

## Course Econ 27000: International Economics (also listed as PBPL 27000)

This course covers international economics with an emphasis on international trade. The basic theories of international trade are introduced and used to analyze welfare and distributional effects of international trade, government policies, and international technology diffusion. The course also discusses the main empirical patterns of international trade as well as international investment.

**Instructor:** Felix Tintelnot

Email: [tintelnot@uchicago.edu](mailto:tintelnot@uchicago.edu)

Office hours on Zoom: Wednesday from 6-6:45am and 1-1:45pm

**Teaching Assistants:** Toshiaki Komatsu, Levi Crews

Email: [komatsu@uchicago.edu](mailto:komatsu@uchicago.edu) , [lgc7@uchicago.edu](mailto:lgc7@uchicago.edu)

Office hours on Zoom: Wednesday 7-8pm and Friday 1-2pm

**Grader:** Linghui Wu

**Schedule:** The class meets Tuesday and Thursday from 9:40am-11:00am (Section 1) and from 11:20am-12:40pm (Section 2) on Zoom. The discussion sections are held on Monday from 5:20-6:10pm (Section 1) and 6:30-7:20pm (Section 2). The midterm exam will be on Tuesday, February 9. There will be a 24 hours period to take the exam in one 80 minute session. The exam will be open book. The final exam will be held on a date yet to be determined during the final exam week. There will be a final exam for graduating senior students on the last day of class (March 11). The final exam will also be open book.

**Grading policy:** Problem Sets 20%, Empirical Project 20%, Midterm 27.5%, Final exam 32.5%. These weights are final. There will not be any re-weighting (If you do better in the final than in the midterm your average score goes up due to the better score on the final, but not through changes in the weights). I will count only the best 4 out of your 5 homework problem sets. Therefore it is ok to miss to submit a homework problem set for one week. If you miss the midterm due to illness, your final carries a weight of 60%.

Participation credit: Students who actively participate in the lectures, send constructive suggestions for improving the course materials, or provide helpful input for others on Slack / the discussion board, will get bumped to a higher grade if near a grade cutoff.

**Remote Format** This entire class will be conducted remotely. Pre-recorded videos will be available prior to each class for asynchronous viewing so that our synchronous Zoom meetings can emphasize discussion and interaction. Students must consume the asynchronous material before synchronous classes. There is an expectation that students attending the live lectures

will be actively engaged and on camera while on Zoom. All classes will be recorded. By participating in the live class or discussion section on Zoom you provide consent to being recorded.

**Problem sets** are due at the beginning of the TA session. See also the Problem Set guidelines at the end.

**Empirical project** You are asked to analyze the consequences of trade policy restrictions in the context of one of the recent crises: a) On essential medical goods during the coronavirus pandemic, b) during the United States-China trade quarrel, c) recent China-Australia trade quarrel, d) another recent trade conflict. More detailed instructions will be provided in the first few weeks of the course. The empirical project is due some time in the second half of the course.

**Textbook:** A recommended textbook for the class is International Trade: Theory and Policy by Paul Krugman, Maurice Obstfeld, and Marc Melitz (Pearson, 11<sup>th</sup> edition, henceforth KOM). Note: There also exists a book called International Economics by the same authors, which includes additional material that is not needed for this class. The textbook will be particularly useful for the first 5 weeks of class. The book is recommended but not required.

You may also find it helpful or at least interesting to read “Pop Internationalism,” by Paul Krugman. The book was published in 1997 and remarkably many issues discussed in the book are still debated today. “Understanding Global Trade” and “Globalization and Inequality” by Elhanan Helpman are other interesting books that cover several of the topics discussed in class.

**Warning:** The syllabus will likely be updated during the quarter. The assignment of weeks to topics is tentative. I am still experimenting with the class format. At this point, I haven’t decided what fraction of the content will be pre-recorded versus live. It could be that I pre-record 0%, 25%, 50%, 75%, or 100% of the material.

**Outline of topics:** The following list summarizes the topics and readings by week. I may deviate from this schedule if more time is required for a certain topic or add an additional topic if time remains. I may add additional readings to the list.

## CORE MATERIALS

Key questions:

Why do countries trade? Who specializes in the production of which goods? Is technological progress of your trading partner welcome? What are the distributional consequences of international trade? How sluggish are the adjustments to economic shocks?

1. Overview of the class facts about world trade and economic globalization (January 8)

Readings:

- KOM chapters 1 and 2;
- Antras (2020), De-Globalisation? Global Value Chains in the Post-COVID-19 Age, Harvard University mimeo.

2. Review of background materials / introduction into modeling of trade flows. Endowment economy. (January 10)

- Background reading: Markusen chapter 3 (a review of properties of indifference curves and utility maximization)

3. The Ricardian trade model (week 2)

Readings:

- KOM chapter 3;
- Samuelson (2004): Where Ricardo and Mill Rebut and Confirm Arguments of Mainstream Economists Supporting Globalization, *Journal of Economic Perspectives*, 18(3), 135-146.
- Testing the Ricardian Trade model:
  - o Costinot and Donaldson (2012), Ricardo's Theory of Comparative Advantage: Old Idea, New Evidence, *American Economic Review*, 102(3): 453-58.
  - o Bernhofen and Brown (2004), A Direct Test of the Theory of Comparative Advantage: The Case of Japan, *Journal of Political Economy*, 112:1, 48-67

4. Trade models with increasing returns (week 3)

External economies of scale, Intra-industry trade, Home market effect, Selection effect

Readings:

- KOM chapters 7 and 8;
- Krugman (1979), Increasing Returns, Monopolistic Competition, and International Trade, *Journal of International Economics*, 9(4), 469-479;
- Additional readings (not required):
  - o Krugman (1980), Scale Economies, Product Differentiation, and the Pattern of Trade, *American Economic Review*, 70(5), 950-959;
  - o Melitz and Trefler (2012), Gains from Trade when Firms Matter, *Journal of Economic Perspectives*, 26(2), 91-118;
  - o Melitz (2003), The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity, *Econometrica*, 71(6), 1695-1725.

5. The specific-factor model and empirics on labor market effects of international trade (week 4-5)

Readings:

- KOM chapter 4;
- Empirical work on the labor market effects of trade:
  - o Autor, Dorn, and Hanson (2013), The China Syndrome: Local Labor Market Effects of Import Competition in the United States, *American Economic Review*, Vol. 103 (6), 2121-2168
  - o Hummels, Jorgensen, Munch, and Xiang (2014), The Wage Effects of Offshoring: Evidence from Danish Matched Worker-Firm Data, *American Economic Review*, 104(6), 1597-1629.

MIDTERM (February 6)

ADVANCED MATERIALS

6. A simple multi-country trade model, Empirics of gravity model (week 6)

Readings:

- Anderson and van Wincoop (2003), Gravity with Gravitas: A Solution to the Border Puzzle, *American Economic Review*, 93(1), 170-192 [only the model part of the paper];

Additional readings (not required):

- Eaton and Kortum (2002), Technology, Geography, and Trade, *Econometrica*

7. Trade policy (week 6-7) [incl. presentation of empirical projects]

Readings:

- KOM chapters 9 and 10.
- Amiti, Redding, and Weinstein (2019), The Impact of the 2018 Tariffs on Prices and Welfare, *Journal of Economic Perspectives*, Vol 33, No 4, p. 187-210
- Flaeen, Hortacsu, and Tintelnot (2020), The Production Relocation and Price Effects of US Trade Policy: The Case of Washing Machines, *American Economic Review*

8. Firms in International Trade / Multinational Production (week 7-8)

Readings:

- KOM chapter 8;
- Helpman (2011), *Understanding Global Trade*, Chapter 6 (available on Chalk – Library Course Reserves).

- Antras and Yeaple (2014), Multinational Firms and the Structure of International Trade, *Handbook of International Economics*, 2014, Vol 4, p. 55-130
- Helpman, Melitz, and Yeaple (2004), Export Versus FDI with Heterogeneous Firms, *American Economic Review*, 94, 300-316.
- Setzler and Tintelnot (2019): The Effects of Foreign Multinationals on Workers and Firms in the United States, NBER Working Paper

9. Economic Impact of immigration (week 9)

Readings:

- Borjas (2014), *Immigration Economics*, Harvard University Press (chapters 4 and 5)
- Card (1990), The Impact of the Mariel Boatlift on the Miami Labor Market, *ILR Review*, 43, issue 2, p. 245-257.
- Card and Peri (2016), *Immigration Economics by George J. Borjas: A Review Essay*, *Journal of Economic Literature*, 54(4): 1333-49.

### **Problem Set Guidelines**

1. You are encouraged to work on your problem sets in **groups of up to three**, but **every** student must hand in an individual copy of the problem set.
2. All group members should be active in group sessions. Do not just watch others anticipating for answers and encourage your friends to be active if they are not.
3. Write the names of all group members clearly on top of the first page. If your name is not readable, your problem set will not be graded!
4. Each group should hand in all write-ups from its members TOGETHER! If you form a group of members that are in both sections, you must hand in all write-ups in Section 1's TA session.
5. Mark the final answer to each question clearly. If appropriate, include the final answer to each question in a BOX.

6. Use the notation established in the problem.
7. Write your answers as neatly and clearly as possible. You will not receive points if your answer is not readable.
8. Use a ruler and different colors to draw your plots. Also, please avoid drawing small graphs. The more content you want to display on a single graph, the larger the graph must be.
9. Compile all pages into one document before handing them in. You do not want some of the work you have worked hard on to be lost.
10. You may work in groups, but do not just copy each other's work. Answers should be a balance of discussion and work among your peers, and you should turn in individual answers. If answers are typed, the graphs may be shared, but the answers still need to be your own.

**Scholastic Dishonesty:**

The university has strict rules in relation to academic honesty. The underlying principle is that all work submitted for assessment (projects, exams, etc.) should be your own original work.

Anyone committing scholastic dishonesty on an exam, problem set, or empirical project will

receive an F for the class and will be referred to the Dean of Students. In relation to an

examination, problem set, or empirical project, misconduct on the part of the student includes:

- Cheating;

- Plagiarism (including the reproducing in, or submitting for assessment for, any examination, by way of copying, paraphrasing or summarizing, without acknowledgement and with the intention to deceive, any work of another person as the student's own work, with or without the knowledge or consent of that other person);
- Submitting for an examination any work previously submitted for examination (except with the approval of the prescribed authority)
- Failing to comply with the University's instructions to students at, or in relation to, an examination;
- Acting, or assisting another person to act dishonestly, in or in connection with an examination;
- Taking a prohibited document into an examination venue.

The administrative procedures regarding misconduct are incorporated in the University of Chicago rules detailed here: <http://studentmanual.uchicago.edu/Policies>.