

**ECON 6803**  
**Understanding Productivity in IO and International Trade**  
**Second Term, 2023-2024**

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**About the Course**

The second half of the course focuses on International Trade, covering both theory and applications. The overall goal is to develop a broad conceptual understanding of ongoing research in international trade and familiarity with the analytical techniques used by economists in studying those questions and in developing policy recommendations.

**Course Outline & Readings**  
**(\* Required Readings, # Recommended Readings)**

***Topic 1 [1 week]: Gravity Equation, Armington Model, and Gains from Trade***

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

Costinot, Arnaud, and Andrés Rodríguez-Clare. 2014. "Trade Theory with Numbers: Quantifying the Consequences of Globalization." *Handbook of International Economics*, Vol. 4, ed. Gita Gopinath, Elhanan Helpman and Kenneth Rogo. New York: Elsevier. (Sections 1&2 \*)

Head, Keith, and Thierry Mayer. 2014. "Gravity Equations: Workhorse, Toolkit, and Cookbook." *Handbook of International Economics*. Vol. 4, ed. Gita Gopinath, Elhanan Helpman and Kenneth Rogo. New York: Elsevier. (\*)

Silva, J. M. C. Santos, and Silvana Tenreyro. 2006. "The Log of Gravity." *Review of Economic and Statistics* 88(4): 641-658 (#)

Boehm, Christoph E., Andrei A. Levchenko, and Nitya Pandalai-Nayar. 2022. "The Long and Short (Run) of Trade Elasticities." Forthcoming, *American Economic Review*. (#)

Fontange, Lionel, Houssein Guimbard, and Gianluca Orefice. 2022. "Tariff-Based Product-Level Trade Elasticities." *Journal of International Economics* 137:103593 (#)

***Topic 2 [1 week]: Ricardian Models (DFS & EK Models)***

Eaton, Jonathan, and Samuel Kortum. 2002. "Technology, Geography, and Trade." *Econometrica* 70 (5): 1741-1779. (\*)

Dekle, Robert, Jonathan Eaton, and Samuel Kortum. 2007. "Unbalanced Trade." *American Economic Review* 97(2): 351-355. (\*)

Costinot, Arnaud, Dave 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. (\*)

Caliendo, Lorenzo, and Fernando Parro. 2015. "Estimates of the Trade and Welfare Effects of NAFTA." *Review of Economic Studies* 82(1): 1-44. (\*)

Dornbusch, Rudiger, Stanley Fischer, and Paul Anthony Samuelson. 1977. "Comparative Advantage, Trade, and Payments in a Ricardian Model with a Continuum of Goods." *American Economic Review* 67(5): 823-839. (#)

Bernard, Andrew B., Jonathan Eaton, J. Bradford Jensen, and Samuel Kortum. 2003 "Plants and Productivity in International Trade." *American Economic Review* 93(4): 1268-1290. (#)

Waugh, Michael. 2010 "International Trade and Income Differences." *American Economic Review* 100(5): 2093-2124. (#)

Di Giovanni, Julian, Andrei A. Levchenko, and Jing Zhang. 2014. "The Global Welfare Impact of China: Trade Integration and Technological Change." *American Economic Journal: Macroeconomics* 6(3): 153-183. (#)

Simonovska, Ina, and Michael E. Waugh. 2014. "The Elasticity of Trade: Estimates and Evidence." *Journal of International Economics* 92 (1): 34-50. (#)

Levchenko, Andrei A., and Jing Zhang. 2016. "The Evolution of Comparative Advantage: Measurement and Welfare Implications." *Journal of Monetary Economics* 78: 96-111. (#)

Brandt, Loren, Bingjing Li, and Peter M. Morrow. 2021. "Processing Trade and Costs of Incomplete Liberalization: The Case of China." *Journal of International Economics* 131: 103453. (#)

**Topic 3 [1.5 week]: Firm Heterogeneity and Increasing Returns to Scale (Krugman & Melitz Models)**

Krugman, Paul. 1980. "Scale Economies, Product Differentiation, and the Pattern of Trade." *American Economic Review* 70(5): 950-959. (\*)

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

Brandt, Loren, Johannes Van Biesebroeck, Luhang Wang, and Yifan Zhang. 2017. "WTO

Accession and Performance of Chinese Manufacturing Firms.” *American Economic Review* 103(6): 2169-2195. (\*)

Costinot, Arnaud, and Andrés Rodríguez-Clare. 2014. “Trade Theory with Numbers: Quantifying the Consequences of Globalization.” *Handbook of International Economics*, Vol. 4, ed. Gita Gopinath, Elhanan Helpman and Kenneth Rogo. New York: Elsevier. (Sections 3-8 \*)

Melitz, Marc, and Gianmarco I.P. Ottaviano. 2008. “Market Size, Trade, and Productivity.” *Review of Economic Studies* 75: 295-316. (#)

Chaney, Thomas. 2008. “Distorted Gravity: The Intensive and Extensive Margins of Trade.” *American Economic Review* 98(4): 1707-1721 (#)

Hsieh, Chang-Tai and Ralph Ossa. 2016. “A Global View of Productivity Growth in China.” *Journal of International Economics* 102: 209–224. (#)

Burstein, Ariel, and Jonathan Vogel. 2016. “International Trade, Technology, and the Skill Premium.” *Journal of Political Economics* 125(5): 1356–1412. (#)

Shapiro, Joseph S., and Reed Walker. 2018. “Why is Pollution from U.S. Manufacturing Declining? The Roles of Environmental Regulation, Productivity, and Trade.” *American Economic Review* 108(12): 3814-3854 (#)

Pavcnik, Nina. 2002. “Trade Liberalization, Exit, and Productivity Improvements: Evidence from Chilean Plants.” *Review of Economic Studies* 69(1): 245-276. (#)

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. (#)

Faber, Ben. 2014. “Trade Integration, Market Size, and Industrialization: Evidence from China’s National Trunk Highway System.” *Review of Economic Studies* 81(3): 1046-1070. (#)

Aghion, Philippe, Antonin Bergeaud, Matthieu Lequien, and Marc J. Melitz. 2022. “The Heterogenous Impact of Market Size on Innovation: Evidence from French Firm-Level Exports.” *Review of Economic and Statistics*.

#### **Topic 4 [1 week]: Trade Shocks and Local Labor Markets**

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

Kovak, Brian. 2013. “Regional Effects of Trade Reform: What is the Correct measure of Liberalization?” *American Economic Review* 103(5): 1960-1979. (\*)

Pierce, Justin R., and Peter K. Schott. 2016. "The Surprisingly Swift Decline of US Manufacturing Employment." *American Economic Review* 106(7): 1632-1662. (\*)

Galle, Simon, Andrés Rodríguez-Clare. 2022. "Slicing the Pie: Quantifying the Aggregate and Distributional Effects of Trade." *Review of Economic Studies* 0: 1-45. (\*)

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

Borusyak, Kirill, Peter Hull, and Xavier Jaravel. 2022. "Quasi-Experimental Shift-Share Research Designs." *Review of Economic Studies* 1: 181-213. (#)

Goldsmith-Pinkham, Paul, Isaac Sorkin, and Henry Swift. 2020. "Bartik Instruments: What, When, Why, and How." *American Economic Review* 110(8): 2586-2624. (#)

Adão, Rodrigo, Michal Kolesár, and Eduardo Morales. 2019. "Shift-Share Designs: Theory and Inference." *Quarterly Journal of Economics*, 134(4): 1949-2010. (#)

Adão, Rodrigo, Costas Arkolakis, and Federico Esposito. 2022. "General Equilibrium Effects in Space: Theory and Measurement." NBER Working Paper. (#)

Kim, Ryan, and Jonathan Vogel. 2021. "Trade Shocks and Labor-Market Adjustment." *American Economic Review: Insights* 3(1): 115-130. (#)

Autor, David, David Dorn, Gordon Hanson, and Kaveh Majlesi. 2020. "Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure." *American Economic Review* 110(10): 3139-3183. (#)

Campante, Filipe R., Davin Chor, and Bingjing Li. 2022. "The Political Economy Consequences of China's Export Slowdown." Forthcoming, *Journal of the European Economic Association*. (#)

Bombardini, Matilde, and Bingjing Li. 2020. "Trade, Pollution and Mortality in China." *Journal of International Economics* 125: 103321. (#)

### ***Topic 5 [0.5 week]: Trade and Information***

Dickstein, Michael J., and Eduardo Morales. 2018. "What Do Exporters Know?" *Quarterly Journal of Economics* 133(4): 1753-1801. (\*)

Bombardini, Matilde, Bingjing Li, and Francesco Trebbi. 2023. "Did U.S. Politicians Expect the China Shock?" *American Economic Review* 113(1): 174-209. (\*)

Steinwender, Claudia. 2018. "Real Effects of Information Frictions: 'When the States and the Kingdom became United'." *American Economic Review* 108(3): 657-696. (#)

Allen, Treb. 2014. “Information Frictions in Trade.” *Econometrica* 82(6): 2041-2083. (#)

Startz, Meredith. 2021. “The Value of Face-to-Face: Search and Contracting Problems in Nigerian Trade.” Working Paper. (#)

### **Topic 6 [1 week]: From Flows of Goods to Flows of Ideas (Group Presentation)**

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

Perla, Jesse, and Christopher Tonetti. 2014. “Equilibrium Imitation and Growth.” *Journal of Political Economy* 122(1): 52-76.

Bloom, Nicholas, Mark Schankerman, and John Van Reenen. 2013. “Identifying Technology Spillovers and Product Market Rivalry.” *Econometrica* 81(4): 1347-1393.

Atkin, David, M. Keith Chen, and Anton Popov. 2022. “The Returns to Face-to-Face Interactions: Knowledge Spillovers in Silicon Valley.” NBER Working Paper 30147.

Bilir, L. Kamran, and Eduardo Morales. 2020. “Innovation in the Global Firm.” *Journal of Political Economy* 128(4): 1566-1625.

Arkolakis, Costas, Natalia Ramondo, Andrés Rodríguez-Clare, and Stephen Yeaple. 2017. “Innovation and Production in the Global Economy.” *American Economic Review* 108 (8): 2128–73.

Wolfgang, Keller, and Stephen Yeaple. 2013. “The Gravity of Knowledge.” *American Economic Review* 103(4): 1414-1444.

Kantor, Shawn, and Alexander Whalley. 2019. “Research Proximity and Productivity: Long-Term Evidence from Agriculture” *Journal of Political Economy* 127(2): 819-854.

Myers, Kyle R., and Lauren Lanahan. 2013. “Estimating Spillovers from Publicly Funded R&D: Evidence from the US Department of Energy.” *American Economic Review* 112(7): 2393-2423.

## **Evaluations**

1. Research Proposal	20%
2. In-class Presentation	20%
3. In-class Participation	10%

- **40-minute Presentation:** On [Apr 26](#), students are required to form groups of two and take turns in presenting the research papers. Due date: Each group should select 3 papers in the reading list of Topic 6 “From Flows of Goods to Flows of

Ideas”, and communicate with me via email by Mar 17. I will assign one paper for your presentation based on the choices. Topics are first come first served.

- **6-page research proposal:** Students are required to write a 6-page 1.5-spaced research proposal. Graphs and figures are strongly encouraged but are not counted toward the page and word count requirements. Proper citation is required. Due date: Submit the paper on Moodle on May 3 before 11 pm. It will be checked against plagiarism.