

## **Economics 423, Fall Semester 2024**

### **International Trade**

**Instructor: Prof. Santiago Camara**

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**Pre-requisites:** ECON 230D1/D2 or ECON 250D1/D2; not open to students who have taken ECON 423 D1/D2.

### **Course Description**

This course covers the microeconomics foundations of international trade, trade policies in *Developed* and *Developing countries*, the process of globalization, and multinational corporations. To do so, we will cover the origins, ideologies, and empirical analysis of different theories. The emphasis will be on developing analytical tools (mostly through economic models which rely on rigorous mathematical analysis), studying their predictions and testing their predictions with data. We begin with a brief introduction and then develop a theoretical framework to help us understand (1) why countries trade with each other and what determines trade patterns (2) whether trade is beneficial for a country and (3) how trade affects the distribution of income within a country. We then analyze the effects of commercial policy on trade and economic welfare. Lastly, we will study the role of individual firms in international trade, the rise of global value chains and multinational corporations, and the recent challenges and potential retrenchment in the globalization phenomenon.

Understanding the foundations behind international trade is of crucial importance: we live in a globalized world in which firms' decisions over importing, exporting, and geographical location of production determine several aspects of our day-to-day economic life, such as our real wages and/or the price and quality of the goods we consume. Additionally, governments (both federal and provincial, and even supra-national ones) continuously make decisions over international trade

policy. Thus, understanding the mechanisms through which these policy decisions affect firms and consumers may provide insights into how to consume and/or invest.

**Required course material & readings:** There is only one required text, “International Economics: Theory & Policy” 12<sup>th</sup> edition, by Krugman, Obstfeld and Melitz (KOM). We will cover the first half of the book. Previous editions of the book may also prove adequate. There will also be other reading material, articles, etc. Every lecture will follow lecture notes based on the chapters of the books and upon a wide range of sources, which will be duly referenced.

**Practical details & Evaluation:** Classes will focus on the introduction of different foundational theories of international trade, describing their key assumptions, the validity of their assumptions, logically and mathematically arriving at their conclusions. You will have to submit weekly problem sets that will help you practice and test your knowledge leading up to the midterm and final exams. Each exam will have three different parts: (i) a multiple choice set of questions; (ii) a practical question which will be based on exercises seen in class and in the problem sets; (iii) an essay question which will be based on the theory presented in class and in the additional readings in the syllabus.

- **Problem Sets / Assignments: 15%.** Problem sets will be due almost every Monday before class. Problem sets will have one of three grades: 0 points for no submission; half points for a submission that meets minimum standards; full points for a submission that exhibits a significant effort. For more details on the evaluation of Problem Sets see the Q&A section below.
- **Oral Presentation: 10%.** 10-minute team presentation. Students must present data on a country’s international trade or bilateral trade pattern and argue which of the models seen in class explains the pattern the best. The choice of international trade or bilateral trade pattern must be submitted for approval before the Midterm along with the name of the members of the group. Teams can be made up of up to 5 students. After the 10-minute presentation, students should expect questions from the Professor and their peers. The evaluation will consider the data collected and presented, strength of the argument presented and format of the presentation.

- **Midterm Exam: 30%.** Administered by the Professor and the Teaching Assistant outside of class during an evening.
- **Final Exam: 45%.** Administered centrally by the Exam Office. The final exam is comprehensive, including all the topics seen in class since the first class.

**Course delivery, and classroom participation and etiquette:** Participation is strongly encouraged. Feel free to ask questions over all the topics discussed in class. This is, questions over the topics presented, over the underlying mathematical tools, the logic of the models, but also on the ideology, philosophy and historical context surrounding the different theories. One of the key goals of this class is to have a dialogue on the economics of international trade, to question assumptions, and bring the theory into real life applications. This course is lecture heavy; attendance is recommended.

**Extraordinary circumstances:** In the event of extraordinary circumstances beyond the control of McGill University, assessment tasks in a course are subject to change, provided students are sent adequate and timely communications regarding the change. The determination of what constitutes extraordinary circumstances is not at the discretion of the instructor.

#### **Use of Generative AI:**

- You may use generative artificial intelligence tools (e.g., ChatGPT, Gemini, Claude, etc.) for learning and practicing the concepts in this course, but these tools may NOT be used for completing assignments in this course.
- The use of generative artificial intelligence tools or apps for assignments in this course, including tools like ChatGPT, Gemini, Claude, Microsoft Copilot and other AI writing or coding assistants, is prohibited.
- Representing as one's own an idea, or expression of an idea, that was AI-generated is considered an academic offense in this course.

**Bonus for completing Student Evaluation:** If 90% or more of the class completes the student evaluation by the last day of class, Tuesday, Dec. 3, everyone will get a 3% bonus in their final grade.

**Office Hours:** (schedule may change throughout the Semester). My office hours will be held in my office.

- Mondays from 2pm to 3pm.
- Wednesdays from 4pm to 5:30pm.
- If neither option works, please reach out to me through email. I will try to accommodate but can't make promises.

**Class structure:**

The following class structure is tentative and might slightly change during the semester:

1. Introduction: Stylized Facts & Class Summary

- KOM, Cap. 1.
- Deardorff, Alan y Robert Stern (2002), "What You Should Know about Globalization and the World Trade Organization", *Review of International Economics*, 10: 404-423.
- Fajgelbaum, Pablo D., and Amit Khandelwal. *The Value of De Minimis Imports*. No. w32607. National Bureau of Economic Research, 2024.
- Hoekman, Bernard (2015). "Trade and growth - end of an era?", in Hoekman, Bernard (ed.), *The Global Trade Slowdown: A New Normal?* London: CEPR Press.
- Irwin, Douglas A. (2015). "World trade and production: a long-run view", in Hoekman, Bernard (ed.), *The Global Trade Slowdown: A New Normal?* London: CEPR Press.

2. International Trade in General Equilibrium: Technology & Production Factors

2.1 Labor Productivity & Comparative Advantages: The Ricardian Model

- KOM, Cap. 3.
- Bastiat, Frederic. "The candlemakers' petition: an economic fable." *Policy: A Journal of Public Policy and Ideas* 17.2 (2001): 60-62.

- Dornbusch, Rudiger, Stanley Fischer y 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 y Samuel Kortum (2012). “Putting Ricardo to Work”, *Journal of Economic Perspectives*, Vol. 26, No. 2, pp: 65-90.
- Krugman, Paul. "Does third world growth hurt first world prosperity?." *Harvard Business Review* 72.4 (1994): 113-121.
- Krugman, Paul. "In praise of cheap labor." *Slate*, March 21 (1997): 1997.
- Krugman, Paul. "Ricardo's difficult idea: why intellectuals don't understand comparative advantage." *The economics and politics of international trade*. Routledge, 2002. 40-54.
- Li, Hongbin, Lei Li, Binzhen Wu y Yanyan Xiong (2012). “The End of Cheap Chinese Labor”, *Journal of Economic Perspectives*, Vol. 26, No. 4: 57-74.

## 2.2. Factor Endowments & Comparative Advantages: The Ricardo-Viner Model

- KOM, Cap. 4.
- Autor, David, David Dorn and Gordon Hanson (2013). “The China Syndrome: Local Labor
- Galiani, Sebastián y Pablo Sanguinetti (2003). “The Impact of Trade Liberalization on Trade Inequality: Evidence from Argentina”, *Journal of Development Economics*, Vol. 72, No. , pp: 497-513.
- Market Effects of Import Competition in the United States”, *American Economic Review*, Vol. 103, No. 6, pp: 2121-2168.

## 2.3. Factor Endowments & Comparative Advantages: The Heckscher-Ohlin Model

- KOM, Cap. 5.
- Bustos, Paula (2011). “Trade Liberalization, Exports and Technology Upgrading: Evidence on the Impact of MERCOSUR on Argentinean Firms”, *American Economic Review*, Vol. 101, No. 1, pp: 304-340.
- Bustos, Paula, B. Caprettini y J. Ponticelli (2016). “Agricultural Productivity and Structural Transformation. Evidence from Brazil”, *American Economic Review*, Vol. 106, No. 6, pp: 1320-1365.
- Deardorff 's Glossary of International Economics: Lerner Diagrams, en: <http://www-personal.umich.edu/%7Ealandear/glossary/figs/Lerner/ld.html>
- Freeman, Richard B. "Are your wages set in Beijing?" *Journal of Economic perspectives* 9.3 (1995): 15-32.
- Gasparini, Leonardo y Guillermo Cruces (2008): “A Distribution in Motion: The Case of Argentina: A Review of the Empirical Evidence”, CEDLAS, mimeo.

## 3. New Theories in International Trade

### 3.1. Economies of Scale & Imperfect Competition

- KOM, Cap. 7-8.

- Krugman, Paul (1980). "Scale Economies, Product Differentiation, and the Pattern of Trade", *The American Economic Review*, Vol. 70, No. 5, pp: 950-959.
- Redding, Stephen y Daniel Sturm (2008), "The Costs of Remoteness: Evidence from German Division and Reunification", *The American Economic Review*, 98(5): 1766-1797.

### 3.2. Firm Heterogeneity

- KOM, Cap. 8.
- Albornoz, Facundo y Marco Ercolani (2007). "Learning-by-exporting: do firm characteristics matter? Evidence from Argentinian panel data," *Department of Economics, University of Birmingham*, Discussion Papers 07-17.
- Artopoulos, Alejandro, Daniel Friel y Juan C. Hallak (2013), "Export Emergence of Differentiated
- Bernard, Andrew y J. Bradford Jensen (1999). "Exceptional Exporting Performance: Cause, Effect, or Both?", *Journal of International Economics*, 47: 1-25.
- Bernard, Andrew, J. Bradford Jensen, Stephen J. Redding y Peter K. Schott (2007). "Firms in International Trade", *Journal of Economic Perspectives*, 21: 105-130.
- Goods from Developing Countries: Export Pioneers and Business Practices in Argentina", *Journal of Development Economics*, 105(3): 19-35.
- Melitz, Marc J., and Stephen J. Redding (2014). "Heterogeneous Firms and Trade". *Handbook of International Economics* (4ta Edition), 4: 1-54. Elsevier, 4, 1-54.

### 3.3. Outsourcing and Global Value Chains

- KOM, Cap. 8.
- Bhagwati, Jagdish, Arvind Panagariya, y T.N. Srinivasan (2004). "The Muddles over Outsourcing", *Journal of Economic Perspectives*, Vol. 18, No. 4, pp. 93-114.
- Freeman, Richard B. (1995). "Are Your Wages Set in Beijing?", *Journal of Economic Perspectives*, Vol. 9, No. 3, pp. 15-32.
- Gereffi, Gary y Karina Fernandez-Stark (2016). *Global Value Chain Analysis: A Primer* (2<sup>nd</sup> Edition), Duke Center on Globalization, Governance & Competitiveness.

### 3.4. Gains from Trade

- Costinot, Arnaud y Andrés Rodríguez-Clare (2018). "The U.S. Gains from Trade: Valuation Using the Demand for Foreign Factor Services", *Journal of Economic Perspectives*, Vol. 32, No. 2, pp.3-24.
- Donaldson, Dave (2015). "The Gains from Market Integration", *Annual Review of Economics*, Vol.7, pp. 619-647.
- Feenstra, Robert C. (2018). "Alternative Sources of the Gains from International Trade: Variety, Creative Destruction, and Mark Ups", *Journal of Economic Perspectives*, Vol. 32, No. 2, pp. 25-46.
- Melitz, Mark y Daniel Trefler (2012). "Gains from Trade when Firms Matter", *Journal of Economic Perspectives*, Vol. 26, No. 2, pp. 91-118.

## 4. International Movements of Production Factors

- KOM, Cap. 8.
- Barba Navaretti, Giorgio y Anthony Venables (2005). *Multinational Firms in the World Economy*. Princeton: Princeton University Press.
- Borjas, George J., Richard B. Freeman, and Lawrence F. Katz. "Searching for the Effect of Immigration on the Labor Market." (1996).

- Markusen, James (1995). "The Boundaries of Multinational Enterprises and the Theory of International Trade", *Journal of Economic Perspectives*, Vol. 9, pp. 169-189.
- Smarzynska, Beata (2004). "Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers through Backward Linkages", *American Economic Review*, Vol. 94, pp. 605-627. Marín, Anabel y Martin Bell (2010). "The local/global integration of MNC subsidiaries and their technological behavior: Argentina in the late 1990s", *Research Policy*, Vol. 39, pp. 919-931.

## 5. Trade Policy

### 5.1. Instruments of Trade Policy: Tariffs, Quotas & Other Measures

- Baldwin, Robert E. "The political economy of trade policy." *Journal of economic perspectives* 3.4 (1989): 119-135.
- Bown, Chad P. y Jennifer A. Hillman (2017). "Foot-and-Mouth Disease and Argentina's Beef Exports: The WTO's *US-Animals* Dispute", *Peterson Institute for International Economics*, Working Paper 16-14.
- Brambilla, Irene, Sebastián Galiani, y Guido Porto, "Argentine Trade Policies in the XX Century: 60 Years of Solitude," in Edward Glaeser, Rafael Di Tella y Lucas Llach (eds.), *Exceptional Argentina*.
- Caliendo, Lorenzo, Robert C. Feenstra, John Romalis y Alan M. Taylor (2017). "Tariff Reductions, Entry, and Welfare: Theory and Evidence for the Last Two Decades".
- Deardorff, Alan V., and Robert M. Stern. "What you should know about globalization and the World Trade Organization." *Review of International Economics* 10.3 (2002): 404-423.
- Feenstra, Robert C. "How costly is protectionism?." *Journal of Economic Perspectives* 6.3 (1992): 159-178.
- Pavcnik, Nina (2002). "Trade Disputes in the Commercial Aircraft Industry," *The World Economy*, Mayo, pp. 733-751.
- Rodrik, Dani (2018). "What Do Trade Agreements Really Do?," *Journal of Economic Perspectives*, Vol. 32, No. 2, pp. 73-90.

### 5.2. Trade & Industrial Policy

- Brown, Drusilla, Alan V. Deardorff, and Robert M. Stern. "Issues of Environmental and Labor Standards in the Global Trading System." *Prepared for the Conference on 'Globalization, Technological Change, and the Welfare State' at the American Institute for Contemporary German Studies, The Johns Hopkins University, Washington, DC. 1997.*
- Harrison, Ann y Andrés Rodríguez-Clare (2009). "Trade, Foreign Investment, and Industrial Policy for Developing Countries", in Rodrik, Dani y Mark Rosenzweig (eds.), *Handbook of Development Economics*, 5. Elsevier.
- Hausmann, Ricardo, Jason Hwang y Dani Rodrik (2007). "What You Export Matters", *Journal of Economic Growth*, Vol. 12, Issue 1, pp. 1-25.
- Juhász, Réka, Nathan Lane, and Dani Rodrik. "The new economics of industrial policy." *Annual Review of Economics* 16 (2023).
- Rodrik, Dani (2004). "Industrial Policy for the Twenty-First Century", CEPR Discussion Papers No. 4767.
- Rodrik, Dani. "Premature deindustrialization." *Journal of economic growth* 21 (2016): 1-33.

**Academic Integrity:** McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures. McGill's policy on Academic Integrity can be found [here](#).

L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter [le guide pour l'honnêteté académique de McGill](#)).

**Language of submission:** In accord with McGill University's Charter of Student Rights, students in this course have the right to submit in English or in French any written work that is to be graded. This does not apply to courses in which acquiring proficiency in a language is one of the objectives.

Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté, sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue.

### **Frequently Asked Questions:**

**Q:** What are the economics requirements for this class?

**A:** First, the class requirements for this class are ECON 230D1/D2 or ECON 250D1/D2; not open to students who have taken ECON 423 D1/D2. This class uses concepts of consumer and production theory, and particularly of general equilibrium. While I will derive economic models from their primitive foundational assumptions, there won't be time during class to go through the basics of consumer/production theory. Feel free to assist office hours if you have doubts about these concepts.

**Q:** What are the math tools/knowledge requirements for this class?

**A:** You will need to be able to do calculus, graphing, exponentials, and algebra. You should feel comfortable with constrained convex optimization. I will do some more complicated math for the purposes of exposition, but I will not ask you to reproduce it on the exams although you should understand the underlying ideas. As a guide, I will preview any mathematical tool in problem sets and/or in class during lectures.

**Q:** What is the most important thing?

**A:** Most importantly, please be assured that I want students to learn and to receive the good grades they deserve. So please make an appointment with me should you have difficulty with your work during the course.

**Q:** What about asking questions in class?



**A:** PLEASE! Feel free to ask questions if I haven't been clear about a definition, abbreviation, or I have skipped the explanation or step in a mathematical proof or derivation. Additionally, I am human, so I will make mistakes which you should feel free to correct. If you're puzzled by something, then probably everyone else is as well, so you'd be serving yourself, me, and your classmates' education by getting it cleared up. While I encourage you to question models' assumptions and philosophies, for the sake of time I might defer the question to office hours.

**Q:** What will the tests be like?

**A:** The tests will be composed of three distinct parts. A multiple-choice question section, a problem-solving section, and an essay question. The weekly problem sets will give you examples of the sort of problem-solving questions that I am willing to ask in an exam. The tests are designed to take the methodological tools learned in class and apply it to a different scenario. Thus, it is not designed for you to memorize proofs or concepts and regurgitate them. The problem-solving section will be written in a way to guide you to the answer. The essay-section is designed such that you discuss the models and theories discussed during lecture and relate/discuss them with the additional papers/articles discussed in class and/or assigned as additional readings. Exams are closed book and no lecture notes, or any other aid is allowed. Calculators are allowed.

**Q:** How are problem sets graded?

**A:** The problem sets have three potential grades: (i) Not Submitted, (ii) Half Points, (iii) Full Points. The grade "Not Submitted" will be assigned if you don't submit the problem set by the specified deadline. There are no possible extensions for problem sets. Out of the submitted problem sets, 10 problem sets a week will be chosen at random and graded. The grade "Full Points" will be assigned if you have completed the problem set showing a significant effort. This is, you can get "Full Points" even if your answer is not 100% correct. The grade "Half Points" will be assigned if you a significant share of the problem set is left blank and or the student does not show a meaningful effort to complete the problem set. The day after the problem set is due, I will upload the solutions to the problem set.

**Q:** What happens if we have fewer Problem Sets than originally scheduled?

**A:** For a variety of reasons (such as scheduling conflicts, unplanned meetings, certain topics taking unexpectedly longer to cover), there might be fewer problem sets than originally scheduled. In that case, the total grade for problem sets (15%) will be distributed according to the effective number of problem sets. This is, if there are 11 problem sets as scheduled, each problem set will weigh  $1/11$  of the 15% of the final grade. If there are 9 problem sets, each problem set will weigh  $1/9$  of the 15% of the final grade, etc.

**Q:** What is the policy on regrading?

**A:** If you have any concerns regarding grading please get in touch with me. Mistakes in tallying scores would be corrected immediately. If you feel that an exam has been graded unfairly, please

let me know. In such a case you must submit your entire exam for a regrade. Requests to regrade specific questions, however, will not be entertained. Exams written in pencil will not be regraded.

**Q:** My final grade is only X% below the final grade needed to obtain a letter grade, can I get a boost or rounded it up?

**A:** No, there will be no rounding up or boosting of grades.

**Q:** Are lectures recorded?

**A:** Yes, lectures are recorded. The LRS system in the classroom uploads the recording of the class screen automatically. In the past, the LRS system had problems with the recording of my voice. To deal with this, I will record my screen and voice and upload it to myCourses under zoom recordings.