21* and run through November 30. This class is remote-only.

Course description

This is a graduate course in international trade. It introduces the fundamental concepts and tools of international trade and economic geography to prepare students to tackle research questions in these areas.

This course is the first in a two-part trade sequence. The second is taught by Felix Tintelnot.

Assessment

Grades will be based on comprehension checks (15%), assignments (60%), and a final exam (25%).

- Comprehension checks should require little more than comprehending the assigned readings.
- I will give three types of assignments, which require more time and creativity:
 1. Economics: I will ask you to derive a theoretical result or survey an empirical literature.
 2. Programming: I will ask you to write a function that solves for equilibrium or estimates a parameter. See comments on computation below.
 3. Referee reports: I will ask you to write a referee report on a recent working paper.
- Students may choose between a traditional final exam or a quarter-long joint replication project. I would prefer the latter. We will discuss this during the first week of class.
- In addition to course material, the traditional final exam may ask you to propose an original research idea, so you should be thinking about these during our class (and for the rest of your life!).

Comprehension checks and assignments will be posted to the GitHub repository. Submit your work via the Canvas site.

Computation

Scientific computation is important. You have choices to make. See “[A Comparison of Programming Languages in Economics](#).”¹ I recommend [Julia](#).² Julia’s advantages are that it is open source and typically faster than Matlab. Its downside is that it is a young language, so its syntax is evolving. To get started doing economics in Julia, see Perla, Sargent, and Stachurski’s “[Lectures in Quantitative Economics](#).”³ You may submit Julia or Matlab code as homework solutions. Please confer with me before submitting code written in other languages.

¹<https://github.com/jesusfv/Comparison-Programming-Languages-Economics>

²<https://tradediversion.net/2018/09/17/why-i-encourage-econ-phd-students-to-learn-julia/>

³<https://lectures.quantecon.org/jl/>

Standards for transparency and replicability are rising quickly. The AEA has appointed a [Data Editor](#) who will verify that code works [prior](#) to accepting papers for publication. Please write code for this class that is transparent and self-contained.

Other resources

- I borrow considerably from Arnaud Costinot and Dave Donaldson's PhD [class materials](#)
- I will link to relevant [Trade Diversion](#) blog posts
- Alan Deardorff's [Glossary of International Economics](#)

Presentation and writing

Graduate students often underestimate the importance of good writing and presentation skills. A job market paper must teach us something new. Teaching means communicating your content to the audience. A useful idea that cannot be conveyed is not a useful idea.

Clear presentations also build others' confidence that you are a clear thinker. As a well-known IO economist once said, "if I see typos in your slides, I know there are typos in your code."

Course Outline and Reading List

I have opted for a minimalist reading list. Every reading listed below is required. We will discuss each paper and chapter that is listed in considerable detail. Do the readings before class each week. If you don't have time to do all the readings before class, I have marked the highest-priority item in each week with an exclamation point.

If you're going to be a trade economist, you ought to own the following books:

- Avinash Dixit and Victor Norman, *Theory of International Trade: A Dual, General Equilibrium Approach*, 1980.
- Elhanan Helpman and Paul R. Krugman, *Market Structure and Foreign Trade: Increasing Returns, Imperfect Competition, and the International Economy*, 1985.
- Robert C. Feenstra, *Advanced International Trade: Theory and Evidence*, 2016.

Week 1: Gains from Trade and Comparative Advantage

- Dixit and Norman textbook, chapters 1 and 3.
- ! Deardorff, Alan V. 1980. "The General Validity of the Law of Comparative Advantage." *Journal of Political Economy*, 88(5): 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* 112 (1): 48-67.
- Bernhofen, Daniel, M., and John C. Brown. 2005. "An Empirical Assessment of the Comparative Advantage Gains from Trade: Evidence from Japan" *American Economic Review*, 95 (1): 208-225.

Week 2: Deterministic Ricardian models

- ! 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*, 67(5): 823-839
- Costinot, Arnaud. 2009. "An Elementary Theory of Comparative Advantage." *Econometrica*, 77(4): 1165-1192.
- Matsuyama, Kiminori. 2000. "A Ricardian Model with a Continuum of Goods under Nonhomothetic Preferences: Demand Complementarities, Income Distribution and North-South Trade." *Journal of Political Economy*, 108(6): 1093-1120.

Week 3: Probabilistic Ricardian models

- ! Eaton, Jonathan and Samuel Kortum. 2002. "Technology, Geography, and Trade." *Econometrica*, 70(5): 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*, 79(2): 581-608.

Week 4: Gravity and gains from trade

- ! Head, Keith, and Thierry Mayer. 2014. “[Gravity Equations: Workhorse, Toolkit, and Cookbook.](#)” in *Handbook of International Economics*, Vol. 4, 131-195.
- Costinot, Arnaud and Andres Rodriguez-Clare. 2014. “[Trade Theory with Numbers: Quantifying the Consequences of Globalization.](#)” in *Handbook of International Economics*, Vol. 4, 197-261.
- Feyrer, James. 2009. “[Distance, Trade, and Income – The 1967 to 1975 Closing of the Suez Canal as a Natural Experiment.](#)” *NBER Working Papers No. 15557*.
- Feyrer, James. 2019. “[Trade and Income - Exploiting Time Series in Geography.](#)” *American Economic Journal: Applied Economics*, 11(4): 1-35.

Week 5: Multiple factors of production

- Jones, Ronald W. and J. Peter Neary. 1984. “[The positive theory of international trade.](#)” in *Handbook of International Economics*, Vol. 1, 1-62.
- ! Feenstra textbook, chapters 1 and 2.
- Davis, Donald and David Weinstein. 2001. “[An Account of Global Factor Trade.](#)” *American Economic Review*, 91(5): 1423-1453.
- Costinot, Arnaud and Jonathan Vogel. 2010. “[Matching and Inequality in the World Economy.](#)” *Journal of Political Economy*, 118(4): 747-786.

Week 6: Increasing returns and home-market effects

- ! Krugman, Paul. 1980. “[Scale Economies, Product Differentiation, and the Pattern of Trade.](#)” *American Economic Review*, 70(5): 950-959.
- Fajgelbaum, Pablo, Gene M. Grossman, and Elhanan Helpman. 2011. “[Income Distribution, Product Quality, and International Trade.](#)” *Journal of Political Economy*, 119(4): 721-765.
- Dingel, Jonathan I. 2017. “[The Determinants of Quality Specialization](#)”, *Review of Economic Studies*, 84(4): 1551-1582.
- Matsuyama, Kiminori. 2019. “[Engel’s Law in the Global Economy: Demand-Induced Patterns of Structural Change, Innovation, and Trade](#)”, *Econometrica* 87: 497-528.
- Costinot, Arnaud, Dave Donaldson, Margaret Kyle, and Heidi Williams. 2019. “[The More We Die, The More We Sell? A Simple Test of the Home-Market Effect](#)”. *Quarterly Journal of Economics*, 134(2): 843-894.

Week 7: Heterogeneous firms

- Melitz, Marc and Daniel Trefler. 2012. “[Gains from Trade when Firms Matter.](#)” *Journal of Economic Perspectives*, 26(2): 91-118.
- ! Melitz, Marc J. 2003. “[The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity.](#)” *Econometrica*, 71(6): 1695-1725.

Week 8: Models of agglomeration

- Henderson, J.V. 1974. “[The Sizes and Types of Cities.](#)” *American Economic Review*, 64(4): 640-656.
- Behrens, Kristian, Gilles Duranton, and Frédéric Robert-Nicoud. 2014. “[Productive Cities: Sorting, Selection, and Agglomeration.](#)” *Journal of Political Economy*, 122(3): 507-553.
- ! Ahfeldt, Gabriel M., Stephen J. Redding, Daniel M. Sturm, and Nikolaus Wolf. 2015. “[The Economics of Density: Evidence from the Berlin Wall.](#)” *Econometrica*, 83(6): 2127-2189.
- Dingel, Jonathan I. and Felix Tintelnot. 2020. “[Spatial Economics for Granular Settings.](#)” Working paper.

Week 9: Economic geography

- ! Krugman, Paul. 1991. “[Increasing Returns and Economic Geography.](#)” *Journal of Political Economy*, 99(3): 483-499.
- Helpman, Elhanan. 1998. “The Size of Regions.” *Topics in Public Economics: Theoretical and Applied Analysis*, 33-54. Cambridge: Cambridge University Press. ([1995 working paper](#))
- Allen, Treb and Costas Arkolakis. 2014. “[Trade and the Topography of the Spatial Economy.](#)” *Quarterly Journal of Economics*, 129(3): 1085-1140.

Week 10: Spatial sorting of skills and sectors

- ! Diamond, Rebecca. 2016. “[The Determinants and Welfare Implications of US Workers’ Diverging Location Choices by Skill: 1980-2000.](#)” *American Economic Review*, 106(3): 479-524.
- Davis, Donald R., and Jonathan I. Dingel. 2019. “[A Spatial Knowledge Economy.](#)” *American Economic Review*, 109 (1): 153-70.
- Davis, Donald and Jonathan I. Dingel. 2020. “[The Comparative Advantage of Cities.](#)” *Journal of International Economics*.